**TwinCAT状态监控（TF3600）基本介绍**

|  |  |
| --- | --- |
|  | 作者：袁英杰  职务：华东区 技术支持工程师  邮箱：yj.yuan@beckhoff.com.cn  日期：2024-05-09 |
| **摘 要：**  本文介绍了TwinCAT中对信号的频域处理方法，以TF3600 Conditon Monitoring展开，介绍信号处理流程，并挑选了部分函数简单介绍其使用。  本文只是针对TF 3600做一个简单的介绍与测试，有关于傅里叶变换的相关内容相较复杂深奥，如果希望深入研究可以参考Beckhoff Infosys中的相关部分或者查阅其它文献。 | |
| **附 件：**   |  |  |  | | --- | --- | --- | | 序 号 | 文件名 | 备注 | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |
| **历史版本：**   |  |  |  | | --- | --- | --- | | 2022-9-9 | 袁英杰 | TF3600使用流程 | |  |  |  | |  |  |  | |  |  |  | | |
| **免责声明：**  我们已对本文档描述的内容做测试。但是差错在所难免，无法保证绝对正确并完全满足您的使用需求。本文档的内容可能随时更新，如有改动，恕不事先通知，也欢迎您提出改进建议。 | |
| **参考信息：** | |

目 录

[1. 软件版本 4](#_Toc165883627)

[1.1. 倍福Beckhoff 4](#_Toc165883628)

[1.1.1. 控制器硬件 4](#_Toc165883629)

[1.1.2. 控制软件 4](#_Toc165883630)

[1.2. TF3600 4](#_Toc165883631)

[1.2.1. 模拟波形 4](#_Toc165883632)

[1.3. 函数库 4](#_Toc165883633)

[2. 信号处理一般流程 5](#_Toc165883634)

[2.1. 状态监控过程 5](#_Toc165883635)

[2.2. 控制任务和计算任务的数据交换 6](#_Toc165883636)

[2.2.1. MultiArray 6](#_Toc165883637)

[2.2.2. MultiArray的配置 7](#_Toc165883638)

[2.2.3. FB\_Source和FB\_Sink 7](#_Toc165883639)

[2.3. 频谱的分度 9](#_Toc165883640)

[2.3.1. TF3600中的频谱缩放 11](#_Toc165883641)

[2.3.2. 校准的分类 12](#_Toc165883642)

[2.3.3. 基于参考信号的缩放 12](#_Toc165883643)

[3. 使用示例 13](#_Toc165883644)

[3.1. RealFFT（实信号快速傅里叶变换） 14](#_Toc165883645)

[3.1.1. 功能块介绍 14](#_Toc165883646)

[3.1.2. 功能块使用 15](#_Toc165883647)

[3.2. MagnitudeSpectrum（幅度谱） 15](#_Toc165883648)

[3.2.1. 功能块介绍 16](#_Toc165883649)

[3.2.2. 功能块使用 16](#_Toc165883650)

[3.3. ComplexFFT（复信号快速傅里叶变换） 19](#_Toc165883651)

[3.3.1. 逆傅里叶变换 20](#_Toc165883652)

[3.4. PowerSpectrum（功率谱） 21](#_Toc165883653)

[3.5. PowerCespectrum（倒频谱） 21](#_Toc165883654)

[3.6. SlidingDFT（滑动离散傅里叶变换） 23](#_Toc165883655)

[4. 常见问题 25](#_Toc165883656)

[4.1. 振动检测问题 25](#_Toc165883657)

[4.2. 小波变换 25](#_Toc165883658)

[5. 附页—傅里叶变换及相关内容 27](#_Toc165883659)

[5.1. 傅里叶变换 27](#_Toc165883660)

[5.1.1. 信号的分类 28](#_Toc165883661)

[5.1.2. 离散傅里叶变换 29](#_Toc165883662)

[5.1.3. FFT的误差分析 32](#_Toc165883663)

[5.2. 其它信号处理方法 33](#_Toc165883664)

[5.2.1. 功率谱问题 33](#_Toc165883665)

[5.2.2. 倒频谱问题 34](#_Toc165883666)

[5.2.3. 解析信号（复数信号） 35](#_Toc165883667)

[5.3. 齿轮振动分析 35](#_Toc165883668)

[5.3.1. 幅值调制信号 35](#_Toc165883669)

[5.3.2. 频率调制信号 35](#_Toc165883670)

[5.3.3. 边频带 36](#_Toc165883671)

# 软件版本

## 倍福Beckhoff

### 控制器硬件

笔记本

### 控制软件

大于TwinCAT 3.1 Build 4013版本

## TF3600

TF3600 | TwinCAT 3 Condition Monitoring

安装包下载：[TF3600 | TwinCAT 3 Condition Monitoring | 倍福 中国 (beckhoff.com.cn)](https://www.beckhoff.com.cn/zh-cn/products/automation/twincat/tfxxxx-twincat-3-functions/tf3xxx-tc3-measurement/tf3600.html)

### 模拟波形

使用模拟波形发生器FB\_FunctionGenerator模拟需要采集的信号，该函数可以产生调幅波、三角波、方波、脉冲波、锯齿波、正弦波、噪声信号等。

## 函数库

Tc3\_CM、Tc3\_CM\_Base、Tc3\_MultiArray，这三个库函数需要添加到PLC的库中。

# 信号处理一般流程

TwinCAT会在初始化阶段开辟内存区并完成相关的初始化。由于输入数据的元素数量、类型和内部结构体参数取决于各自功能块的配置，因此它们的内存空间在原则上是动态分配的。这是通过使用PLC状态监控库（TF3600）自动完成的。

由于所有的内存分配都发生在初始化过程中，函数块的初始化可能因此占用了相对大量的内存，因此也可能在此时(但不会在以后)由于缺少内存空间而失败，可以通过加大route memory或者提升硬件运算能力规避该问题。

一旦对象被删除，分配的内存将被再次释放。

TwinCAT 3状态监控库保留的缓冲区是在TwinCAT AMS router memory中的功能块初始化期间创建的，因此它们可以在实时条件下执行。某些功能，如高分辨率直方图和分位数，以及具有非常高分辨率的频谱计算，需要比传统控制程序更多的内存。因此，如上文提到的，可能需要增加route memory的大小。

## 状态监控过程

一个状态监控过程通常由数据采集、若干种算法和显示结果这三部分组成。

TwinCAT 3状态监控库使用了灵活的数据结构的数组，允许一个块一个块地保存、传输和计算数值数据，既可以表示多维数据，也可以表示一维数据。

根据配置的不同，Condition Monitoring算法对CPU资源的消耗非常的大。因此，应该为算法优先配置单独的任务（Process Task）。同步数据交换和线程安全（避免访问临界区）的相关难题被库函数块内部封装（即使用库函数可以高效安全地完成同步数据交换），以便灵活地操作数据分析链。当然，并不禁止单个任务来处理整个数据分析链。如果可以根据CPU和任务周期时间快速处理所需的算法，则建议这样做，这需要强大的CPU算了和合理的task分配（时间和优先级）。

分析步骤和相应的缓冲区大小表示任务周期时间的状态。这样的计算必须经常执行，以便能够处理所有输入数据。

比方说：数采集到的数据存储在缓冲区中，缓冲区的大小声明为1600个元素。当超采样系数为10时，填充缓冲区需要160个周期。如果是1ms的任务触发信号采集，则触发任务计算的周期时间必须小于160ms。

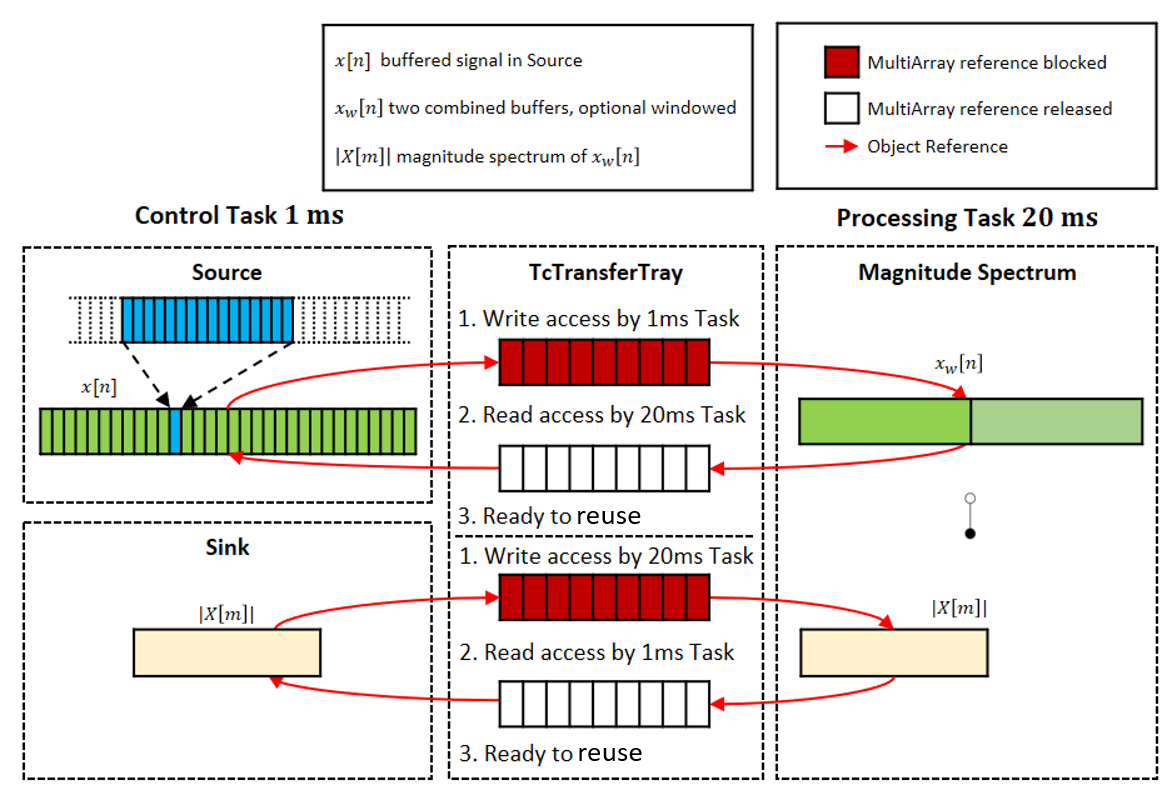
建议将计算周期时间设置为一个较低的值，以实现更快的响应(至少0.5倍)。此外，最小的可能计算周期时间必须考虑到算法的复杂性和所使用的CPU的性能。

计算周期时间< 0.5 \*信号采集周期时间\*缓冲区大小/超采样率

由于参数和输入值的组合可能会导致更长的执行点，所以任务时间的设置应该提供少量预留。

通常情况下，数据分析时间不应该超过任务周期时间。但对于一些统计函数块(分位数、直方图……)来说，这些函数块最初只向内部内存中添加几个任务周期的数据，只有后续的计算(N次循环后收集数据)需要时间。相应的任务周期时间可以适应简单的无需计算的调用。虽然这将导致在调用计算时超出周期时间，但它确保了快速响应时间。

## 控制任务和计算任务的数据交换



上图为condition monitoring的处理流程，数据在FB\_Source中被填充，通过MultiArray传送至计算任务，并再次通过MultiArray进入FB\_Sink中（回到控制任务）。

对于控制任务，一般将其的周期时间设置为为1毫秒。假设，每个周期进行超采样系数为20的数据采样，相当于20 kHz的采样频率，在此采样频率下信号的最大频率为20k/2.56=7812.5Hz，此处的2.56是对于计算机采样来说的合理倍数（理论上是2），要求频率分辨率为0.16Hz。记FFT的长度为N，频率分辨率Δf和采样率之间的关系如下：

结果是FFT长度为N = 125000。由基础知识可以知道，为了便于运算，FFT长度N'必须是2的幂，而log2(125000) = 16.93。可以得出最终的FFT长度应该为，即不足的信号将被零填充。

状态监控库提供的解决方案如上图所示。控制任务通过超采样 (图中蓝色部分)采集20个样本的“包”数据。这些数据存储在一个缓冲区中，其大小对应于幅度谱函数块的输入缓冲区的长度(125000 / 20 = 6250，如图中绿色部分所示)。一旦缓冲区满了，即控制任务运行了3125个周期后，通过FIFO原理将数据传递给第二个任务(计算任务)，这个控制任务的周期时间要长得多，一般为5-20毫秒。

### MultiArray

MultiArray是一个多维数据缓冲区，它使应用程序能够轻松地在几个PLC任务之间交换多维数据。

在控制（采样）任务和计算任务之间，数据通过MultiArray传输，这种多维的数组类似于传送托盘，譬如，客户在银行办理业务时的现金（数据流）通过托盘在客户和接待员之间轮转，这可以最大限度地防止数据同时被两个任务访问造成的问题。

通常，每个线路至少需要三个MultiArray：第一个MultiArray属于控制任务，即将被新数据填充。计算任务访问第二个MultiArray并对其进行处理。必须有第三个MultiArray，以便在控制任务已填满当前MultiArray时可用，但剩余的超采样数据必须在这个周期内写入下一个MultiArray。因此，最小的数字是3。

这种传送托盘的本质是一组队列，来自控制任务的第一组数据进入队列、第二组数据为常规数据交换，第三组数据进入队列等待（在队列中可以等待多少组数据由MultiArray的初始化决定，建议是3-4个）。只有当结果缓冲区(MultiArrays)要由几种算法直接处理时，才需要四个以上的MultiArrays。如果多个算法访问一个MultiArray的数据，建议为每个增加的访问算法提供一个额外的MultiArray。当然考虑到安全，建议在最坏情况下每个数据链要有四个MultiArrays。

提供的MultiArrays的数量是通过条件监控库函数块的输入参数nResultBuffers来设置的。默认值为4。

这些额外的缓冲区是在内部创建和管理的。它们需要AMS route中一定数量的额外内存。

### MultiArray的配置

文本

中度可信度描述已自动生成

如果MultiArray与FB\_CMA\_Source函数块一起使用，那么实例fbSource需要配置一个(或几个)MultiArray实例。上面描述的MultiArray有2个维度(nDims = 2, nDims = 1也是允许的)；尺寸的大小用aDimSizes来描述。因此，所描述的MultiArray的维度为cChannels × cBufferLength，每个元素的数据类型为LREAL。

使用MultiArrays与FB\_CMA\_Source的例子如下：

文本

描述已自动生成

MultiArrays在数据存储管理方面非常灵活。例如，在上面的例子中，行和列是完全可互换的。如果正确地分配/标识了维度(如下面的示例所示)，则不会对结果产生影响。

正如下面的例子中显示的，FB\_CMA\_Source(或FB\_CMA\_Sink, FB\_CMA\_BufferConverting)提供了诸如nWorkDim, pStartIndex或nElementsDim之类的参数。这些参数可用于：

描述/读出MultiArray的某一段

从指定位置写入/读取/复制

从特定的点开始复制一定数量的元素

这些参数的组合不仅保证了内存优化，而且保证了多通道，多任务应用程序的选择性。

MultiArrays是自动管理的，但它们必须首先进行初始化。这是在ST\_MA\_MultiArray\_InitPars的帮助下在PLC声明中完成的，而后传递给FB\_CMA\_Source实例。

每个算法功能块使用配置了stInitPars的MultiArrays传输其结果。它们的形状大小是用初始化参数定义的(参见功能块的相应解释)，除了FB\_CMA\_Sink。也可以仅将MultiArray的一部分复制到PLC阵列中以进行进一步处理或评估。这是通过FB\_CMA\_BufferConversion完成的。

功能块具有可在MultiArrays中写入或读取PLC变量的方法。有关方法及其参数的更多信息，请参见函数块的描述。

### FB\_Source和FB\_Sink

可以参考如下示例：

加速度传感器的三个超采样系数为10，采集信号。输入数据收集在长度为1000的MultiArray中，并传输到一个功能块FB\_CMA\_MomentCoefficients。FB\_CMA\_MomentCoefficients根据配置计算每个通道输入数据的不同统计参数。我们现在的目标是在FB\_CMA\_MomentCoefficient的输出处配置MultiArray，以便只输出结果的某一部分，例如平均值和标准差。

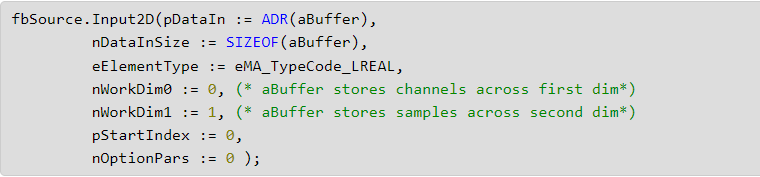
输入和输出变量的声明和初始化如下:

图形用户界面, 文本, 应用程序

描述已自动生成

定义一个3×10的buffer作为超采样的信号采集，定义了一个3×1000的结构体变量，将作为FB\_Source的参数采集信号。当FB\_Source填满了这一个长度为1000缓冲区后，将数据送到DesID为MomentCoeffs的函数块中。后续定义了元素的列表和期望得到的统计信息。

由于定义的MultiArray为两维



可以通过行保存通道，通过列保存采样，或者通过行保存样本，通过列保存通道。

本地PLC变量buffer作为引用传递，指定要传输的数据类型。

将MultiArray的第一个工作维度赋给buffer的第一个维度(cChannels)，将第二个工作维度赋给采样值(cOversamples)。

以上所有设置都完全配置了MultiArray，使其沿着第一个维度(行)存储通道，并沿着第二个维度(列)存储采样值，直至长度为cBufferLength。

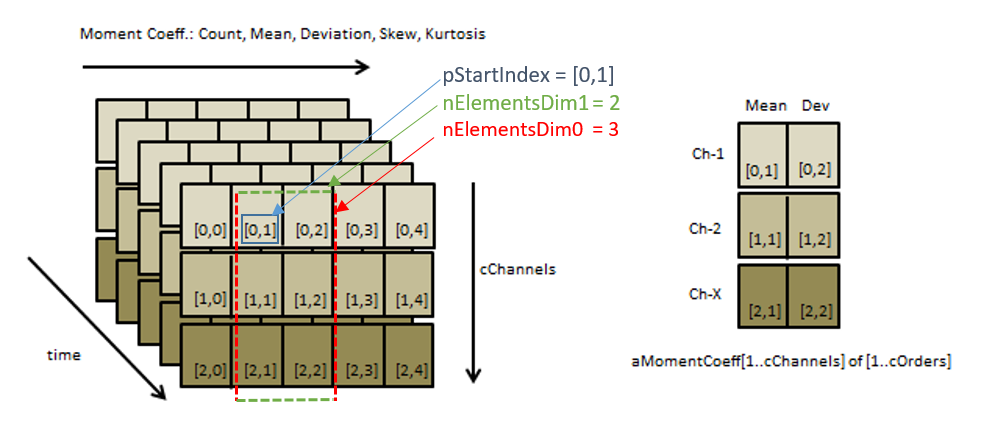
文本

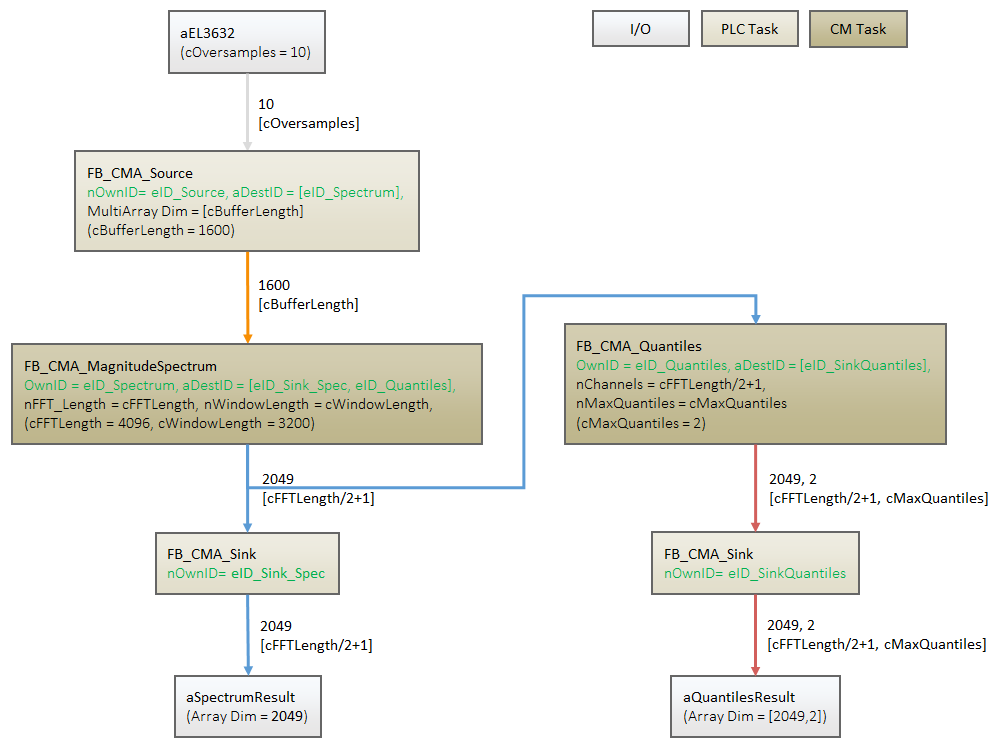
描述已自动生成

类似地，FB\_CMA\_Sink实例可以将MultiArray的内容写入本地PLC变量aMomentCoef。

本地PLC变量aMomentCoef(现在需要对其进行写访问)作为引用传递。

MultiArray的第一个工作维赋给变量aMomentCoef的第一维，即通道。第二维类似地传递，对应统计参数。在本例中，WorkDim0方向有3个元素(全部3个通道)，WorkDim1方向有2个元素。参数pStartIndex定义了2x3矩形中要复制的第一个元素。参数是一个指向2D数组的指针(aStartIndex)。





如上图，EL3362模块超采样周期为10采样信号，采样到的数据保存在缓冲区FB\_CMA\_Source（慢任务），当数据缓存至1600之后，通过预设的ID将数据送到快任务进行信号处理，将结果送入FB\_CMA\_Sink中。此外，还可以将数据送到其它统计处理的功能块中进行运算。

## 频谱的分度

详细说明见5.1.2和5.1.3节

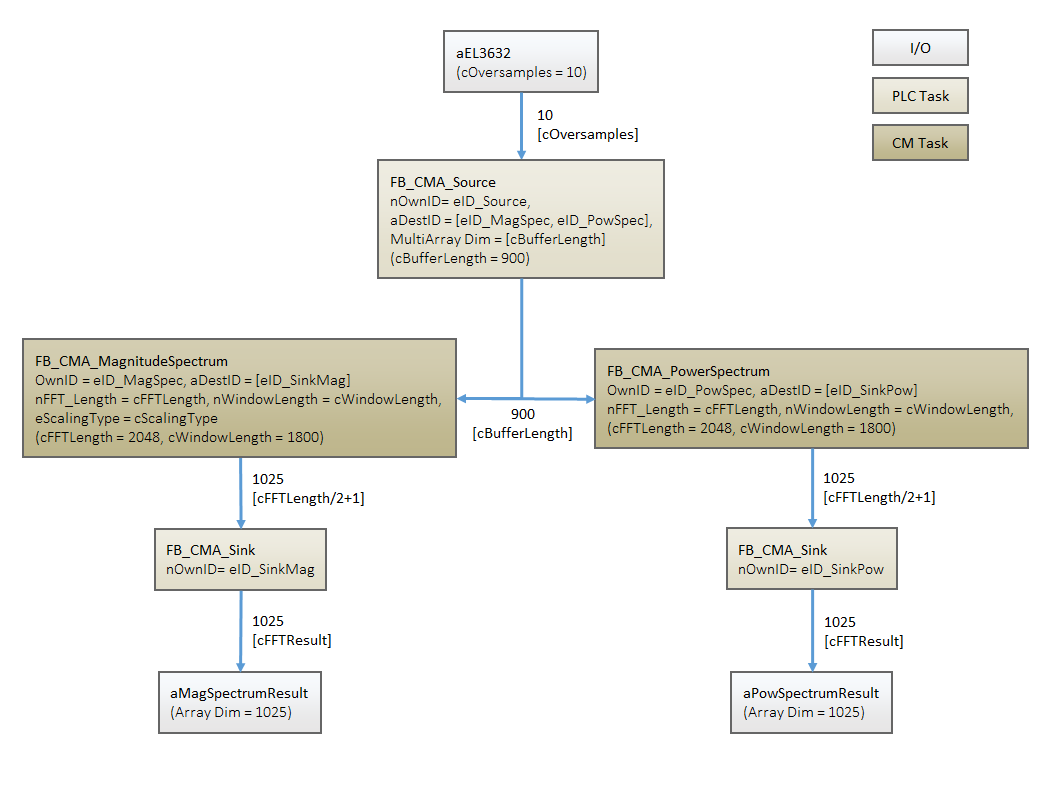
确定性信号由具有确定频率的周期性振动组成。这里的决定性因素是频率分辨率(ENBW等效噪声带宽)比谐波频率宽。因此，信号的这个频率分量的整个功率在这个频率通道中被合并。因此，频谱值可直接扩展到振幅(频谱缩放选项eCM\_PeakAmplitude)或等效正弦信号的RMS值。若频率信号落在频率分辨率的两个bin之间，那么信号的幅值信息将极大地丢失（栅栏现象）。此时可以加窗去补足，尤其是flattop window和hann window。

随机或宽带信号需要评估功率谱密度(PSD)或线性谱密度(LSD)，因为所有频率都包含在定义的频率范围内的信号功率。在这种情况下，确定的功率值取决于FFT频率通道的有效宽度。从逻辑上讲，它们必须引用此带宽，以便获得独立于评估参数的结果。由于使用窗函数时信道的有效宽度取决于窗函数的长度和形状，因此在这种情况下必须使用上述等效噪声带宽(ENBW)，参见频谱缩放选项eCM\_PowerSpectralDensity。

图形用户界面, 文本

中度可信度描述已自动生成

如果信号同时包含确定部分和随机部分，则必须相互独立地使用这两种缩放，以便获得与处理参数无关的值。举个例子，由谐波正弦波和带限噪声组成的信号。如果要评估谐波正弦波的振幅，则必须对确定性信号进行缩放，而评估随机噪声，那么缩放必须作为PSD或LSD进行。流程如下：



图片包含 图形用户界面

描述已自动生成

### TF3600中的频谱缩放

下表列出了默认缩放选项(E\_CM\_ScalingType类型)，可以通过功能块FB\_CMA\_PowerSpectrum和FB\_CMA\_MagnitudeSpectrum以及由此衍生的功能块来选择。它们的因子在第二列中给出，以便在必要时能够包括进一步的参数。值表示功能块的输入值，值表示由缩放产生的频率通道k的频谱值。

|  |  |  |
| --- | --- | --- |
| 确定信号 | | |
| eCM\_PeakAmplitude |  | 振幅为A的输入正弦信号达到最大值A，结果与窗函数的类型无关。幅值的单位与输入信号的单位相同。  MAX(||) = A  然而，由于可能发生栅栏损失，频谱的振幅稳定性得不到保障。 |
| eCM\_RootPowerSum |  | 对于振幅为A的输入正弦信号，功率值和的平方为A，也可以使用幅度值平方和的平方根。因此，结果等于输入信号的均方根值乘  SQRT(2)  =A  这种标度适用于窄带信号的评估。由于相邻频带的求和减少了栅栏效应，因此它的鲁棒性比eCM\_PeakAmplitude更好。 |
| eCM\_RMS |  | 这种缩放产生功率值，其和的平方根等于输入信号的均方根值。振幅为A的正弦信号得到的值为A/SQRT(2)：  它对于窄带和宽带信号都拥有比较好的鲁棒性。 |
| 随机信号 | | |
| eCM\_PowerSpectralDensity |  | 这个缩放决定了功率谱密度(PSD)。对于宽带和随机信号，这与FFT和窗函数的参数无关。    为了确定物理上正确的功率谱密度，结果必须另外除以以赫兹为单位的输入信号的采样率。如果输入信号的单位为伏特，则得到的幅度单位为1 V/Hz，功率密度单位为1/Hz。线性谱密度必须除以采样率的根;单位为1V /: |
| 基础 | | |
| eCM\_DiracScaling |  | 这种缩放使功率谱标准化，使宽带信号等于未缩放的FFT。这样就消除了窗型和窗长的影响。然而，FFT长度N的影响就像它对未缩放的FFT一样存在。 |
| eCM\_NoScaling |  | 没有缩放。结果包括窗口函数的应用(按照惯例，窗口函数的最大值总是1)，然后是FFT。 |

### 校准的分类

在许多情况下，通用的限值一般不适用于不同的机械，它们不太适合早期诊断检测损伤。由于测量点的选择(测量点的位置、传感器信号的耦合等)对传输链路的衰减有着重大影响，因此对于趋势监测（trend monitoring）而言，始终保持所选测点和耦合条件更为重要。在许多情况下，最初低电平的信号元件可能很重要。如果它们是周期性的，那么在使用尽可能窄的带宽和合适的统计函数的高分辨率FFT谱时，它们会显得特别清晰和及时。在状态监测中，长期的趋势观测和分贝尺度的相对比较通常比单个绝对值发挥更重要的作用。对于传感器来说，昂贵的、高精度的绝对校准和平滑的频率响应通常不如高长期稳定性和足够低的温度依赖性重要，尽管这并不意味着可以完全忽略校准。

### 基于参考信号的缩放

在许多情况下，测量值的数学引用(通过参考进行缩放)比乍一看要复杂得多。一旦处理涉及到非线性依赖于不同参数的几个步骤，在许多情况下，使用校准装置进行缩放更简单，最重要的是更不容易出错。这里我们利用了这样一个事实，即计算频谱的幅度值总是与输入值成线性关系。因此，为了正确地缩放信号，我们只需要在已知的参考输入值的基础上确定相关的线性因子。这是通过使用校准设备产生具有定义幅度(或定义RMS值)的物理信号，测量输出值并确定所需的校正因子作为输入和输出的商来完成的。基于参考信号进行标度的最大优点是可以可靠地发现物理缺陷，例如加速度计的损坏以及测量系统的不正确配置。如果在评估时要测试大量的参数组合，则该方法有其局限性。

# 使用示例

变量的定义和数据分析链的流程请参考上文，此处只介绍不同函数块的使用。本节将以MagnitudeSpectrum（幅度谱）、PowerSpectrum（功率谱）和Real FFT（实数傅里叶变换）为典型例程介绍，其它算法大同小异。首先在reference中添加以下三个库文件。

图形用户界面, 文本, 应用程序, 聊天或短信

描述已自动生成

如上文所述，创建两个任务，一个PLC周期为1ms的用于信号采集的快任务PlcTask和一个PLC周期为5ms-20ms的用于信号处理的慢任务CM\_Task。



在POU中包含了一个用于模拟信号的FB，可以模拟脉冲、锯齿波、三角波、正弦波等。

图形用户界面, 文本, 应用程序

描述已自动生成

不同算法的变量定义大同小异，在使用示例中会逐步列举。

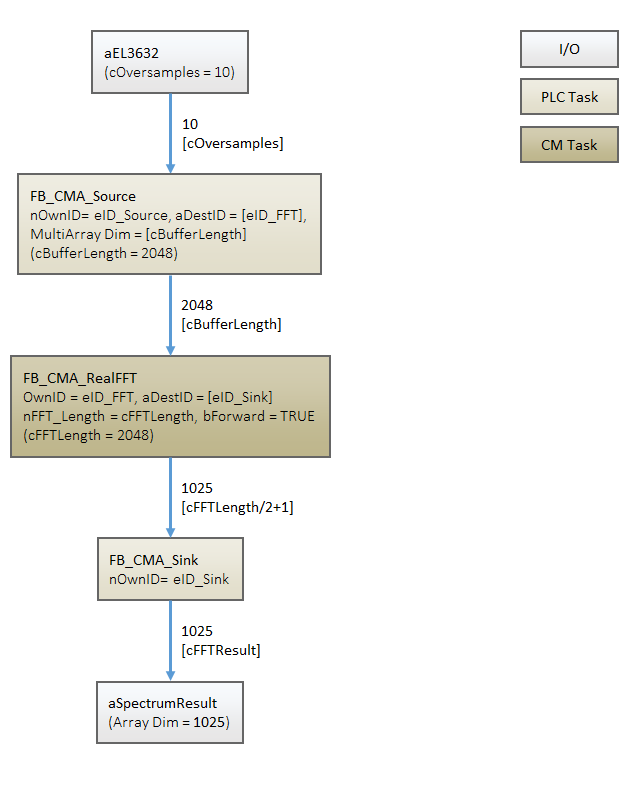
所有完整的例程可以参考infosys中TF3600的Sample。使用信号发生器每个周期产生和超采样数相同的信号。

手机屏幕截图

描述已自动生成

## RealFFT（实信号快速傅里叶变换）

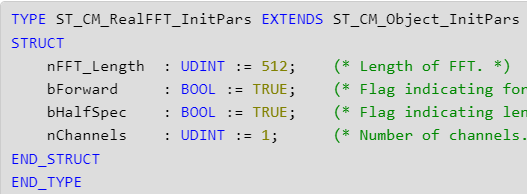
实数FFT的流程图可以概括大部分的信号处理过程，不同的只是算法函数的使用，因此后续将不再列举拥有相似处理过程的函数流程图。



### 功能块介绍

RealFFT是最传统的信号分析方法，直接将预先定义好的一个信号块进行快速傅里叶变换，使用了ST\_CM\_RealFFT\_InitPars这一结构体定义功能块。其中nFFT\_Length是有限离散傅里叶变换的长度；bForward代表离散信号序列是前向傅里叶变换还是后向傅里叶变换；bHalfSpec为True，则输出的是大于0部分的频谱；nChannels表示通道数。

值得注意的参数有两个，傅里叶变换的长度会影响PLC计算的周期以及对信号信息的复现；而频谱一半的效果则意味着舍弃无用的负频谱，类似于复数傅里叶变换。而对于bForward，则是逆傅里叶变换的触发，这类配置需要在Complex中生效。



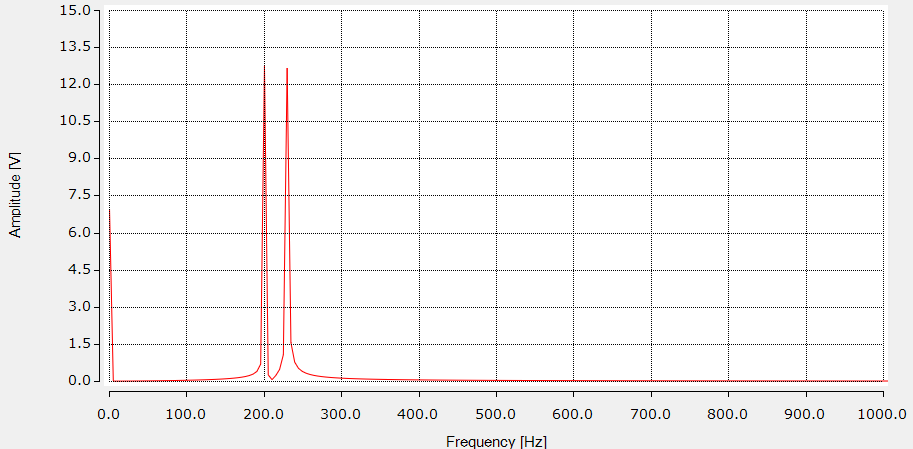
### 功能块使用

输入频率为200Hz、幅度为13的正弦波，其中直流分量为7

图表, 折线图

描述已自动生成

下图将输入信号改为频率为200Hz和频率为240Hz正弦波的叠加。



## MagnitudeSpectrum（幅度谱）

幅度谱从一个实值输入信号计算幅值谱。

输入数据缓冲区首先与紧邻前面的缓冲区重叠，并与窗口函数相乘。如果参数nFFT\_Length大于参数nWindowLength，加窗时间信号将在开始和结束处填充相同数量的零，以达到所需的FFT输入长度(零填充)。随后应用真实值的FFT，并计算得到的复值的绝对值。如果参数bTransformToDecibel为TRUE，则将这些值转换为分贝值。这些分贝值对于幅度谱和功率谱是相同的，即在计算幅度谱的分贝值时将平方的影响考虑为两倍。

FB\_CMA\_MagnitudSpectrum函数块的行为类似于FB\_CMA\_PowerSpectrum。差异是FB\_CMA\_PowerSpectrum结果的平方。

在许多情况下，短期频谱并不是信号频谱的一个很好的统计估计器。在许多情况下，建议通过对多个频率或连续频谱求平均来减少估计值的波动。

### 功能块介绍

幅度谱加入了窗函数的概念，可以调整窗函数的相关配置以解决时域信号无限长带来的频谱泄露问题。

### 功能块使用

文本

描述已自动生成

变量声明如下，包括了数据长度、数据类型、采样通道、采样数据、fb\_source等

文本

描述已自动生成

窗函数长度为8000，FFT长度为8192，窗为Hann窗。

图形用户界面, 文本, 应用程序

描述已自动生成

本案例通过导入CSV格式的数据文件作为信号的输入，在快任务中进行信号功率谱的计算，其它步骤和RealFFT相同。注意FB\_Source的OwnID和DesID，它们将作为功能块在数据通讯中的身份认证，同样的，在算法和数据变换后结果的保存也需要用到各自的ID。

图形用户界面, 文本, 应用程序

描述已自动生成

图形用户界面, 文本, 应用程序, 电子邮件

描述已自动生成

结果如下，上图为输入信号，下图为频域的计算结果：

图表

描述已自动生成

图表, 条形图, 直方图

描述已自动生成

## ComplexFFT（复信号快速傅里叶变换）

使用函数块FB\_CMA\_ComplexDataHandling从复杂的输入数据中提取实部或虚部，或者计算绝对值或相位。

对于输入信号，将一个频率为200Hz、幅度为13的正弦波作为实数信号，将一个频率为600Hz、幅度为7的正弦波作为虚数信号。将输入缓存aBuffer定义为LCOMPLEX型。

图片包含 图表

描述已自动生成

绿色为实数信号，蓝色为虚数信号。

图表, 折线图

描述已自动生成

可以看到，频率缩小为原先的约为5倍。

当将输入信号的实数部分更改为频率为150Hz、幅值不变的情况下，变换结果中30Hz的幅值出现了一定的衰减。当采用其它频率（幅值）时同样会出现数值的缩放。

图表, 折线图

描述已自动生成

当使用MATLAB对复信号做傅里叶变换时，结果如下（使用了FFTSHIFT，将零频率放到频率区域中心）：

输入为15Hz和40Hz的复信号的叠加

图表

低可信度描述已自动生成

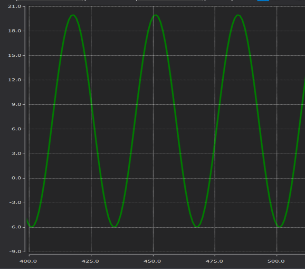
### 逆傅里叶变换

有关逆傅里叶变换的实现如下

文本

描述已自动生成

将bForward配置为true，并将bHalfSpec配置为false，因为逆傅里叶变换的结果等于傅里叶长度cFFTLength；同时，配置RealFFT并多配置一个输出通道eID\_IFFT，将buffer的数量加1。结果如下



## PowerSpectrum（功率谱）

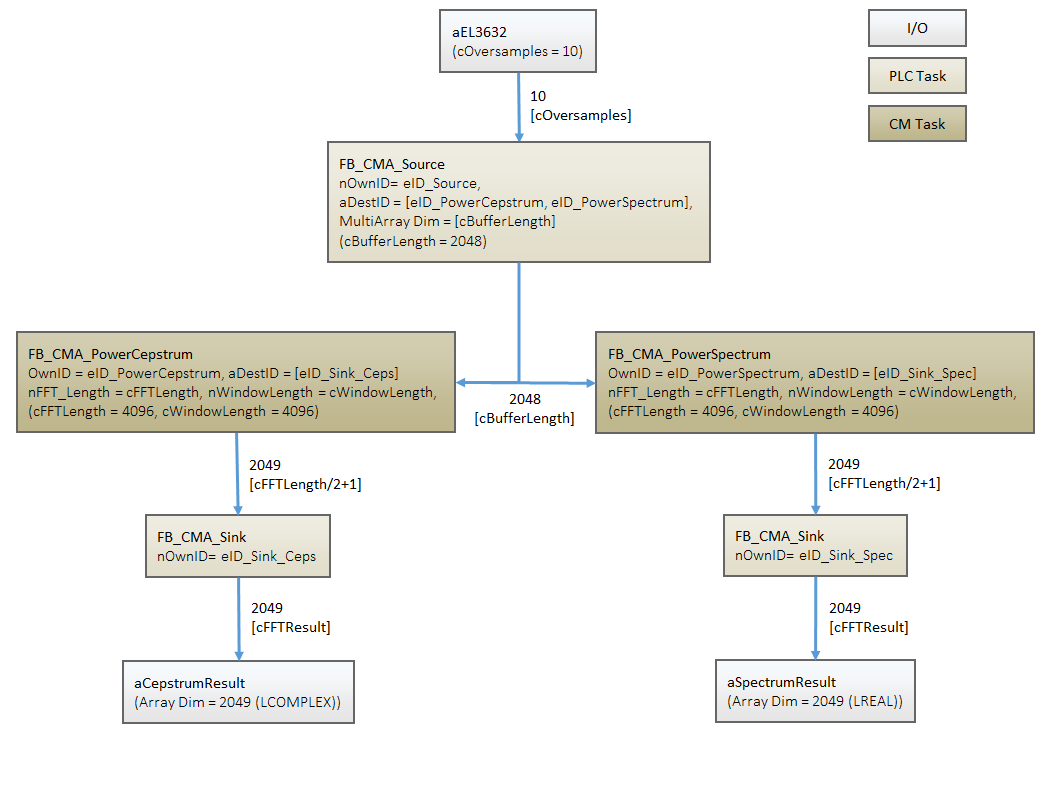
功率谱可以简单理解为幅值谱的平方，它是针对随机信号、通过求解相关函数的傅里叶变换来分析信号。使用方式与MagnitudeSpectrum相类似。

简单叙述相关函数的计算流程：输入数据缓冲区首先与缓冲区相重叠，然后与窗口函数相乘。如果参数nFFT\_Length的值大于参数nWindowLength，窗口时间信号在开始和结束处用相同数量的零填充，以达到所需的FFT输入长度。随后对实数值使用FFT，并计算得到的复数值的绝对值。此时如果参数 bTransformToDecibel为TRUE，那么绝对值将转换为分贝值（取对数）。这些分贝值对于幅值谱和功率谱是相同的，它可以更好地展示出频率中低频部分的信息并拉大高频的范围。

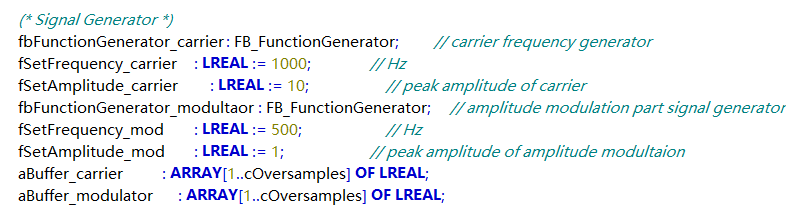
在许多情况下，统计学意义上短期功率谱的估计值并不十分良好。在许多情况下，估计值的波动应通过对若干频率或连续频谱进行平均来减少。

有关功率谱的示例可以参考倒频谱的内容进行对比。

## PowerCespectrum（倒频谱）



输入信号为频率1000Hz、幅度1的高频正弦载波，和频率为500Hz、幅度1、占空比为20%的低频脉冲调制波。以A\_c \* sin(2\*pi\*f\_c) \* (1+A\_m/A\_c\*pulse)的方式对高低频信号进行调制。



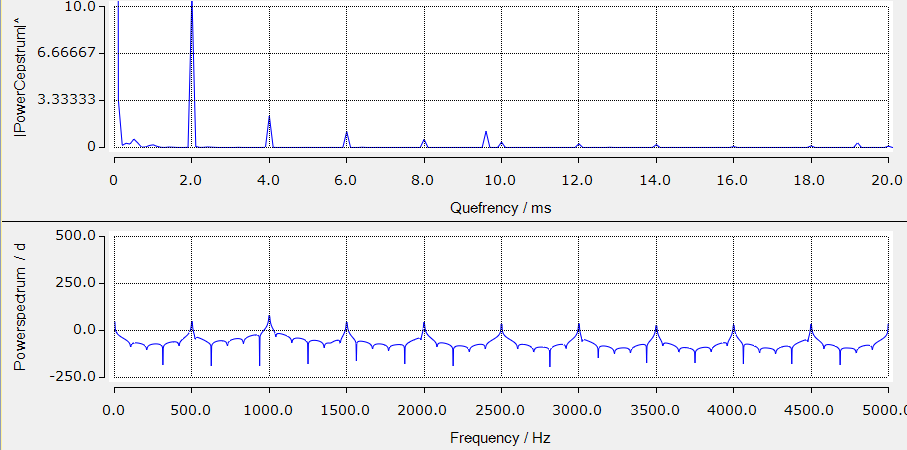
使用FB\_sink收集数据并发送给信号调制部分



在慢任务中对调制完成的信号进行倒频谱的处理

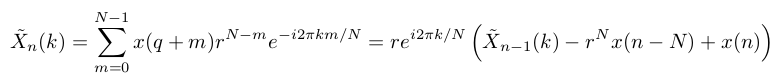


结果如下，上图是倒频谱，下图是功率谱



有关于倒频谱的概念可以参考附页中关于齿轮振动分析的应用。

## SlidingDFT（滑动离散傅里叶变换）

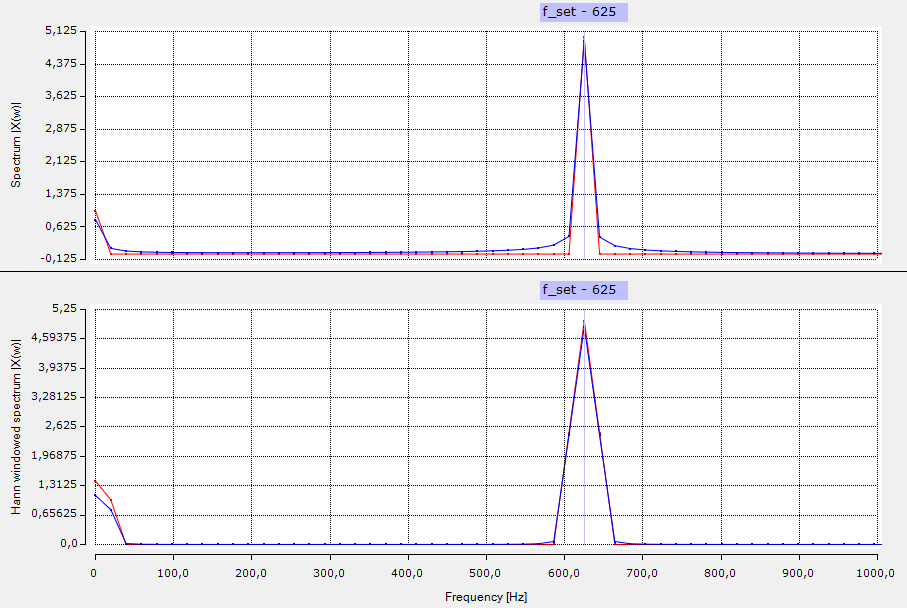


r为阻尼系数，从表达式中可以看出该函数具有实时处理能力，可以同控制任务一同运行。该函数的输出结果可以通过加汉宁窗优化。

图形用户界面, 应用程序

描述已自动生成

下图是该函数和Real FFT（红色）的效果对比，可以看到，一方面，在函数SlidingDFT(蓝色)的频谱中，侧瓣的影响是明显的。偏差基本上取决于所选择的阻尼参数。大于0.995时，偏差变小，但衰减过小(>0.999)，计算不稳定。另一方面，由于定义了频谱线k = 0的递归规则，使得DC分量的计算更加精确。通过在光谱范围内应用汉宁窗(下图)，可以实现计算值的改进。



# 常见问题

## 振动检测问题

振动评估的目的是通过振动测量对机器的运行状态进行评估，从而保证机器的可靠、安全运行。

合适的测量点的特点是它们尽可能纯粹地反映机器的动态能力。例如，局部共振发生的位置是不合适的。合适的位置往往是轴承架和轴承盖；测量通常在两个正交的方向上进行。

下图的分类还考虑到机器的子结构，细分为刚性子结构和弹性子结构。如果由机器和子结构组成的整个系统的最低固有频率比主激励频率(一般为转动频率)至少高25%，则子结构可视为刚性，否则视为弹性。该评价应分别对每个测量方向(两个正交方向)进行。

DIN ISO 10816-3:2009描述了四个评估区域(A, B, C, D)，极限值如下表所示。

日历

低可信度描述已自动生成

## 小波变换

对于LTI（线性时不变）系统，上文所叙述的步骤可以解决大部分问题。值得注意的是，傅里叶变换只能针对确定信号和平稳信号进行分析而不能处理非平稳信号，它只能获取一段信号总体上包含哪些频率的成分，但是对各成分出现的时刻并无所知。如果系统的频率随着时间发生变化，那我们需要使用小波变换来处理。

小波变换是一种自适应的时频分析方法，它的时窗函数可以随着频率的增高而缩小、减低而增大。更为准确地理解是，小波变换舍弃了传统傅里叶变换的三角函数基而变成了有限长的会衰减的小波基。如果需要分析信号在某些瞬间的突变，需要使用小波变换来明确信号频率随时间变化的情况，小波变换是一种时频分析。

小波变换的适用性非常广，但是TF3600没有提供小波变换的函数，如果需要分析频率随时间变换的信号需要使用第三方软件，可以考虑配合使用MATLAB。TwinCAT3做采样，MATLAB进行分析，但这样的任务分配需要考虑到实时性的问题。

在后续文档中会对这部分内容进行补充。

**上海（ 中国区总部）**

中国上海市静安区汶水路 299 弄 9号（市北智汇园）

电话: 021-66312666

**北京分公司**

北京市西城区新街口北大街 3 号新街高和大厦 407 室

电话: 010-82200036 邮箱: beijing@beckhoff.com.cn

**广州分公司**

广州市天河区珠江新城珠江东路32号利通广场1303室

电话: 020-38010300/1/2 邮箱: guangzhou@beckhoff.com.cn

**成都分公司**

成都市锦江区东御街18号 百扬大厦2305 室

电话: 028-86202581 邮箱: chengdu@beckhoff.com.cn

|  |  |
| --- | --- |
| 请用微信扫描二维码  通过公众号与技术支持交流 | 倍福官方网站：  https://www.beckhoff.com.cn  在线帮助系统：  https://infosys.beckhoff.com/index\_en.htm |
| 倍福虚拟学院：  https://tr.beckhoff.com.cn/ |
| 招贤纳士：job@beckhoff.com.cn  技术支持：support@beckhoff.com.cn  产品维修：service@beckhoff.com.cn  方案咨询：sales@beckhoff.com.cn |
|  |

# 附页—傅里叶变换及相关内容

本节是对TF3600 Condition Monitoring功能包使用的基础知识介绍，梳理了数字信号处理的大致流程，便于理解TF3600各个功能块。第一小节将会先简单讲述信号的基本概念，FT（傅里叶变换）、FS（傅里叶级数）、DTFT（离散时间傅里叶变换）、DFT（离散傅里叶变换）和FFT（快速傅里叶变换）之间的关系，并完整介绍一个信号处理的办法；第二小节会包括一些其它的信号处理办法；第三小节将围绕着一个齿轮振动监测的示例，简单解释TF3600 TC3\_CM功能块的应用。

本节旨在简单叙述一些典型的信号处理方法，不具备严谨的数学表达、证明与推导，大部分内容参考了网络以及数本经典教材。

## 傅里叶变换

我们可以大体把自然界的所有信号分为两类：一类是确定信号，即可以使用确定的函数表达式（显函数或者隐函数）描述的信号序列；另一类是随机信号，无法使用确定的函数表达式描述，但可以使用概率密度函数来描述，比如，对一个典型的噪声高斯白噪声（均值为零，方差为）来说，它的概率密度函数为：

对确定信号进行信号处理，采用傅里叶变化及其相关内容，对随机信号而言，我们需要采用功率谱及其相关方法进行处理。

傅里叶变换就是将时域映射到频域。时域我们不难理解，那频域大概念从何而来呢。以音乐信号为例，在时域上，音乐可以表示为具有复杂波形的波形图，而在频域上，五线谱就可以表示在和一段音乐中所具有的所有频段信号的信息。

再以下图为例，一个比较复杂的信号其实是由多个不同频率的正弦信号叠加而成，在时域的平面上，新建立一根垂直于这个平面的频率轴。将这个复杂的信号分解到不同频段上，把整个坐标系绕幅值轴旋转90度，从频率轴那一面看过去，所见的一条条直线就是时域信号在频域中的样子。

图示

描述已自动生成图示

描述已自动生成

### 信号的分类

将确定信号分为四类，连续周期信号、连续非周期信号、离散周期信号、离散非周期信号。它们都存在相应的傅里叶（级数）变换。

对于连续周期信号，可以将其分解为傅里叶级数

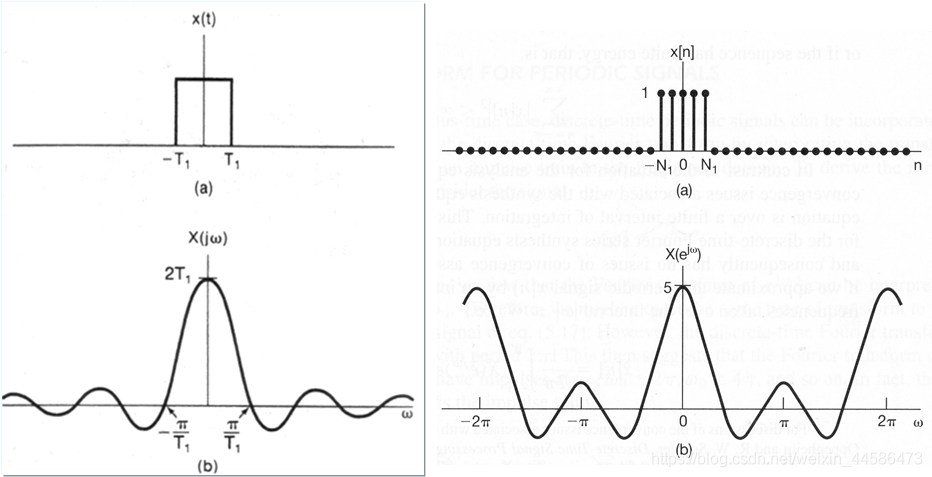
图表, 直方图

描述已自动生成

对于连续非周期信号，可以使用傅里叶变换：

其中

如下图，为频谱密度函数，其为连续谱。



对于周期为N的离散周期信号，这样定义它的傅里叶变换

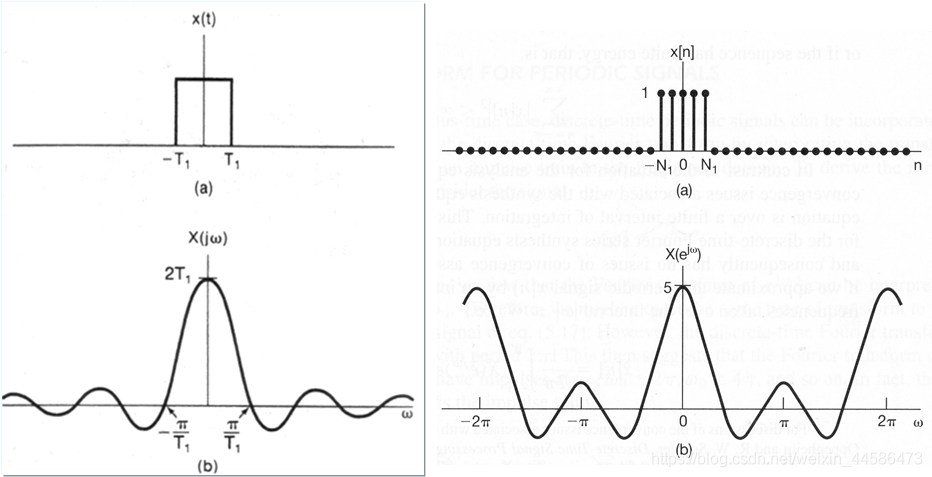
其中

为频谱函数，其为周期为N的离散谱。

对于离散非周期信号，傅里叶变换如下定义

其中

如下图，为频谱密度密度，是周期为2的连续谱



可以看到，对于确定的信号，直接对信号序列进行数学上的积分可以快速的得到频域信号，但是计算机处理信号远没有这么简便。

### 离散傅里叶变换

对于计算机处理数字信号，我们需要经过如下三个部分，采样、量化、计算，这就导致了诸多问题，我们在后续会具体分析。无论如何，对于无限长的信号，我们只能计算它的数值解，但对于确定信号，即使在它被充分采样（即各态的信息都被获取）之后，获取它的表达式也非常困难，所以希望对信号进行数字方法的运算。下面介绍离散傅里叶变换。

不加说明的给出一个结论：信号在时域的离散化导致其频谱函数的周期化；信号在时域的周期化导致其频谱函数的离散化。

根据频率抽样定理来推导有限长序列的傅里叶变换，从而定义有限长序列的离散傅里叶变换DFT。对于离散非周期信号，其离散时间傅里叶变换DTFT为，是周期为2的数字角频率为Ω的连续谱，如上文描述的相同。不加证明地给出频率抽样定理，如果信号为有限长N的序列，则可以表示为N项虚指数信号的线性组合，即有限长N的序列的傅里叶变换为：

其中

上式就是有限长序列的离散傅里叶变换DFT。其物理意义是：对于长度为N的时域序列，它都可以由N项虚指数信号的加权和表示。不同的序列只是其加权系数不同，与为一一对应的关系。通过对信号进行离散化或周期化等处理，可以建立DFT与四种信号频谱之间的关系，从而实现利用有限长序列的离散傅里叶变换分析其他信号频谱。

有了以上的铺垫，我们可以介绍典型的信号处理问题，利用DFT分析连续非周期信号。

我们所要分析的确定信号大多都是连续的、周期的，计算时需要对连续变量进行离散化，通过建立序列的离散傅里叶变换与连续非周期信号的傅里叶变换之间的关系，可以利用DFT对连续非周期信号频谱进行近似分析。

首先，需要对连续非周期信号进行离散化，假设表示对连续信号等间隔T抽样获得的离散信号，即。离散信号与连续信号的频谱之间有如下的关系式：

其中表示对连续信号抽样的角频率，为抽样频率。这种抽样方法可以避免频谱混叠。

可以证明，DFT计算出的频谱是连续信号的频谱周期化后的抽样值，其抽样间隔为，根据周期化的频谱与原来频谱的关系得到原来频谱的信息（由于连续非周期信号的频谱是连续谱，所以得到的是原来连续谱中的离散信号）。也就是说，对于连续非周期信号，先对其采样得到等间隔有限长序列，对其进行N点的DFT，可以得到周期化后的在N个点上的频谱值，从而得到原始连续非周期信号的频率信息。

如果连续信号不是带限信号（在频率的一个区间内有值区间外为零，即它的带宽是有限的）或者抽样频率不满足奈奎斯特采样定理，在信号离散化时会产生频谱混叠现象。为了避免频率混叠，非带限连续信号在抽样前通常都会经过一个模拟低通滤波器（抗混叠滤波器）。

这样的序列在时域上仍然是无穷的，离散化之后的序列也为无限长，我们需要得到有限长的序列，在原有的信号上乘以一个函数（这个函数在时域上是有限的）将其截短成为有限序列。

考虑到加窗后的傅里叶变换，不加证明地给出傅氏卷积定理，时域的乘积等于傅里叶变换的卷积

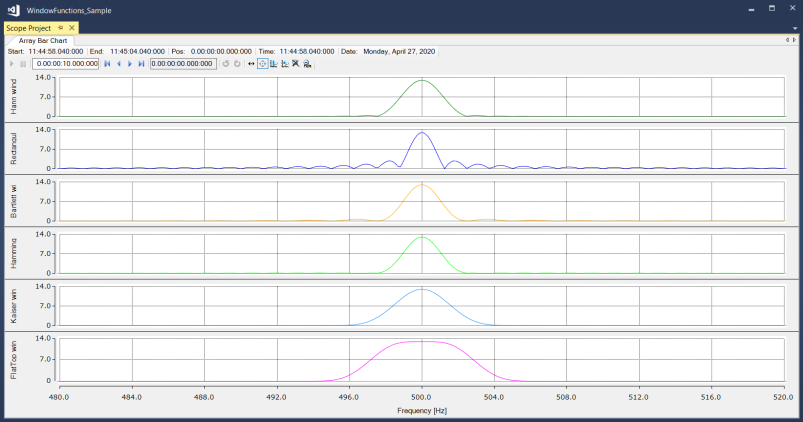
这里给出相对于采样点N之外的另一个重要参数，窗口长度L。对于一个矩形窗，它的离散时间傅里叶变换图如下：

图表

描述已自动生成

可以看到，矩形窗的幅度谱由一个高度为L的主瓣以及若干幅度较小的旁瓣组成，主瓣的宽度为。主瓣代表矩形窗的直流分量，旁瓣则由于矩形窗在两个端点突然被截断而产生的许多高频分量。随着L的增大，主瓣的幅度将会增大，主瓣的宽度将会缩小，但旁瓣的幅度会随之增加。这会产生频谱泄漏，即主瓣会扩散原本只有单值的最大频率，假如频谱中两个频率比较相近，它们可能会无法分辨。此外，旁瓣会增加原本信号中的高频分量，如果附近存在另一个频率，那它的幅值将受到影响。

建议使用如下几种典型的窗函数，比如Hann窗、Hamming窗、Kasier窗等



发生频谱泄漏的根本原因是：FFT 仅分析信号的短片段信号（N 个样本），但是通常想要从这个片段信号中提取有关整个信号的信息。而实际上FFT输出是一个由N点样本重复拼接起来的信号，通常来说这个拼接信号在边界点处不连续，因此FFT的输出频谱代表的并不代表“真实”信号。 对于信号来说，只有那些周期（或者周期的倍数）刚好和信号长度相同时，频谱泄漏才不会发生。

在此基础上，我们需要解决栅栏现象导致的问题。由于最后获得的频谱信号是离散序列，因而反应不了抽样点之间的细节，而有时候时频信号中某些重要的信息就隐藏在抽样点之间，需要使用零填充来提高信号频谱中的分辨率，这种方式可以简单地理解为提高采样频率，同样选用平定窗（flattop window）亦可以帮助改善此问题。

不加证明的说明关于零填充的问题。对于任意有限长的序列，在其前后进行零填充不会增加任何信息，补0前后的两个序列对应的DTFT完全一致，但是对应的DFT则存在明显的差异，也就是说信号的信息不发生变化，但频谱中的分辨率得到了提升，DFT会展现出更多的细节。补0会增加频谱中一个周期内的采样值，即得到的频率曲线更加平滑。快速傅里叶变换FFT本质上就是一种DFT，但其计算速度随计算量快速上升，远高于DFT。为了更好地利用FFT，需要将有限长序列进行零填充，成为2的整数幂次。

为了保证边缘的信号不会丢失，采用50%重叠的办法进行加窗。

以上的内容就是对一个连续非周期的信号处理的一般步骤。

### FFT的误差分析

FFT的误差来自下图中的几个信息

![图表

描述已自动生成](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAkACQAAD/4RDaRXhpZgAATU0AKgAAAAgABAE7AAIAAAAFAAAISodpAAQAAAABAAAIUJydAAEAAAAKAAAQyOocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEp1ZHkAAAAFkAMAAgAAABQAABCekAQAAgAAABQAABCykpEAAgAAAAMyMQAAkpIAAgAAAAMyMQAA6hwABwAACAwAAAiSAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMzowNzoyNiAxMDowMDo0OQAyMDIzOjA3OjI2IDEwOjAwOjQ5AAAASgB1AGQAeQAAAP/hCxdodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDIzLTA3LTI2VDEwOjAwOjQ5LjIwNzwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5KdWR5PC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAsUEYQMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAgur61slDXdxHCD3dgKfBcQ3UYkt5UlQ9GQ5FcH4dtbfxT4q1261uBLtbS48iCCYbkRR32njNUNWmuvCPjSe18Nqqw3Fkbj7KQTGjKecDtn2o7X6/8ADh3t0PT6K4O48fSSLpLWAjdZbV7q84zsVR0HpzmsWL4mXwtbfWXvdPls551jOnRqfORWbAbdnk+2Kdne39dg6XPVqM4615nD4i8Y69q+vRaJcWFtDprYhWa3Z2l4yAfmGKvR+O7nUtP0JdNWI3d+SbhWUkRqo+bjP1FLp/XUHod3DPFcR74JFkXJGVORkU+vJbH4jXEegabbxrYWF5qN3cxrKY9sMSxyEbioPJP1qeT4j6pb2+o26SWl9PpctvJLdQxkRzQSMVOBnhhj1NVy6gep0V5s/wATZYfHGpWU8US6Pb6a9xFcd2mQbmXP+6a6rQ9YvH8EW+r64iJcG38+VIxgDjOKnaPM/wCt/wDIOtv66f5m/UD31ql0ts9xGs7crGWG4/hXnS+NPEaeE7fxjMLQ6VcBZPsQjPmJE3Rt+eTjnGKg8JWl3ffGPxDeXtxa3McMUDRbrb5kVlJAViTt98darlfNZg2rXPU6K4bxT40ms/FUPh7T7y00+ZoDcSXV2pZVAIAUKCMk59awbz4laxJoaDSxaNqC6lFZPKULROGbG5Rn+tSve2/rW35g9N/60uer0V5u2ueMV8aReH/t2n4W1+0S3H2VufYDfToPFniTUtIvdesDZpYWUjJ9neMl5ghwTuz8vT0NHS/9dh26Ho1FebW3jPX/ABB4pis9Ee1trRrBLtjLCXYkk5X7w9KNH8Y65qOrFLi9060ZZzG2n3ETI5UfxB88/TFOz2/rsTfS/wDXc9GmmjgjMkzrGg6sxwKeCGAIOQehrl/iDq0ujeC7m+hgt53Rkwk6b0OWA6fjWAniXxPqfiDVNO0qSwtYbG3SVHkhLEkqDtwGFLv5D7Ho9UJdd0qGVopdQt0kQ4ZTIMg1neCfEMnijwnaapcRLFLKCHVTxuBwcflXnnha+8M22u+KE13S47uc6q5V2sPOwNi8Zwfyp295x8v8v8w+zf8ArqerSazpsUEc0l9AkcnCOZAA30pi69pLKzLqNsQoyxEg4rzfx82i2vijwO81hEdM8+Y/Z1tQVwYmx+7x6+1djosHhTWY5xp2h2iIMCQSaese7v3Xmi2lw6mqviLR2baup2pb0EorSByARyDXmXhPw9oz/E3xdG2kWDJDJD5am2TCfu16DHFemgAAADAHQCjon3Dq0FFFFIAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKx9d8S2mgtDHPHNPPOcRwW6F3b6AVJoXiCy8QW0ktkXVonMcsUi7XjYdiOxoWobGpRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBylz4b1PTtaudU8MT26vdnM9tdZCMf7wIBOfwqTSfC841W41fXp47i/nj8oLED5cSegzya6eigDgPC3w2bRb7Wnv7pLiC+3R2yKDmGI8lefcmorL4f6naxwaasmmpp0MocXKQD7Qyg528rj8c16JRTu1/XYDmvDXhibQ9a1i8lmSSO/mEiKoOVHvWR4c+Hb6H4w1XVnu0ltrjd9kgAP7gMST+prvKKX+Vg/wCHPNbf4YXFto9htntJdR0+5nmi85N0TrI5ba2RnuOcVr2Xgu5l07WF1eS1jm1ODyRDZxhYoQAcEHAJOTmuzopt3Vg63PJrn4O3l14P0nS31RBeWt9593cAH9/ERtdOndeK9QksYZdMaxcfuWi8ogemMVZook+ZWYLR3R52ngDWToEHhee/tjoVuVVZAG89ox0QjGPbOa39D8Ly6T4v1jVjNG0F9HCkcYzuTYCOa6Wijme4HH+I/B0974kh17ShZSXaQmB4b6PdG6kg5zgkEY9Kz5/h9fXGn2iSXluLiPUI7yUJHtjUK2dqgD+degUURfLt/Wtweu/9dDmh4YmPj1tdaaMwNafZzHzuz61jf8IRrNlZ3uj6VfWy6Teys7GXd5sQY5IAAwfzFd9RS8v67jv/AF+Bx+ieCH0TxR9vtrhPsy2CWiIQdwK55P51T1jwdrevXAg1F9M+zrMsi3kaMtwADnGMY/Wu8op3d0/67k20/r0Od8X+G5vEXhCXR7adY5G2Ykkzj5WB7fSqmkeEbnTte1W/kuI2S+hSNFXOVIXHNdbRS7+Y+3kc/wCCPD03hfwtb6XczJNJEWJePODlie/1pnhTw3P4fuNYknmjlGoXzXKBM/KCqjB9+K6Oind3v/X9aCtpY5vXvDM+reLfD+rRTRpHpUsryI2cvujKjH510lFFLpYfW5zmieG59L8X67q8k0bx6m8bIi5ym1QvP5V0dFFHSwdbhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAcNqm7/hcGleZ/q/sbbc+uTSeDSP8AhPfFnlf6r7SnTpu2Lmuh17wzZ6+0ElxJNBPbnMU9vIUdfxFSaD4esvD1q8NlvZpXLyyytueRj3J704uy18/xdwlr+H4HOwWup694o11Brt7Zw2dwkUUUBAABjVj+prQ/4RPUP+hq1T/voUnhj/kavFX/AF+x/wDolK6ikBzH/CJ6h/0NWqf99Cj/AIRPUP8AoatU/wC+hXT0UAcx/wAInqH/AENWqf8AfQo/4RPUP+hq1T/voV09FAHMf8InqH/Q1ap/30KP+ET1D/oatU/76FdPRQBzH/CJ6h/0NWqf99Cj/hE9Q/6GrVP++hXT0UAcx/wieof9DVqn/fQo/wCET1D/AKGrVP8AvoV09FAHn1ppGrz+L7/TH8Ual5NvBHIhBGct1ra/4RPUP+hq1T/voVsw6baw61c6hGT9pnjVJBu7DpxV6gDmP+ET1D/oatU/76FH/CJ6h/0NWqf99CunooA5j/hE9Q/6GrVP++hR/wAInqH/AENWqf8AfQrp6KAOY/4RPUP+hq1T/voUf8InqH/Q1ap/30K6eigDmP8AhE9Q/wChq1T/AL6FH/CJ6h/0NWqf99CunooA5j/hE9Q/6GrVP++hR/wieof9DVqn/fQrp6KAPPvE+k6vo+n201t4o1ItLeQwNuI+67AGtr/hE9Q/6GrVP++hWzq2mWuq20UN6SEjnSZcNj5lOR+tXqAOY/4RPUP+hq1T/voUf8InqH/Q1ap/30K6eigDkrrw5eWkBll8V6oAOANw5PpTNP8ADWtO5lufEeoCFh8sbEZ+tdBcKLjWoYpOUij8wD1Ocf0rQqLcx0KXskmt2cZN8PpppjIfE+rqT2WXirFn4LubGNhD4k1NmI4Mj5xXV0U+SIliKqd7nEDQNXt7kRX/AIn1IK5wkqkYPt7Vf/4RPUP+hq1T/voV0N7Ck9lKkgyNpP0PrVewv4WtYUlnUzbBuyevvQtHZhKPtI88Vr1Mf/hE9Q/6GrVP++hR/wAInqH/AENWqf8AfQrplYMMqQR7GlqjA5dvCeohSf8AhKdU4H94VjeFNI1fW/D63t14o1ISG5uIsKRjEc7oP0UV6CRkEHvVHR9MtdI00WlgSYRLLIMtn5nkZ25/3mNAGN/wieof9DVqn/fQo/4RPUP+hq1T/voV09FAHMf8InqH/Q1ap/30KP8AhE9Q/wChq1T/AL6FdPRQBzH/AAieof8AQ1ap/wB9Cj/hE9Q/6GrVP++hXT0UAcx/wieof9DVqn/fQo/4RPUP+hq1T/voV09FAHMf8InqH/Q1ap/30KP+ET1D/oatU/76FdPRQBzH/CJ6h/0NWqf99CsVtJ1dfHUWjjxRqX2d9Ne6JyM7hIq/lgmvQapHSrc68urkN9pW2NsDnjYWDHj1yBQBi/8ACJ6h/wBDVqn/AH0KP+ET1D/oatU/76FdPRQBzH/CJ6h/0NWqf99Cj/hE9Q/6GrVP++hXT0UAcx/wieof9DVqn/fQo/4RPUP+hq1T/voV09FAHMf8InqH/Q1ap/30KP8AhE9Q/wChq1T/AL6FdPRQBzH/AAieof8AQ1ap/wB9Cj/hE9Q/6GrVP++hXT0UAcx/wieof9DVqn/fQrF1HSdXtPFej6bH4o1Iw3sVw8hJGQU8vGP++zXoNUrnSre61az1GUN59mkiRYPGH27sj/gAoAxf+ET1D/oatU/76FH/AAieof8AQ1ap/wB9CunooA5j/hE9Q/6GrVP++hR/wieof9DVqn/fQrp6KAOY/wCET1D/AKGrVP8AvoUf8InqH/Q1ap/30K6eigDmP+ET1D/oatU/76FH/CJ6h/0NWqf99CunooA5j/hE9Q/6GrVP++hR/wAInqH/AENWqf8AfQrp6KAOY/4RPUP+hq1T/voVneINB1XS/Dt/fQeKdTMtvA8iBmGMgZruKralZwajplxZ3ZIgnjMchBxwRzzQBy+neGtTu9LtbiTxTqYeWFXbDDqRmrX/AAieof8AQ1ap/wB9CuitYEtrSKCH/VxoEXnPAGBUtAHMf8InqH/Q1ap/30Kl8CXt1qHgyxuNQna4uGVg8rdWwxGa6KuX+HH/ACIlh/wP/wBCNAHUUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHL+GP+Rq8Vf9fsf/olK6iuX8Mf8jV4q/6/Y/8A0SldRQAUUUUAFFFFABRRRQAUUUUAFFFFAFSKztY9Wnu42JuZUVZF35wB047VbqpFbWaatPcRFftciKsoD5O0dOO1W6ACiiigAooooAKKKKACiiigAooooAqalZ2t7BGl6xVElSRSH2/MDkfr2q3VPUrWzuoI01AqI1lR03Pt+cHK/r2q5QAUUUUAUdRgl3R3VsN0sPVf769xUtpfw3afI21+6NwwqzVa40+3uTmRMN/eU4NTZp3RspRlHln06mH4/wDFZ8GeD7vWEhE8kQAjjY4BYnAqz4P8RDxR4SsdYMYhNzEHZM5CmvNP2g5X03wTbQLM8sc9wA0b9MAZrf8Ag9axX/wz0uSXeFVcBA2AMV708HGOTxxPJ7zm1e/S2xnaHPbn/Bna3d2bwmzsTuLcSSj7qD+pq2LC28hYmhVlVQoyOcVLFDHAgWJAq+gFPrwUu5pKpolDRFFtJgBBheWHHQI/H5U37PqMP+qukl9pU6flWhRRyoXtp9dfUzzeXceRcWZZcctG+c/hVfSbnTLKxW3tXkSPzJGHmksdzOWbnn+In6dK2DyDnpVHTrGwt7AQ2AR7fzJGyG3Dczktz/vE0WfcfNB7x+4txzxS/wCqkV/91s0+qcmlWj9I/LOc5Q4pn2C4jbNveuBjhHGRRdhy03tL7y/RVDzNThxviinHdlbafyoGrImftNvPBjuyZB/LNHMuoexk/h19C/RUEV9azECOeMsf4d2D+XWp6q9zJxcdGgorm/Gl/cWenWsVtIYjdXKQtIvVVJ5qjrttL4b0Z5dOvJ/9IkSL9424Jk4LCsnUtfTY7qODdWMHzWcnZfI7B3EcbO3RQSarabqVvq1il3ZljE5IBYYPBwf5Vymoxv4f1LT47S4lkjvkkWZJH3ZIX7w9OtYVjayab4DtdXt7qZblbvAw3y7TKQRio9q+a1tjsp5bCdJSU/iaS078y1Xqj1OivOn1K61fWtUW4tNRlW0YRwfZCoVDtzuOWH+RUVg9/r3iHRrfVp5Yg1hI80cUo+dgwwSVOKFWu7JC/sqSjec0rK769L99fwPSqK80XULzUZtWla11KSS0uHhtmgZQkYQ4GcsPTNW7aS91vxDpcGpTyRCXSvMnihk4L565FCr81rLcUsqlBNymtFr91+53F7f2+nxLJdPsVnCL7knAFWK8svEa/wBBaC8mklFnrKwxMXOdvynB/Ou917da+FLz7O7I0du21s8jjrmqVR8jnbRf5XMq+BjS5IqV3JteXS35mtRXn0n2jQ9H0nVIbyWe4nZFlDvkSA+1EBuLzwrP4hkvZUvVdmXD/KoDEBcUva2bVti/7M05ufS/Lt1/y8z0GivM7jWdQjhvLUTstxqMMUtsCeVJHzY/EUWuu389uHSZ3l0qyczgN96TOBn+dL26XT+upp/Y9Xl5uZf0v89PU9Morze0vtRjTTr21tNQE80q+fJO6CJ1J5x81a3hO1a91TUb26uJneG6dY1Lnaoz0xVRqcztb+v6ZlWy32UJTlNWX53t3OyormNXeTUfFttpEkkkVt5HnN5ZxvOSMZ/CudhvLjTbfXLZ9RnfbfpFCQNzkFQdgodWz2JpZc6sU1LWydrdG7Ho7tsjZsE7QTgdTTYJhPAsoR0DDO1xgivPY7q907xHPZos0EE2lyzbJZdzbxjn261HoPn6xq+l213dzmF9MMkiq5G87hzSVa7sl/Wv+Ru8qtBzc9LXv5Wf+Xc9KormPA9zPLY39tcStMLO9lgjZzk7VYgZrp61jJSipLqeXiKLoVZU272CiiiqMAooooAKKKKACoL63hu9Pnt7s7YJEKyHdtwCOee1T1Xv4be40+eG9IFvIhWQs20bcc89qAJLeNIbaOOE5jRAqnOeAOOakqO3SOK2iSDBiVAEwc8Y45qSgArl/hx/yIlh/wAD/wDQjXUVy/w4/wCREsP+B/8AoRoA6iiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5fwx/wAjV4q/6/Y//RKV1Fcv4Y/5GrxV/wBfsf8A6JSuooAKKKKACiiigAooooAKKKKACiiigCuljbx38t4kYFxKoV37kDpVioUgt1vJJ0RBO6gOw6kDpmpqACiiigAooooAKKKKACiiigAooooAr3ljb38SR3cYkRJFkUHsynINWKhure3uI1W7RGVXDKH7MDxU1ABRRRQAUUUUAeJftLkf8Ivpozz9o6fhW5+z5M0vwtgV2LFJ5FGew3HFc5+0z/yBdJ/66n+VbX7Okm74clMfduH/AJ19xWj/AMYvB/3/APM5l/HZ61RRRXw50hRRRQAEZGDVexsrfT7UW9nGI4g7vtHqzFmP4kk1YqG0gt7a3EdmiJFuZsJ0yWJb9SaAJqKKKACggHqM0UUAV5bG2mz5kKknvin29vHbR+XCML6ZqWilZFOcmrN6FPU9MttWsmtrxNyEggjqpHQiqCeF7NoJY7uWa8Eq7SZn3ED2qTxTO9v4ZvnhuFt5fKYJITjBxxXK+ALgXN5Lcwj7JbbBG8Dty0vdsVi3F1OVo9TD0q7wkq0Z2UXt56f1p21OntvDFrBcCaaae5kVCkZmfd5ansKU+F7E6AmkfvPsySCQfNzndu6/Wp9f1b+xNHlvfKMpTAC/X19qz7TX7yOwubzU47VraGHzRLayZB/2SCc5pt04uxEHjKkFVUtLq2vVdvv/ABLF14Ytbi6e4hmntXlULN5L7fNA9altvDlhaalbXturI9tAYI1B42k5NVNN1bWbvybqawh+wzoXBjc70GMjIPXPtWXceNruzNpcXVvbR21xcLB5BY+em44yecUr04u7RrGjjajdKMr203XmrfgzYufC1ncXc00c01uLhszxxPtWU+4qzFoNnBqkN9CpSSC3+zooPyhPpXAXs8gbUf3jceIYwOe2RxXVt4k1C7kvpdKtIZLSwkMcjSE7pCo5249PeohOG9vP8P8Agm1bC4qMVapdWt26LT53sW5PCenyWdzbZkC3Fx9pLBuVfjkflVjWbGWfwxd2VvulleBo03Hljj1rF/4S+9v9TsbTRbSGQXdq0++Yn93ggEHH1qKfxR581lFd2ERukvlgkBORGT0Zapum1y99P0M1h8a5Rc9ba2utPl8rF3QPCcVnY2LXzzSywRjEMj7ljb2FTv4QsHlfEky28j73tlfEbH1xWSvjHVZNPvtQSwt/stlO0bgsdzqD1HNaL+JLq9uvI0S3ikZIVmkMxOACMgDHehSptaIqpDH+0c3K3fVWXX5bl668N6fd6rZ6hJGRNZqUj2nAx6U3TvDGm6a1+bePP29i0wY5z7U3wvrc+vaU91dW4t5EmeIxg5xtOK53TtcOkzauQhnnmvxFChPGSP5U24Jp23/4H5mcaWLlz0eZ3jZWv59/J6nQW/hSyguInMs8kULbooHfKIfYVe03SLfSjcG23fv5DI+455NYVx4su9Iklg1mzjMwgaaL7PnDgdRz3qbTPEGoXNu11cQWstv5RkBtnO5fYgnrQpU09P6/qxNWjjJQcpyvF+ej9B3iWyuLi6t5rexmmMYOJbaUJIvtz2rP0PwYv9n3q6mskbXd0LhBvy8ZAABz61c0HxFqOsNDOIbQ2s3O1JCJIv8AeBNdPRGEZPmCpiMThIfV9E/J66O/5nPR+DrFdQN9LPcTXJge3aSSTJKNVjTvDFjpd3BcW3mb4Lf7Om5s/LnNbNFaKEVsjjljMRNcspu2xQ0vSLfSftP2Xd/pM7TvuOfmY5NX6KKpJJWRhOcqkuaTuwooopkBRRRQAUUUUAFRXVtDeWkttcoHhlUo6nuD1qWo7iKKe2kiuVVonUhw3Qj3oAWGJIIUiiG1EUKoHYCn02NEjiVIgAigBQOgFOoAK5f4cf8AIiWH/A//AEI11Fcv8OP+REsP+B/+hGgDqKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDl/DH/I1eKv8Ar9j/APRKV1Fcv4Y/5GrxV/1+x/8AolK6igAooooAKKKKACiiigAooooAKKKKAKcVlZx6tPdxY+1yoqy/OT8o6cZ4q5VOK2sU1ae4i8v7a6KsuHy20dMjtVygAooooAKKKKACiiigAooooAKKKKAKep2VnfW8ceoY8tJkkTLlfnByvf17VcqnqdtY3VvGmp+X5azI6eY+0bwfl79c9quUAFFFFABRRRQB4L+03cqtjo9uQd7uzg+wrY/ZvkLeBblD0W4bFc7+09/r9C/3ZP51v/s2/wDIk3f/AF8Gv0CtFLhWHr/7czkX8c9looor8/OsKKKKAA8g56VT0uys7CwEGm4+ziSRxhy/zM7M3JP94n6dKuHkHPSqel21jaWAi0ry/s3mSMPLfcNxdi/P+8W+hoAuUUUUAFFFFABRRRQBieJtHm1ezg+ysvm20yzLHJ9yTHY1zcvhbWLzxXba79mtLMRMPMtBKzCT/aJGBn8K7+isnSi5c3zPQw+YVqEOSFuq+T3X9fIq6ity9i4tI4ZZT/BMCVb2rkk8JXN9dXUj2cOjwz2zQvBbS71lY9HPAHGPSu3opypxk7szoYyph4tU+vX+tPvRzNhb+IY9Pj0t4bWCGOIxG6EhZmG0gFV42nOO5rBn8Ka1LoNtpsVhZQvbXEcr3AkJa42uGz04Jx716JRUukpbs3p5lUpy5oxS1v131138/TscJceEtTlN3tEX77V0u1+f/lmDz261dj0bWNK/tKz0yKCe2v5nlWWSTaYSw+bIx83OT2rrqKFRitv6/qwSzKtJcskmu33f5HnMVlfaB4x0uy0uKO7ki06QOsj7N2XUkg4OOTV9vCeoyXNteSNG07X63M67uEUA8D1612ZghM4nMSeaBtD7RuA9M1JQqS6/1rc0nmlR2cUr2s331b/U4+Dw1fx+FdWsGEfn3c0jx/NxgnjJqoEk8PaiWtpbR7iS0SOeGaby9pVcbgcc/Su7qtc6dZXjq13aQTsvQyRhiPzpOlZe6TDMZNyVVXT3X3f5GB4AS4Xw48l2B5ktzI+QMAgnqKov4Rv3e7uFaNZxfLdW4JyGAGMH0rtURY1CooVRwABgClq/ZppLt/X6GbzCoq06sFbmZyo0rWL/AFddUvIba3lt4THDBvMisT1LHioLbQNQfW4r+PT7TSnjB3+RIWW4PuABx+ddjRS9kr3EswqJWSS0t10XbfX53ONOgaheaxbXLabaabLDJukuraTmYem3A/UmuyooqoxUVZGFfEzr25um39O4UUUVZzBRRRQAUUUUAFFFFABRRRQAVXv7e3u9Pnt73H2eWMrJltvykc89qsVXv4ba40+eG/2/ZXjKy722jbjnJ7UASW8UcNrFFB/qkQKnOeAOOakqO3SKO1iS2x5KoAm05G3HHNSUAFcv8OP+REsP+B/+hGuorl/hx/yIlh/wP/0I0AdRRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAcv4Y/5GrxV/wBfsf8A6JSuorl/DH/I1eKv+v2P/wBEpXUUAFFFFABRRRQAUUUUAFFFFABRRRQBAllbR30t4kSi5lUK8g6sB0FT1CkFut5JMiILh1Adh94jtmpqACiiigAooooAKKKKACiiigAooooAr3llbX8SR3sKyokiyKG7MDkH8DViobqC3uI1W7RHRXDKH6BgeD9amoAKKKKACiiigDwP9oY7/E3hlGAK+Z0I/wBoVd/ZskY6TrkZY7EuxtHpwKqfH6Jrjxl4WhT7zyhR+LCrX7Nw2WPiCNvvC7HH/ARX6FUt/qyl5L/0tnIv4x7hRRRX56dYUUUUAB5HNQWVlbafai3sYVhhDu+xem5mLMfxYk/jU/1qG0gt7a3EdmiJFuZtqdMliW/UmgCaiiigAooooAKKKKACiiigAooooAKM0VCYLY34uCifahEUD/xbMgkfTIFAE1FFFABRRRQAUUUUAFFFFABRRRQAUZoqGSC3e7hmlRDPGGETH7yg43Y/IUATUUUUAFFFFABRRRQAUUUUAFFFFABUV1bQ3lrLb3UayQyqVdG6MD1FS1HcRQzW8kVyqvC6kOrdCO+aAFiiSCFIoVCxooVVHYDpT6bGiRxIkQARQAoHQCnUAFcv8OP+REsP+B/+hGuorl/hx/yIlh/wP/0I0AdRRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAcv4Y/5GrxV/wBfsf8A6JSuorl/DH/I1eKv+v2P/wBEpXUUAFFFFABRRRQAUUUUAFFFFABRRRQBTis7KPWLi7iC/bJUVZTu52jpxVyqcUFgurTzRBPtroolIb5tvbIq5QAUUUUAFFFFABRRRQAUUUUAFFFFAFLVLOxvreKPUgpjSZJE3Nt+cHK/rV2qepwWE9vGuqBDEsyMm9sDeD8v45q5QAUUUUAFFFFAHg3xu/5Kb4S/6+I//QxVj9nT7/iL/r6/pS/Fi3jv/jD4StZCy4lViR7MDTf2d2C3XiOLv9qzX6DUf/GPcv8Adj/6WzkX8U9yooor8+OsKKKKAA8g56VT0qzsrDTxBpYUW4kkcBW3Dczsz8/7xarh6HPSqelQWFvYCPSQgtvMkIEbZG8uxfn/AHi340AXKKKKACiiigAooooAKKKKACiiigAqkbKxOurfEL9vW2MKndz5RYE8f7wHNXapmCw/txbghP7RFsUU7vm8rcCePTdjmgC5RRRQAUUUUAFFFFABRRRQAUUUUAFUrmzsZtWs7q4C/a4FkW3JbBAbbv47/dWrtU7iCwfVLSW5CfbI1kFuS2GAO3fgd+i0AXKKKKACiiigAooooAKKKKACiiigAqvqFvbXenXFvfgG2ljKygnA2kc81Yqvfx2s2nzx6gFNq0ZEoc4G3HOTQBJbRxQ2sUVvgRIgVMHPAHFSVHbrElrEttjyVQBNpyNuOKkoAK5f4cf8iJYf8D/9CNdRXL/Dj/kRLD/gf/oRoA6iiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5fwx/yNXir/r9j/wDRKV1Fcv4Y/wCRq8Vf9fsf/olK6igAooooAKKKKACiiigAooooAKKKKAKcS2A1acw+X9uKL52D823tmrlQJFarfSSxrGLllAkYfeI7ZqegAooooAKKKKACiiigAooooAKKKKAKeprYNbx/2p5flechTzDgeZn5fxzVyoLuG1mjRb1Y2QOrKJOm4Hj8c1PQAUUUUAFFFFAHiXxI/wCS6+Ff95f51X/Z5/5CniP/AK+KsfEf/kuvhX/eX+dHwSIi8beK7eNQqC5JAHbmvv6j/wCERx/6dx/9LZy/8vPme20UUV8AdQUUUUAB6HPSqelLYLYAaT5f2bzJMeUcrv3tv/Hduz71cPvUFnFbQWwSxWNYdzECPpuLEt/48T+NAE9FFFABRRRQAUUUUAFFFFABRRRQAVTK2H9uKx8v+0fsxC8/P5W4Z/DdirlQGG1/tETFY/tYiKBv4tmQSPpnFAE9FFFABRRRQAUUUUAFFFFABRRRQAVTuFsDqlobny/toWT7NuPzY+Xfj/x3P4VcqCWG1e8gkmWM3CBhEW+8AcbsfkP0oAnooooAKKKKACiiigAooooAKKKKACq9+LVtPnGobPspjPnbz8u3HOasVFcxwy2siXQVoWUiQP0I75oAW3EQtYhbbfJ2Dy9vTbjjFSU2JUSFFhAEYUBQvTHanUAFcv8ADj/kRLD/AIH/AOhGuorl/hx/yIlh/wAD/wDQjQB1FFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBy/hj/AJGrxV/1+x/+iUrqK5fwx/yNXir/AK/Y/wD0SldRQAUUUUAFFFFABRRRQAUUUUAFFFFAECfZvtsnl+X9p2jzMfex2zU9U4o7AavcSQiP7cyKJiD823tmrlABRRRQAUUUUAFFFFABRRRQAUUUUAQXf2by1+2eXs3rt8zpuzx+OanqnqcdhLbxjVBGYhMhTzDxvz8v45q5QAUUUUAFFFFAHiXxH/5Lr4V/3l/nR8GAU+IXi1W4bzzx+NHxH/5Lr4V/3l/nUHwrzF8cvF0TnHLcZ77zX37V8oa/6dJ/+TnL/wAvPme6UUUV8AdQUUUUAH1qCz+zfZx9h8vydzY8vpu3Hd/49nPvU56HPSqelR2EVgF0kRi28yQjy+m8uxf8d27PvQBcooooAKKKKACiiigAooooAKKKKACoD9m/tAZ8v7X5Rx/e2ZGfwzip6pmOw/txZSI/7R+zFVOfm8rcM/huxQBcooooAKKKKACiiigAooooAKKKKACoJfs32yHzfL+0Ybyt33scbsfp+lT1TuI7BtVs3uRH9sVZBblj82Dt34/Jf0oAuUUUUAFFFFABRRRQAUUUUAFFFFABUdz5P2WT7Vt8nad+/wC7jvmpKr36WsmnTpqG02rRkS7+m3HOaAJotnkp5OPL2jbt6Y7U6o7ZYltYltseSEAj29NuOKkoAK5f4cf8iJYf8D/9CNdRXL/Dj/kRLD/gf/oRoA6iiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5fwx/yNXir/r9j/wDRKV1Fcv4Y/wCRq8Vf9fsf/olK6igAooooAKKKKACiiigAooooAKKKKAKcRsP7WnEPl/bti+dj723tmrlQIlqL2Ro/L+0lR5mCN2O2anoAKKKKACiiigAooooAKKKKACiiigCnqZsBbx/2p5flecmzzOnmZ+X8c1cqC7S1eNBe+XsDqV8wgDdnjGe+anoAKKKKACiiigDxL4j/APJdfCv+8v8AOoPh7iH9ofxXGecu4B/4Ean+IhEnx68LRoQXUqSo7DNN8NItr+0vraRDAmQs31PNffxf/Cdy/wDTl/8ApZy/b+Z7fRRRXwB1BRRRQAHoc9Kp6WbA2A/sny/s3mSY8vpv3tv/AB3bs+9XD71BZpapbBbHy/J3MR5RBXduO7p33Zz75oAnooooAKKKKACiiigAooooAKKKKACqZNh/big+X/aP2Y7f7/lbhn8N2KuVAUtf7QDny/tflEDkb/LyM++M4oAnooooAKKKKACiiigAooooAKKKKACqdwbD+1LQXPl/bCsn2bd97Hy78f8Ajv6VcqCVLU3kDTeX9oUN5O4jdjjdj9M/hQBPRRRQAUUUUAFFFFABRRRQAUUUUAFV782o0+c6ht+y+WfN3/d245zViorlYGtZFu9nkFSJPMPy475oAW38r7LF9mx5OweXt6bccVJTYhGIUEO3ywo27emO2KdQAVy/w4/5ESw/4H/6Ea6iuX+HH/IiWH/A/wD0I0AdRRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXNePPEE/h3w011ZSRR3DyLHG0uNqknGTmrmreHF1W6Ex1TU7XAxstbySJT+CkVj6xpum6FpcP8Aa1vea3bC4Vme8macwf7fzZ4FL1GJY+ILi10C+1a616y1eK3iLbbVFG1gOhIqhD4m8Qacukahq8tvNZarIEESR7TBuGV571j69af8JNqd9J4WKvp509kkMIwjv2HuaLjVbfxFpXhjRtM3SXltNG1zFtIMIQYO705rSKTa+X3a3Je33/kje0nxHo2keL/E8Wq6paWcj3cbKk8wQkeUvPNdhZ6rYahLJHY3kNw8QBdY3DFc9M49a5vw7ZW1x4q8UG4t45WF5GAXQH/lildXHBDCxMUSIW6lVxmoGR29/aXdxPBbXMUstu22ZEcExn0I7UW1/aXsk8dpcxTPbyGOZY3BMbD+E+hqVIY43Zo0VWc5YgY3H3oSGOJmMaKpc7mIGNx9TQAkVxDNJLHFKjvC2yVVOSjYDYPocEH8ajg1C0urq4tra5ilntSBPGjgtGSMgMO2anVFVmKqAWOWIHU9KakMccjuiKrP99gMFvrQBFbahaXk08NrcxTSW7bJkRwTG3ofQ0WuoWl60y2lzFO0D+XKI3B2N6H0NSpDHGztGiqznLEDG4+9CQxxFjGioXOW2jGT60ARWmoWl+JTZXMVwIZDHJ5bhtjDqpx0NFvqFnd3E9vbXMUs1uQs0aOCYyeQCO1Sxwxw7vKRU3HJ2jGT60JDHG7PHGqs5yxAwW+tAEVtf2l7JNHaXMUzwNslWNwSh9D6Gi1v7S+Mos7mKcwtsk8tw2xvQ+hqVIY4mYxoqlzliBjJojhji3eUipuOTtGMmgCnYanpWo3U4067trieI7ZhE4Zk9jjpVuG4huN/kSrJsYo2052sOoPvVS1g0uHVrk2kcCXzKpn2KAxHbNXlRUztUDJycDqaAILXULS+aZbO5inaB9kojcHY3ofQ0Wl/aX4kNlcxXAico/luG2sOxx3qWOGOIsY0VCxy20YyaI4Y4s+UipuOTtGMmgCKz1C01CJpLG5iuEVijNE4YAjqOKLLULTUrfz9PuYrmHJXfE4YZHBGRUscMcKlYo1QE5IUYyaIoY4U2QoqLnOFGBQAkFxDcxl7eVZVDMhKHIDA4I+oIIqOz1C01BJHsbmK4WKQxOYnDBXHVTjuPSp1RUGEUKMk4A7mmxwxwgiKNUDHcQoxk+tAEVnqFnqMDTWFzFcRK5RnicMAw6jI7iiyv7TUrYXFhcxXMJJUSROGXI6jIqWOGOFSsUaopOSFGOaIoo4U2QoqLnOFGBQAkNxDcRmSCVZEVipZTkAg4I/AiorTUbO/ikksrqKdInMbtG4YKw6g+4qwqKi4RQoJJwBTY4Y4lKxRqgY5IUYyfWgCn/amlXVl9p+2W0tssuzzPMBUOD0z65qa21GzvLM3VpdRTW4zmVHBUY681BqFvpaWkaajHAsBnUoHUbfMz8v45q6kMccflxxqqf3QMCgCO0vbW/tVubK4jngb7skbBlP4inRXMM9v58MqSRc/OpyOOvNPjiSKMJEiog6KowKFRUTaqgL6AUAQWuo2d7atc2l1FNApIMkbgqMdefai31GzurI3ltdRS2wBJmRwVAHXn2qZIY4oykcaqh6qowKEhjji8tI1VP7oGBQB4Rr95bat+0poM1nPHNAYlKyRtuVsKe9PtLyM/tRGS2mVrea3LF1OVYbM5zUlxbrN+1HZC3VVS2iJZQMAfKelNu0VP2qYERQqi3AwBx9wV+gxtyKH/UM/zOTrfzPbLXUrK+svtlndQz23P72Nwy8cHn2waLfUbO60/wC3W11FLabS3no4KYHU59sGpo4Yoo/LijVE5+VRgUJDFHD5SRqseMbAMD8q/PjrIY9RsptN/tCK6hez2GTz1cFNo6nPTHFSW91Bd2iXVrMk0Ei70lRsqw9QacsMSw+SsaiPGNgHGPTFKkaRxhI1CoBgKBgAUAMjuoJrNbqKZHt3TesobKlcZzn0xUFnfadJpYvLG4gaxIZxNGwKYydxz065q0I0WLywqhAMbccAVT0qLTV0sRaQkIst8gCxAbN29t/H+9uz75oAlTUbKTTvt6XULWewv54cbNo756YqSG7t7i0W6gmSSBl3rKrZUj1zThDEIfJEaiPGNmOMfSlWNEjCIoVAMBQOMUAMFzA1r9pEqGDbv8zd8uPXNRxalZT6cL+G6hktCu4Tq4KY9c1PsUR7Ao2YxtxxikWCJIfKWNRHjGwDj8qAIRqVk2nfbxdQmz27/P3jZt9c9MUPqNlHp3297qFbMLv88uNm31z0xU3kxCHyRGvl4xsxxj6UGGIw+UY1MeMbMcY+lADftUH2P7V5yfZ9m/zd3y7euc+lEl1BFaNdSzIkCrvaVmwoX1z6U/y08vy9o2Yxtxxigxo0ZRlBQjBUjjFAEH9pWQ03+0DdQ/Y9nmefvGzb656Yok1Kyh07+0JbqFLPYH89nATaehz0xzU3kxeT5Plr5WMbMcY9MUNDE0PktGpjxjYRxj6UAQ3GpWVpp5v7q6hhtAoYzu4CAHgHP4imTX2nW8hmnuII3S3MpdnAIiB5b/dzjmrLwxSQ+VJGrR4xsIyPyqm8WmPrIWRITfm1ZQCBuMO4ZH+7uxQBaubu3srV7m7mSGCNdzySNhVHqTUcuo2cGn/b5rqKO02B/PZwE2noc+nNTvGksZSRQyMMFSMg0jQxPD5TRqY8Y2EcY+lAENxqNnaWP226uoorXAPnO4C4PTn3zUklzBFbG4llRIQu4yM2FA9c054Y5IvKkjVo/wC6RkflSlFZNjKCuMbSOMUAR3N5bWVo91dzxwwIu5pXYBQPXNMm1Gzt7AXs91FHalQwmZwFwehzU7xpJGUkRWQjBUjINI0MTxeU8atHjG0jj8qAIbjUbO0sxd3V1FDbnGJXcBTnpz70XWoWdlbLcXlzFBC5CrJI4CknoM+9TPDHJH5ckasn90jIokhjlQJJGrqCCAwyBQA2a5ht4POnlSOPj52OBzwOabeX1rp9q1zfXEdvAvWSRgqj8TUrIrrtdQy+hFEkUc0ZSVFdD1VhkUAQ3WoWdjai5vLmKCAkASSOApz05qDUNU0rTpLZ9TvLa3eUlbczSBS5OMhc9e1XJIY5Y9kkaun91hkVSvbfS5tTshfRwPdqrm1EigsB8u/b/wCO5/CgC5NcQ28PmzyrHHkDcxwMkgD8yQPxqO+v7TTLNrrULmK2t0xullcKoycDk1OyK67XUMOOCKbLDHPGY5kWRD1VhkGgCG81Gz061+0391FbwZC+ZK4VcnoMn1pb3ULTTollv7mK3jdwitK4UFj0HPepZIY5o9k0aumc7WGRRJDHMoWVFcA5AYZwaAIrvULTT1ja+uYrcSyCOMyOF3MeijPepJ7iG2RWuJVjVmCAscZYnAH1JNLJDHNt81Ffadw3DOD605kVwA6hgDkZHegCC9v7TToBNf3MVtEWCh5XCjJ4AyaLzULTT40e+uYrdXYIpkcKGY9AM96llhjmXbMiuuc4YZokhjmAEqK4ByAwzg0ARXd/aWPlfbbmKDzX2R+Y4Xe3oPU1JNcRW6qZ5FjDMFUscZJ6Clkijl2+aivtORuGcGnMivjeobByMjvQBBeahaadEsl/cxW6M4RWlcKCx6DnvUWp6npum2fmavd29tbyfLuncKrZ7c1akhjmUCVFcA5AYZwar6pBYT6bMurRxPaBCZBMoKhcc5zQAsuo2FmluJrqGFZyEg3OBvPYL6065v7SzmgiurmKGS4YrCruAZD6D1pYobWS2g8qONoUUGLAyAMcY/CpHhjkZWkRWKHKkjOPpQBl3vizw/p129rf6zY206fejlnVWX6gmsz4aSJL8P8ATpImDowYqwOQRuNdFLp9nNIXmtYXc9WZASa574bgL4C08KMAB8Af7xoA6miiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoqGe8trYgXNxFCT08xwufzpYLq3uQTbTxzAdfLcNj8qAJaKKKACkKhhhgCPQilooAakaRjEaKo9FGKRYY0YskaKx6kKAafRQBy/hj/kavFX/X7H/6JSuorl/DH/I1eKv+v2P/ANEpXUUAFFFFABRRRQAUUUUAFFFFABRRRQBTiksDq06Q+V9uVFM2F+bb2yauVTiubB9Wnt4in21EUygL8209MnvVygAooooAKKKKACiiigAooooAKKKKAKepyafHbxnVfK8ozIE81cjzM/Lj3zVyqep3Nha28b6oUETTIib13DeThe3XNXKACiiigAooooA8O0OQ3v7T+qFwCLeNlUimXv8AydZB/wBcB/6AKX4fI13+0J4kuwN0aIw3Dscikvf+TrIP+uA/9AFfoMrLETh2w/6I5Oi9T3Siiivz46wooooADjBz0qnpUlhLYBtI8r7N5kgHlLhd4dg/4792ffNXD0OelU9KubC7sBLpJQ23mSKDGu0bw7B+P94NQBcooooAKKKKACiiigAooooAKKKKACqZk0/+3FjPlf2l9mLL8vz+VuGefTdirlUzc2A1xbUlP7RNsZFGz5vK3AHnHTcRxmgC5RRRQAUUUUAFFFFABRRRQAUUUUAFU7iSwXVLRLnyvtrLJ9m3L82Bt34Pb+HP4VcqncXNhHqtnBclBeSrIbcFcsQNu/Bxx1WgC5RRRQAUUUUAFFFFABRRRQAUUUUAFV797VNPnbUdn2VYyZvMGV245z7VYqvfzWtvp882oFRapGWlLrkbcc5HegCS3MTWsRttvklAY9o4244xUlR27xSWsT22DCyAx4GBtxxUlABXL/Dj/kRLD/gf/oRrqK5f4cf8iJYf8D/9CNAHUUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUE4GTwKAPF/FzaAPibep4h0nUvEINuhSKxt5Jha+zBBxn+ldr8PP7C+yXP/CPaDf6Om4b1vbWSEufYP1rB8QRa1p/im/8Q+HvEehWVi8Sx3K3Y3fMOhJHSur8E3mr6hpr3Wr6npuoxuf3Mung7ce+aIfCE/i/rsdNRRRQAUUUUAFFFFAHL+GP+Rq8Vf8AX7H/AOiUrqK5fwx/yNXir/r9j/8ARKV1FABRRRQAUUUUAFFFFABRRRQAUUUUAQJLateyRRvEblVBkQEbwO2R1xU9QJd2z30lskqG5jUNJGD8yg9CanoAKKKKACiiigAooooAKKKKACiiigCC7ltYY1a+khRC6qplIALE8AZ756VPUF3d21nGj3sqRIzqilzgFicAfXNT0AFFFFABSMdqknoBmlqvfy+TptzKTgJC7Z+gNOKu7AeLfBFmu/Hviq7k+ZvOIz+NHiKM2X7T2mXGQFuIVAx1+6BzVj9n233t4h1DORPdYH4E1W+KjNafG/wjcIxUu6A44yN2MV99J82c1qS603H7oL/I5f8Al2n5nuVFAORRXwB1BRRRQAH3qCzltZ7YPYPFJDuYBoSCu4MQ3TvuBB981OeBzUFnd217bCaxlSWEuy7ozkblYqw/BgR9RQBPRRRQAUUUUAFFFFABRRRQAUUUUAFQGa1/tAQmSH7YYi4TI8zy8gE467c49s1PUBu7UaiLMyx/azEZRHn5igIBP0yRQBPRRRQAUUUUAFFFFABRRRQAUUUUAFQSy2qXkEc0kK3LhjCrEb2Axu2jr3Gce1T1BLd20V5BbTSxrcTBjEhPzMFxux9Mj86AJ6KKKACiiigAooooAKKKKACiiigAqK5kgitZHu2jSBVJkaQgKF75zxipaiuZ4bW1knunWOGNSzu54UDqTQA+Jo3hRoSrRlQVKngjtinU2KRJYUkhYNG6hlZehHanUAFcv8OP+REsP+B/+hGuorl/hx/yIlh/wP8A9CNAHUUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVg+OJ5bbwLrEtuzLItpIVZeo47VvVV1SO5l0u4SxSF7hoyI1uBmMt23e1TLVMqLtJM+fYr/wCHVvrfhZ4Tai3QFtSXymKO+wkGQYwx3Y65r0X4ZXmmXfiHxG3h3yxpbTI0SwpsTOOcDtzXP20/jy78RXWjwaL4Raa0QPK/lsFGeg+7muu+Hup6rcXuq6dr1lplpd2bgFdPUhWBHWtU7/c/zIemnodzRRRUDCiiigAooooA5fwx/wAjV4q/6/Y//RKV1Fcv4Y/5GrxV/wBfsf8A6JSuooAKKKKACiiigAooooAKKKKACiiigCnFNYNq08UIi+3KimYhRv29snvVyqcV1ZPq09vFt+2RorS4TB2npz3q5QAUUUUAFFFFABRRRQAUUUUAFFFFAFPU5rCG3jbVBEYjMip5qhh5hPy4981cqnqV1ZWsEb6iFMbTIibk3fOThf171coAKKKKACsjxZN5Hg7VpM4xZyfqpFa9ch8VbxrH4X63Khw5g2jPuwH8q6sHD2mJpwXWSX4ky0TOR/Z1h2+BbqYjHmXb8+vNZ3x5VLLxJ4W1ZuPJnCk+27NdX8D7fyPhdp7YwZcufxrnv2jbVn8L6VdKOIbwbj6A4r6qhVU+JJX2cpL8GjFr9yewwtvgjYdCoP6U+qOhzi50GxmByJLdGz9VFXq+OnHlk49joCiiioAD0OelU9KmsJ7APpIiFt5kgHlKFXeHYPx67g2ffNXD0OelU9LurK8sBNpgUW/mSKNibRuVyr8f7wb60AXKKKKACiiigAooooAKKKKACiiigAqmZrD+3FhIi/tE2xZTtG/ytwB59N2OPWrlUzdWQ1tbUhft5tzIp2fN5QYA/N6ZI4oAuUUUUAFFFFABRRRQAUUUUAFFFFABVO4msE1S0juRF9tdZDbFlBbA279p7dVz+FXKp3F1ZRapaW9wF+1zLIYMpk4G3dg9uq0AXKKKKACiiigAooooAKKKKACiiigAqvfyWsWnzvqGw2qxky+YuV245yPSrFV7+a3t9Pnmvtv2aNC0u5dw245470ASW7RPaxNbbfJKAx7RgbccYqSo7d4pbaJ7fHlMgKYGBjHHFSUAFcv8OP8AkRLD/gf/AKEa6iuX+HH/ACIlh/wP/wBCNAHUUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUActr/gO01vUv7Rt7+80y8Zdjy2jgbx6EGr3hvwtZeGbeVLV5p5p23TXE7bnkPua888Wawk/xDu9L1jxk3h+3ihV7eOJgDJnqTk11/gEWQtbj7B4nk8QDcMu7A7PbiiPw6BLezOvooooAKKKKACiiigDl/DH/ACNXir/r9j/9EpXUVy/hj/kavFX/AF+x/wDolK6igAooooAKKKKACiiigAooooAKKKKAKcV7ayatPaRj/SokVpDsxwenPerlJtAYsAMnqcUtABRRRQAUUUUAFFFFABRRRQAUUUUAU9SvbSxgjkvhlHmSNfk3fMTgfr3q5Ve9u7WyiR72RI0aRUUv0LE4A+uasUAFFFFABXmfx8v/ALF8L7hOpuJki4/E/wBK9Mrxn9om4WTR9E0ok5vL0DA9uP617ORU1UzKin0d/u1M6rtBnf8Aw5sl0/4faTbou0LbqcVznx6tGufhZduilmhlR+B0GeTXeaJbi00KygXgRwqv6Vh/E21+1/DXW48biLVmA+gpYXEWzWFb+/f8QkvcsHwyuvtfw00KTO4izjQn6DH9K6qvNPgFdtc/CmyR2LNDLKnPYbzj9K9LrDNKfssdWh2k/wAxwd4phRRRXnFgTgHNU9LvbXULAXFgMQmSRANmz5ldlbj/AHgfr1q4Tgc1Xsbu1vrUT2EiSQl3QMnTcrFWH4MCKALFFFFABRRRQAUUUUAFFFFABRRRQAVTN7aDXFsSP9Ma3MwOz/lmGAPzfUjirlVzeWo1NbMyJ9rMJlEf8XlggE/TJFAFiiiigAooooAKKKKACiiigAooooAKp3F7aQ6paWsw/wBJuFkaE7M4C7d3Pb7w+tXKrzXlrDfW9tNIi3E6uYUPVguN2PzH50AWKKKKACiiigAooooAKKKKACiiigAqvf3EFpp89xdjMESFpBt3fKBzx3qxUV1cQWtpLPduqQRqWkZugA65oAW3ljmtopYeI3QMvGOCOOKkpkMiTQpJCQ0bqGUjoQelPoAK5f4cf8iJYf8AA/8A0I11Fcv8OP8AkRLD/gf/AKEaAOoooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqvfG6FhMdPCNc7D5Qf7pbtmrFFAHnPiPQPEuoaks8GgaBe5iUPLdxqX3dxk9q3fBOl6ppltOuraZpmnszZVdPQKG+uKztR+Jun6D4yu9H14m3iWNXgkSMtuz1zXRaB4p0rxNFJJo87TLGcMShXH5047XQS3szYooopAFFFFABRRRQBy/hj/kavFX/AF+x/wDolK6iuX8Mf8jV4q/6/Y//AESldRQAUUUUAFFFFABRRRQAUUUUAcz4zuJbePTPJlaPdexq204yPSkl8WyZuZbO0E1paHE0hfB464HerHirTLnU47AWqb/Kukkfnoo61zp8JS2cl7ANLF59pkLxzecwVc/3gDzXLJ1E3y/1oj38LHC1MPFVXqr6fP1XQ3rjxS0nl/2XbLOGiEpeR9q4Pv61g6l4uivE0TUhM1rB9odJhvwMjgj3qx/YV/Y6kpewF9B5AjiRHKpEcc8elZdt4IvrnTdPstUs42jivJZZVB4CseCKmTqt6f1qdeHpYCnaTat662alfS/p0Wp1ieJpG0pr82TeU8my3GeZB/ePoKhtvGAW+ubTVIUgkgtzcZjfcCo/rWZNoutx6OdNVGlt7W5DRgPgzRf3c+1VZ/Dt3eaxdXM9imn2MunPASWyyNxgn8qpzqX0/rT/ADMIYbBNS5mra2s9eluu7XkbE3jC8tmsHn0si3v51iikD8gMepFSz+LZC93LY2gntLNyk0hfByOuB3xXPaheX1xHoOni3QpHeR7pFfdvCnqBU7eFJrKa+hXS/tv2mZ5Ip/OZVUMc4YA84pc83fl/rRf8E0+q4SKTqJJu+l91ffVrW3n8jurK7iv7GG6t23RTIHQ+oIzU9VdLtPsGlW1rhB5MaoQgwowO1Wq6z5upyqbUdugUUUUEBRRRQBT1Oeyt7eNtSCGNpkVN65+cn5fxzVyqmpXdpZwRvfKGRpURcpu+cnC/r3q3QAUUUUAFeFfF1hrPxe8KaJzhZBKcfXP/ALLXuteD+Luf2nPDv0/9lavoeH9MVOfWMJtetjKr8NvM92jXZEqjooAqprFv9r0S8tzyJIWX9Ku0jLuQqe4xXgRk4yUjU8a/Z0uGTQdZ055A/wBnvjtx2BUf1zXs1eFfCQvo/wAYvF2jyHYrzM8af8DY5/Iivda93iGK/tCU1tJRl96RlS+CwUUUV4BqB6HPSqelT2VzYCTTAgt/MkUbFwNwdg/H+8Gq4eAc1U0y7tL2xE2nqFg8yRQAm35lcq3H+8DQBbooooAKKKKACiiigAooqG7u4bK2ae5cRxoMkmk3bVjScnZE1FZlh4gsNQkZIXZHVdxWVdpI9fpVWTxjo8UgWSZ1DSCNHKfK7HjAPelzx7nQsLXcnFQd/Q3aj8iI3IuPLXzgmwSY+bbnOM+maqQ61ZTremKXIsSRPx93Az/Ks4+KdPEpuPtubYWhufLEfOwH72f6UuePcUcLWk2lF/cdBRVOfVbS3NqJJf8Aj6OIsfxVS/4SvSvtCxea2GfYJdnyFs4xn603KKdmxRw9aavGLZs0Vzun+IWbVdbj1CREtrB4wjYxwwJP16VctvEunXSyFJHQxoZCsi7SVHcetJVItXuXPCVoP4b7beaT/U1qKxLbxdpN1JCkUz4n/wBW7JhWPpmotB8TDWNX1Gz8p0FrLsUlcZFHPFuyY3g66jKUotcurv62OgorLv8AxFp+m3otLh388p5gRFySKF8Raa+mi+W4Hklto453emPWnzx7mf1etyqXK7PbQ1KKw5vEtjLptzLFcm3aFdzGSPlR67afL4m0+12RyyvLIUDN5aZwD3PpS549yvqlf+V39DZqN4IpJo5njVpIwQjkcqDjOD74H5VRu9fsLSCGSSRn84ZjVFyzD1xVmw1C21K2E9pJvTOD6g+hquZN2M5UakY87i7FmiuUj8Xrb+JtUsdQJ8q22eV5ceSAQck1s3Gvafb2sM5m3rP/AKoRjcz/AEFQqkWr3NqmDr02k472t81f8jSorH/4SrShpst885SGFxHJuXBRj2IqSz8RaffXj20UjJKqltsi7dy+o9RVc8b2uQ8LXSbcHZeRqUVyHiDxvBaWsZ0xy0jXKRbmj+VgWwcGtdvFGlxaSNQluAtv5giLEdHJxj8zUqpB31NZYHERhGTi/edkbFFYuq+IbK0SWL7Z5EscYkLbNwCk0upeJLLTlaNpGeYR7sImdvHU+lNzildszjha0rWi9fL+u5s0Vwtl46me20gzx73vmfc6JwACQMVb0fxvBJHcDVXKsly0QZY/lUdsmpVWDdrnVPK8VBN8u3+bX5o6+myxJNE0UyK8bjDKwyCPSlR1kQOhyrDII70tanmCIixoERQqqMAAcAUtFFABXL/Dj/kRLD/gf/oRrqK5f4cf8iJYf8D/APQjQB1FFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHkfj7xDqH/CRTw2C2cEWnyQCUzQK7z+Y4XAz0ABrq/BeqSza1rOlzJbEWcoKS26BQVYZwcdxXGfFnRzNq3228SwktQq/J9sEMxxz0PWuj+Emq6PqOi3C6Ppl5ZNG+JmukOZG9Qx+9RT+FhPf7j0GiiigAooooAKKKKAOX8Mf8jV4q/6/Y/8A0SldRXL+GP8AkavFX/X7H/6JSuooAKKKKACiiigAooooAKKKKACiiigAoqJbmJ7p7dSfMjAZhtOMH36VLQAUjosiFHUMrDBBHWlooAoWuiabZzedbWkccnZh2q/RRSSS0Rcpym7ydworOuzPZXBu4t0sDY82Puv+0KvQzRzwrLCwZGGQRQnrYcoNRUlsPooopmYUUUUAVNSvbexgjku0Z0eVI1CpuwxOAf8A69W6huZ4beNWuPus4UfKW5J46VNQAUUUUAFeEj/ifftRAMMpp0JZCPYY/wDZq9zmkEMEkjcBFLH8BXiXwZibV/iP4p16X5x5nlxyfj0/Svoco/dYfFYjtC3zk7GVTVxR7hRRRXzxqeGTRHSP2qt6H5L23BwPdFB/UGvc68O8WyrY/tNaJLPkJPAioffkf0r3GvoM5vKnhpvrTj+F0ZU95eoUUUV8+agTgHNVNMvbe/sRcWaMkRkkTDJtOVcq3H1B+vWrdQ2s8Nzb+Zbf6vcy/dK8hiDwfcGgCaiiigAooooAKKKKACuZ8eWd1eaAotN2Y5kdwgydoPPHeumqO4mjt7eSadgsaKWYnsKicVKLTOjDVZUa0akVdpnn5tJNX1RXtL+4vZI7R0D+SIlTI4U+pqnq+oWqeEdF0ySBvtsF3CkiFCPLIPJz7122k+IrDULw2sEMkEjJ5iB02+Yn94e1WdX0S21i3SKf5Nkyy7kHJK9Kx9ndXi/6ue0sd7KtGNeDSjZrv17Kz36WOOS6XSD4rgu45BNdbpIEVCfNBjxwag8K2TXOp2EVzA4ik0Ty3DKe7DivRjFGcFkViBjJFOCKpyqgHGOBTVHXV/1r/mc7zRckoqOsra37Kx5z4Xj1G5v5IL6B2/sGF7eIuD+9bJAP/fOKyr5zN4RtEd52uxdK8lpFCVWA7uQfUe9ethVBJCgE9cDrTfJiyT5aZPX5RzS9i7JX/q5pHN0qvtOTqnZPte/Tq22eZalp97dt4g+yrIMXNrISFyWUA5wO9WJoDqF4s8N7c3xgtZMsIBGqZQjae5r0cIozhRz1460ixRpnairnrgdaPYLuT/aztbl2/wAkn0v08jz2e2ceDfDipCwdbiIkBeR8wrb8NyCHxLrdvKGSSS48xAVOGXA5zXUbFwBtGB0GOlQySCK5jUW7MZODIqjC/U1ooWlzGFTHOrCVNx3v17tP9DnJoS3xJWQxkqLLAYrwDn1rmre0njZbp4JGtrbVXeVAv8JHDYr07aN27Az64o2LgjaMHqMdal0b9f6vcdLMnTVuXol91/8AM828UZ1e5v73TI3a2SyKO4QjexIwAO9XLqK0tWS4gvZ9Pv2t1DboS6S4HSu8EaBdoRQp7AcUjRRvjdGrY6ZXpS9j5/1r/mWsztGMFHRefTTe6s9ux5vnU21bT9V1KR9NSSzCF0h3hGyeMds10ngu0MMV/OHnkS4uC6vKoXfwBkKOg4rpWRHXa6qw9CM1E83kzRQpA7K+fmQfKmPWqjTUZXv/AEyK2Pdem6ajb7tk79r/AInH2+o2emeLfEBv4XUyhNj+WSJOD8orLs4brTV0SLUM2UAWSRrjyy7Jk8J7ZFekNFGxy0ak+pWlaNHGHRWHoRmp9i++xUcyivsbpJ69o8qtp5+Z5HcQtLp3iVYorh0kv4WQyIcuOOfpXVeJbOafxhYraoVZtPnQOq8A8YGa7Lyo+fkXnrxS7QWBIGR0OKFQSja5dTNnKako7X694qP6XPMtSvLd/Buk6X9mka9guYkkQRHMZDcsT7/1pt7o099rl/oLwOLMZvlbHBbaQAP+BbTXpvkx7s+WmfXaKdtXdnaM9M4odHm3ZUc39mvcj3e/VtO69DypIrvUfA+o6ndW8i3EzLEqMp3BVOK3IriPR77WV1SN2N0gaE+WW3jbjbXceWm3btXb6YoaNHxvRWx0yM0ex7MmpmiqXTh7reye3w2Xy5TzTS82+k+G7iWGSKJJJdwKH5Mk4BFWIbZj4B1zEDb5LlmA2cnkYNeh+WhUAouB0GKNi7SNq4PUYpujdNX6f5f5BPNeZ35et9/7zl+pV0gEaNaBgQfKXIP0q5QBjpRW5405c0nLuFFFFBIVy/w4/wCREsP+B/8AoRrqK5f4cf8AIiWH/A//AEI0AdRRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB478StGtNR8UiWx0e/m1WNV23SPsiHpyeDXYfDiy8T2ekyjxXLauzNmEQfwr7nvXL+K10a4+IFzH4+klTTlgU2AYsIif4unetn4Xsom1aPSXnfQklH2IzEntyFz2pw+EKnxHoNFFFIAooooAKKKKAOX8Mf8jV4q/6/Y//AESldRXL+GP+Rq8Vf9fsf/olK6igAooooAKKKKACiiigAooooAKKKKAK0d/bS6lNZI+biFA7rjoD0qzVSK9tpNVns0B+0RIrOdvY9Oe9W6ACiiigAooooACMjmsyVG0qQzW6FrVzmVB/Af7w/rWnQRkYNJq5pCfLvsNjkSaNZImDKwyCO9OrLdTo8jSxhms3OXQf8sz/AHh7etaSSLLGHjYMrDII70J9wnC3vR2Y6iiimZlW/v7bToUkvH2I8qxKcZyzHAH51aqpqV7bWEEcl4CUeVI1wu75icD9at0AFFFFAHN/ELVv7F8BareZAZYCq5Pc8VyXwC0k2PgA3sikSX8zSnNUv2hdSKeFtP0aPPmahdAHHYD/APXXo3hLTRpHhPTrJRjyoFB+uK+hl/s+Spdas7/KP/BMt6nobFFFFfPGp4f8e4H03xJ4X8QW64kim8ovjoAwPP8A30a9qtJhc2cMycrIgYfiK86+PWktqXwxuJo/v2cqzZ/2eh/pW/8ADDVl1n4b6PdIc4gETZ7Ffl/pX0WK/fZRQq9YSlF/PVGUdKjR1lFFFfOmoE4GTVbT7+21OzFzZPvhLumcY+ZHKt+qmrJOAc1U0y9ttQsRcWIIhMkiAFdvzK5VuP8AeBoAt0UUUAFFFFABRRRQAVieLL6Oy0CVZIvONwRCqZxktxW3Ve+sLfUbRre7jDxt2Pb3qJxcotI2oThCrGU9kzzjQ5pPCviO3sNdSS5vJUSGzdeVEXp+Fdr4vd4/CN+8TmNxHw4OCvI5qv8A8ITpMkyT3SzXM8ZBjlnlZ2jx2BJ4q54m0+bUfC97Y2q7pZYtqgnryKw5JqlKPrY9eviqGIxVKqt7rm6LfouiOYmhOhtoFxZXEjy30giuAz580GNjn8CBWPYGay+H0OqRXMovLu5W3e4ZySiNIFP5A122jeFrWwitpJvNlniiCqJZC4iOMHaD0/CrUHhzTYNBOjiDfZkEFHO7r9aPZSu3/XT+vmbPMqMPd1lqru26Tlp+KOe1BD4a17TE0uRyl2sgmiLZ3YXIajwtp66roFtrlzcz/bpGeR2DkdGI2Y9BjFdBY+HLKyuhc5muJVXajzyFyi+gz0FQx+EtOiuC8fnLF5hk+ziVvKDE5J25x1pqnJO/9IwljaTp8ib5tLytq/i03819xxcN3qGo6be6mbK6a9SdxFceaFSIKcAYJ6f41p39rqU0yX+pW8l9atbqQlvJhoW7sPWuhl8JabLcSSYlSOVt8kCSERyN6lehqS78NWd1N5iyXFsSoRhbzMgYDsQDUqjKxtLMaDmnFWXpstNFr+X6nN3cVxqcdne2izajpghwYd+2QN6/WoDqUc91oy2E9x5amRHWVjuBHY/Supk8LWBjiW3ae08pdoa3lZCR74NLH4V0yI2xSJgbckqdxySepPqafs53JWOwyjZ30vbTunvrZvXdWOIt4JI/BI1gXMxvI7tgshc8DeRj6VrW6HxBc6rJqE0iNaRqIQGxsyud1dGPDWnrop0sI/2YuXxvOc5z1+tYms6Jdz3sq2+nMUkj8sSwXJj3DGPnH8VTKm4ra/8AnY2jjaVeUknZ3dnporrTf10L/gmSQ+EYGklad13fOxyWwa5i7gbUvBeoazPdTRXuWwwcjYAfu12vhvSTomgW9iSC0Y5x0zXKat4XvNT+02n9nmBbh8s8dwRF1+9s9aqrFtJW6EYatS+t1J81lzJ302u7q3mMkZtVnmixLd/ZrVDgttWFtgPXue9VNM1O8uo/DTzzsWdLpXw33tpAH1rrz4QsHcSF543aNUlEUrKsuBj5gOtOtfCGlWS2iwRuq2fmeSN5+Xf96k6U73/rcr+0MKocuv3f3ZJ9e7XT8TilheHwIutrcTG+ivF2SFzwDMFI+mCa9OgYvbxs3UqCayz4Y046EdJKP9lMgkxvOchg3X6itdECRqi9FGBW1ODj+B52OxcMQvd35pP5O1l+YtFFFanlhRRRQAUUUUAFFFFABRRRQAUUUUAFcv8ADj/kRLD/AIH/AOhGuorl/hx/yIlh/wAD/wDQjQB1FFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHmfiV9S8T+NLjQo9Xt9GtrOJZAXijeScn035AArU8Ba5ObjUNE1G9tbttPcIl1CFQSAjoQOM/Sr2ufDbwz4i1g6pqlk0l4V2eYszKcenBqrp3wl8I6VeLdWGnyRSq+8ETvyfU880R0VmEtdjtKKKKACiiigAooooA5fwx/yNXir/r9j/wDRKV1Fcv4Y/wCRq8Vf9fsf/olK6igAooooAKKKKACiiigAooooAKKKKAKkV9DJqs9kscgmhRWZymFIPTB71bqpFfpLqs9kIJleFFYysmEbPYHuat0AFFFFABRRRQAUUUUABAIIIyD1FZRRtHlLqSbFjlkxnyj6j29q1aRlDKVYZB6g0mrmkJ8uj2YI6yIGRgysMgg8GlrJCSaNN8mXsHPI7wn29q1VYOoZSCpGQR3oTuFSHLqtUyrqN9Dp8EclzHJIrypGAibiGY4B+nvVuqmo36afBHJJBNOHlSMLCm4gscZPsO5q3TMwopGZUUs7BQOpJxVOTV7GNcicSD1iUv8A+gg0rpFRhKXwq54t47Y+J/2gNE0ZSTHYIJHU9D3/AMK91VQqhR0AwK8E0GV/EH7Q9/rNhGZoLSPy2VMZ9MnOPQ17cbnUG/1VlGP+uk2P5A17+dVIxjh6EfswX3vVihQmm3K33ovUVQ87Vf8Anztf/Ahv/iaPO1X/AJ87X/wIb/4mvn+ZGvsZd196I/Eempq/hnULCRQ6z27LtPc44/WvLf2dtUZdD1bw/dP/AKRp12TsP8KnjA/FT+derC51Bf8AW2UZ/wCucuf5gV4jobf8Ij+0dfo4a2ttUjLLb9WYkA5wPdXr6HLaka2BxOFlvZTXrHf8GZSoT5046/NHvtFU49WspOs4j7fvVMf/AKEBVtWDKCpBB6EV8+mnsOUJR+JWFJwCaqaZfQ6jYi4tY5I4zJIm2RNpyrlScfUE+4q2TgE1U0y/TUrEXMUE0CmSRNkybGyrlScehK5HqCDTJLdFFFABRRRQAUUUUAFFFFABRRRQAUUVUOoKNZXTvIm3tbmfztn7sAMF27v73OcelAFuiiigAooooAKKKKACiikZgqlm4AGTQAtFMilWaMOnKnpT6BtNOzCiiqk+oLb6la2RhmdrlXYSImUTbt4Y9s7uPXBoEW6KKKACiiigAooooAKKKKACiiigAooqC+uhY2E908ckqwoXKRLuZsdgO5oAnoqOCYXFvHMFZBIoYK4wRkdCPWpKACuX+HH/ACIlh/wP/wBCNdRXL/Dj/kRLD/gf/oRoA6iiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKM0AFFc54y1+90PRbiTSrNp7kQu6uV/dx4Gcsf6Vi3Xi7Ux4K0SaGSNdT1Z0iEpQFULdW29KaTe39XA72ivPJ/FWr+FdTvtP1u9XUxHZm5hnMKxsT/dIUAUyPXvEekx6LqmqalHeWuqyKj232dEEG4ZG1gMn8aEriehveGP8AkavFX/X7H/6JSuorz7T/ABdoGgeMfE0Gs6rbWUsl3G6pK+CR5S812en63puqzTQ6dexXEkIUyLG2SoPIz9aQy9RVS01Sxvrq5trO5jmmtH2TopyY29DRZarY6jNcxWN1HPJaSmGdUOTG46qfegC3RUMN3BcTTxQSq8ls4jmUHlGKhsH8GB/GorXVbG9vbuztLqOW4s2VbiNTkxFhkA/UCgC3RVSz1Wxv7i6gsrqOaW0cRzohyY2PY0WWq2OoyXCWN1HO1rIYpghz5bDsfegC3RVSw1Sx1QTHT7mO4EEphl2HOxx1U+9FpqtjfXdza2l1HNPaMFnjU5MZIyAfwoAt0VUs9UsdQmuIrK5jne1fZMqHJjb0NFjqljqRmFhcxzmB/Ll2HOxvQ0ATLcI908ASQOgBLGMhTn0bGDUtZOl+JtK1rULuy0u6FxLZkCYoPlU+mfWtG3uoLrzPs8qyeW5jfafusOooAloqpZarY6lJcJY3Uc7W0nlTBDnY3ofeiw1Sx1RZTp9zHcCGQxyFDnaw6g+9AFuiqmn6rY6rA82nXUdzGjlGaM5AYdRRpuqWOr2n2rTLmO5g3FfMjORkHBH50AW6KhtruC8iMlrKsqK7RllOcMpKsPwIIqLT9VsdVjlk066juUhlaGRozna69VPuM0AW6Kqadqtjq1s9xpt1Hcwo7Rs8ZyAy9R+FGm6pZavZi70y5juYCxUSRnIyOCKALTKHUqwyCMEGsseZo0uPmexc/Uwn/Cr9vdwXcTS20qyIrshZTwGUkEfgQRWY3iCy1CB00ieK8fzGhbacqjL97d9KmXc3ott8u6f9XLt/qlrp0KSXDMfMYLGkaF2cn0A5NRb9RvP9Wq2cfYuNzn8O1ZlnqeiWOljUku1vEM4t2uIxv2uTjbx0ANbFnq1jqGnm9srqOa2XOZUOVGOtFm9wcqcNIK/m/wDL/MYukQFg9yXuHHRpGzisXx/rkPhLwPf6gkahljKIFGPmNdBYajZ6pYpeafcJcW78rKhyDXjPx28Qwapa6RoGmXCTG8m3OUORtBxz+Rr1cowkcTjadNrS936LVmFarNxd2bHwE8OS6f4Vn1q9XFzqsplGeu3tXq9YfhSXTovCFmum3EUtraw+WXjPyqVHzfkc1oWurWF9pp1C0uo5bRQxMynKgDrz7VnmOKeLxc6z6v8ADp+BMI8sUi5RVewv7XU7OO70+dLi3kGUkQ5DU63vLe7tFuraVZIGXcsingj1rgKJq8H+Ko/sb48eFNauRstZUWEOB/EGYH/0Yte2WOr2Gpad9vsLuOe0+b98hyvykg/lg15b8c7e28S/C+DXNGnS4WyuRKk8XPy8q2D/ALwH5V7uQVYwx8YS2mnF/wDbyt+ZlVXu37HrRihnQFkVwRkZGaqPpEIYvavJbOTkmNsZ+orC8CeK7HW/h7aat9qXy7e3xcux/wBWUX5t34DNdLaX1tf2MV7ZzJNbSpvjlQ5Vl9RXj4ig6NWVKa1i7HRCrJK8WVTLqNkMzRi8jHVohhx/wHv+FT6fqNtqVuZbVmwGKsroUZSDjBU8inxX1tPp6X0MyvavGJVlB+UqRnP0xWPBf6breir4g0u48mLDlLkrtDKjFTkd1yp/DmsLNbGilCeklZ9/81/kb9FY+meJLG+0d9Qa4iWGJN8kob5Nv94H04NaNvfW11YJe28ySWzpvWVT8pX1pp3RlKLg7MnoqFby3ay+2LMpt9m/zM8bfWoINY0+50kanb3cUliU3idT8u31zTJLtFU11ewbSP7UW7jNjs8z7Rn5dvrmiTV7CLSDqkl3GtiE8w3BPy7fXNAFyioPttt9gN75yfZhH5nm5+XbjOfpiia9toLFr2aZEtkTzGlJ+UL60AT0VTOr6eNH/tU3cX2DyxL9oz8uw98+lE2r6fb6P/as13GljsEn2gn5dp6HP40AXKhNwgvRbbJN5jMm7yzsxnGN2MZ56ZzUN3q+n2GknU7y7ihsVVXM7nCgEgA598iobnX9OtLpobmfywtm160rKdixKQCxbp3oA0qKgvL620+xlvL2ZILeFd8krnAUepqKfV7C20kapcXccdiYxJ57H5dp6HPocigC5RVO71awsdM/tG8uo4bMhW85jhcN0OffIqaW8t4LM3c0qpbqm8yE8BfWgCaiq95qFpp9hJe3s6QW0a7nlc4VR61HcatYWmljUbm6jjsyocTsflwehzQBcqrqUnladMQMkjaB654pt3q1hYaet9eXUcNq23ErnCnd0/OqGv6tYWMdi19dx28E0y7ZHOAx7D8c1MtjWkrzX9bGtaxCG0ijHRVAqWoZ7u3tbbz7iVY4eBvY8cnA/nUeoalZ6VYteajcR29umN0khwBmqM27u7LVQyXCR3UUDJIWlDFWWMlRjGcsBgdeM9efSor7VbHTbEXl/dRwWzEASucAk9Pzqpq3ifSdDubGHVLpbf7eWWB2HysRt4z2J3DHrQI1qKhuLuC0t/PuZVjiyq72PGWIUD8SQPxqLUtUsdH0977VLmO1tY8bpZDhRk4H6mgC3RVPUdWsNJsftmpXUdtb7lXzJDgZPAH40uo6pY6TAk2pXUdtG8gjVpDgFj0H1oAt0VUv9UsdLWFtRuY7cTyiGMyHG9z0Ue9S3N3BZxq9zKsSs6xqWPVmOAPxJAoAmoqpqOqWOkWwuNSuY7aEsEDyHAyTgCi/1Sx0uKOTUbqO3SRxGjSHG5j0FAFuiql9qljpnk/b7mO389xHFvON7egqa4uoLVUa5lWMO4RSx6segoAlqOeVYLd5XV2VFLEIhZj9AOTUGoapY6TCk2pXMdtG8ixq0hwCxOAPqag1zxDpnhzTTfaxdLbwdFJ5LH0A7mgDQjcSRq6hgGAIDAgj6g9KdVCbW9PtobSS6uUgF6QIBJwXJGQAPWpLzVLHT7i2gvbmOGW6cpAjnBkYckCgC3XL/Dj/AJESw/4H/wChGrOo+OfDGk30lnqWt2ltcx/fikkwy1T+GkqTfD7TpYmDo6sysOhG40AdXRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAB5Fczd+AdHvLuS4muNZDyNuYRa3dxrn2VZQB+ArpqKAOe8Raetp4B1GysxNIFtHVBJK0rnj+8xJP4muNvbC4i8A+F7/7PK39myxzTRqpLBR1OK9Toppta+n4Bpa3r+J5NrEDePNb1C80eOR7SLTmgSVkKh3POADSvqI8Saf4b0PT4J/tdlMj3avEV8kIMck8V6xRTUrWB6/15WOW8LDHijxSP+n2P/wBEpXU1y/hj/kavFX/X7H/6JSuoqQCiiigAooooAKKKKACiiigAooooAqRahHLqk9iqSCSFFdmK/KQfQ96t1UivxLqk9kIJlMKKxlZfkbPYH1q3QAUUUUAFFFFABRRRQAUUUUAFZ+noZL28uZOWMnlrz0UAf1JrQrOtW+y6nPbSZxMfNjJ6HjBH6frUvdG1O/LJLsTajqMemwRyzJI4klWICNdxBY4BPtVuqmo3406CORoJpt8qx7YV3EbjjJ9h3q3VGIE4GTXhWmW1jr/7SmoSTL9pWyUFCTkKwrt/i/4wTwt4LnSCUpf3imO3C9cnvXO/A3wFqGhWs3iDXGDXeooGQMSXVf8AaJ719Pl9P6pl9bGTlZzThFdXtd/Ixm+aaij2CiiivmDYKKKKACq+oWceoabcWk6K8c8bIysMg5GKsUU03F3QHh3wA1FdO1TxF4ZunWKWK58yCFuCQCQ2P0r3GvAPirZReFPjL4W13Sl+yPe3Ci5dRhT86qc/VWNe/I25FYcgjNfQ57GNWdPHQ2qq9uzWj/IxpaXj2FJwCaqabqEeqWIuoUkjQySR7ZV2tlHKHj0ypx7Yq2TgZqppt+NSsRcrBNADJImyZdrfK5XOPQ7cj2Ir502I7xfK1C1uE4JYxv7qR/iBV+s6Zzd6tDDGcpb/ALyQ9s4wB/X8K0albs2qaRinvYKKKKoxCiiigAooooAKKKKACqh1GIayum7JPNa3NwH2/JtDBcZ9cnpVuqhvwNZXT/Im3Nbmfztv7sYYLtz/AHuc49KALdFFFABRRRQAUUUUAFZ6fvtckYHKwx7cejGtAnAJPQVQ0sFlnnYYaWQ8+oHSpe6RtT0jKX9al+iiiqMQqpPqMdvqVrZOkhkuldkZVyq7Nucnt94Y/GrdVJ78Qala2Zgmc3KuwkVcom3bwx7Z3cfQ0AW6KKKACiiigAooooAKKKKACiiigAqC9u0sLGa6lV3SFC7LGuWIHoO5qeoL26FlYzXRjklEKFykYyzY7AetAD4JluLeOZAwWRQwDDBGR3qSo4JfPt45grIJFDbWGCMjoakoAK5f4cf8iJYf8D/9CNdRXL/Dj/kRLD/gf/oRoA6iiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5fwx/yNXir/r9j/wDRKV1Fcv4Y/wCRq8Vf9fsf/olK6igAooooAKKKKACiiigAooooAKKKKAIluVe6eALIGQAlihCnPoehqWqkWoxS6pPYKH82FFdiVO3B9DVugAooooAKKKKACiiigAooooAKr3lot3EFJKOpyjjqpqxRRuOMnF3RkPrDaZsi1aOQbnCJNGhZWycc46fjWrvTZv3DbjOc8VU1S9t7K1RrtGeOWVYgFXdyxwPwrwP4t/Ea90DxFf8AhnTkaGzaDa7K/OWHb0rvy7Lq+Prexo69X6fqaTnSau/df4f8Al8fyy+LfjtpWjRyedbWrqSq8he5zX0GiqiBUACqMADtXzl8DvDuox+IW8S3NtdS2vlFVd0JZie49a+gU1a0ZgjSeW/91+CK9TP6lOnOlg6buqcbdtXuZwoVFeW9+2pdopizxP8AckVvoafmvnAaa3CiiigQUUZqN54o/vyKv1NA0m9jyv8AaI0hb34cDUBxLp1ykgYdcMdmPzYflWn8HviC3jjw/NHcW/k3GnlYmO7O8Y4NdP4hj0nxDol3o16TPHcx7WSMZb1BH0IBr51tLu5+DHxHeLz5U0+Zs+U6HLxnoWHqK+sy/wBjmOWSwO9aDcoeml0S6FSM+d6Lz0/M+p2ZUUsxAA6k1kRas2rR7dKjkCFmVp5EKhcMVOAeT0ql4b1Cw8XaPFq9veteW8mcKOFUjqCK2dKvoNR09bi0Rki3vGFZdpyjlDx9VNfKVKdSEnCas1uupunThqvef4f8Els7RLOHYmWJOXc9WPrU9FFLYylJyd2FFFFAgooooAKKKKACiiigAqE3Ki9Fttk3mMybth24zjG7pnnp1qaqh1GEayum4fzmtzcA7Tt2hgvX1yelAFuiiigAooooAKKKKAK99L5NjK/fbgClsYvJsYkHZar6od/2e3BwZZB+lXwMDAqeps9KaXcKKKKoxCoZLlY7qKArIWlDEMqEqMY6noOvfrU1VJ9Rit9StbJw5luldkIUkAJtzk9vvCgC3RRRQAUUUUAFFFFABRRRQAUUUUAFRzzC3t3lZWYIpYhFLE/QDk1JUF7dx2FjNdzBjHChdgoycD0FAEsbiSNXAIDAEBhgj8KdUcEy3FvHMmQsihhkYOCKkoAK5f4cf8iJYf8AA/8A0I11Fcv8OP8AkRLD/gf/AKEaAOoooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAOX8Mf8AI1eKv+v2P/0SldRXL+GP+Rq8Vf8AX7H/AOiUrp2YKpLEAAZJPagBaKakiSoHjYOp6FTkGnUAFFFFABRRRQAUUUUAFFFFAFSK/WXVJ7IRSBoUVy5X5Tn0NW6qRXxk1Sez8iRREit5pHytnsKt0AFFFFABRRRQAUUUUAFFFFABRVe8u0treVgymRIy4Qnk4FeUeC/ipqWueHvFV1fJEJ9Ldmg2jA284H6V34fAV8TTlVprSNk/+3nZEuSTszvfF/jTTPB+i3F/fP5hhxmFDljk4HFfMVsknxc+Lu6ZxDHdSZ5HSNecflXJ+IfE2p+JtVmv9TuGaSb7yqSFx2GK7T4DW80nxOtJI42ZERtzAcDiv0zCZMskwNXEKV6vK9e2my+ZxSqe0kl0Pq+xs4tPsILS3XbFCgRR7AVM8aSrtkRWHoRmnUV+Sybk7s71psVDpVkc7bdI8/8APMbf5UwaRbqco0yn/rqx/rV6io5V2NfbVF9plL+zsfduZgPTdR/Z2fvXMxHpuq7RRyoPaz7lE6Rbscu0zH/rqw/rTxpdlxut0cjoXG4/rVuijlXYPbVP5mNRFjUKihQOwGK+Xv2j1I+IFuSDg2owa+o68x+OfhN9f8Dy3GnWK3GoW5Uqyr8+wEFgPwr6ThvFwwmZQlPZ6el+py1k5QZm/s6anbSeAZLL7QhuIbhyYs/MAeeleq6bfrqViLmOKSJTJIm2RcH5XK5+h25Hsa+Mfhxrf9gePtLvJblra3WcCdgcAr3Br7D0HxJYeINDj1W0kC20kjopdh/C5XP44z+NdnFWWyw2NdZaxqa7bPsRQnzRt2NaijOelFfInQFFFFABRRRQAUUUUAFFFFABVQ36DWV0/wAqTe1uZ/M2/LgMFxn15q3VGTU0i1yPTnjZTJAZllJAUkMBt+vOfwo3AvUU15EjGZGCj3NU31a2UgRlpSTj5FzSbS3LjCUvhReoqh9rvJc+TZ7PQytwfyoMepSgEzxQH0VN1Lm7Feya+Jpf15F+jIHWqB0+aQfvb6YH/pnhaVdLQf6y4nk/3n/wou+wckF9r8BrOJdbUblKwx5PPQmr+9f7w/OqP9i2PmM5iYu3VvMbn9ad/Y9j/wA8W/7+N/jSXMi5OlK2r08v+CXN6/3h+dLketUv7Ish0iYH18xv8aDpcX8Esyf7r/40/eI5afRv7v8Agl2qk9+sGpWtmYpGa5V2V1X5V27ep7Z3foaj/s54wWW/uOP75BH8qoteX0eoWsFvMt3HcLIRIqDYm3bwSD33foaeu9g9nHpJfibtFUPtOoRD99aJJ/1yb/GlGqwhts6SQkDncvA/GlzIPYz6a+heoqOK4hnUGKRWB6YNSVRm01owooooEFFFFABRRRQAVBfXS2NjNdOjSLChcqgyTjsBU9QXtz9jsZrkRPN5SF/LQfM2OwoAfBKJ7eOZVKiRQwDDBGRUlRwS+fbxy7GTeoba3UZHQ1JQAVy/w4/5ESw/4H/6Ea6iuX+HH/IiWH/A/wD0I0AdRRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAcv4Y/5GrxV/1+x/8AolKg+KupSaT8MdZuoGKSiEIpU4I3MF/rU/hj/kavFX/X7H/6JSuc+Pl2tt8K7pGbBnmjjA9ec/0r0cqpqrj6MH1kvzIm7RYz4Balcaj8NYzdzNK8U7oGY5OM8V6dXhHwG8SWei/DTWLq/lCw6fIZJPXkZxXp3gbx9pfjzTJLrSyyvE5WSJ/vL6fnXo55gq0cbiKsYe4pb9FfUmnJcqR1NFI7rGhdyFVRkkngCmwzR3ESywSLJGwyGU5Br56ztc1H0UVyfi/4g6X4Nv8AT7XUhIWvpAilRkKPU1rQoVcRP2dKN32E2krs6yuC+K3jy68C6TY3FjCkslxcCMhz0XvXK/FT4sTaN4k0/R/Dl2pmjnAvABnHT5awv2jtUZ7Tw7FjmVDO3PQ4H+NfSZVks5YrDvER92pd28kupjOouV26HvWl3n9oaTa3eNvnxK+PTIq1XO+ALr7b4A0efoWtlyM+nFdFXzeIh7OtOHZtfibJ3VypFeSSapPaNbSJHEiss5+65PYfSrdRLOWunh8pwEAPmEfK3sKDdW63ItzNGJiNwjLDcR64rJJvYZLXAfFrx9deAtDtLqxgSaWecIQ5429TXf14N+05csun6JbjG15JGP4Af417ORYanisxpUqivF3uvRNmdWTjBtHt2lXw1LSbW8Ax58Svj0yKpeLNb/4RzwnqOrBA7WsDSKhP3iOgrJ+Ft+2pfDXR7h+GMAB/CvJfix8V5bxPEnhRbYRrBKIEk3cthsNWuCympicwlQirqMtfTmsKVRRhc9T+FfjK68b+DV1O/iSKcTPGwQ8HB4/Su1r5G+EnjrV9E8QabodnKq2V1eFpVb+LcoGP/Hf1r60nuYbWHzbmVIowQCzsAMngc1fEGVvAY1xilyy1il2vsKlPmiZvi3UZdJ8HavqFswWa2s5ZYyR0YISP1r53034/63p3huytWCXd95rGaaXjCZ4H1r1X4yeOtK0Dwfe6XLIJrvUYHhSOMgldyn5j6CvlK00+a7tbqeEEi1QO4HpnFfS8MZTQr4OVTF09HJWv16fddmNao1K0WelfFvxtqR8ftNpN/Nbq1nFlUb5cOgbj864vw34om0VtSV2Yx6hA0cgHcnkGqniPUI9T1KGeJtwW0t4ifdIlU/qKvjwyn/CtT4jDMZPt/wBm2joBtzn9a+yoYbD4bCU6NSO/LH59Dncm5Noq+EfDdz4q8S2ul2scjCVwJHRc+Wvdq+svht8O4PAGkz24mW5mmk3GXZggeleb/s/eE77SIbjxJe2khju0WG3CjJKluW+nFe+1+f8AFecVK2Ilg6UvcVr26v8A4B10KaS5nuFFFFfDHSFFFFABRRRQAUUUUAFMnG63kHqpFPoprRgfBOrWEmm6rc2rq48qVkBdcZwcV2lhrt3bfBeS2t7uSIpqykBWI+UqDj8xXb/tK2Fta3ekzW8KRvLv3lVxuPqa8MFxKLcwCRvKLbimeCfWv3TB1Y5tgqVeStqnbfZ2PMkvZyaPorx14+1XQ/Bvg+9068Ma3Chp2xnfgY5rY+B/jfVvFzav/a8wmEbho8DG0E9K+etR8T3WreDrLSb2UMNOlxbjHOxgc/rj866z4K+OZfC/imLT/JV7fUZFjlcnBT3rwcZkKjldSEYJ1E20/Lmvv6GsavvrXQ+taK4fRPiroOs3Wrxh2gi0vJlmk4UgdxXQL4p0yXwu2v204msViMgdO4FfmdXBYmlLlnBp6L79jsUk9jYorB8HeLbHxpoK6rpodYmcptcYIIpfGniE+FvCN9q6xiR7ePKIe5zgVH1ar7f6u1ad7W8x8ytc3aK8ovvjE9p8KLXxR9jU3VxIIhDngNXo3h/VP7a8P2eolPLNxErlfTIrfEZfiMND2lWNldx+a3EppuyNGio57iO2iMkzhVHr3rIv7+T+z5726Y2VhAhd3P3mUfyrgV21Fatm0aba5nou5oXGpW9u/l7jJKekcYya+ffjb4yvdP8AHWmeQ8tvPYxiVIVk4BJyC2K9T8BeP/D3iqK9bTR9n+yyrGWnIBkLZ24J9cGvnj43X6X/AMWNSMbbhBthPsVHSvsuG8sqf2nKliotcsXdetv0ZnVrwpxvTV/N/wCW35n1bYWUF3ZQXU++VpUWTDt0JFaSRpGMRoqj2GKqaN/yA7L/AK4J/KrtfHziozaRTqSktWFFRz3ENrH5lxKkSZA3OwAyelZWueLdF8OzWsWr30du124SIMfvGqp0qlR8sItvyIbS3NmsA+NdEHipvDpux/aKruMeP0z61u7wY96nK4yDXx5rniiWL4z3msQvsKXrLknsDt/pXu5JlKzOVWLduWN169DOpU5LH0Fo/wAXdM1X4hXPhb7NJHJGxSOckFXI6ivQ6+KfDvihNB+JP9u3AaaNbp3bHJILGvsrSdTh1nSLXUbXPk3MYkTPoa6OIsojl0qbpRfK0r/4upNGpz3uXKK5T4l6/deGvAGo6lp7BbmNMRsR0JOKj+F/iG68T+A7HUNQcPcsuJGA6mvD+pVfqn1v7PNy/O1zXmXNykfxZ1yXw/8ADfUbu3JWVlESsvVS3euH/Z78R3l14dbTriOa5AuZT55bIiAVCAc+pY4+hrovj3/ySe8/67R/1rz79mbVHXUNW0zynZGVJhIBwp5GD9f6V9LhsNCfDlaolqpr8LL9TGUv3yR9FVXvbuzs7SWe/miigiXdI0hGFHvVjp1r458deOtQ1TxF4igF7K9ndS+XGgb5QFcH+leVkuTzzWrKEZWUbX+b/wCHLqVPZq59b/YLK7jWa34DjKyQtjI9qb5OoWv+olW5QfwScH8DXmfhz4naV4T8I+DdL1YyNLf2MZMnURjAAJ/GvXFYMoZSCCMgjvXnYzAVMJP300m3Z97Ox0QxEmrPX1KUWqRFhHcq1tJ02ydD9DV4HIyOlRzwRTxlZ0Vl9xXC3njHTUs9aj0PVY5pNOhdp4Gb5owB1H0rnpUatV+5FtLe3S/cu1Oezs/PY70MGGVIP0NLXkfwD1e/1HR9UTUrprlluN8bM2eDXrlb43DfVMRKjzXt1MnGUXaSswoJAGScCivMvjv4gutC8A/6BcNbzXMwjDKcHHU4owWFljMRDDxdnJ2IlLlVz0wMGGVII9RUN9cPaWE9xHC07xoWWJOrkdhXmfwO8Y2useE4dLuNQ8/VIQWdHPzba9QnkMMDyBGkKqTsQZLewp43CTweIlQnun9/mEZKSuhLeQzW0cjIY2dQxRuq5HSpKbG2+NWKldwB2t1FOrjKCuX+HH/IiWH/AAP/ANCNdRXL/Dj/AJESw/4H/wChGgDqKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDl/DHHirxV/wBfsf8A6JSuB/aSu4z4Hs7dJFLfbVLKDyPlaub8eePLrwh8Q/F1ta3EsUt5BCICp4RwOT9cV4zc6nqev6gFv72aeS5lUEyMTljwDj8a/RMh4dqQrU8bKXuq0l53V/wuclWsrOJ1/hxivwR8V4OM3duPryK639me4EXiLWldsJ9lRjk8DDHmuN0dDH8G/EyHqt9ADXMaB4k1Lw1dyXGlTtE0sZjkA6Op7GvqcRg5Y3DYqhB6yl+kTBS5XFn1d8Q/Etnf/CHxBfaHerL5cTReZE33WDAEV498IvijrFprGi+GHKNYyTOjM3LHcMj8iP1rnvD3i3T7D4OeIPD9xK4v765EsS44K7VHX6iuW8JakNI8Y6Tfu4RILqNnYjOF3Yb9M152CyKnRweIw1SPNq+Vtf3dGXKq3JSR9k+MfGmmeCNNhvdYZhHNMsKBRySf8Bk/hXgf7Quri78WaPNaSboltRKhHQ5OQa1Pjv4q03xX4H0a80eYywm9YHIxghGFeReJtVm1J9OWc5+z2UUanPbbXFw1kypezxck1P300/uRVape8S3Jatq2i3via6lY3bX6g8/3jk11Hxh1STWtU0Wyt1Mgs9KhZiOTkqM5/IVj6XbtL8ItSkRc+VqETE+gq7HMdY13V3IGbfSkVSO+EX/GvoZW+se1f/LtyS8rqK/Uy6W7n0X8JZfO+GOkHIO2Lbx9a7JmCqWbgAZNfOn7PXi2+S41HTL27Z7C3tjNHG54Qg9j2rO8SfHzW9Qg1WzszHaxsfLt2RcOozgnPrivgMVw7i8RmVWnTta97+UmdUa0VBNnsUPxb8PzW+tTgyiHSG2yuR98+1fOnjnx5d+JPG8+v6C9zbRRoqrhiCoFc1a+JL+00nUdPVlaPUSDOzDLH8a7X4f+B9Tv/DevXk9i4t3sg0DsOHPJ4r67C5Rg8lc8RPrZK76O1/xv8jnlUlU0PpLwfq0uo/DzT9SuH3StZ73b1IHWvj/xjrl9rnia9mvrqS4AmYJvbIUZ7V7b4I+JGlaP8Fja6vc7LqPzbVUA5zjj+dfP0VtJqWovHb/M7l3Ge4ALH9BWPDmAeFxWKqVI2Sdk7dLvYdafNGKR9O/DHxJHo3wI/tQgSCwiclc9SO1fNniXWm8ReJtQ1d4xE15O8xQH7u45xXr/AIMmH/DNniGJjgo0nX3NeHIu+VV/vECu7JMLTp4vF1be9ztfLcmpJuMUbPg2ZIPGukySNtVbpMn05rtPiR8VNX8Rf2poVxiOCDUQ0Bj4IEe9SD9SQfwrgrq1l8PeIxHOuXtZlcA9wCGH6YqtqV39v1S6vCNv2iZ5cem5if617E8HRxGJhiZRvZaPtrfQzUmo2GXV5c303m3k8k0mMbnbJxXqXwS8OQ6/b+JY72HfbtYFM/7Wa8nr60+DGkWln8I4JrWJVmvI3eV8csa8viXF/U8BaGjk0l5df0Lox5pnyfFBJNv8pS3lqXbHYDvXvvwm8HweNPgtf6XdSGJXv2KyD+EhVrxvSrV7ebWYG5aG0lVse3FfRf7OII+Gc2RjN/Jj/vlK5+J8TOlgXOm7OMotP8SqMU5WZ3unWkXg7wvp2nQRzXMcGy3BQZPJ+8fbmt2qmo3r2MEckdtJcF5VjKx9VBON30FW6/H5zlUk5y3ep6GwUUUVABRRRQAUUUUAFFFFABRRRQB4F+04o8jQ3xzvcfpXC+LtC0wQeDLyysGtX1O3QXEci4LlSF3Y98Z+hr0X9pWEyWHh87SV+0uGI9wKta94H1PxpB4M1DT4DawaeoilinPzKiHaG/ELn8RX6PluOjhcFhHOfKv3l/xt+JxzjzSl8j5z1yyOna9e2hAHlTMoA6AZ4qrBPLbTpNA5SRDlWHUGur+KWkXWkfEPU1uYWjSaUvESOGXA5FchX6Dhair4eE97pfkcslZ2NCy1u9sLO9tYJMR3ybJs/wAQr0bwB40vpPA+t+Hrplazhs2eLjlT6V5SBk4HWrYkvtKklhDS2zyJtkTOCVPODWGMwVLE0+RpXun81bX9Bxk07nuf7P8A4+0zT7P/AIRm/cxXE0peFj91s9vrXb/H2+Np8L51TrPOifhyf6V4Y/gWXQPAWkeM47tvOlugSq8CNc/z613/AMctfbUvBPhuytmEkl8BKQDycLgfqa+JxOAoVc5o4nDu6lN83k46s6YyapuLPK77WpZPhbp2lscoLx2+gA4r6j+G+oj/AIVXot3dEZNqmcdzivkO7LpoFtBIMGOZ8j3r1P4N+Mr8eJtK0TUrl5bNk2wwk/LHgccV28S5fKtgb0rXUpS9d7mmESlNuWyWp1nxv8W3WjWFjGl09vfzSCZIUP3Ywe/vxXMfET41f2t4StNF0ORt80AW+lI6/KpwPxzWd+0ZqC3PxFS1U5NrbIp/Ebv615Ta273d5Dbx/fmkWNc+pOK0yPJMJ9Rw9erG8leX39/ToZ4jETnNrpsSW+oXdpGY7a4kiUushCNjLLnB/DJrc10f2nqOu6pKHZllVg/bJYDr64zWLqumy6Rqs9hc4MsDbWx616V8K9Mj17wL4006e0aU/YjPFOw+VJVHyj655/CvoMdXp4eksUttF8m4nPFNvlPoT4beI08VeAdN1NI/KLIYmQ9mQ7T+orqa+MfBfxI17wrfadb2t666fbykPbk/IwZstkfjXonjb4/6zYeKL2y8OG0eyhZVim2B93GSefc4/CvznHcKYt4xxw9uWV2tdlfZ+ep1xrx5dRPj549luNWj8LW0bRLazRzvMGwWODx+ua434wazcXuv6VA8hZbWwiZGz3Ycn9K5HxR4huPFHiS51i7AWW4KkqOgwoHH5ZrOury4vZRJdzPM6qEDOckAdBX3uXZTDCU6GiTgnf1klc5Z1HJs9++F3xb1HWvEEWi6g6C0Wz2KW4O9V65968N8Qkv4k1GTGA11Ic/8CNQQW99Baf2lbpKkKPs89OAG9M1pzWgk8FR38jFpTdMuSetXhsBh8DiZVaNkp2jZd1cTk5KzM+5s/J0m0utpHns4z64NfXPhvxHZ+G/g5pmq6huEEFqobaOTzXgLeFE1D4Dwa/5u2Sxu5E2/3gxFc5qHxA8Qal4dttDmvCthbpsEKAAMPf1rzcxwX9txjTi9Kc2pei7fIuEvZ690e8fGLxbYaz8G1vtMlEkV9KiqM89eal/Z5vVT4bz+c+EgndiSegr5je+upbOO0kuJGt4zlIix2qfYV7J8ONU/sv4IeJZ/N8s/MinOOSMV5+YZLHCZV9Ug73qJr5uxcKnNU5vIwvjD8Sj4v1trTSp5l0yH5PLJwHYH72KufALxFaeH9c1iW/ykLWgcy/wptJ4P13VyD/DvXF8Fr4nMYayfBXbyxB71k2Wpz6Rp+o2LRsrXqIrBuMAZP9a9z6jhauXSwGGd4qydt9Gr38zPmkp8zPQrP4w67pniDV728kmnsdRimS2U/dU9FZfp/WvMLyKdJhJcqQ06+cCe4bnNfRmufC5vFPwc8PwaRFFHqFqquhIxuVh8w/UH8K8z+MXhlfC17odgFXfHp6xuw/iK/wD665Mpx+AnW9nh4qM5Npryhs/mh1IStdnP+ILx9d/suC1YMum6RFkg9NsYLfkc19OfCDWHufg9pF9qlxllSVGkduySMo/QCvm74c6P/a8mvKufMTSZ9h7AlSKk1TxBdD4S+HtLtrp44457gyxo2MnfkZ/Os83y+OPhDAwduWS17Jxk3946c+R8zPqTw9450jxbbaqdIlLnT3McoIx2OD9OD+VfH0mr3Gn+ItUmhY5uGnhcZ6q+4f1r0j4F6/ZaNp3in+0LqODzbZChkbG5gH4/WvP9S0QHwqPEC5Im1B4D6HgsD+lZ5Pl9LLsZiKGvI+RK/W6uOpNzimeofs7zs41mOOVo5beMTIxPHpg1cPxy16z8WSTXFtHLopm8obRwvOM5rxzQfFWoeHLHUIdMmaCS9jETSKcELnmuz07ww118DJ9SbcJPtu5TnqorPMMqw9LF1MXiYpxqOMbeq1fqddCo60VR69H+nozudI+ImoXnx/e1F0x0yVRGkW75cbQwP61yPxt+If8Awk+pNoaW3lR6bcnEmfv8YrhPDl/d6b4jtNZlL7LedVklPPbGM/Sqvia9TUfE9/eRsGSaYuCO4r0sNk2Ho46FWMfggkmu60v62OKVSXK0+53v7Pk3k/FCMZ+/buv6V9VXt19isZrny3l8pC+xBlmx2FfHvwbvTZ/FPSMAYlkMZz2BBr1LUfinqOgfG/ULLULlpNKjyiwAgDIHGPc18zxNllbGZg5UulPm9bN7G1GajDXue5wS+fbxy7WTzFDbWHIyOhrjfiv4uu/BvgiTUdN2/aWlWNCwyBnOT+ldPc6ht8Pyagg2f6OZQD2+XNfIfiT4jat4h8PXGlavcvcsb1pkZv4V7AfrXgcP5RPH11UaThBq6fU1q1OVWPeta+LEmgfDvRtaMCXl5fMivEGx1BycfhXRfCu4+1/DTSbgrtMsZcr6ZYnFfHtjdXV5q2nxTzySBZo1RWYkL8w6V9f/AAnUp8MNHU9RER+prr4jyqhltOnGC96Tk7+XRfImjUc2zsqKKK+OOgKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPlT466eg8X3+pYO9rsQE+wiQj/wBCNed+H4HbxXpULqVZ7yFcMMdXFfTmreA7Lx7q3iKzvpnhEGpxyKyDOf3KZFeT3ukQWf7R1tptsgMUF3GFB9FXP9K/VOHs3hUy94ZtuUIyb9Ft+f4HDVp2ncyDft/wrzxNbSBATqEWAihehrgfLfyfN2nZu27vf0ruPEZSyn8U6auFIvVcIBxjdivaY/gn4d1zwPYpEj2VxKEuHkTk7ioyMV6tTNcPlkFOsnapL/22JHs3PRdD5q0fRdQ1+/8AsWkWr3NxtL7Exwo6mqk8L29xJDKMPGxRh6EHBr2T4KaKtj8VvEEUbEpp0FxbjI5Pz4B/8drkvCXgn/hPfiJqmk/a/smwzT+Zs3dJAMY/4FXf/akI1qqnpCEYyv63/wCARyOyt1Obl1cy+EotKY/6m6Myj1ypBrKLFvvEnjHNaGsaWdP1690+33zC2kZchckhep/rUug2y3LX+9A3l2U0gz2IQnNejGVOFN1I7PX7yNW7HZeGIw/wV8SMeqTowqn4AJ1CfxDLJgONLbGPbA/pWr4OQt8EfFpAztZT9Ko/CeJZf+Em3fw6RIR+YrwKkrU8U+01+UTZbxOEtb+7svM+x3EkHmrsfy2I3D0NNtIvtN7DCf8AlpIF/M11Hw98A3Pj/VbmytbmO3MEJkLOCcnoBVa68OXXhjx9baRftG08VzGGKHK8sK9p4uh7WdGMlzpXa62MuV2v0Dx1pS6P4yuLKOPy0TaAMdeK+uPAtnEnw70m28sLGbNVK+xFeQ/tC6fAkOl3CWBjlUqrXWFw/t1z+Yr23wshj8J6Yp7Wsf8A6CK/NM+x7xmV4aps7v71odtKPLNo+OfiHpkei+OtU0+1Zvs6TlkUngZ5pPh7b/a/HumQf89Hdf8Axxq0Pi6pX4oasGGP3gP6Uz4SR+Z8VtCX1mb/ANAavv8A2kv7J9o3r7O//kpyW/eW8yzpuoz2/hfxlo4dvI2rIF3cAiVR0ribXm7gH/TRf512HiaybQvEnizT2Jznbwf+mgNYek6Nd31tBc2drLOReLEfLQtjgHtW2GlTjTlV6Ss/vihSvexsfFaLyfiNfJjGI4M49fJSuOr034q+Ftav/ifqpsdNuJ0SCKUuqfLsESgnPTqD+Vee2um3N3NaJGmBdz+RE7dC+VGPw3D86MtrU5YKl7y0jG/3BNPmZVKMFDFSFbOCRwa+xPhFEy/CHSw38UBI+hrzH4h+CU8JfAnT7a9jgfUIblS00a9N3UZ/CvVfhOM/CbRh/wBOo/lXxPEmYQx+XRq09lUa9bJ6/M6aMHGdn2Pm+xtQs3jfKhnhhlAbHT5zmvfPgIAPhXa4H/LaT+deR+G9Audb1z4g6fpy+ZcuJo4lJxuO9q9y+E2hXnh74c2FjqcHkXI3O8ZOSMnv+FRxLiISwjpX97mg7dbcg6KfNc6nUbuazhje3tHumaVUKIwG0E4LfQdat1DcztBGrJBJOWcKVjxkAnryRwKmr86OsKKKKACiiigAooooAKKKKACiiigDN1rQNM8QW8cOr2iXKROJEVuzCptKuJLrTkkls2sirvGIWIJCq5UHjsQAfxq5UVrO1xB5jwSQHcw2SYzwSM8EjBxkexq3OTiot6ID56/aL003fjLw9EpCG6R492OnzKP615O3hWV/HY8NQTqZGuRAsrLxk45x+NfWvjTwBZ+M7zS7m6neF9Pm8xdozuHp+grwLUoUg/aRto4xgC/j/Hmv0/h/NVLBrD03rThJv1vp+Bw1afvXfVkXxF+Hlp4Jv9Ait3MlxcbVnP8ACzeoFYnxctEs/H9wqDBaKMsPfaK9S+Pa7/FXhlTzmYD9a4H46wbPiU0art3Qxjp7V3ZNjKuIeGnVd3KM7/8AgSJqRSul5HrNv4Sn8W/s76fploVS4aASR7u5BPFeN6Ze6lq3xF0HRtdiRZNMJtQgHYAnmvp/4f2j2Pw90W2l+8lqufx5/rXkEXhq4T9pWaQ2cn2cI04k8s7fu469K+fyvMUp4ulO1lzyi+t3o7eptOGkX6HievSP/bF1aLjZHcPtH1Na/g66ktviZozI23bdxpx6ZrI8TDb4q1Lbxi5fH51p6bbPpmt6VrtwypZNdKwk64wea+6rKLpxi/tQkl6tIKd/YTt3j+prfGu4+0/FbVWBztZU/JQK5rTbT7PrWhSc/wCkSxSf+RSP6V0N9oGp/EX4nauvh5VuhJdO/nFvkVCxwSfStbxr4Mn8Ga14NsruZJZgiLJsHAbzy3/s2Pwrno4ijQo0cFze/wAu3XSJzNNtyOX+JMZi+IurqevnD/0EV65+zlDNJoOt2jWzG3vF3facjarD5dmPUg5/CoPin8Gb/UNSGueHd93PfzRiWA4Hl5XBbPp0r0X4S+Eb/wAD+HBpOpx755S07zREGNTnATOck856Y4618vm+bYatkkKdKa5vdVuulr/ijenTkql2fJOradcaTq91Y3aFZreVo3GO4NU6+k/2jNCsY/C1vqUFpFHcm6HmSquGbIxz614jrXh+DS7jw+iFz/aFnHPLu9Wdhx+AFfWZXm0MdhYVmrN3VvNbmE6bjKxzywSvC8qRu0cZAdwuQuemTTVjZlZlUlVGWPpX0t498F6P4W+BN8ujWqxmVYZZXblmJI7/AI18/afZTv4c1W78pxDGkY8zadpJkXjPrVZdm1PH0pVoKyUuVX+X+Yp03F2PUvBXg+fxF8BNYitoxJctcedCo6kr2rldR0a8034NwNf2j27tqDY8xcHFe7/AODy/hdbPj/WSMenvTfjf4W1LxL4Rt7XRLXz5EuAzIuAcetfHU86lTzWeFqWUPaXu+llY6PZ3p8y7HJ6ZZxr+y7MDEMPukxjqc9a+d6+uNX8Pv4e+AsulMMywWf7zn+Lqf5185TeDlg+G0Xidp2Z5rnyVj28AY65r2OH8bSl7ebekqjt89iKsXp6Hq/hD4I6BrXw7TULqe4+1XKeaJFI+THYcV5LPrTW3h258KWkTnde7vM3feAOAMYr6m+HH/JKbD/r2P8q+c/h1pltq3xpt7W+j8yL7S7lT6jkVx5Xj6lWpi54luUaT5ku1r/5DnFJRt1PpjwHov2H4c6RpuoQqzLaoJY3GRnHNfMXxZtI4vi/qFuFAjMsY2qMAAqOK+xAAqgAYA4FeC/HzwWP7W0nX9KsZJJp5xHdvEpboV2kj8/yr5/hnMFHM5yqO3tE/S+/6G1aHuadD2vQIlh8O6fHGMKtugA/4CK+fP2mowvibR37tbP8AzFfQ+jqU0WzVwVYQICCOnFeCftPWzm90K6GNgjkjPrkkH+lYcMytnMb9eb8mOt/DMP8AZ6svt+u67D/e08r+ZIrzC8sr611CXRHR3lt7l4/KVckuDtOB/wABr2j9mK1P9qa3d5GPJSPH45zUl54Tu4f2pIZY7RzZyTLd79h2kbBu56fezX2n9pRw+bYuMukFL5xW34nNyXpxPDtQ02+0m4+zajbS2spUNskGCQehr2LW/DkOm/sx2VxEzO006XTFuxZtuBXrvxM+H8PjXw3NBaQ28epDBindeRg9MiszxN4FvX+BI8MW/wDpV5bW6bQnG9lbdgZ/KvJqcSUsbHDSb5Wqi5l5d/TU0VFxv6HyRXvNi3l/svlh2c/+hV5L4s8K6h4WvLeDU7RrZ5YFfB55xzzXt/g/w/L4m/Z1Gn28ixyOWILdPvV7mfYii8NQruXuc8Xfy1Jw6kqlluYOi+GLSX4C6zfXlqC73BlhYjkYA5H61wHhTwQ+ueFta16SZVg02L7mOWY9K+gvEOinQPgHLp7kF47UFyB1J5rzv4eWvk/AHxXPuz5xHGOmB/8AXrx8uzOq8HVrQlvUil6Oy/I6MVGLxErbankWi6neaBqltrFko8yB8xswyN2KulrvxVcavrGo3DNdQxfaGYDG45qG5s3i8H2ly6ECW5YKc9RitPwrahvCvia53cpaBcfVq+zrSgk6yXvXUb+XNscCvseu+EviYuufCTVNJfzBqWnafhpWOd4xjNcl4Z+HlhL8GdV8XXRaa7eJhEjAbY8PjI965TwBdrBFr0JYAz6e4Az1xXs/gi3W7/ZhuYXJAaGfp7OTXyeOp/2W5fV/dU6sL+jV2vS5vF8+/Y+d9AXf4k01T0a7iH/j4r7E+Fy7fhxpajsjD/x418jeH7OSPxdogK7/ADbyFlC8nHmD/Cvr34aDHw/04D+63/oRrzuN5Jzopdn+heG2Z1VFFFfnZ1hRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBy/hj/kavFX/X7H/6JSvItet937VGmgp99t3A64Ruf0r13wx/yNXir/r9j/8ARKUXHgHSbnx9b+LJPMN9bxlFXd8uSCM4+hNezlONp4OdV1PtQlFer2M6kXK1j5e+LGmXuk/EvVRcwvDHdTmSMkcSITkEV9c6B/yLth/1wT+Qr59/aVjI8VaQ/ZoD/OvoXRoxFotmgOQsKjP4V7mfYh4jK8HUe7T/AAsjKkrTkjC0vwJo/hzVta1nTY2S51MM82WyAeScemSSa8b+AdoH+KXiO83cxQyx7cdd0oOf/Ha+ibr/AI85v+ubfyrwr9nuPPifxjJ/dmVfzeT/AArmwGJqzy7GTqSu7QWva9vyKkkpxSOO0Gz+1+M/HpWLzXj028KDGSCVxx+dc34BsTe2fiONI90w0uXZnjBwa9B+HtpJJ428fzhMqtlOgP8AtFh/gaxPghbC51XxDEy5JsXFfazxPs6OIf8AKqf5I5lG7XzJfh1a/bPgz4vhLbcgHP4U34IW0dxYeKVkX71gVyOuOa0fhFGJPhZ4sR1z8pyP+A1f/Zw0p7qy11riB/stwqxeZjg8HIB/GuXH11ToY5t7Tj/7b/kVFXcSj+zegj8baui9FtyB/wB9iqnjvTjJ+0ZbxyRbkmuImUHvzXsngX4V6Z4F1i/1Cxupp3uxtCyYwgznArz7xvZlv2jtBOxsSMpJx6GvNo5lSxWbVq9F6Om/wRbg400n3PQPHvg9PiAqaRJ9otPsbJMLgp+7k9VB9a7WytVsbCC1jJKwxqgJ7gDFRxXkr6nNaNaSpHEistwfuuT2H0q3XwU8TVnRjRk/djdpeu51cqTufJvx70qW2+J88yIxW5hSQYHpwad8MtM2fGzTElBRoY/NAAx/yzI/rX1TPZW1ywa4gjkYDALqDxXhmmwof2qL4BcCOIlQOMfKK+8wGdvFZfUwvLbkpS1vvsjllT5ZqXdnn/xzRrf4oagFOBMqlgO/1r6C+Euj2Fn8MdFe3tY0e4to5pWC8s5UEk+9eeftJ6BYx2On63HAq3jzeTJIP4lxnmvXfBESQ+BtHjiUIi2kYCgYA+UVx5tjFWyPDcl1rZ/9uqxVONqsjaeCJyxeNSWXaxI6j0rGi8F+HoFthFpVsotZ2uIcIPkdurCt2ivjIVqkFaMmvmdFkzy79oRQfhXOSOVnix7fMK6P4WqP+FWaCPWzT+VSfEbwi/jbwXdaPDOsE0hV45GGQCrA/wBK1PC2iDw34W0/SBKZvscKxbyMbsDrXrTxVJ5RDDp++pt28rIjlftL+RxPgD4e6j4Y8f8AiPV7x4za38zNAFOSQzFufzxXplFFefi8XVxdX2tXeyX3KxUYqKsipqN81hBHIttNc75Vj2wrkruONx9h3q3VTUbyWygjeG0lui8qxlIuqgnBY+w61brkKCiiigAooooAKKKKACiiigAooooACcAmqum3p1CxFw1tNakySJ5c67W+VyucehxkexFWjwD3qppt5LfWInntJbNzJInlS/ewrlQ30IAYexFAFuvIG+E19dfGz/hJbpkXTY3Ey4f5mcdBj616/RXbhMdWwfP7F25k4v0ZMoqW55t8Sfh/qPi7xJoV3YyRpBZzBpix5AB7VjeO/hJqPjD4oWuqNJHHpYjXzWz8wK9sV7FRXXh85xeHUFTa91OK06S3+ZLpxe5HbQJa2sUEYwkSBF+gGKXyozIX2LvIxuxzin0V5F3e5ofD+tWyXfxGurWTISXUPLbHoWxXpnxe8EWXhjwdpFtpG7y87trtlicc1n6d4QPin4/Xds26K3t7k3EpC9lOcfnXZ/tH/uNF0YRnG2bAr9WxeMlUx+CoUpWduZrptpf8Tnw7jBSc1eL0ZpfAHwNL4f8ADz65elTNqiK8YU5xHjIz+dZvx8sZpfFHhGeKFnBudhKrnnehx/OvRPBs0uleFNKhuzutWto/KmxjZ8o+U/411EkMNyI2kRJNh3ISM4PqK+I/tipDNZY2orvVW+TS+43qUFGHKnp0YtuMW0YI52j+VQG+Yayth9lmKtbmb7Rt/dghgNmf73Ocegq3VQ3ko1lbL7JKYjbmU3X8AYMBs+uDn8K8B6sZyHxc8IX/AI08FNp2k+WblZkkUOcZAPPNeb/En4Y6str4Rl021e8nsbeKzufJGdu05z9Mk819BUV7WBzrE4JQjCzjFt29VZmcqakeffFiyll+C9/b8LIlvFuB7bSuf5V5Pe2S2n7LUbYUtNdq5IHq619I39hbanYS2d9Cs1vMu142GQwrndf+H2ja54M/4RoRmzsVKlBBxtIORXXlmb08NThRqXsqim35Ezptttdit8JbNbL4Y6RGq7Q0W/8APmuzqnpGlwaLpFtp1mCIbaMRpuOTgVcrwsXWVfETqr7Tb+9msVZJFTVdNt9Y0u4sLxd0FwhRwPQ1438YvC1j4V+DkOnaShW3hulPzHJJOa9vrzD9oKPd8LJmwcrcx/1r08jr1I46jTT91yTt0vsZ1UuVs3vhl/yTDTP+uFeFfCKBJfjhK7jJjklK+xya92+GC7vhnpa+sOK8S+DkO742Xxz/AKtpD9eTX0GBlaGZej/NmUt4H07VK7uguoWtm9nLMtwrsZQmUi27eGPYndx9DV2qk95LDqVrapaSyxzq7POv3Ytu3AP1ycfQ18GdRb6V4p+0lo93e+G9Pv7W3klitJSZmUZ2KR1Ptmva65H4qf8AJLfEH/XlJ/KvWybESw+YUqkV1S+/T9TOorwaPLv2Yo28nW5P4dyL+OK99MSGUSFF3gYDY5xXhH7MX/IN1r/rsv8A6CK95rt4mb/tar8vyRNH+Ggooor5w2OF+MNnbzfDHWZZYEeSO2Yo5XJXjsa5/wCCZa8+G+n2aA+Wrs0zdsbjxXb+LLMeJtCvtAtTlrqJo5JP4Y8jvSeBPCx8IeFoNMklWWRMl2RcDPtXrrGQllbwt9edP5WNY0/ZP2st+i/X/Io/FYY+Geqgf88q8p8CxFP2cvEDno5bH6V6v8V/+Saar/1zry/wUpH7NOtMRw2/H6V7mVO2Vr/r7D9Din8fyORs/A2q+KvhBZ3WkRCU2U7ySqWA+XbyRnrVv4LaNaavpfiW01O1luYvIw0UIy7Y7L716r8BUWT4XRI4yrOwI9RW74e8Dad4C/tfUdHjuLqW6Jl8gHJPfatduYZ7KnHFYOWjUvda9bu5MKV+WR4P8XPBFr4HOm32gNNaxXluI3icfMvHIJ9T3r2D4GRJP8HbGKZQ8btKrKRwRvNcr+0iGm8K6NcvG0TNIco3VcgHB96634Df8kj07/rpL/6GazzDE1MTw7Sq1HeXPv105gikqzSM7xL8J3uPiH4f1fw/DBbWVkf36A4xg5GB+Jrr/huMeAtPHs//AKEa6muX+HH/ACIlh/wP/wBCNfIYnG1sVCEarvyKy+++p0KKi3Y6iiiiuIoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAOX8Mf8jV4q/6/Y//AESldRXL+GP+Rq8Vf9fsf/olK6igD51/aZjxrmhOAeYXBP8AwKvoDTONKts/88l/lXiP7TERNroku3gSsua9ztf+PSL/AHB/Kvp8ynzZRg1/j/NGMP4kh0qebC8ecblIzXAfC74e3fgi48QT39xHM2p3IeMIPuopcj8Tv/SvQqK8KniqtKjOhF+7O1/k7o0cU2mcRonw4tvDk3iG7srmSe41cNhZMAJkdPzrlvgh8PL3wymq3+vWzQXVxIYUjYggpnrXsFFdf9rYl0alKTv7Tlu+vu7IXs43T7HP6T4I0HRLO/tdOsxHFqDs9wu8ncW69TwKteHPDOl+FNKGnaJbC3t95fbuJJJ75Na1FcU8TXqJqc276vXe2xXKkFQSWNpLeR3UltE9xECElZAWXPoeoqeisE2thlSK6nfVJ7Z7N0gjRWS4LcSE9QB7VbqpFcXbapPBJabLVEUx3G8HeT1G3tirdIArj7X4d2Nt8SrnxgLmZrieLZ5BxtB7n17V2FFb0cRVoqSpu3MrPzQmk9zlvH/gWz8faCmm3s8lv5coljkj6g/T6Vv6bYRaXplvYwEmO3jEak9cAYq1RRLEVZUY0G/dTbS83uFle4UUUVgMKKKKACiiigCpqN1cWkEb2tm92zSqjIjY2qTgt+HWrdVNRuLu2gjaxtPtbtKism8LtQnlvwHOKt0AFFFFABRRRQAUUUUAFFFFABRRRQAHgetVNNup7yxE13ZvZy+ZIvku24gK5UNn/aADfjVs9DjmqmmXF3dWIl1C0+xz+ZIpi3h/lDkK2R6qA3tnFAFuiiigAooooAKKKKAK8On2dvdS3MFrDHPL/rJVQBn+p714x+0lzpOj/wDXxXt9ecfF7wJqfjey0yLSWiU29wGk8xsYX1Fe3keIhRzGnVrSsl1foZ1E3BpHa6HCB4bsYpEBH2dAVI4+6Kb9iudOYtpreZB1NtIen+63b6cj6Ves4PstlDATny41XPrgVNXjVbTm5G8KjgrdOxUttSguG2NmGboYpeD/APXoN3cDWVtBZubY25lN3uG0OGA2Y9SCTn2qW5s7e7ULcRK+Oh7j6HqKyGj1i01lbewXzbD7O0hluHziTcAIxjkcEnOD0rPVF8tOfwu3r/n/AJm7RWf/AGm0HF9ayw4/jQb1P0xz+lWYb22uM+TOjkdQG5H4U+ZMmVKcVe2hPRRRTMwooooAKz9c0Sw8RaRNpmrQ+dazDDpkj9RWhRVQnKElKLs0G5V0zTbXR9NhsNPiEVvAu1EB6CvnP4MqW+NOqkDhTJn/AL6NfS1fPfwsjWP48a8sahVAfgf71fT5PUbweN5tW4r8zCoveifQlVJ7q4i1K1t47N5YZlcyXAYAQlduAR3zk/8AfNW6qXFxdx6naww2nm20quZp94HlEbdox3zlvpivljct1yvxPTzPhf4hGcYsJW/JSa6quV+JciD4aeIELLubT5gozyTsPFdeCdsVTf8AeX5iabVkebfsxf8AIA1r/r6X/wBBFe514V+zk8lh4b1dDayyzPdrgJjgbB1JNeyeVqV3/r5Y7OPJ+WH53I7fMcAfka9LiOpGea1nHXVfki6VCcYJVPd9d/u3LN1f29muZ5ACeijkn8KqEXupcHdZ2x64/wBY49P9n+dWbbTra1beibpD1kc7mP4np+FWq8Cze5rzwh8Cu+7/AMiK3torWERQIEUenf3PrUtFFUYttu7OO+K//JNNV/651w/wt0SXxD8AbvS4JBFJdNIiOw4B4ruPiv8A8k01X/rnWL8Av+SUWv8A13k/pX0+HqSpZK5x3VRP7kYNXqW8joPhv4UuPBvgy20m8ljlnQku0YwOa6S9nltrGaa3t2uZY0LJCpwZCOwNT1BfSzwWE8tpB9pnRC0cO7bvbsM9q+er1p4irKrU3k7s1SSVkeS/tCwG8+HNndTRNHJHMHKZ+4SBkGtr4Df8kj07/rpL/wChmrHxd0yfW/hTeKYilwiLMY1G4qR1FRfAqKSH4TacsqMjb5Dhhg43mvo5VVLh5Qvqqn5psxt++v5Holcv8OP+REsP+B/+hGuorl/hx/yIlh/wP/0I18sbnUUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUZoAKKAQehzRkHoaAOX8Mf8AI1eKv+v2P/0SldRXL+GP+Rq8Vf8AX7H/AOiUrqKAMzWfDuleIFtxrFnHdC3kEsW8fdYVpgAAAcAUUVbnOUVFvRbAFFFFQAUUUUAFFFFABRRRQBEsspunjaBljUArKWGGPpjOalrNt9YSfxFd6UImDW0SSF88HdWlQAUUUUAFFFFABRRRQAUUUUAFFFFAEVxLLEimGBpyXAKqwGAep5I6VLWbrmsJolnDPJE0oluI4AFPQu2M1pUAFFFFABRRRQAUUUUAFFFFABRRRQAVFbSyzQb54Ggfcw2MwJwCQDkEjkYP41IThSfQVnaBrCa7pAvo4miUzTRbWPP7uVoyfx2Z/GgDSooooAKKKKACiiigAooooAKKKKACovNl+2CLyG8ryyxm3DAbONuM5zjnOMVLWa2sIvipNF8pt72TXfmZ4wHCY/8AHqANKq02n2k/+tgQ+4GP5VZopWTKjKUXdMo/2ZsObe6nj9FLblH4Unk6lEPkuYZj6OhT+Wav0UuVF+2l11+RREupIP3ltFIf+mUn+OKQX15n59MmUeu9D/I1foos+4e0j1ivx/zKX9osOHtJwfZM/wAqP7S/6drj/v2au0UWfcOaH8v4lL+0vS1uCf8Arma8P+G6TWvxu8QyJF50rK+YVYBl+bvkgV77WJpvhDR9J1+81mytQl7ef62TPWvUwWLWHo16cm/fjZWt36kuULp8n4sui41CQfJZiI/9NZB/TNQudYa4jj2Qojht00Z3CPGMZBwTnJ6elalZt5rCWev6dpjRMzX0czq4PC+Xs/nv/SvL5fMr2naK/r1H/wBnSyY+0X0zEf8APP5Af51z/j/SrWL4ceI5I48SDTZ23kknIjJrr6534hf8k08Sf9gu4/8ARbV1YOK+s0/8S/MmVabi9f0PPP2a7YxeCdRuC+4z3mcHthcf0r2WvI/2ckZfh1KxHDXT4969cr08/d80rephS+BBRRRXiGgUUUUAcd8V/wDkmmq/9c6qfBcAfC3TcAD73T610/iXQ4vEnh+60qeRo0uE2l16im+FvD8Phfw5a6TbOZEt1xvI5Y+tessVT/sx4f7XPf5WsZ8r57mvTJ3eOB3iiMrqpKxggFj6ZPFPqnq+oLpWj3d+6GRbaJpSo6nAzivJNCyB50AE0eN6/MjYOPY9qIoY4IljgRY0XgKowBTLK5F5YwXKrtE0auAe2Rmpqd3awBXL/Dj/AJESw/4H/wChGuorl/hx/wAiJYf8D/8AQjSA6iiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKzZfEWjwStFNqNujqcMpkGRWlWfL4f0aaVpJtIsZJGOWZ7ZCSfc4oAxPG17qT+FLqfQZ0jh+zu7XSnLKAONvvXN6tf6hL8ItLWF7ya5vPLR5IGbzCCeTkciu48QaYbjwlf6fpsCK0lu0cUaAKMkdPasiys/EGj+CtLg06KI3VsqieB+d6jqAexpq1n6r9R66fP8AQwk1PTvDug6m9lDqNlqUdsXEV/cSSMRj7wDMarPBP4dsPDmtW1/eST38yLdiW4Z1k3jP3ScD8K0dQ8L3/jDUbnUb+0fTf9Da2jhkYMxJ7nFQJpHiDWYdD0nUNLNnBpcivNcGQFZdowNoqo2vr5fdqS9tPP8AJGlbXuo6D4o12Q6Ff3kN7cJLFLbplSBGqn9RWh/wl97/ANCtq/8A36rqAMDFFQM5f/hL73/oVtX/AO/VH/CX3v8A0K2r/wDfquoooA5f/hL73/oVtX/79Uf8Jfe/9Ctq/wD36rqKKAOX/wCEvvf+hW1f/v1R/wAJfe/9Ctq//fquoooA5f8A4S+9/wChW1f/AL9Uf8Jfe/8AQrav/wB+q6iigDl/+Evvf+hW1f8A79Uf8Jfe/wDQrav/AN+q6iigDz601nVIPF+oam/hfVfIuII40Aj5yvWtn/hL73/oVtX/AO/VdRRQBy//AAl97/0K2r/9+qP+Evvf+hW1f/v1XUUUAcv/AMJfe/8AQrav/wB+qP8AhL73/oVtX/79V1FFAHL/APCX3v8A0K2r/wDfqj/hL73/AKFbV/8Av1XUUUAcv/wl97/0K2r/APfqj/hL73/oVtX/AO/VdRRQBy//AAl97/0K2r/9+qP+Evvf+hW1f/v1XUUUAefeKNZ1TWNPtobXwvqoaK8hnbdHj5UYE1s/8Jfe/wDQrav/AN+q6iigDl/+Evvf+hW1f/v1R/wl97/0K2r/APfquoooA5f/AIS+9/6FbV/+/VH/AAl97/0K2r/9+q6iigDl/wDhL73/AKFbV/8Av1R/wl97/wBCtq//AH6rqKKAOX/4S+9/6FbV/wDv1R/wl97/ANCtq/8A36rqKKAOX/4S+9/6FbV/+/VH/CX3v/Qrav8A9+q6iigDlm8XXpUj/hFtX5H/ADyrH8J6zqmi+H1srvwvqpkFzcS/LHkYkndx+jCvQaKAOX/4S+9/6FbV/wDv1R/wl97/ANCtq/8A36rqKKAOX/4S+9/6FbV/+/VH/CX3v/Qrav8A9+q6iigDl/8AhL73/oVtX/79Uf8ACX3v/Qrav/36rqKKAOX/AOEvvf8AoVtX/wC/VH/CX3v/AEK2r/8AfquoooA5f/hL73/oVtX/AO/VH/CX3v8A0K2r/wDfquoooA5f/hL73/oVtX/79VjNrOqHx3FrA8L6r9nXTXtSPL53mVW/LANeg0UAcv8A8Jfe/wDQrav/AN+qP+Evvf8AoVtX/wC/VdRRQBy//CX3v/Qrav8A9+qP+Evvf+hW1f8A79V1FFAHL/8ACX3v/Qrav/36o/4S+9/6FbV/+/VdRRQBy/8Awl97/wBCtq//AH6o/wCEvvf+hW1f/v1XUUUAcv8A8Jfe/wDQrav/AN+qP+Evvf8AoVtX/wC/VdRRQBy//CX3v/Qrav8A9+qxtR1nVLvxZo+pR+F9V8myiuEkBj5y/l4x/wB8GvQaKAOX/wCEvvf+hW1f/v1UF94il1LT7iyvPCerSW9zG0UqGL7ysMEfka6+imm4u6A898KSx+D9DTS9I8KaysCsWJaPJJJyTW1/wl97/wBCtq//AH6rqKKupUnVm6lR3b3YkklZHL/8Jfe/9Ctq/wD36o/4S+9/6FbV/wDv1XUUVmM5f/hL73/oVtX/AO/VH/CX3v8A0K2r/wDfquoooA5f/hL73/oVtX/79Uf8Jfe/9Ctq/wD36rqKKAOX/wCEvvf+hW1f/v1Wd4g8Qajqfh2/sbfwvqwluLd403RcZIxXc0UAcdpvie/tNLtbeTwvq2+KFUbEXcDFWf8AhL73/oVtX/79V1FFAHL/APCX3v8A0K2r/wDfqpvAdldaf4Lsbe/ga3nVWLxP1XLE4NdFRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFZXijU20fwxf38f34Yiy/WtWszxJph1nw3fWCfeniKrn17VMr8rsVG3MrnAl9S0HT/DutLqlzcPqNwkd3HK2UIdSflHbGK9QU5UH1FeZLZa3rdnoGiz6RcWa6ZOslxcSjCMEBA2nvnNemgYUD0Fayt07/gZrpfe2vqLRRRUFBRRRQAUUUUAFFFFABSHO0469qWkY7UJAJIGcDvQB5z4osNV0HQ7nW7nXJ21FZMwxRH903PC7eprvtNmmuNLtZrldk0kSs6+hI5rzeO/1rVfEkl34k8N6obW1lP2S3ii3KcHhzXp0EnmwI5Ro9yg7GGCvsaa+EH8Q+iiikAUUUUAFFFFABRRRQAUUUUAcp498Q3Gk6LJa6OA+q3KMIF/uADJc+wp3w3vbvUPAen3GpTGe5ZT5jnuc1W8R+CJtR1C81az1a6guZLYwrEigjHoPrUvw10W/0LwXbWeqvKZwSSkgwU56U47O/l+oS6WOtooopAFFFFABRRRQAUUUUAFFFFAHNeP/ABC/hnwhc6hCQJRhEJ7EnGawfDdwV8U2622rXuyWIma31CMjzz/fiPp7V0PjnQZPEfhaextwpmyHQN0JBzishbXUPEfifRryTTbjTYtKDGQzLt3sQBhfUU47/wBbWCWx3NFFFIAooooAKKKKACiiigAooooAK8V1XxPfRQa1dSanNH4gtb4xWVkp/dOu7Cg8Y59c17SRlSOmRXlEvh/VLfwdqnhY6RPc394ZfL1HaCmX6MX7EUJ2l/XdD0tb+up6rCzNAjSDDlQWA9afVbTreS00u2t5pPNkiiVGc/xEDrVmm99CY3srhRRRSGFFFFABRRRQAUUUUAZ2tz38Gnt/ZUKyTtxljgIMda840/xRq0HwkuL64uzLfyag9ssxH3cylePoK9VmBa3kVeSVIH5V5lZ+ENVl+Ft1psts0d8t+91FE/8AFiUsPzFNW1v5fnqPtb+tGXovt3hjxpoNouoXF3aarFIsy3DbiJFUMCPQdeK9Crz+3ttW8SeMtEvrrS7jTrXSYpC5uBgySMAo2+oxmvQKb2X9dSFuFFFFSUFFFFABRRRQAUUUUANkZkidkXcwUkL6n0rgtJ1bW5vinLZanII4PsfmJbKchT7n1rv649dJvl+LEuqfZ2+xmyEYl7FvShfEvn+TFL4X8vzRm+KNN1PStG1LXL3XZlu42L20cBxGBn5VKnqa7LQbm4vPD9jc3qbLiWBWkX0JHNef3N/rer+KJX1/w5qZ0y0l/wBFghi3LLj+Nq9KtJfPtIpPJeDcoPluMMvsRTXwjl8RNRRRSAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigApu9d23cu70zzSnO07evbNeG2viLWdC1LxL4gvLO1vriDUvssQ3PlctjA5xihau39dv1HbS57nRXC3XjPV7O8s9IuLfT11e7jM43OVijj7E5Oc/jTE+JSDS7pXt431W3vEsfIjfKPIwypB9MZP4U7f1+H5iO9orgP+E41ux8TS6NrGmWyOmmTX6yws219mPl5PvzU03j+eLwVoOufY4y+qzwRPHk4QSMFJH0zQk3t5fi2v0YPT+vK53NFefT/Ea6l/tC902CyfTdPmaKXzZcSyFThioz6g9qe3j7UdS8Rx6Z4csbeaObTUv0nnY4AYnggH2pdP69R2/r8DvqK4CP4kyTeH7aaKxX+1Li9axW3LHZ5g5Jz1xjmrF/4s8Q6FbxTa5pNssP2lIpZoXO0IxxuAPTFO2v9f11EdvSbhuxkZ9M1hWfiJr/AMWT6VbRK1vbwiSSbP8AEegrF8QeKRo3iy6jSwjlmt9PNwJSxycfw0hpX0R3FISFGWIA968/s/H2sCPRb3VNMt4rHVyETy2JeNj65OMVf+Klw9t8PruaNnUrJEcocH746U2rb+glqdiWAGSQB60teV+LvGcNx8O3ggtNThlZIgJWgKgfMP4s1u6/4h13w9okd7bJpz2wiURrMHMkjEdBhqT0uC1sdvRWdoF1qF7odtc6xbx213KgaSKMkhCe3NaNNqzsJO6uFFFFIYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFeW6h4B1q50/W4Y1g3XurrdxZkP8Aqw2eeOtepUUbO/8AW6f6D6W/rr/mcJ4s8GS6h4isNdtrG21F7e2+zy2lwxUOM5BDYODye1UV+H97No0syw2dhfLfx3ttbwJ8ibBjazdWyC3PvXpNFC02/rW/5i/r8LfkeSOms6x8YI7bXLaGx8/QrmGJIpPMxlkBYnA9RxRJ4P8AF1x4d0DQHtLNLfSL2F3uBOSZo0cHIXb8p46ZNeqm0t2u1ujChuFUosmPmCnqM/hU1NO1rdP0ba/MHrf+uiR5T/wry902XUbOz0bTb6K9uZJ4r64YhoN7EkFMHdjPqK39I8I32meOBfkxNZppMdmGX5SXUtn5QMAc129FJaf15WB63/rrf9Dy6P4f6xDpaTx+T/aFnrD38EZc7ZEIxtJxwcZrf1T7fqvhfVE8XQ2em2skJWNFm3ENjgljjv2xXZVDd2dtfQ+TeQpNHnO1xkUPVW/rt+g0/ev/AF3OJ+EmlXdn4U+26q5kvLxtzORglRwv6Unifwjqeq+J72+tBF5M2nG3Xc+Dv/LpXdoixoEjUKqjAAHAp1OT5nf+uwo+7/Xnc4G78IapN4b8L2SCLztMlR7jL8YA5xxzW3450W71/wAJzafp4Qzu8bDe2BgOCf5V0dFDd/vuJafkcz4p0K81bwHJpVoENyyIoDNgZBBPP4VzuoaR4ol8V21zPo9vqGnWMai2h+2eWN+OWYbDk16RRS63H0sVdNnu7ixSTULRbOc/ehWXzAv/AALA/lVqiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAorHk8V6JFHevLfxoLE4uAykFPwxk/hWlFdwz2a3UTFoWXeG2kZH060dLh5E1FcXpnja51Px8+kLZmCxFqJkklUh3OSM47DiqM3i3xBd2+q6vpRtF03TJmjMEkZLzbDhiGzx+Xaj+v0A373xpa2Gsw6dcaZqQeeXyo5RCpRjjPXdnH4V0Y5FcnpAn8QeIbfW54NtklkptSSCN78tx7YFdZTasrPcV03dbBRRRSGFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHiHjaI6n4+/tnT7XztJ0l0/tPaTibn0HXb1/CvZ7G4gvNPhntCrQSIChHTFTeWmCNq4brx1pwAUYAwPQU1pHlB6yucCyZ+NrgDA/sxR09zXOW2sWXh/wz4l8P6hOsWpzXU32e2Y4ecSHKlR3HPavYNq7t20bvXFNaGJn3tGpb1I5o6W+X43HfW/p+CsZXhOzlsPCWm21wpWWO3UMp7HFbFFFEnzNslKysFFFFIYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV494ffxj4x8UeJ44PF0+nW2m3/AJEMMdvGwC7c9Sua9hrxv4c6Vdah4t8cPbapPZhdVAKxBSG+TryKAO403QPEum6dfi78USahcSx4t3ngRRC3r8oGa3dLNxbaPD/at1HNOq/vJlwFY+tZGvWtxpvgHWBJfTXMgtJWErYDD5T6VwRvGbwL4Qj1SaRtMuHAvcO29lxxkg5xmgD10Xls23bcRnd93DDmpq8u8F+F9HuvGOqX1jBcyaXbyJ9iaW4l2qwUbtoLcjOeua9RoAK4vWJvG0tzd3OmNY2NnZlikc6F2uABnOc/KDXaVzvivw5P4n017a21eeyjdCjCHGH9j3x24IoAn8H+IR4p8KWWsCEwm5j3FD2NU/F3iibRpbPTdJijn1a/YiGORsKij7zt7Cqvww1+HXfBsfk2aWZspGtHijOVBQ4yPbiuZ8SaQusftBada6hJItm+ithFYr5mHbIBHI98UAdr4XXxAPPbXtRsb+NsGM2se3Ye4PJzXQLIjswVgSvUA9K84sLVfCPxdtdG0ZpF03U7B5pbZ5GcRyIwAYEkkZDfpXcadolrpd9f3dsZTJfyCSbzJCwBAwNoPQfSgDRrmvF/ieTQxZWdhGs2o6hMIbdGPAJ7n2FdLXmXjZJLT4u+E9QuB/oRdoQx6I56UAdlNpupxaeZItTka9Vd2WUbGPpj0qPwl4ni8R6Q88m2G5t5WguY8/ccf49a3ZGCxsW4ABJrxrwH4bk13/hOWuBKtpeX5Nq6SsmWVcZBUjvQB7L5qbd29dvrnikaWNF3O6hfUmvOPDdhZ6/4Hg0O7W4jlt7kxzhLlw+VOc7s55qaGeVvic2jeVLJYabaK0MAfO5j/ExJ5oA9B86PZv3rt9c8UvmoTgOucZ61wWp6RePZeIUvImi054/OtVEzBkfHPQ9M9qv+GfDkN3omk397c3MlwtrtfbKQsm4c5H8qAOuWVGztdTjrg9KzNdl1H+zQdBmtVuPNTJnPy7Nw3D64zXE+HrK28PeK/EmhzLMRcRrcWryXMjbo2BUoMnjDenqKn8TeE9P0b4cTJb/avMhdJlka6kLB94756c9OlAHoPmBIQ0zKvHJzxQssbJuV1Kjqc159qWpXd18StF0V1kexjsTdtEhx5rjgZPcDritX+xby98RalDcW7Q6NfWqho/NKsswyCV2ngYx070AdZ50WM+YmP94UvmJuA3rk9BnrXiSaVa3Pw7v9LiF2dX0XUZUkYXcu9lUhw33uQY9grvtI0/SfEOqadrcCXAa3skIH2hwoLdARnBIw3WgDsaY80cRAkdVJ9TTmO1SfQVxXga7bxLDquo6kN8n2yS3RG6RorEAAUAdbqF2LPTZ7kEfu4ywyevFct4YXX9Qaw1WXV45bSdXee3KDIyflCkdAAKxtPm/tuw8WaFqfmXFtpk7LAxdlO0qGAyCCcZrofh7o1jpfhKzksYmRpogXLSu+eT/eJx+FAHVUxZ4nfasilvQGq+qzQW+kXUt3cfZoVibfNnGwY6153rWoGw8HWF9pBuXMVzEI72TAMqs4ByO4waAOp1K8v7XxvptvHdt9kuVbfDtGMj360mmXl+PHWpafc3bTW0cKSRoVA25HqKi1hg/jrQiDn5HzinWP/JTtT/69Yv5UAdVTHmjix5jquemTT6898N6jdaz408RSX8ElwtnMLaCIEBY1xknHqfWgDvzLGqhi6gHoSetL5sfPzr8vXnpXmHiHStSg8C3xvy0U1peB9PkErZRC427sHn8a61/Clibe5uJprqQz2nlSIZ2CnAzu4wQfcGgDoRLGduHU7unPWkM8SybDIob0zXmui6eYPhfa63NdXUl5pqTTw7ZCA20sqqwOcjAGfU1v+GrZNU+Hdve3bs91e232iSfPzByM8Htj09qAOteRExvZVycDJ60CRCSAwJHXnpXktzqFx4n+Ddrq907pqNvcKscysyjcsoXcQCMjHY11et+GbmLQ7+50K+mi1O4tBEhlm/d7uucdj70AdatxE7bVkUn0BqSvPNF1wXXiHT7TXNCutF1CP5Yn37opTjkAg8/jXoeaAAnHWqNlqtvfXFxFBIjeQ+wkMDk1cliWaJo5BlHGCAccfhXn3gXwxotpe6leLA6SwXp2MbmQgfgWwfxoA3IL2+i8fTWM14ZLQ2/mLGygbT9a6ZWVxlSCPY1xlxZ/a/ioN8rCFbMbo143fU0zwrcyxeOPE9k07/ZIHR40ZsiPKAnFAHaGeISbDIob0zVbU9Tg0u1E1w6jc6ooLY3EkD+tcLcXdq/hXXLjSprnUPLaSVbwkDy3HO1T3Aqv4msbXxF4L8NXmqo01w08G4rKyfe68KRQB6YjrIoZCGHsc06qGk6bY6Ra/ZNORo0HzFWlZyCfdiTWd461m40DwTqWpWYzPBCSnGcH1oA3PPi8zZ5i7vTNPZgq5YgAdzXJ3VkkPw5e5jkYXUdn9pFzu+cybd2c+57dK5X/AISnUfEN38PrCdvJg1iGW6vdoIMhiVcID2BLZ/CgD1SOVJc+W4bHXBpPPi8zZ5i7vTNct4mik8NafrniawnkMkGmSeVZ4Hlh1G4Njrniq+g6G2tfDvTjNfzRXlzHHcTXkR+cseTjOcA+lAHZ+YhfYHXd6Z5oWWN2IV1JXqAelcetnDbfFgSQGQfabEtIDKxUnJ5wTgfhWd4Us4rX4peKrOFpfs7QwSGNpmYBm35xk8Z9qAPQPOiIyJFwDjrT6878O+G4L6+8RWMtzdJapdL5KxzNujJGSckn0r0GKMQwpGCWCKFBY5JoAV3VR8zBfqa47wzqmpTeOvEGnX18bm2tTGYAVA2AjOMjrUGiX8/iH4ga5b35P2bTGWOCEEgHPVj61X8KWcUPxL8VQKXaNhFwzdAVHAPWgD0ASxspKupA6kHpSCWMx7w6lP72eK4jwrp1uLXxJp581rb7S4CtM5IG3PDZyPzqj4Isor34V39rctNLEr3AUmZtwAzj5s5/WgD0YSxnGHU56c9azNGk1P8A0s6xLasombyTAeiZ4z71zvg7w9HeeH9Jvr27uXuIMsNspCsCCMEdxTPDWlWvmeJ9OIlNr9qcBDM5IGOzZyPzoA7fzoyoIkXB6HPWn5AGT0rzDQtPMHwfvZ5LmeWaOKcxSGQ5jCs20A57epq9e6hq9x8HNLvLOUtdyxWpnf8AiZCy78e5GaAO9NxCq7mlQD1zUmc9K4ZtMGo+OIIbSORtIbS5I73c7Bd5KBMc/exv5FdwihEVF6KMCgDzf4ha/reheMPDNlpuoGO31m8MEqGNTsAA5HFdFqGm65DCWsNeZposOySxqQVz04H1rjfi+rP45+H6xvsY6m2GxnHArudJ0nULPxTqN5e3hube4t4kiUoAEKl8/wAxQByvxL8Ra34ebw9Npd+Yl1S/itZYyikKGUkkcdeK6S+0vXBaMbDX3Fyq7wssSkH8hXHfHNSyeEFQ7SddiAOOnytXa6bpGoW/iuS+ur03Fs9n5aoUACtuU/yFAFeyj13VLq4mk1FrS3QKIkjRSWOOTyKwfBt/4g8RrrP2jWXRrG8kt4tsS8hemeK9GIAQ4AHHavPfhP8A6zxL/wBhWX+dAHb6PJcSaVD9tcPcKCsjAYyQatu6xrl2Cj1JxTgAOgxXN+PrGG98GX3neYGiQOjRyMhVsjnINAHRCRC2A6k+maDKgbaXUN1xnmuE1+0/s/4YSalZ3UsN7Z2v2iOcyEklRnB7EHGKz4FOteJPDepFpbd9QtC10gkbD8dMZwPyoA9LEiFNwYFfXNJHNHLny3VsdcGuB1iM6Dreg+HLOe4az1G4mmnaWTc2M7tgPYZP5Va8b3r+Gr7QL3TRsNxfrZzRL0kRlY9PUFRz9aAO0kljiH7x1X6ml3rs37ht65zxXC+Fb6fxD4/8TtqJDRaZKlrawHoqkZZiO5PH5VneJY7zQ7vw34civbm6ttT1JzcuWAdkAL+UCOgOMeuKAPSo5o5f9W6t9DSNcRI215FDehNc1Laakni6wu9Ptvs1kYniu1ZuCMfKQB3Brkm1LUtGhvLDxbo9xe2k13LImrWkm7EbSEpu6EbRhcD0oA9TeaOMAu6rnpk9azNbl1I20DaHNaq5mXzDOeCmfmA98Vx+q3us6V4gfUYtMbXtFnsokRYJB5kBGSW2nruBHPtUGsJpmofD22vtO+0oIbxDGHldXibeMq3PPXvQB6V5ighXdQ5HTNKrq+drA464NcL4r0tZvFfhu4hnmglkmCSMkjYdcdMZx+OKfNJJYfFiys7SR0t57Fi8RYlSR0PPegDtzIithnUH0JoSVJM+W4bBwcHpXmmb660LXxfea+rfbWS1MZI+XjbjHbrmu60LTvsOnxvIm26mjQ3HzEgsB+lAGmTgZPArB0S8n1yS4vyxjtw7R2wU8MB/FV3xDLLB4Z1OW3/1qWkrJ9QhxVHwOMeC9N4CkwgkAY5oAr+FdQvJr3WINSvPPFrdtHGzKFwvpxXTbhtzkY9a4bw5p63Gv+KJbiRnT7W4SMHAXjrx1NcmPEWqx/DzT7dLiVjda3JZPLn5xEHf5QfoAM0AexpNFISI5FYjrg0efFgnzFwDgnNcnfafqA1TRZtHtDBFDIY7ve/DwlD79d205+tZGh+F7fUNQ8U6ZLc3UVn9o2RLFO26LcOSGJPPp6UAehvLHEAZHVQemTTlYOoKkEHuK890m/udR+J+u2t3FLc2+kxxQ20ORgbkBLkdyc10PhW01OxutWhvk2WTXRksVZ9zKjKCwP8AwPdj2IoA6Lp1piTRSMVSRWI7A1n+Ip7W28PXkl/eGyg8oh51OCmeMj3riNZ1CTTtP8N3WmrOm6/t4PtEmB58bsFO4e4NAHpVNaREIDuqk9MnrShgwypyPauJ+JGnLcW2nXEUssFyl2irLHIwwCeeAcH8aAO1EiMxUMCR2zSSTRxY8x1XPqa4fxKz6P4z8NLYyyIs8jpMu8kSDGeam8F3beI7rWb3UhvaG7a2jRuiIB6epz1oA6vUHuP7MnbT3jFxsPlNJ93d2zTdNkuhpULao8JuNv7xovuZ9q4fS7ltTk8WaBfGSW1sQTC29lYAqTjcCDxUIj1n/hBNDm0RRdtbyB5rWSUgzoO2T3oA9GWeJwSkinHXBpwlQqSHUgdSD0rhvD95p/iXUL+3u9MvNKvJIgs9rK5XI6BlKnj8KyvCdlb2ln4g8KXomE0d3tV2uZC8sb/MhBJyMDjj0oA9PVgwypBHqDQzKilnIAHc1S0fSbbRdNisrMSeXGP+WkjOxP1JJrC8cprIj0250KJLv7Nc+ZcWTSbDcJtIwD6gkHHtQB0U85ezlNlLEZgh2FjwD2zVfRpb1dDtm1yW3N5sHnPCcIW9q5TQbzTvEdxqsN1pl3pl28AFzZzOVyOgZSp4H0rLhsI7z4E7ZZJi9vG7RSec4ZSJCAcg5P40AeneYm4DeuT0GaV3WNdzsFA7k15t4sSbSPhxpF9bXU325Z7Mtcbjl9xUNkdMEHpVrX9Tu7r4paJojCRrH7JLePFGcec6lQoJ9BuJx7CgDvkkSQZjYMPY06ua0611KDxjPMkHk6XPb/MjNkiUHggdhjNbWqpPJpNylpIIp2jIjc9FOOKAJ/tEO7b5q7vTNZ1i+qtrl6LyS2axAX7Osf3we+6uD0zV54P7M0vxdotxZXULKq6jFJuimf1JGD83Xmt3SbRLL4kawtoZFElokhVpWZd2Tzgnj8KAOyMqBsF1B9M00XEJ6SoecferzJxqF54P1DzfOfXWvdsJRiMjcMfhjNXPGXh6KHT9LuIHltb1ruMvJHK2MkjPy5xQB6GJEZiAwJHbNJJLHFjzHVc+priPEJfSfHHhqOxlkjW4d0mXcSJB71oajc2L+NUhW4mu7tLbD2CYKqpJ+c+hoA3NXaU6LdSWdwYZEiZ1kUA4IBPeqnhO8uNQ8MWdzeyebO6Zd8AZP4VzfhfUJ59L8VWtwzCO0uJYoEc5KqY84z+Nb3gf/kTrH/c/rQBvEhRliAPU03zosZ8xMf7wqO+s4dQspbW5DGKVSrBWKnH1HIrxmPQ7aXwXrmgIbv8AtfS7+VVk+1yl2XO5W+9zmPbQB7WZUBALrk8gZ61maPJqfmX51eW1aNZv9HMJ+7Hj+L3rndIsNI8UzaLqscVwpt9PRtouJAo3cBSN3JBD5zzzR4X0u1XVPFmnYla0a4T920znGVOcEnI/A0AdVpuqW+qRSPbyKwWVowVYHOO9Yui316PF+sWN7eGa3gVGiDKBtz9Kx/hp4d0jT9FS/gheO4W4kRWa4kI5OMbS2O/pVnT7EXXxM1x5pGMSwRYiHAJwOSaAO1VgwypBHqKHcIjOxwqjJNcV8O7q4lufEdrNM8kVrqjpCHOdilVOB7ZJrrNUVm0i7CfeML4x9DQBjabr11rmn3Ooab5S20TukYdSTJt6nNaHh/W4PEGjx31t91iVZf7rDqK5f4Vjb8M4w3BV5gwPbk0vwlR18Jzls4a8lK59N1AHdUUUUAFFFFABRRRQAVzvhjwfb+GNR1m7t7l5m1a6+0yKy42HGMCuiooAp6tpyato93p8rlEuYmiZgOQCMZrzDxVoP9nP4e8PpqD6fZ2qsw1ORAy5A+6R05969bqG7s7a+gaG8gSaNhgq65BoA8v0i91PQfFGmWGna/F4gtLtiJ444gvkKP4sjjFegWmiz23ia+1V9TnmhukRUs2A8uEqMEr9asafoum6UpGm2UNsD18tcVeoACMjFcLeeCNfhkmi8P8AiiSzsrhiXimi8xo89djZruqKAORj8AQWHgdPDmh6jcaYFdZDdwgGRm3ZYnPr3q74o8LnXWtruxujY6nZkm3ugu7aD1BHcGuhooA5bw14Qm0zU5tY12//ALT1eVBF5wTascY52qP1Namk6NPpup6ndTalPeJfSq8cMoG23AGNq+xrVooAKy/EHh+y8R6abO/VtuQyOpwyMOhBrUooAwptI1S609tPn1BBAy7DMgIkI/l+taGkaTa6JpcVhYJshiHGepPcn3qf7ZbfaDB58fnAZMe4bgPpTDqViCQbyAEdR5goAzdN8L2umeIr/VoHffegbos/KpHcD1p994ein1qLV7R/Iv40Me/HDr6GtSKeKdd0EiSD1Vs1JQBj3+iT6hptzbyXxiluE2NIqZCj2Gal0DSpdF0mGxmvGuxCoVXaPacAfU1p0UAYereFrXVvEGm6vI7xz2G8DYcCQNjhvUZGak8T6C/iPRJdOS9azWXG51j3Hgg+o9K2KZLNHBGXmkWNB1ZjgCgDEn8LpNLp941yf7R09SsdyFxuUjBUj0NadraSpN593L5ku3aAvCrVmORJYw8bB0YZDKcg06gDDtvC1lbeKNQ1pM+ZfwpHJHj5crkFvqRtH/ARVjw7oNv4c0r7DaMzx+Y8gLdRuYnH05rUooAKwoPDh0y8u5tHmEC3j+ZLEwyobuRW7RQBgxeFYLXSLyzsp2hmvWZ57jZuZ2PU4zVnw7o8uhaTFYy3rXixLtR2j2kD8zWrRQBn67o9v4g0O60u9LCC5TY5U8isS98FnUPDsOj3N6RBbFTCUXBypyufyrq6CcDJ6UAcs/hC5k1iy1D+13V7XJKCEEOT15zxVm18NXFv4qn1ptUeTz0VGg8oAADpzmugBz0ooAKxD4dW11q41TSpBbz3QAuEIyr46H61t1CLu3N19nE8fn4z5e4bsfSgDE17wvJrmiyWH9pPbmZw8koj3EkHPAyK0xY3P9ktaNelpSpXz/L/AKZq9RQBg+HfDTaHoX9lXN6dQt9rKA8QXgkk9z60y08My6fpR0mxvCmnkMqqRl41JyVB9OTXQ013WONnc4VRkmgDm9V8Fw3nheLQtNum061jKkbIw5OGDeo7ir9/ok2oeHX0ya/cSOu37Qi7WH4VqRSpPEskTBkYZBHen0AZLaM91d2s1/OswtH8yIBcHd2JqlpelT2njDUbtL+4uLe4UF4ZPuxN0AWujpAoGcDGetAC1hW/hs2l7cNBckW1zKJZIivOfQGt2igDnx4anHis60NUfmPy/I8oYx9c1X03wa1jr2qalLqkk41PiWIxBQBjAAOfSuoooA5Sx8EJYeHLjQIbthp02/jb84DckZqRPBcf9gxadNdMzQNG0MoH3dhyvFdPRQBTsLSW2DvcyiWV+pAwAB0FS31lb6lYzWd5GJIJkKOp7g1PRQBzw8My/wBijRXvWbThGIuR+8KD+En6cZqW+8KafdWunJAgt5NLYNZyIOYuNuPoRW5RQBnrpjXCONTdbgPG0RjA+UqetU9O8PSaZp66ZbXRFhGNsa4+ZV/u5rcooAyL3Q/N1e31OzlENxDGYsMMhlPasrSfBc2leMNS15NUd21FEEsTJkAqCBjngc11lFAHP6J4auNH1W9u21R7hbyTzHiaELg4x1zXQUUUAY0nh9Ytal1XTXWC5nULNkcSAevvVHSPCM2l+LL/AFr+0Wk+3BfMhKcZAx1zXT0UAYQ8OyW91fPY3XlR35zKpXlTjGRWf4d8EzeH/Dd1o8WqvJHOzlXaPJTdnPfnrXW0UAY/h3Q5tB0lbF9Qa7VBhHaMKR+pqnpvha60671OddXeQ6g5cgwgbCfTnmukooA5S18Fz23g250D+2JHScMPPMAyoYkkYz71ma1pc+heEdH8OrcTT28tzHbPfBdptkVSwY9e6gfjXfU2SNJUKSKGU9QRQBwWq22peHLOO+0nXmvpRLGv2N0B88FgCBg8HBJz7V3sbFo1ZhgkAkelV4dNs4JA8NtGjDoQOlWqAOP8VeAj4p13StTl1aS2bSp/Pt40hBAbHc5rq7aOSK3RJpfOcDl9uN34VLRQByPjPwJ/wmU+nvPqslqmn3K3USJEG+dQQMnPvXT2cMtvbLHcT+e46uV25/Cp6KAK17bz3EOy2uTbN/eCbv61zXhbwRP4XuLySLWpLhLy4aeRHgA+Y9ec111FABXO+PJoYvBGpCeTYHi2g9+o6V0VRT20N1HsuIllX+6wyKAOUtvD0PiTwbZ2F1fPNYMieYijmQDnaT6Vcu/CUk2tWN9Z6k1olkhjjgWEEY+ua6GGGO3jCQoqKOgUYFPoAytZ0G31pbZpmKXFpIJIJl6q3+BqGXw9/aF9aXWsSrcGycvBGowobGNx98Vt0UAYreHlt9cn1XS3W3uLpVW4Uj5ZMdD9Rk0mpeF7XVbWIXUj/aYLhbmG4H3o5Acgj27Y9K26KAKENlcPIr3twJCmdoQYH1NZtr4ant9Jl0xr8zW0zyMxkXLAO5baPbnFdDRQBhWvh2XT9QmuLC9ZY5IYoRA4yqBAQCPfn9Kqan4L+3aG2m2+oNaCSf7RLIsQbe+QemeOgrqKKAOb1HwtdahfabcnV3jawYMAIAd59+eKi1HwrO/ilPEaajIZbaAxpbCIYI7jOe9dTRQB53oWky6nYy6k+tzabPPM7vbEA+Sc4xzjsAfxro/B99qF5YXCam4mMExjjuAu3zV9cVry6ZZTSGSW2jZj1JFWEjSJAkahVHQAUAEsazQvFIMq6lWHqDXO+ElmstPl0e5JSa0dkRj/ABpnhhXSVGYI2nExUeYowG9qAMDSvC9zplxqcw1Z5TqDtIQYQPLJ9Oeao6Z8O7az8Oy6Pe30l7C9wblHMYRo5CxbcOT3NdjRQBmw6ddFY1u7vzFiOU2jGTjAJqjo3hq40jWr6+bVHuFvZPMeEwhQDjHXNdBRQBiz+HkXX31rTn+z3ssQimyMrKo6Z9x61pWlq0G95ZDJLIcs3YcYwKsUUAZXiXw/a+KNBn0q+LLDMVJK9QQQR+orM1TwhJq+m2dvd3uGsJY5rcouBuQgqSPwrqKKAILO2+yWqxFi7dWY9zWT4l8Oy+IY7eNNQazWGUSfLEG3EfiK3aKAOZ1nwjNrGtaZqL6q8TacSyoIQQ7HqTzVmDw4dNvrm60icQm7IadGXKlh/EPQ1u0UAYcHhiG00+9htJjHcX2TNcbcliRjpVKy8HXFlp+n266vK5sZN6P5YXd7EZrqaKAMO4ih0eSbXtUcyyRxCMmKMnaufTvyarW2mWGqeLU1+3DbltVjJxgNySM+4Bro3RZUKSKGVhggjrSQwxwRiOFFRB0CigB9ZeraRJqN5Y3MN29u9nIZAFGQ+VK4PtzWpRQBjjQ5HvJ76S5AvJYPIEip9xc5x781k2/gee38FyeHRrUjRvuHnmAZALZxjNddRQBymt+Cpdb8M2OjT6vJGlq8btKsIzJsIK8Z46VfvfDMV7Pp960xGo6fnyrkLjIIwQR6Ef0rcooAqWtpMk3n3c3mS7doCjCin39r9usJrbeY/NQrvHUe9WKKAMFfDskunWthfXf2i3tgmCy/M5UcE1Wl0C60/XL7xBHfyXDvblBaCIAHGSBnNdPRQB55oejy3mki/wD7fmsJpmaRoGCnyTnpzg1YtNL1XxfokA1HUWtntLncsqQ584KeDgkYrsZNLspZC8lrGzHqdtWURUUKihVHQAUAc1rHhGbV9b03Um1V4m0/lEEIIYnqTzT08Jra+KLrXbC42XN5Gsc4dcg7RgEeldHRQByUHgf7NJqP2fUZEW/cyuSmSHK7SevTFbHhzRZNA0eOwkvWvBHwrsm04/M1q0UAFYsfhm0i8WXOvLnzrmBYnj/hJHG764wPwraooAyfD/h+38O6dNaWbsUknkmBbnaXYtgewzVbRvDU2k61qV/Jqb3K6g4d4jEFCkDAwc1v0UAYWmeHDpbGGG5JsxO06xleQxOcZ9AeaZY+Griz8R3urHVXk+1qFaEwgBcdOc10FFAHN+F/Ccnhu81Gc6m939vuDcSK0QXDEAccnsBXSEAgg8g9aKKAOfj8Oz2MN1a6XcJDaXTMzKQcxluu2tTSdLt9H0yKytBiOIY56k+tXKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACql9qdrp5jW4kw8hwiDlm+gq3XBXUVxH8a7S4vd32NrFlt2J+VZO/wCNAFYvaz/G62aFNrtp7+aCME81g2VvZL+0brFpcqgtRpkTrE33QxY5OPWulvZ7cfG+xHmIH/s5s8j1rA02S3b9prWTI8RX+yoQCxGM7moA0NQe5g+LGjW/hI/6MVY6kiH5AmOPxzXZDxdpR1qbSvMcXkS7jGUIz9PWuF8d3txZfEjwuPChU3U87LepFyrQ4/ixXSEWz/FiN5DEZlssDJGRQBuQ+JdOnlmhilLTwttkhA+ZT7irWmaraaxa/aLCUSIGKHH8LA4INcX4aa3b4p+KnDRlh5YyCP7opfhhcwraeID5q7U1W5Y4bOBvJzQB39ZniWCK48MakkyB1FrIQD6hTU+l6tY6zZ/atMuEuIdxXevqOoqLxC6p4a1IuwUfZJeScfwGgDB8OeIdO03wVp0t3NsgjhRXl/hUn1NdHqOq2ul26TXcoRZHEcf+0x6CvNfEwtIP2cblIDEqf2fhQpHXH866DxPr8VpD4d06O0ivJ9TnVIpJOUhKgEufcUAdPb6xbTXktmxMd1EgkaJuu31HrVDT/GOk6pJdRWUjvLayeXLGUIYH6enFc1eztZ/GPSGu7sTbdHuS7BQv8ceBx+NXvCTWb+LPFVxG0XmPJDlsjO3Yf8aAOhTxDp0uiy6pDKZbaLO8ouSCOox61VtvGWkXekjU4Jma027mk28KPeuc+Gc8P/CO65iVNo1K4P3hwOKraX9jh+C975TRKrRzFiGHJJNAHo8E0dzbxzwOHikUMjKeGB5BrM8QeJtN8M2qXOrSPHE7bQyoW5qr4DdX+H+hlWDYsIQcHP8AAKteKNN/tbwze2ijLtGSnsw5FAFJfHeiNqtpp3mzC5vBmFDERuHWq+p+K9Dv7DU7KeW6VYEZbgxxsCo74NcfJqV5feH9J8ShSs2hyiK5BXJIztfH4Yrvdwbwxe3s2xGuYXcnpxt4oAZZ61pWj+DLe/SaaTT44htkYFmK+pqZfFuktp8V8J/9Fl24mx8oz05rF0iaFvhNnzIyv2RgTuGOlYut/ZIPgTEkDRLH5MeMMMZ3CgD0O81W0sUiaeUZmOI1HJf6CuFkltpvjnp8kC7JW0ybzARgn5kxUMCTf8LT0K6uiWsG0fZbtnKLLkbvxxirmoTwD46aUN6B/wCy5gef9pMCgDspdWgS8a0hDTzou50TnaPeqd94t0nT9Hk1O5nYW0TbZCqkmM9wR2rn/ARmg17xNDqR23Rv2cb+8Z+7j2xVbQLGXUvGnjZCpOl3TJGnHys/lgMR+NAG2/xD0CNdPLzTAajj7MTCf3mSQB+h/CtGHxNp1x4hl0SNpDeRLudTGdoGPWvNIH1LU/AS2oBXUvCM5DFhncY2wp+pi5/4FXpXh26GrWn9shQFvEQxHGD5eMjPvktQBS0m7ax8ZX+iO48qSEXdsmPujIV/1Za6WuNnieb4zWUkQ+S30iYSn/ekjwK7KgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACoLqyt71QtzGH2nKnuPoanooAym8NaS99FeyWaPcxLtSVuWA+tNHhXQhfPeDS7f7S4w0u35iPrWvRQBStdG06yuDPa2cUcrdXC8/nTf7C0z+0v7Q+xRfa8Y87HzYq/RQBnW/h/SbW7murewhjnn/wBbIq8v9aLLQdL0vz20+whgM+TLsXG8nrmtGigDM0PSYtJt5lghSATSmQxxjCr2/pV27s7e/tnt7yJZoXGGRuhFTUUAZUnhjRZdLGmyabA1kpyICvy/lU8mi6dLax2zWkflQnMYx9w+o9KvUUAZ0mg6bK8Ty2qPJETtc/e568/gKLbw/pVnPPNa2MMUlwMSsowX+taNFAGbaeHdIsIJYbLT4YY5s+YqLgNn1pqeGdGj019PTToFtHOWhC/KfwrUooAr2Nha6barbWECQQr91EGAKsdaKKAKq6bZpayWy28YhlYs6Y4Ymnz2Vtc2htZ4VeAjaYyOMelT0UAZ0egaVDppsIrGFbQjBhA+WmP4Z0aTTV0+TToGtEOVhK/KPwrUooApnSbE2iWwtkWKP7igfd+lVm8NaS+oQX0lmj3MAIjlblgPr+FatFAFS50u0u5PMliHmYxvXgkemamt7aG1iEdvGsaeiipaKAK8en2sRuTHAim6bdPgf6w7QuT+AAp8ccVnaCOGMJFEvyoo6AelS0UAY2jaY0eo3urXWRcXu1QhP+rRc4H681s0UUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB//2Q==)

对于频谱泄露，即在频谱的bin中，单个频率信号表示为一个凸起而不是一个尖峰，该问题已在上一小节中论述，可以通过选择加窗函数来解决。

矩形窗口可以实现非常好的频率分辨率，但会导致强烈的频谱泄漏，例如，如果振幅为0.5的频率分量出现在550 Hz，那么除了500 Hz的峰值之外，还会出现问题。此外，最大可能振幅误差非常高，将达到-36.34%。Hann大大减少了副瓣，但它也降低了可达到的频率分辨率。这里可能的最大振幅误差是-15.12%。Hann窗口是最著名的窗口函数之一，因此在条件监控库中默认设置。如果要求谐波信号的幅度精度，则应使用平顶窗(SFT5M)，在中央主瓣区域使用尽可能平坦的曲率(最大幅度误差-0.045%)。然而，这里的主瓣非常宽，因此这个窗口只推荐用于纯谐波信号的分析。

对于栅栏损失，5.1.2节中已经论述，选择平顶窗或者调整采样频率。

对于相干功率增益（CPG），对信号加窗后会造成信号在时域上幅值的损失。固定的窗函数会有固定的CPG，会造成信号的固定的幅值的损失，可根据此进行增益的补偿。无窗函数则无CPG。

![图表, 直方图

描述已自动生成](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAkACQAAD/4RDaRXhpZgAATU0AKgAAAAgABAE7AAIAAAAFAAAISodpAAQAAAABAAAIUJydAAEAAAAKAAAQyOocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEp1ZHkAAAAFkAMAAgAAABQAABCekAQAAgAAABQAABCykpEAAgAAAAM4NgAAkpIAAgAAAAM4NgAA6hwABwAACAwAAAiSAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMzowNzoyNiAwOTo1OTowNgAyMDIzOjA3OjI2IDA5OjU5OjA2AAAASgB1AGQAeQAAAP/hCxdodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDIzLTA3LTI2VDA5OjU5OjA2Ljg2NDwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5KdWR5PC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAjcEtAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKgvbyGwsprq5bbFChdz6AVPWb4itlvPDeoQPEswe3cbGXIPHpUzbUW0VFXaTDSdf07WtNgvrG4VoZ1LJuOCQOvFWBqdiSQLuHIGT844FeJWNtbxW/heOxt0j8vT9QWZYo9uH2r1x3q5pvhXTTa+B2awXfPI4uW28yrtc7X9RkDg1e8rL+tWv0MuZ217N/ceyi8tjB5wnj8r+/uGPzp0M8VxHvgkWRP7ynIrwi8s7mC8e0h22ujxaowdHiLwoO2V6ba9B+HenxWdzqj2mpR3UEkgIit4PKhiOB9wf4Uo+8r/wBdP8xttO39dTq9U1qw0e1lnvrhEWJd7Ln5sewpbfWbG5sbe7FwiRXCB4/MO0kH2NeR6/BppTxgPFEO/U2nzYvIm5vK2Lt8s9uc5xSaLDpiySf8JlAskf8AZsYsPPTco4Odvo2ce9SpXjfyT/Bu3qN729fzS+49klvrWAAzXEUeRkbnA4pEv7SSRY0uYmdhkKHGTXjXhjRW1Xxdo0PiO0NzEulzFY7hdwxvXbkHrxUNtotvpnhPw/f2towvBqe0ygHzNm/G3PXGO3Sq2aT6/wCdiOfR/wBdLntf2+0E/km5i83+5vGfypXvbaMEvcRqA20ksOvpXg2u3cF1Hb3dnZWtndLqWCFjLXKjcQdznkA1bnsBfahZwXUDSQyeJyXUqcMvkd/alG8ml/X2f8xzly/16/5HtyXtrJF5qXEbR5xuDDGakkljhj3yuqJ/eY4Fed+G7PTtM8aeJ7Ce3hh0tGt3igaMeUrndyoxgHIFafxVh+0fD26iVSys0Ywo7bhQ9k11t+Ja1bT6HXQ3ltcFhBPHIV+9tYHFJDe21w5SC4jkZeoVgSK8g8SaRPpGuyxeE7b7JLcaGxYW67d7jPJx/F71bsI9J/tbwv8A8IdAIrlQPtxiQqxXb83mHuc+tNau39btfdoS5NK/9bJ/qesGaJZPLMih8Z2k849aYbu3VFczxhWOFO4YNedfFEXOk6jp+s6fFJJJcI1hJ5YycPjB/DmuR0zSr03Vx4evYZJLfQbK5ulkkyd7vGVX8fmao5vdb7X/AA1/K33lPRpf1rp+Z7g+o2cYBkuoVBGRlwMinyXltDCJZZ40jboxYAGvGvDGh2mqa/ZpqlitxGmgLhZo8qGyOx71B4dWJl0oeKkMukRxSxxrOu5FYOQMg+2MVpJWdv63a/QzjO6vb+rJ/qeuaV4m0zWLa5uLScCK2naCR3G0bl69a0EvLaRUZJ42DnCkMOT7V4NoEFqq2n2mFz4a/ti7MyOp2HkeXuHdetXtStWgfWtZ8PQN/Zel3MFxZpGpCFgGEmwdhgjpU3Vk35fp/mVd3a83+bt+R7YbqAKzGZAFOGO4cGmNf2iIGa5iCnOCXHavDNOtNTm1iz0u4hmeDxBOl/KZM4QKdxX9Kn0vSIb3XPDlpe2vm239pXW+N0ypGD1HpTSbaX9ab/iS521/rqe3C8tmt/PWeMxf3wwx+dEF3b3Ofs88cuOuxgcV4o9obPVtUsXhZNAt9cHmwKuI1jKKcY6bck8V0fgAaQPiR4iHh+NI7TyocCJdqZwegoj71vNX/BP9Sm7X8v8AOx37a1ZprX9llmNz5JnbC8IoIGSe3WphqVkUZhdQlV+8d44rhWA/4SbxsJQTO2nL5ee6bH6fjXFy6Cll4f8ACUsEMFpZzAm+llt96ucHHmDuM461EZXt8vxv/kDdm/n+Fv8AM9yW6t3g85ZozF/fDDH51mav4q0jRbGK7vLtfJlmWFWQ7vmP0ryq70022hubS/8AtumPfobqK2hMcSJnkAelXfF1h4TuvDZbQLGF4YNRgkuNsX7tR3IHQds4FVf81+n+YX0fo/1/yPV31GzjZVkuolZhlQXHNLLf2kDYmuYkPozgV4j4tu9PvrfXDZ6fZW8kDKsDSRF5nAUENH/dXtxjpWlomiWmtXmpzataC6ZdGQoZk3YbaeRnv71PNpf5/hcd9Uv63S/U9elvLaBFeaeONW+6WYDNUJPEmmx61a6Z52+4ulZo9gypC9ea8r0JbOS+00+Mo/O0/wDs7bai5Usgkzzwf4sdK5rw9HO8dodCWQc6gIDg5A3tj8aq9n9/4XJ5rxv6fjqfQ8d7bTStHFPG7r1VWBIqDTNXtdV+0C1Zt1tKYpVZcFWHtXkng/TIZLzRJxqtvFfxjM8cFpslc4+YSN359a7XwwM/EPxQYM/Z8wBvTzNpz+m2qtrb1/Cwc11f0O0ooopFhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABVLV9WtND0yW/wBQk8uCIZZsZq7XM/EOyS/8C6jDJbrOPLyEZd36VM21G6HFXdjatdWsbyyjuobmMxSRiQEtjg9Kd/aljtZvtkO1TgneOK8N1K3gk068TT4QIDplouIkwM7uRxXSW/g/Rj4yMR0yI27aHvaIx/u3kyPmI6FuTz1pydrv1/BN/oZRk2lfy/G3+Z6lJeW8MIllnjSM9GZgAakjlSaMPE6up6MpyDXgNhDezWvhpdUuI4tMFvKn+mwGaIPnjcp9uma9P+H9h9g8P3KW2ofbY2lYxER7ET2UelU1a/l/mVfY29b8TaX4fsZLnULlVWMgMqfMwycDgVeN/aqyK9xGjOAVVmAJ/CvCdet9MPgO8XU7fPiX+0SXcoTKf3vHPXbjHHStlotNEXiP/hJIPM1ky/6C0iEuI9i7PLPbnPSoT92/9bLb7wbs0j12TULOJ9ktzEjZxhnAp0d7bTOyRTxuy/eCsCRXiFloC3+meKZ9as/OvYrBDG8i5ZGAOCD2PuK0J7K38O6npF1Y6c779Fna5SHKtcEIThiOSffrRJ8q1/rRv9ATu0l/W3+Z67Hf2k0hSK5id16qrgkUPqFnGoZ7qJQRkEuOa8LSaE+ItAm0+CztjMjectlCQeV6O3Un61b8JaLbanrGhQ6pZieFbOfKSplc+a3UGq1/r5/5C5j2wXUDKjCZCshwh3fePtVHW/EFh4fit5NSkZFuJlgQhc/MxwM1yPw7jsoNBa31COPEGqTJZLMmdmCcBM9OM9Kf8V7JL/TtGt5ojLE+qQB1xnI3in1il1a/G3+Y7tKV+l/wv/kdvFe200RkinjdF6sGBApqajZyo7x3ULKn3iHHy/WvJdVFv4d1zX7a10wNp5iiP2eMFIwSRliF7etcrraL/amtRWEdsltPo/zJYQ7I2bd7dTUX/r5XKW9n5fi0v1PoWO/tJiwiuYnKDLbXBxSxX1rNL5cNxE74ztVwTXkmtaNbaRquk/2VaC2Fzo0guPKTHmkKuC2Op5PWpNP0S10tfBV5YWgguZZGWeVFwzqVPDHv+NVpe3y/Fr9DPndr+V/wTPWzLGJRGXUOwyFzyRTPtdv5Yfzo9pOAdwwT6V5/8U5rjQJdL8UafA801qz2zqgyWWVSo/8AHitcjoGjX1trcPhS8jlmtrHOoNLJk7iy5xn/AHqlSvf+vP8ALUuTt/Xy/PQ9sbULNFDPdRKp6EuOaVr21S3E7XEYiPRywwfxrxPwlo1vqesaDDqdmJ4Rb3GUlTK/6xuoNN0W3ih1Wzg16It4dt7y9jEUq5iR9y7AQeMYziq629fwYubS/wDW1z1/TPEumat9t+yTjbYy+VM7DChsZ4Per6XtrIqtHcRsrHCkMOTXg+mwW4mufKif/hHP7dzcptO0x+WcZHdd2K0NWso/tOran4Zg26ZppiuoUhXCF1ILbR9M9KSasm/L8k3+Y23ql/WrS/I9qNzAoctMgEf3yW+79alBBAIOQehr5+gi1W7vYLaWGdo/GUqXEwfOIl3fMvt8te/oixxqiDCqAAB2FVZ2u/67iUruy/rsOooopFBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRXNeKr/VodS0TT9Fu4LOTULiSOSaa384KqxM/C7l7r60AdLR161zH9keMf8Aoa7D/wAEx/8Aj1H9keMf+hrsP/BMf/j1AHRLaW6fdt4l69EHfrThDENuI0Gz7vyj5fpXI6lp3jy3sWk07xDp91OHQCI6VsypcBjnzuykn3xirX9keMf+hrsP/BMf/j1AHRtbQMrK0MZVuWBQYP1pYoYoE2QRpGv91FAH6Vzf9keMf+hrsP8AwTH/AOPUf2R4x/6Guw/8Ex/+PUAdFLaW87h5reKRh0LoCRSSWltKFEtvE4T7oZAdv0rnv7I8Y/8AQ12H/gmP/wAeo/sjxj/0Ndh/4Jj/APHqAOkEUYcOI13AYB28gelJ5EO0L5SbVOQNowDXOf2R4x/6Guw/8Ex/+PVU0/TvHk8Upv8AxDp9s6zukajSt2+MNhW/13GRzjtQB1f2G03l/ssO5jkt5Yyaf9nhBB8mPIO4fKOvrXOf2R4x/wChrsP/AATH/wCPUf2R4x/6Guw/8Ex/+PUAdG1vC5JeGNi2MkqOcdKc8aSJtkRWX0YZFc1/ZHjH/oa7D/wTH/49R/ZHjH/oa7D/AMEx/wDj1AHS+VHvD7F3AYDY5x6UyK1t4HZoYIo2bqUQAmud/sjxj/0Ndh/4Jj/8eqrLp3jxdUghj8Q6e9o6MZZ/7KwUYY2jb53OefyoA6940kAEiK4ByAwzg0nkxbmby0ywwx2jkehrm/7I8Y/9DXYf+CY//HqP7I8Y/wDQ12H/AIJj/wDHqAOkWCJDlIkU4xkKBx6U1rS3ePy3giZM52lAR+Vc7/ZHjH/oa7D/AMEx/wDj1H9keMf+hrsP/BMf/j1AHRfZLfyTF9ni8s8lNgwfwpVt4Uh8pIY1j/uBQB+Vc5/ZHjH/AKGuw/8ABMf/AI9TJdJ8aLC7ReKLB3Ckqv8AY5GT2H+uoA6cQxBlYRpuUYU7Rx9KQW8KsCsUYKnIIUcGuUsdM8dTWMUl74k0+3uGXLxDSd20+mfO5qx/ZHjH/oa7D/wTH/49QBoa5oI1iz8qC7lsJN+/zYAuWPuCCD+NQeHfCtt4fkuLgTPc3dyR5s7qqlgOgwoAH5VW/sjxj/0Ndh/4Jj/8eo/sjxj/ANDXYf8AgmP/AMeoWmwPXc1J9Cgm1+HVldo544mhdVxtlQ9mHsRV9reF4fKeGNo/7hUEflXOf2R4x/6Guw/8Ex/+PUf2R4x/6Guw/wDBMf8A49R0sHW50a20CQ+UkMax/wBwIAPypq2dssJiW3iEZ6oEG0/hXKRad48bVJopPEOnpaqimOf+yclz3GPO4xVr+yPGP/Q12H/gmP8A8eoA6A2NoW3G1hLAYz5Yzj0qRYIkzsiRcjBwoGR6Vzf9keMf+hrsP/BMf/j1H9keMf8Aoa7D/wAEx/8Aj1AE2ueFX1a4jltdTnsNi7THHHG6Ef7rKQD7iruheHrHw/pkVlZRgrGSd7gFmYnJJPuazP7I8Y/9DXYf+CY//HqP7I8Y/wDQ12H/AIJj/wDHqFpsK13c6FbO3jZnigijkbq6oAfzqpo2iwaNDMsLNI88pllkf7zsa5+/07x5BFEbHxDp9yzSqrqdJ27U7t/rucelWv7I8Y/9DXYf+CY//HqBnT0VzH9keMf+hrsP/BMf/j1I+k+MVRm/4Sqw4Gf+QMf/AI9QB1FFYng3VLrWvB2majqBRrm4t1eUxrtUsRzgZOK26ACiiigAooooAKKKKACiiigAooooAKK4fQ38XeINN/tCLxDY2iSSuqwnSjJtAYgfN5oz09K0f7I8Y/8AQ12H/gmP/wAeoA6eiuY/sjxj/wBDXYf+CY//AB6qmnad49nt3a/8Q6fbSCV1VBpW7KBiFbPndxg47ZoA7KiuY/sjxj/0Ndh/4Jj/APHqP7I8Y/8AQ12H/gmP/wAeoA6ekZQylWAIPUEda5n+yPGP/Q12H/gmP/x6j+yPGP8A0Ndh/wCCY/8Ax6gDoVs7ZV2rbxAHsEFSeUm7dsXdjGcdvSua/sjxj/0Ndh/4Jj/8eqpJp3j1dXggj8Q6e1m8LtJcf2Vgo4KhV2+dzkFjntt96AOte0t5IhE9vE0Y6IUBA/CnxxpEgSJFRR0CjAFc1/ZHjH/oa7D/AMEx/wDj1H9keMf+hrsP/BMf/j1AHQvZ20kheS3idz1ZkBP50r2tvJIskkETuvRmQEj8a53+yPGP/Q12H/gmP/x6j+yPGP8A0Ndh/wCCY/8Ax6gDpPJi+b92nzjDfKPm+tHkxEgmNMqMA7RwPSub/sjxj/0Ndh/4Jj/8eqrqmnePLbSbqbTPEOn3d5HEzQW7aVsErgcLuM3GTxmgDqksbSM5jtYV5z8sYFPWCFCCkSKQMAhQMVzY0jxlgZ8VWAP/AGBz/wDHqX+yPGP/AENdh/4Jj/8AHqAOj+zw8fuY+G3D5RwfX60540kx5iK2DkbhnBrmv7I8Y/8AQ12H/gmP/wAeo/sjxj/0Ndh/4Jj/APHqAOja3hfdvijbcMNlQcj3pi2Noi4W1hUYxgRjpXP/ANkeMf8Aoa7D/wAEx/8Aj1H9keMf+hrsP/BMf/j1AHSNDExBaNCQMDKjgelHkxfL+7T5Pu/KPl+lchFp3j1tVnhk8Q6elokSNFP/AGVku5Lbl2+dxgBee+farf8AZHjH/oa7D/wTH/49QB0skaSrtlRXXOcMMik8qPeX8tdxGC23kiub/sjxj/0Ndh/4Jj/8eo/sjxj/ANDXYf8AgmP/AMeoA6NbeFCCkSKR0IUDFI1rbvGY3gjZGOSpQEE+uK53+yPGP/Q12H/gmP8A8eo/sjxj/wBDXYf+CY//AB6gDoha26xNGIIgjdVCDB/ClS3gjiMUcMaxnqiqAD+FcjqGnePYIYzYeIdPuXaVFdTpW3ahPzN/ruw5xVv+yPGP/Q12H/gmP/x6gDpBBEChESZT7p2j5fp6U+uY/sjxj/0Ndh/4Jj/8eo/sjxj/ANDXYf8AgmP/AMeoA6eiuY/sjxj/ANDXYf8AgmP/AMeo/sjxj/0Ndh/4Jj/8eoA6eiuYOkeMcf8AI12H/gmP/wAeqrpunePLiyWTUPEOn2s5YgxjSd+Bng587uKAOxormP7I8Y/9DXYf+CY//HqP7I8Y/wDQ12H/AIJj/wDHqAOnorl9Bu9bi8VXuk61qFtfpHbJNHJDaGAgk4wRvbNdRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBzniTxnaeHrq1tmikuJ7iZI9iD7gY4yT2qLxEd3i7wifW7nP8A5LvUPxBhB0uzZI8ub6HJA5xuqLxlYnUde8JWwuZ7UtdzfvbeQo4xbv0IqY3ad+/6ITvzW8v1Z2dFULfSzBcW8v226k8mERbJJSVf/aYd296lWyK6m959pnIdAnkmQ+WMdwvTNUMNSsjqFibdZ5Lcl0bzIzhhtcNj8cYPsaskhVJY4A6k1QvtLhvLSeG6uJhHNNHJnzCNhVlIAPYZUce5rzD436rdeFvh6ljY3908+oXWzzHkLPtPJXPpxiuzA4SWMxMMPF2cnYmUuVXPXlZXUMhDA9CDS1418Adcu9Y8KX+j39xL5to21WLEOgPvXrV7YG8sltxdXEG1lPmQyFXOO2R61WYYOWBxM8PJ35evcIy5o3LdFVb6yN6sQFzPB5cgf9y5XdjscdR7UXdkbq4t5Rczw+QxbZFIVWTjow7iuEonM0YlERdRIRkLnk/hUFhZGxilRp5J/MmeXMh5Xc2do9h0FfKXi7xtqUPxem12Ceb7PY3yqqBjt2qclfxANfT+h6TBZSXF5a3tzOl47TGOSYuiMxydo7c17eaZRUy6nSnKV+dX9Hpp+KM4VFNtdjYoqrbWRtrq4mNzPL57btkkhZY/ZR2pyWu20kg8+U+Zu/eFzuXPoe2O1eIaFgkAZPApscqSruidXX1U5Fed/FvVZvCvwpuY7W5mknkC26TSSEudx5JPUnGa4b9nrVry8/tPRb+5uFK7Zk+chhzz+de3RyipVy6ePUtIu1u+13+Jm6iU1E9/qrLZGTU4Lvz5FEKMhhB+V845PuMUXdkbqa2cXM8PkSb9sUhUSezY6j2qG70uG61iyvmuJo5rUMEjSQqrg4zuHfpXiGhoU1pEV1VmUM33QT1pnkf6X5/mSfc2+Xu+Xr1x618v/GvxFq+mfFbNpqNwi2m2SFPMO1D14HpxXr5Rlc8zxDoRlbRszqT5Fc+paKxvDDC60aLUVup51v0WcCWQsEyOi+gq1Fphisri3+23T+czHzGlJdM9lPbFeVKLhJxe6NC/TZU8yF03Fdykbh1HvVWTTy+j/YPtdyp2BPtCyES8d93XPvWN46E1t8O9Ua2u54Zre0LLMjkOSo7n371VKm6tSMF1aX3ibsrm5p8K21jHAtw1x5Y2mRjkt9as184fs9eIb298SXWlXl9O6Mv2hQZDyR1z7c19Cy2Rl1KG7+0zoIlK+SshEb57lehNehmuXTy3FPDyd7Wd/UmE+eNy1RVU2ROqLefaZwBHs8gOfLPvt6Z96ljg2XEsvmSN5mPkZsquPQdq8sskZlQZchRnGSaWvnz9oLWbvQ/7L0qx1G7LSzPdyM8pJXGAoHoBzxXrvgGc6j8P9Nujd3E7XUAdpZZCzgkep9K9XEZZUoYGljG9Jtq3a3+ZCmnJx7G5HZmPUprvz5GEqBRET8q47irVZEmhRSNNsvruOaSNEaRJyGAXv16mrl7YG9tEgF1cQbGVvMhkKscdiR2PevKLLdIHUsVDAsOoz0rO1yP/AIlzXJuprcWuZsxSFd2AeGx1HtXz/wDCDxhe6j8Y77+0LyV0vRIFQuduQeOPoK9bBZZUxmHrV4uypq/qZymotLufSVFVVsiuqPefaZyGjCeQZD5Y9wvTPvRDZGLUJ7r7TO4mAHlO5KJj+6O1eSaBf2ZvY4kWeSDy5RJmM/ex2PtVqs680mG6tzFcXM4BnEqt5pBU44APp7VLb2Bt9MNn9quJCVYedJITIM993XjPFAFymS/6l/8AdNV47Ax6Wtl9quGKrt89pCZD77uuaqa3ox1SBcaje2nlqf8Aj2naPdx3x1oAz/hz/wAk70X/AK9U/lXTVy/w2XZ8N9DXJbFogyTkniuooAKKKKACiiigAooooAKKKKAKuo6jb6XYyXd4+yJByfX2rO8K+JI/FGly3sUDwKk7RBX6nHeteeNJYGWRA4x0IzXK/DtGTStRDKV/4mEuMjHpRHd37fqhSdrW7/oyx8Pv+RQh/wCu0v8A6Ga6auO+G1kbfw28/wBpnk8+eQ+XJISseHb7o7V0smnmTSjZfarhSU2+eshEn13dc0DLlVdPsjYwPG1xJPuleTdIckbmJ2/QZwPpTbnTzcaatp9quIioA86OQiQ4/wBrrUVlpMNpbJFbXMxVbhpyfNJLEkkqT6ZPT2oA0aKqzWJm1GC6+0zoIQw8lJCEfP8AeHfFBsidTW8+0zgBCnk7z5Z99vTNAFqiqqWRTU5Lz7TOwdAnkmQ+WuO4XoDUkcHlyTN5sjea2cM2QnGMD06ZoAmqrJZF9WgvftEiiKF4jCD8j7ip3H3G3A+ppLSwNpZyQG6uJt7MfMlkLMuewJ9O1U00KFJYWa+unnjtpYEkeclirlSW69QVGD2oA16KqXtgbyzWAXVxBtKnzIZCrHHqR60t5Ym8EOLmeDynD/upCu/HY46igC1RUTwb7iKXzJF8sMNithWzjqO+MVELEjVWvftM5BjEfkGQ+WOc7tvTPvQBaqrqdkdR0m6slnktjcRNGJojho8jG4e4ohsjFqE119pnfzQB5TuSiY9B2qHUNKhvdHv7G7uJhDeI6yP5hBjVhg7T/DigDQAwAKKzobSPS9FNvPfzsiKc3M8xLjPfca8p8YfFmLStJk0vw7cTzvANj6jI5Y/g3c+9RKaTUd29kt36GFavCjG82eyvIka7pGCj1JxUf2u2/wCe8f8A30K8F8BadqXxQs5rq+8QXXkW0+x4yxyeM5rtv+FNWP8A0F77/vuitHE0ajp1KdmujepjGvWmuaNPTzZ6PHNHLny3V8f3Tmn15Td/CvWdKZrjwvr1wkgXhJHPzH60mhePtY0XxBHp/j6GS28xPLS4JxGTk8+ntmsfbuLtUjb8h/WXF2qx5fPdfeemx2Rj1Se8+0SMJYkjEJPyptLHI9zu/QVarK02ytP7Tu9VtbyS5a9VAQZi6Iq5xtHbqat2dkbSSdjczzec+/EshYJ7LnoK6TsLVFVTZE6bJafaJ8ujL52871z3DdQRTH04vpAsftdypCBPtAkPmfXd1z70AXaKga13W0UXnyjy9vzhzubHqe+aZc2Ruby1nFzPF9nYny45CqyZGMMO+KAC/sjfRRotxJBslSTdGcFtpztPsatVk6tokOqXlpcXF5dQrbSBxFHMUSRgQRuAPPSrn2I/2mLz7TPgJs8nzD5f129M0AWqKq2tkbWe5kNzPN5779sshYR+yjsPaksrA2aTqbq4n86RpMzSFimf4Vz0A7CgC3RVS1sDa2L25uribeWPmyyFnGfQ+3aku9PN1pZsxdXEJIA8+KQrIMEH73XtQBcPIqrp1mbCzWBp5LghifMkPJyc0l9YG9tVhF1cQbWB3wyFWOOxI9aisdLhs7aCK2uJjHE7N/rCd2TnB9aANCiqrWRbVEvftM4CxGPyBIfLPOdxXpn3qKfSzPdTzfbbuPzofK2JKQqc/eUdm96AMi0/5KZqH/YPj/8AQq6auK8PaWdK+ImpRG9urzdYxnfdSmRh83QE12tABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABjPWuY8Sf8jh4S/6/J//AEneunrmPEn/ACOHhL/r8n/9J3oA6eiiigCnqs1jBp7SaqsbW3mRgiRNy7i6hOP94rj3rxz45n7d408I6V1EtyHK+vzAf1r2TVLu2stPae+jMkIeNSoTfyzhV4+pB9uteM+O/wDiYftFeF7XqLfbJg/XP9K+g4f0xjqfyxk//JWZVfhsJ8IV+zfFbxRbxfLHvOVHrmvcq8Q+Ff8AyWPxV/10b+de30cQa4xP+7H/ANJQUvhCoL2b7Pp9xP08uJn/ACGanrI8WXH2Xwfq0xONtpJ+qkf1rw6UeepGPdo0ex8rz6Z/aHw28T60wyU1SJ1b0yxU/wDoVfS3w21Gz1b4e6XeWIQCSEGbYu397/Hn1Oc5PevGfD2mfaf2ZfETlfmedpvwRw39K9R+Clyl18JtJaNQoRWjOBjJU4NfccRT9thZv+Sq4/LlX+RzUdJeqO+ooor4M6jxn9oudjoeh2Y4WbUF3e4weKyfAtuvh/4/XOnrxHNZgL7nbmtH9or/AI9fDn/YQX+RqrqA/s/9o7QZD8oubdQT6/LX6BgtcpjR/mhVfzTTOWX8S/oe61TlmsV1e3ilWP7a8bmElMsFGN2D27VcqpLd2yatb2skZNzLG7RvsyABjI3duor8/Oot18p/FKy/t74leKmUbjp1oJEPph0B6ezHrX1ZXzhpFsNa8WfEu6I3bdMuEHuQNw/Va+t4ZqewqVcR/Kl+MkYVldJHrXwhu/tnwr0Rs58uARf988V2teX/ALP1yZvhdDExyYZ5F+nNeoV4ubU/Z4+tH+8/zNKbvBBXF/F28+xfC7WJM43RhPzOK7SvMP2gLnyfhfPFn/Xzxrj15z/SjKaftMfRj/eX5hUdoM8j+E9q2gfE7QOSv9oQNnPfINfVdfNl5Guk+NPh5eINoa3RDxjknH9a+klOVB9q9rieftqtKv8AzRf4SaM6OiaFooor5I3PmX402sniX4tSWMZO2y015Gx22Iz/ANBXqnwJvvtvwqsQTkwO8X0APFcJHb/218ffFw6rHpFwo/FFX/2auj/Z0mz4N1C1z/x73hGPTOf8K+/zXXJo0f8An2qb/wDAk7nLD+Jfvc9SimsW1aeKJY/tqoplITDFe2T3q5VSK6tn1We2SMi4jRWd9mAQenzd6t18AdRznxAu/sXgDWJgcEWzAH0JFfM3w9tf7H8eeEtQY4+3SOXJ78Ef1r3/AONV0bX4U6qynDMFUe+WFeNavZnSNL+HV6o2lp1GfYsK+/4d93ATh/z8co/dBnLW+K/b/M+ogcjNFMibdCjDnKg0+vgDqKeozWMMUR1JYyjSqsfmJu+ftj3681cqpqN1bWkUTXcZkV5VRQE3YY9D7fWrdABTJf8AUv8A7pp9Ml/1L/7poA5z4c/8k70X/r1T+VdNXM/Dn/knei/9eqfyrpqACiiigAooooAKKKKACiiigAoxjpRRQBzPw+/5FCH/AK7S/wDoZrpq5n4ff8ihD/12l/8AQzXTUAFU9MmsZ7aRtMWNYhNIr+Wm0eYGIf8AHdnJq5VPTbu2vLeSSzjMaLNIjAx7MsrEMcfUHnvQBcooooAKKKKACqck1gut28Mqx/b2gkaElPmEYZN+D2GSmR9PSrlU5Lu2TWoLR4ybqSCSSN/LyAisgYbu3LLx3x7UAXKKKKACiiigAqnq81jb6Pdy6uI2sViY3AlUMpTHIIPUY7Vbd1RC7kKqjJJ7CvGfiD40uPFButE8Oq72FujSX1yiFsovJAA69OnesatVU4+fRGFesqUb7t7LuT6hqGpfFXWjpmkM9r4fgb99OBjzf8+lQfFvwrpPhf4TyWekWwjaW4TLk5Zz7k16l4b0K28O6DbafaAYiQBnxgue5NecftA3TJoGjWijP2i+UH6Aj/GvW4foN5lRnLWV7/dqYRo8sXUqayf4eSOb/Z3jm0fxLruj3MhLGCGbZ2HXt/wIV9AV4X4WtW0b9pKeEHCXWlAhenZP/iTXulenxFL2mMVf+eMX+Fv0OijpG3YKyvEPhrTPE+nGz1a3EqdVbOGQ+oIrVor5tpSVmayipKz2PBdH8Qf8Kt8f3miTutzYuVBdgN6qeV59Bk8dOte52V7b6hZx3VnKssUgyrKa+Tvirc3V98XNZntl/c2jxROw6AbV6/iTXpngTXrjwRqsema48n9mX0avazN91SR616OZZVLKqdGpzXhUS9YuydvTXQ8ulUeHnyP4L6eX/APbKKbHIssavGwZWGQQetOrzz1QooooAp6lNYwQxHUljaNpkWPzE3DzCflx7571cqpqN3bWcMT3kZkV5kRQE3YYnAPtz3q3QAUUUUAFFFFAAenNU9LmsZ7BX0tY1tyzACNNoznnj61cPSqmmXVte2KzWUZjhLMApTZyDg8fWgC3RRRQBzNp/wAlM1D/ALB8f/oVdNXM2n/JTNQ/7B8f/oVdNQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVzHiT/kcPCX/X5P8A+k7109cx4k/5HDwl/wBfk/8A6TvQB09FFFAEN1I0VuWS3a4O5R5aYycsBnkgcdfwrxaUf2h+1bAOq29oc98EIx/CvZdSkvY7Fm0yGOa43oAkjbRtLgMc+y7j9RXjWi/8nT33/Xs//oJr6DJdI4mXanL9DKp09Q8DD7D+0R4htTwJI2bnjJr2+vELf/Qv2oZv4ftMX58V7fSz33qlGfenH8rBS2a8wrlPifK0Hwx12Reotj+pArq65H4q/wDJLNe/69v/AGYV5uAV8ZSX96P5ouXws4Dw1CsX7L2okf8ALSxmc/Xaa6X4Cf8AJItP/wCu03/oZrnvD/8Aya5e/wDYOm/9BNdD8BP+SRaf/wBdpv8A0M19Nmbvg8T/ANfv0ZjD4l6HpFFFFfGHQeJfH9vtGq+FbEcmS9DY+mB/WofiMPsPxh8H3S9T5cfH4Cn/ABgP2v4ueCrPqPOJIPQ5ZaPi2NvxU8ID0nQf+PCv0DAaU8LT706r++/+Ryy3k/NHuA6CoXkYXkcYt2ZWUkzDGE9jznn2qUfdH0qtK96NUgSKGNrNkYyyFvmVuNoA755r8/Oonmk8q3kk/uKW/IV4T8H7X+0JPH8zDIn3xAnoch817bq7+Vol8/8Adt5D/wCOmvJ/2eYg+ga1dHGZrxgfXjP+NfQ5fL2eW4mou8F+N/0Mp6zSHfs5TbvCWqW/P7i9I/PNexV4j+zyfIufEtoedlznP417dWfEMbZnVfez+9IKXwIK8c/aNuCvhXSbdQWaXUF+UdwFPFex14h+0G7y6j4YtIgGkkuiyhjwSMYz+dHD8b5lTfa7+5NhV+Bmd8UoWsrjwBctE0LLNCpQkFhgg444r32Ft8KMOhUGvDvjityvhHwxeX8aRXME6GREOQD7GvatLfzNJtX/AL0Sn9K2zJ+0y7DVH3mvxuKGk2i1RRUc7+XbyP8A3UJ/SvnVq7Gx4j8LIxqHxg8ZXTfMoVoSfqw4/wDHam/Z6kMNz4msW/gu92PxI/rR8B08/wASeMrw8mS6UAnr1fP9Kb8G/wDRfir4xsugVywH/Ax/jX3uYPmjjKX8sKX4W/zOWH2X6ntCSMbuSM27KFUETHGG9uuamqrG94dSmSWGMWgQGKQN8zN3BFWq+BOo8u/aAn8v4amLP+vuUT6964v4o2htPhn4KuAMG0kjP9a6X9omb/ildJtxn97qCZ9xg/41X+N9mIvgxp2MDyXhGAPVa+7yiXs6WCj/ADVJflY5qmrl6Hrukyedo9pJ/ehU/pVusjwrN5/hPTZOmbdP5Vr18TWjy1JR7NnQtiG5kaNEK27T5cAhcfL78mpqq373kccR0+GOVzKA4dsYTuR715X8MfEesaz8UPFdtfajcXFlaPthglclY/mI4HbpXRh8HKvRq1U7Kmk383YTlZpdz16mS/6l/wDdNPpkv+pf/dNcRRznw5/5J3ov/Xqn8q6auZ+HP/JO9F/69U/lXTUAFFFFABRRRQAUUUUAFFFFABRRRQBzPw+/5FCH/rtL/wChmumrmfh9/wAihD/12l/9DNdNQAVDbSNLGxa3a3IdhtbHOD97gnr1/Gpqq6fJeyQOdRhjhkErhVjbcCgY7T9SuDQBaooooAKKKKACoWkYXscYt2ZWjZjOMbUwR8p5zk5zwMcfSpqqySXo1aCOOGM2JhcyylvmWQFdgA9CC/PsKALVFFFABRRWF4x8RQeGvDlxeSyqkpUrCCeWbtiplJRV2TKShFyeyOX+Jni6W2WLw5ohWXUdQPlMAcmNTW14S8LR+D/CrRpbfbLwxl5RGBumbGdo3ED25OK574XeFkltz4o1cNPqN0xZDLzsHtXoWpvexaTdPpUMc96sTG3ikbarvj5QT2Ga56MXN+1n8vJHJQi6kvbz67Lsv+CWh0rx/wCNDrceK/CNgxBMl1v2/j/9avYBnAz1714z8SYjffG7wjbqf9UN5z6ZNfTZEl9c5n0jJ/8AkrOir8JBr0jad+1B4e24C3NkEb6bZP6qK9trxn4mKLT43eCLwDBYvHkdfT/2avZqrNnz0MLU7wt90mgp7yXmFI52oxPYZpar38nk6bcyH+CJm/IV4UVdpGp8vtbTazpfxI1LZukjvAEbHYOw/kBXs/h3QrLxp8JdKg1Fdz/ZgElx8yMO9ea/DiObUvhb44u3iX7NcTPJHJn5mbGSCO2Mj869I+B14138LLEv1jdk/AV9xxClVw1SDWkJxX/kiX6HJCKlpLZoofDjXbvTfE194O1e6SX7KD9mkZsFsH7oz145/CvUq87+J3gn+0rI69oiNFq9niQNFw0gH9R1ra8BeL4vFmhq7gpeW4CXCHs3rX53Rk6cvZS+Xp/wCKEnSl7Cfy81/wAA6qiiius7iG5kaNEK27T5cDauPl5+9yR0qaqt/JexxRnToY5XMqBw7YATPzH6gVaoAKKKKACiiigAqG1kaW3DNbtbnJ/dvjI59iRUx9qq6c95JZq2pRRw3G45SNtwAzxz9KALVFFFAHM2n/JTNQ/7B8f/AKFXTVzNp/yUzUP+wfH/AOhV01ABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXMeJP+Rw8Jf9fk//AKTvXT1zHiT/AJHDwl/1+T/+k70AdPRRRQBV1IXpsW/swxi53pgyjK7d43f+O7se9eNaL/ydPff9ez/+gmvarmKSaApDO0D7lO9QCQAQSOeOQMfjXivh3/SP2odVkXjyYHUj1+XH9a+gyb+Hin/07f5oyqbx9RfEH+hftN6PJ90TRc478V7dXiHxH/0T47+GLr7u/amR9a9vpZv71DCz/uW+5sKe8vUK5D4qnHws13P/AD7/APswrr64T4zTeT8K9V4zvVV6+4rz8tjzY2iv70fzRc/hZzfhCD7R+zNexbcltLuNoPr5bYq9+z5N5nwuiiznyriQY9MsTV3wFZ7/AID29sRv8zTpFwOM5U1ifs5Tb/A99FnPlXjDHpnmvocZL2mExnlVT++6MY6Sj6Hr9FFFfHnQeG+Of9K/aP8ADUH/ADxQP/P/AAp/xd/5Kv4R/wCvhP8A0IU3UR9s/atsFHHlWnf2VzT/AI2r9n8deELr7o+2ICw9Nwr7/D6YnCU/+nL/ABUjlfwyfme2j7o+lVpRe/2nAYjH9j2N5oI+bdxtx7dasoQ0akdCKjaKRrqORZmWNVIaIAYYnoc9eK+AOoy/F03keDdVk/u2r9PpXBfs9RbPh3O56yXsjZ/Kuv8AiTL5Pw21uT0tj0+orn/gTD5Xwts24PmOzdK9+j7uS1X3nFfcmzJ/xF6HMfBj/Rvid4ytP7shOf8Agde3V4j8M+Pj14zA6ebJ/wChV7dRxBrjFLvGD/8AJUFL4Qrw341F7n4n+DLSHG/zHI3dMlkxn8q9yrwv4ig3n7QXhi2Vtpjj359Mk/4U+H9MY59oTf8A5Kwq/CXvj9b3Q+FVm9+yG5juEEnlj5SeelepeGZvP8MadJjG63T+VcD8d7Vz8J5VlmMrxSoxdgMtz7V13w9m+0fD7R5cY3WycE+1Ff3slovtOS+9IF/EfodJVTVX8vRr1/7tu5/8dNW6yfFUvkeEtUk/u2z9PpXiUY81SMe7Ro9jzH9ndN+i65dHrLfEH8M/41U8C/6N+0b4ni/57B25/A/0rX/Z4j2fD+6fOfMv5G/QVk6QPsv7VF5H/wA9rZm5/wBwn+lfa15c+NzCP9x/hY518MD2SMXv9pTGUx/Y9g8oAfNu75q1USxSC6eQzM0bABYiBhT6+tS18KdJ4t8f28288L2n/PS8J9uCv+NbXxstvM+Dsg/55eU3T0xWB8bG+0fETwVaj/nu5IPQ5ZP8K7b4vW+/4S6wvTy4VPT0YV9lRl7OGXerf3zsc71czQ+G0/2j4daNL/etl/lXUVw/wcm834VaNxjZCFruK+bzCPJjKse0n+ZtD4UUtWN6tnu08xh1bL7x/Bg5x714/wDAhfO8W+NLs877pACev3pK9g1aOSTS5/JnaEqjMSoByMHjmvJP2euU8SsfvG+5Pr1r0sBplmLf+Bf+TES+OJ7RTJf9S/8Aumn0yX/Uv/umvnzU5z4c/wDJO9F/69U/lXTVzPw5/wCSd6L/ANeqfyrpqACiiigAooooAKKKKACiiigAooooA5n4ff8AIoQ/9dpf/QzXTVzPw+/5FCH/AK7S/wDoZrpqACquni9ED/2kYzL5r7fLHGzcdv47cZq1UVvFJDGyyztMS7MGYAYBOQOPTpQBLRRRQAUUUUAFVZBe/wBrQGMx/YfJfzQR8/mZXZj2xvz+FWqiaKQ3iSidljVGVocDDEkYbPXjB/OgCWiiigBksiwwvK5wqKWJ9hXzT4y8ff2741tbi9QyaVbXQjjiA+XGeSfrivVfir41/sXSzpGmSK+o3Y2so5MaEcn614zpejHUPhD4m1VFDtDdRLCcdNmckf8AfVd+VYOnjsWo1lelFrm9ZO0V+r9Dy8TJ1qqpR2Wr/RH1HYmFtPga2ULCY1KBRwBimamL06VdDSjGt75TfZzKMqHx8ufbNYvw9vW1DwBpFxI25zbqGPqRW/dRST2ksUE7W8joVWVACUOOoByOPeuavT9lVlT7Nr7j01qiUZwM9e9eNa/MLr9pbSrbH+otN3PvzXso6V4xHCbv9qGSXOBb2YBB5zwK9fJbKVeT6U5f5GdTp6kfx3V4fF3ga6TIC3xUsO3zxf8A169qU7lB9RmvJfj1EDZeGZc8rq8aj8f/ANVer2//AB7Rf7g/lRjpc2W4Xy51/wCTX/UI/HIkrL8TzeR4V1KU8bbZz+lalcr8TbprL4Y69PHjetm+3I715eEh7TEU4d2l+JpLRM86+C+mXY+D+qify2srtZHjXHzb8FWz7YVf1re+AcoPgW4t1/5YXjrj0qb4O2Ui/B2zdpmaOe3l2xYGFO9wSD154/Ksn9n/AHRWfiO2kG1k1BjtPUda+ox8va08ffpUT/Fowjo4+h7DXj+rRXvwy8byavbL5mkajJ++X+4Sa9grM8RaPb67odzZXUQkV0O0Hsexr4itTc43W62CvSdSN46Naou2d3DfWcVzauJIpVDKwPUVNXmHwj1xbe1ufDWoylLyzmZY0kPJXPavT6dKoqkFIqjVVWmplW/F6Yo/7OMYfzV3+YONmfmx74q1UVxFJKiiKdoSHDEqAcgHkc+tS1qbBRRRQAUUUUAB9qq6cL0Wa/2kYzcbjkxjjGeP0q1UVtFJDCEmmadsn52ABP5UAS0UUUAczaf8lM1D/sHx/wDoVdNXM2n/ACUzUP8AsHx/+hV01ABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFc94t1660eGxt9MiSS9v7gQReYflX1JqHw34gvrrXtS0PWUi+22KRy+ZD92RHzg/mpoWuwm0jp65jxJ/yOHhL/AK/J/wD0neszVfFt+fGk2i2GoaZZJBErFrx8F2J6AVY8TXsdhr3hC41W6t4VW6m3zM4VMm3fuaFqrj62OyoqtFqVjPLFFDeQSSTR+bGqyAl0/vAdx708Xls141otxEbhVDNCHG4A98dcUARapYw6jp7W1zLJDGXjcvE+xsq4YDPuQAfUHFeOfDv/AEr9obxdOvzLGrYJ7DKivXtTTT9QsJre9mTyUlj8zEgXa4dWUE9jnbx714/8HHW4+KPjK/LKyZKmTPH3x/hXv5Xpg8XP+4l98kZT+KI74yD7P8SvCFyOCblFLHpjcK9uByOK8O+Ol5bS6l4U1G2uIpoEus70cFTz6ivZ2vrW1sIri7uIoImCgPI4UZPQZNGY65fhJeUl/wCTBD45FqvNPj5N5PwqueSN88a8fjXotxeW1mEN3cRQiRgieY4Xc3oM9TXlf7RVwE+HUcG9Q010mEJ5bAPSufJI82ZUF/eQ6nwM7PwHahfhzplu4wGtQCB6EV51+zfIV0nXbZuCt3u2nqOMV6f4VntY/DunWKTR/aFs0cwbxvC46464ryz4BkQeI/FVmDnZcE5/4FivRpS9pg8d6xf/AJMyXpKJ7hRUMN5bXE0sMFxFJLCcSIjglD6EdqVbmBoHmWaMxJnc4YYXHXJ9q+XNjxPSf9K/anvXHP2e3YHPb5e351P+0EPLuPDV0OPKvAdx6Dmqfge9tbv9obxRqP2mJ7WGBmFwHGwL8gznpjmr37RLxy+D9NvYJFkQXKsjKchh9a+9g7ZxhYf3Ir74v/M5f+XcvU9is232MLdcoD+lRS2UMmrW940siywxuixh8KwbGSV7kYqCwvraDStOFzPFC9xGixK7gF2x0Gepp9ymnrrNpPczIl5seOBGkALg43YHfoK+FmrSaOo5j4vzCH4W6uSSN0YXj60z4NxGH4U6MrAAmIk/nVH453kcPwxvohKglZk+QsM4yecVrfC2a2/4V/plrBNG8sEC+bGrgshPTI7V7j93JF51PyiZf8vPkcF8NP8AkvfjP/rrJ/6FXt1eIfDQ/wDF+/Gf/XWT/wBCr2ZNRspbeWeO7geGEkSSLICqEdQT2xRn/wDvUf8ABD/0lBS+Es14X4ijGo/tRabbknaljg84xw+SK9sa/tEsftr3UK2u3f55cbNvru6Yrws3dlL+01Pc3d1ClpFZlTM8gVVBXjk8fxfrTyPR4ifanIKnT1O0+L1pFZ/Bq+t4XeWOJFCvI25j8w71r/Cck/CvQSTk/ZE6/SsX4vCytPgxeRWcyG3KKsLbwd3zDoe9anwpvLaP4a+HbWS4iW4ls1ZIi4DMAOSB1NEv+RGv+vj/APSQ/wCXnyO3rm/iHL5Hw71qTni1bpW8by2F4LQ3EQuSu8Q7xvK+uOuK5H4q3kafDbW0SZN6whXUNyMnjIry8DHmxdKP95fmXL4WZPwFh8v4XWz8fvJXbiub1H/Rv2qLKTr51sq4Hb5SK634HvC3wn0wQurMu4SBWztbPQ+lcV4qvbVv2ifDd5bXMUkEhCGWNwy5BwQSK+noy581xi7xqL+vuMX8Efke1xWUMeqT3iyyGWVFVoy+VUDuF7VbrM83SbW7n1JryFGkjUSSNMAoX+E+1XLi9tbSBZrq5ihiYhVeRwoJPQZPrXxh0HivxNP2r47eE7YfP5YDlT2+Y8/pXpPxJh8/4ba5HxzasefbmvMvGM0Un7TuhRzSKqJaJjJxhsvx/KvVvGE1tN4Y1awM8X2l7GV1hLjcQFPOOuK+pxkvZ/UV2in98rmEdeY5b4ETeb8L7Qc/u3ZOfY16RXkn7PGoW8ngSWxE6G5iuZGaLcNwUng464r1WO8tpbqS2juInniAMkSuCyA9MjtXmZ1HlzKsv7zLp/Ail4gsob7SJEnlkiEeZFMb7SSFOAfUe1eVfs8/6nxJ/wBf3+Neo66un3+jzLdToUhJIIkAxIFOAffnpXlf7PkqR2fiaWR1WNbwszk4AAzzmurBf8irFesPzFL44ntdMl/1L/7pqNL21ksxdpcxNbFdwmDgoR656VBqWr6dpsH/ABML+2tfMU7POlVN3HbJ5r581Mf4c/8AJO9F/wCvVP5V01cx8N2D/DjRGUgqbRCCO/FdPQAUUUUAFFFFABRRRQAUU2WQRRPI33VBJrzuHx3rP9m2evzwW/8AY93dLCqKT5iKzYDGhau39a7Cbsrno1Fc7438RSeGvDj3tv5QmMixp5pwoJPU1L4Zvb+/t2mvNQ0+9Q42mybIU9wTQtb+Q3pYrfD7/kUIf+u0v/oZrpq5L4c3ltP4X8mG4iklgnlEqK4LR5c4yO1dM19aJZfbHuYVtgu7zi4CY9c9MUAT1U02xhsLd4reWSVWmkkJkfeQWYsRn0BOAO1STX1pb2gup7mGO3IBEruApz056VW09dOsbXbZzx+VNcOQfMB3SMxZgD65zxQBoUVDJeW0V1FbS3ESTzAmOJnAZwOuB1OKDeWwvBaG4iFwV3iHeNxHrjrigCaioVvLZrx7RbiI3CKGaEON6g9yOuKes8TtIqSIzRHDgN904zz6cUAPqnJYwyazBfNNIJoYJIliD4RlYqSSvcjaMHtk+tSwXtrdQNPbXMUsSEhnRwVBHXJHpVLzNJub+DVVu4Xkit5VjkWYbfLLKXPuAVXntQBqVV1LULfS9OmvLuRYoolLFmNPuL61tLdZ7q5ihiYgCSRwqknpyfWvJviBr3/CU+KbXwnYXaRW5kC3EjMAC3p71lVqezjdb9DCvV9lC63e3qV/BWmL4hHiTxXqUTSu6yrbNIOANp5H8vwrC+GyLJ+zr4iDjI86U/8AjiV7DqkNl4b8C3NlbmOJYrKQRpkAthcE479f1ryX4efZ7b9nnWYDcRG6nE0/k7xvCYVQcdcZB5r6jJIexy6Se7qU/v1ZhTpeySi97O/qd58DppJvhTp5lYsQzqCfSu31axh1PR7uxupZIYbiFonkifY6KRgkN2PvXn3wFvLaX4Y2ltFcRPPE7GSJXBZAT3Hau91RNP1HRb+2v50+xtE8VywkChFxhsntgV5+b6ZhW/xP8zrp/Ai+BgAV4x4TmF7+0Z4jZQR5ESod307V69Bf2dxY/a7W6hltsHEySBkwOvI4rxj4a3NvN8ZPGOrfaIjZjH7/AHjb9c9MV15UksPip/3PzkiZ7xNn48/8gvw3/wBhiH+tep2//HtF/uD+VeU/HSaObRfDMsMivG2rwsrqcgj1zXqAvba2htUubiKJpgqRB3ALtjoM9TWeL/5FuG9Z/mhx+NlquH+McvlfCjWucb4dv1zXZSXltDcRQTXESTTf6uNnAZ/oO9eb/HzUFtvhfdQJInnSyxKYyfm2kkZx+FYZTDnzCjH+8vzHU+Bmp8LtHt7HwBpk0TyiSbT0VojJlVG52yF7Elzz9PSuZ+DMixeLfF9mCMpd79pPPeuy+H1vpy+G9Pktpke9/s22juEWQEoNu5cr2++TXBfCk+X8ZPGca9Cw/nXq037Wnj2/X/ych6OJ7XRUJvLYWjXRnj+zopZpd42qB1JPTimtf2iWIvWuoRald4nLjZt9d3TFfLmx5x8TvDMtlND4t0FFjvLRg04XjePWu08JeI7fxR4egv7d1LkbZkH8D45Fcx8ZddOmfDiZrN1Z71lijIPDA+lcF8HPFQ8P6xLomrfuUu2G0t/DJjofqMVU8HUoUo4z7E216NW1+ex50pKhiV2lv6/8E901Gxhv4YknlkiEcySAxvtJKnIB9QfSrdZmqvpU0ltZ6ndwxSvKskETTBGdlIIwOp5xV37ZbfbPsn2iP7Rt3eTvG7HrjripPRJqKhhvLa5kljt7iKV4W2SqjglG9D6Gkt721u1ka1uYphE5SQxuG2MOoOOhHpQBPRUEN7a3Nu1xb3MUsKkhpEcFRjrz7UT31pbWZu7m5hitgATM7gIMnA5PHU0ATnpVTTLKHT7Fbe3lkmQMxDyPvbk561Jc3traQCW7uIoYmIAeRwoJPQZNV9OTT7Czit7KZPKd28v94G3HOSAe/NAF+ioTeWy3i2jXEQuWTzFhLjeVzjOOuPemS6lYwzSQzXkCSxR+bIjSAFE/vEdh70AYVp/yUzUP+wfH/wChV01cho+pWWp/EjUZNOu4LqNbCMFoZA4B3eorr6ACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiuC8ZfESbwzql1awWkci21ibgmRsF3ZgiKo78nmk5JB/X6He0VxvgPxTqmuSX1jr0Nul7Z7GZrYEIQwyByTyK7KqasTGSexyHj20uy2j6pZWkt5/Z14JZYYVLOUIwSB3NUvD4uH8X634on0+9t7WeCG3hikgYSvtLEnZ1/irvKKmOn9eg2r/wBdtTz/AFiOFNQ1Pz/C0s019Dtt7q3ti5ckHG8/wYJpr6VJDL4HsNYRZ5FuJhIsg3c/Z3r0KuY8Sf8AI4eEv+vyf/0nemtFYGru50KWdtFIjxwRq0abEYKMqvoPanC3hFwZxEolYbS+OSPTNSUUDKGqXNjpmny3V6g8kyRh9qbsszqqnH1K14/8AkWfXfFs5UDdclSvbG5v8K9e8Qakmk6DdXsscsixqAViXLfMQuce2c/QV5T+zshNj4lnPIkvhg9/4q9/A+7leLl/gX4mUvjiR/tCWkNroOjvFEkcMV0OFGMfhXr1rBBd6RbLPEssflowVxkZxxXl37RkQPga0lwcpdrXp2gymfw9YSHGWgQ8fQU8X72UYZ9pTX5BH+Iy5Nbw3AUTxLJsbcu4ZwfWvIP2iireHdIiK8yXoAb0r2OvF/2g33v4Wtwcl9QGV9eQKjh9XzOl5X/JhV+Bnquh2kMek2UojXzvsyIZMckY6ZryP4QAW3xe8a2zfe85xx04kr2ixTy9Pt0xjbGox+FeK/DmTy/2gfFsSAoJJZSQ3c7jzW2Xvnw2MX92/wB0kKe8T22O3hikeSKJUeQ5dgMFj70eTGsLRiNQjZ3Ljg561JQfumvnDY8M+E1tBP8AGLxkfKQReWY/KC/Ljev+Fa/7Q9uq/DSIRIqrFcpgAYwKzPgX++8beMLkcr55XJ6/fP8AhXRfH2ES/C+4JBOyVWGPrX29WXJxDRXbkX/kqOZfwn8zsvDKwX3hXSZ5EWUrAjozDJU4HIq7cXNkNYtLWdA126PJCSmdoXGee3UVk/DyYz/D3RZWxlrRDx9K2pb5ItUgsjFIXmRnDhflXbjgn15r5DFR5cROPZv8zojsjzX9oQonw0c7F3vcIN2OcDPFdp4HsobTwdprRRqHktkLuBgtx3rgv2iH/wCKNsIc8y3igL616V4bTy/DOnIRjbboMD6V6+I93JqK7zk/yRmv4jPI/BY+zftI+Ioj1mV2GPzr2lbO2SF4kgjWOQkuoXhieua8X0gfZv2qL1B8gltmJB75QmvbqM91q0Zd6cPyCls/Uia1ga1+zNChgxt8sr8uPTFeF+H4LW6/aS8Ri7hR4La3PyFcjAVO1e8npXhvw4ff8efGV5yyRwtkdSeU/wAKeUe7h8XL/p3b72gqbx9TqPi7LaX3wYvbi0QeQUVogUxj5h27Vq/Ci3hf4ZeHp2iUypZqFcjlQR2NVfipMmp/BrVblInUNAHVHGGX5h1FT/ByUy/CvRstnbCFHtih65GvKp/7aH/Lz5HafZ4TcC4MS+cF2iTHOPTNcF8ailv8L9TkVBukKKxxya9BrzP4+yiP4V3K7tpedAMd+tceUR5swor+8vzKqfAzZ+E1pHafDLSVjVRui3MQMZJNef8AxKtoNP8Ajd4Na2hRFaTJUDAJ3rXqPgGLyPAOjoVC/wCjIcAe1eZfGY4+Jng/H/PYf+hCvXy2XPm9Xz9p+TM5/wANfI9eV9Oub6fTTArSRRq0itH8u3tz3q5NbQXEQjniSRFIIVhkAjpUMF8kmoS2YikDxRqxcr8pz6GrdfKG54XdIl7+1ZAJlBEFqMAjOcA/417DrtpDLouoSNEplNnKgfHzYKHjNePr/wAnW/8Abr/7LXtl8nmafcJ03RMP0NfR5w+WeF8qcP1Mae0vU8i/Z2jjHhzU/kXzEumXdj5sZ6Zr2BLeFJ3mSJVlkADuBy2PU143+z02I/EsP/PO9HPr1r2isOIFbM6vqn96Q6XwIxfE13YaVoFzLeIFSQMoKpn5ypwf0615r+zvAJPC+tyOgZJb90Of4hgcfrXonjjU10rwffTtFJLujMYCLnBIPJ9q4b9neMJ4AvHGcyahIx/JavC+7lGIfeUF+bCX8RHqi20K24t1iQQgYEYHGPpUN9YWl5CftdtFNsU7d6A44q3TJf8AUv8A7prwDU5v4cAL8OdECjAFomAPpXT1zPw5/wCSd6L/ANeqfyrpqACiiigAoorH8U623h7w9caikQmePAVCcAk+tJuyuBsUV5Tb/FDWZ/EMQFpZnSlu4rGXaSZGlZNxKnOMDp0r1an0v/X9aiUk3YjuIvPtZYv76FfzFeRw6dqk3hHTfB50i9S4t72My3DQkQiNWzuD9DxXsFFJaO/p+GqCSurf1qct4nlXULEr/Yb6lHaXC+bFNCeRjO5P71UvDFnNN4uvNVtLK407THt1jWCeIxF3BOW2npXbUU1o7/1tYJK5ynw6t4YvCqyRxIryzSl2A5b5z1rpmtYGtvs7RIYcY8sr8uPTFc98Pv8AkUIf+u0v/oZrpqBkUlrBLbiCSFHiGMIVyOPaqunXFjqNqZLOMeXFO6YKbcOrFWI/EHmr9VdPv01CB5Y4pIgkrxESLgkqxUn6HGRQBM9vC86TPEjSxghHI5XPXBo+zwm4E5iXzgNofHOPTNSUUARi3hW4acRKJmG1nxyR6ZpyxIrOVQAucsQPvduadRQBFFbQwxNHDEiIxJKquAc9apmTTbfU4NK8lVmmt5ZI0Efy+WGUOM9uXXjvWjVSXUEi1aGxaOQtLC8wkC/IoUqCCfU7xj6GgDJ8a63YeH/DE11fRJKFGIomAO5u2B9a5j4VeHGXS59Y1e1X7Rey+cnmLyo7GsVbX/hZXxPuUvZnOlaUfliVvlcg4/WvYI41ijWONQqKMKB2FckL1antOi0X6s4ad69X2r+GOi/VnHfFmb7N8L9bnTCyrbMqP3XJGcVzfgvRIj+z3GGgVLiewly+35sFmIrS+Ot2tp8Kb8McedIkQ9yc/wCFbXhm1CfCiwt8ddMHGfVM/wBa+tpSdLKqb71b/cl/mdD1m/Q5r4BxQp8PRsjQSpOyO4HJx616FqtxY6Vot9e38Y+yQxPNcBU3blAy3HfivMP2fLh38O6xbu2RDfsFGOg5r1PVL5NL0m6vpYpJktomlaOJdzMAM4A7muXPI8uZVl53+/Uqn8CHJbW8NiYYIUjh2n5FXA/KvIPg9bwXHjLxi3lI0JuzHtA+XA7Yr2K4bFpI2P4Cf0rxv4ALuvfFkvrqT8fia2wCtl2Kl5RX/kwpfHEtftChLPwdo06qBHb6nGQijHAVjx+Veo2UcN5pljNLErkRJIhYZKnaORXmv7Rtu03wyhdF3eVqMTMfQbHH8yK9H8Ov5nhnTXznNtHz/wABFGJs8pw77SmvyYR/iMuvbwyTJLJErSR/cYjlfpXln7QiI3gGFSo3S3kSFsc4z0/WvV68e/aHuAmg6HbEHM9+MH0xj/Gs8hi5ZnRt3v8AdqOr8DPQvCzWFtZ22m2qbbqDT7ZpW2Y3KU2qSe5+Q15l8LP+S1eMv94fzr1ywvFNwdPEcge3t4nMhX5WDZGAfX5f1FeR/Cz/AJLV4y/3h/OujL5c2Gxj7xX/AKUiZfFE9o+zw/Z2g8tfKYEFMcEHrxSG1ga1+zNChgxt8vb8uPTFS0V86bHjfxwMd5qnhbQwdomug2xfQH/61cT4u8PSQ/GTUrKF/K8yyW6tscfMij/Bq7TxuItV+P8A4dsX+Y2sQlI9O9RfE63j0343+DtXfAScGBwehxkf+1K+3pU41MJTwMvt0pv535l/6ScVamqikpdzrvBfiaw1fwfp+oawqTXkMy2u/wAvcyuSAp9u3Ndz9nh+0ef5S+djbvxzj0zXj+q2c/ws8bRapp5lfRL9yLiHOVQn/ORXr1pdRXtnFc27bo5VDKfY18BQm2uSXxL+rlYao3H2c/ijv/mOjt4YXkeKJUaRtzlRjcfU0kVtDAriGJIxIxZwoxuJ6k1LRXQdZFHbQQwmKKJEjbOVUYBz1oltYJrcwTRI8JxlGXI49qlooAimtoJ4gk8SSIpBCsuQMVW024stSso7myT90GYJlNpBBwePrV48VV06+TUbNbiOKSJWYjbIuDwcdKAJjbwm5FwYlMyrtEmOQPTNNeztpJHkkgjZ5E2MxUZZfQ+1TUUAcnpdnbWXxJ1BLSCOFTYRkhFwD81dZXM2n/JTNQ/7B8f/AKFXTUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAIxwpPoK8Y8SeMdO1Hx0tvqfgy6vWsU3xypIuWIbvzgjvz3r2d0EkbI3Rhg14x4o8EWV14vOi+GLFG1BoTc3Fxd3LqiKTgAAckk1GvOv6/qw3bld/61Ox+Hl39tm1SeHQm0q3kkDAyyBpJW75wTgCu3rz74Xwppj6ro09qtvqNm6/aPLmaSNwehUnp9K9BrV20t2REevqFFFFSUFcx4k/5HDwl/wBfk/8A6TvXT1zHiT/kcPCX/X5P/wCk70AdPRRRQBjeL7+TTPB2qXcNs9y8duwEaEZOeCeewzk+wrzj9nRP+KQ1ObHMt6ST69f8a9C8czzW/gLW5LeNZJBZSgK7bRgqQecHsSa4f9naIp8MfMOMPdyY/DFe/h/dyeu+8oL82ZP+IiT9oKIyfDZmB/1c6sfzrtPA0wn8C6PKM4a0jPP+6K5j46ReZ8LL9tudhVs+nNbXwwl874YaAxbcfsUeT77RTq+9ktN9qj/FIF/EfodXXiPx1PneLfCNueB9sVs/8CFe3V4f8Xf3/wAXvB9svzNv3bT06ijh7/f1LtGT/wDJWFX4T22EYgjH+yP5V4Z4PuHP7TmupLC0RYShQ3cAHB+hr3RBiNR7CvDrBp7f9qq68+OOHzIcLtYkMpTg8gcn0oyfWGKj3py/BoKn2fU9zqOd/Lt5HHVUJ/SpKqas4j0W9c8BbeQn/vk14MFeSRqeP/s9pvu/FtwfvG+A/NnNdZ8bYjJ8KNVI/gVWP5iua/Z0TOh67P8Awy33B9fvf412Hxdi874V62pBP7jOB7GvrMbK3EKfaUPyRhH+EO+E0ol+FehY/htEU/gK6iW7ePU4LUW0jpKjM04+6hGOD9c/pXF/BWUy/CvSsnO1No/Cu5ZpxdIERDAVO9ix3A9sDHNeDmceXHVl/ef5mkPhR5B+0O+dN8Ow9pNQAP6V6zpSeXpFog6LCo/SvH/j23m6z4Uth943obnp95a9ntxi1iHog/lXoY73crwsf8b/ABJj8cjxS8/0f9qqBzz51uox6fJivb68R8UZt/2mNBf7nnKq5/vdq9upZzrTw0v+na/BsKe79QPQ14b8HnL/ABL8a3hQyOrsAF7/ADHj9K9wkYJEzHoASa8T+AqvJr3jS5jwR9twuTjJLyEfyp5d7uX4uXlFffIJ/HE7z4gO+pfCfVpHha2eS0ZjG/Vcdj+VZfwLlEvwtscDGxmX8jXS+MY5bj4fautzGokNlIWRCWAIU9DXH/s+yb/hjGpbJS5lGPQbqKeuS1F2qR/FMH/EXoeo15T+0K+Ph7FFjiS5UE+lerV5B+0O/wDxTejRZ5kvgAPXpWOQq+Z0fUdX4Gej+Ek8vwfpSD+G1jH6V5R8Z/8Akpng/wD67D/0IV7BoSGPQLFCMFYEGPwrx/4z/wDJTPB//XYf+hCuvJXfNJPyn+TJqfAeyQXbyahLam2kVI41YTH7r57D6VbqGJpzMwdEEIUbGDHcT3yMVNXzRseGL/ydb/26/wDste5EBlIYZBGCK8OX/k6w/wDXr/7LXuVfQ53/AMw//XuP6mVPr6niXwFJi8R+LLc/Li6zs/E17bXiHwc/cfFDxdbHk7y2f+BV7fU8Q/7+5d1F/wDkqCl8ByfxO1B9N+HeqzR20lxuiKERnlQf4voK574BRFPhfA5/5aTuwrd+K008Hwz1g2yozNDtbe2OO/41nfA6IR/CXSiBgvvJ/wC+jRT93JJvvUX/AKSwf8Reh6DTJf8AUv8A7pp9Ml/1L/7prwDU5z4c/wDJO9F/69U/lXTVzPw5/wCSd6L/ANeqfyrpqACiiigArh/ib4pTw/oLRS6LJqsdwMMisABz3713FcR8SdE0W40eTVtXtZbmS3XbHGkpUMT0BqJ7FR3OP0XVLCe60a10fwTc27w3G9ZLmZdibh8z9SSeBjNez14Zpfhm68J61o+qa9p1t9ju7hYovs127PA7DK7gRhhwele51q9vn/kYx3+S/UKKKKk0CiiigDmfh9/yKEP/AF2l/wDQzXTVzPw+/wCRQh/67S/+hmumoAKq6feSXsDyS20lsVleMJJ1IViA30OM/jVqordp2jb7UiI29gAjFgVzweg5xigCWiiigAooooAK89+JfjGbTo08PaLG02qagu1Sh/1YP9TzXaazq9poWlTahqEmyGIZPufQV5b8O5G8YfEfUvFEjQmGFDGkLNmSMkjacdhgNXPWcn7kN3v5LuceJqNtUYPWX4Lqzt/APhOPwr4fSOT5r2cB7hz3b0rqaKK2hFQioo6YQjTiox2R5R+0M2/wDaWuceffxj/P516JpFqLbwpY2vXy7KOPkdcIBXln7Qtywi8MWi/dmv8ALD6Fcfzr2OKPZbpH/dUL+lfQYq8Mrwy7ub/FImPxs8j+CJWDWPFVkuB5d5uwPqe1eq6neSafpN1eQ20l3JBE0iwR/elIGdoz3PSvIfhOrWvxb8ZQONu5wQD3Ga9jumnW0lazRJJwhMaSMVVmxwCQDgfhU58v9ucu6i/vigpfCRai+3SrhzxiJj9OK8u+AMY/sPWZwB+91CQ7vXmvSfEEph8N6hIBkrbucfhXnX7PR8z4fzTkYaW7kY/nTwyaynES7ygvzYS/iI0PjxH5nwmvyTjZLG31+bH9a6zwZJ5vgrSXxjNqn8q5z42pu+EGtHGdqxn6fvFrS+F0zT/C/QZHbcxtRk/iaJq+TQl2qNffFB/y8+R1leL/AB+ia8v/AAnZxn55L0kA9O3+Fe0V498YP33xB8FW7fcN1nj60sgfLmEZdlJ/+SsKvwHq0V276pPZm1kSOKJHWc/dcsWG0e42j8xXk3gSNbP49eKIVGzzY1fHrzXr6tObp1dEEAUbHDHcW5yCMcDp3rxzRZjbftO6lbgfLNZbiT7Yp5VeVHEx/uN/c0wqbx9T2iiig9K8I1PGYYl1L9pyeXOfsVqB+lP/AGgbULH4W1TOPsmohT/wIqf/AGSovh/G158efFl6TlEOwc961v2hLJrr4YGVODa3kcpOO2GH9RX28Z+zzfC077RjH/wKP/BObenJnT+N7Ntc8Ctbw2zXUl0sYQJj5ScfN9BWJ8MPFDNAfDOrRtBqFkCqhuN6iur8OXM9x4O0ia1WORmt4g29sDbgAngHmuM+J/h64sZofFuiZS6s2DTBTjcor4LF03Rqucfs3T9DOupQarx6b+n/AAD06isrwzrcfiHw7aalCMCaMFlznae4rVrVNSV0dkZKSTQUUUUxgaq6ddvfWazy20lsxYjy5OowcZq1UVu07Qg3SIkmTlUYsMducCgCWiiigDmbT/kpmof9g+P/ANCrpq5m0/5KZqH/AGD4/wD0KumoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK83+JFlG2qW95NpuqosUeP7T0pyJIweqsByRXpFcz4j8Lya/fRm61q6tLAJhraCTyxIfcjmpkm2rD0s7lH4bTeGJtKuG8LXr3rl/wDS5ZnLSl/9snnNdpWP4d8NaN4btXg0O2jhVzmRlOWc+pPc1sVpK19CIppBRRRUlBXMeJP+Rw8Jf9fk/wD6TvXT1zHiT/kcPCX/AF+T/wDpO9AHT0UUUAcr8TXnT4Za61pIsUv2UgMwyMZGR+IyK5/4CRCL4U2mBjfPIx9+lavxhcx/CPXmDFf3KDI/66LUHwWiMXwo0nP8Slv1r6CGmRyfeovwiZf8vfkP+MkXm/CnWFBxiMH8jS/ByUS/CvRsDG2AL+XFXPihD5/w11lNu7/R2OKxvgVMZvhRpxLbtpdfphiMULXI35VPziH/AC9+R6LXh3xEP2n9oLwlC3AUHkfif6V7jXhviX/Sf2mdFRfmMMW457cGjIdK9SXanP8AIKuy9T3IcCvBriO8sv2nbRtSnSdrgkxGNcbIz91T7gd695rwfxJbXGnftG+HmurkzGeUuHYYwhfhfwHFLItatWPenP8AIKuy9T3is3xG/l+F9VcdVs5iP++DWlWD44lEPgTWXbgCzkHHuMV4+HjzVoR7tfmaPY8//ZyT/igbuY/ekvGz+Q/xruPiLEZvh3rSA4P2Vzz9K5T9nqIx/CtCf47uRh9MLXb+MYhN4K1hCM5speP+AmvbzKp/wtzl2n+TMofw/kcd8A5RJ8KrTH8Msi/kxr0GWO8OqQSRTItmqMJYivzMxxtIPtzXmf7PEpb4beWTxHcyYHp8xr0yW3uH1OCdLkpbxoyvBjhycYP4YP51yZ3HlzKuv7zKp/Ajxv40nzviL4Qtm5UzbsDr94V7ZEMQoP8AZFeJfFA+f8c/B8KfeXP8zXtwGFA9q6cz0wWEj/db++TFD4pHiXxG/wBF+P8A4Qn+9uKnH/AxXt1eIfGH9x8VPCF193EgXf8A8CFe3ilmmuDwkv7rX3SYQ+KRBfNs0+4YdViY/pXjn7PqM9p4smjIWWW9GCegPz4/nXr2sEjQ74jg/ZpP/QTXk37O6s/hLW9jbZHvCN/cHB5owemU4p93Bfiwl/Ej8z0vVYbn/hCdQhvpUluDYzK8iLgE7DzivPP2dpP+KHuoccx3b5PrzXpc1tNH4antrqY3Mv2d1eQjBfg15b+zu+NG1uDPEV6Rt9KMLrlGIXaUH+aCX8RHsleM/tCSFofDUBHDX4OfxUV7NXi37QX+t8M/9fw/9CWp4e/5GVP5/kwq/Az2KxQR6fboOixqP0rxf42jyfHvhG6blVuAuP8AgQr2q1/484f+ua/yrxf9oJfKvvDFyowy3oG79a0yB3zKK7qS/BhV+A9igjvBfySSTI1o0aiKIL8yt3JNW6pWsE4vHuGui9vJGoSHHCHHJ/GrtfPvc1PDdD/0j9qfWCnPkwANn/dX/Gvcq8O8Df6V+0t4qmfqkPGPogr3Gvfz7SrSj2pw/IypbP1PEfhmPI+PXi6AfKvlsdvvvFe3V4j4L/5OW8T/AO4/8xXt1LPtcTCXeEP/AEkKWz9TgPjY8ifCvUTE4QkqCSM5HpVv4RRGH4W6Op/55E8e5NZnx4kKfCm92nG6VB9etb/w3iEPw50ZQMf6Mp/OnLTJIrvUf4RD/l58jqKZL/qX/wB00+mS/wCpf/dNfPmpznw5/wCSd6L/ANeqfyrpq5n4c/8AJO9F/wCvVP5V01ABRRRQAVk+J7f7V4duoTYHUA6YNupwX+h9a1qp6raT3umy29pdvZyuMCZOq1MleNhrRnkvhj/hE7fxRZW2t3WrwajG/wDoWn6vK2yNsfwA8GvZq47Sfh9oVlqMeoXssmqajGcrcXc28qf9kHgfhXY1f2VczSs2FFFFIsKKKKAOZ+H3/IoQ/wDXaX/0M101cz8Pv+RQh/67S/8AoZrpqACqunx3kUDjUZ0mkMrlWRcAIWJUfUDAq1VXT7e4toHS7uWuXaV3VyMYUsSq/gCB+FAFqiiigAoJwMnpRXnnxM8WXNl5GgaI5/tK9IBKjlFPFZ1Kipx5mZVakaUHKRxvxB1+98W+OrfwvaSYs1mCERnO49yfpR4FsB4V/aG1TRoGaG0mscpGTxIRt5+v3v1ql8OdAey+NVzZ3kpkewt95/2nbqa1viYB4d+N3hDxAgYLcv8AZpMdOTt/9qfpX1WVYJ0HPD1Pjq0m/wD26K+5fecNGnJXrVPib+5dj2yigHIBHQ0V8yemeOfF4rd/EvwTYHBJnLlevGfT8K9jrxfxxEb/APaP8JxL0t4VdgfTcx/rXtFe7mfu4XCw/uN/fJmUPikeO+DmFt+0F4it+hlgD4PXrXrGpx3k2k3Uelzpb3rxMIJZF3Kj4+UkdwDXj9gptv2pLvIwJbI4J717BqdvcXelXVvZXLWlxLEyRXCjJiYjhsex5ozpfvKUu9OH5WCns/UzfGT+X4L1Rm7WzZx9K474A2zW3wtttxB8yaRxj0JrpviJN9n+HmrOWAxbtyfpWV8F4hF8K9KwMblZvryaKbccnn51I/gmH/Lz5Fz4s2ovPhTr0Jbbm3DZ+jqf6VD8H5PM+FOi8Y2w4/WtT4gR+b8PdcUjd/obnH0GawfgjL5vwp0z5t23cv056UotvJpLtUX4x/4Af8vPkegV4p8TP3vx98ERKem3g/77V7XXjfjGJbr9o/wukvSGEOuPUEmnkT5cROXaE/8A0lhV2+Z61HHeDVZ5JZ0azaJBFEF+ZXBbcSfQgr+VeQzQi1/aiilzn7RYnj0r16O3uE1Se4e5ZreSJFSDHCMC2Wz75H5V5H4olWz/AGj/AA+znb59uyDHc/5FGS3c60V1pz/K4VNl6ns1NlbbE7HsCadVfUH8vTbh/wC7Gx/SvEirtI1PIPghI174o8X3rjk3zLx9a7H4w2jXvwn1tI13OsSuB9GH9M1zPwBhB0bWbvbhp9QkJOOvNegeNIlm8D6yjjINnIfyXNfS5hV9nnakvsyj+FjGCvTOf+Gk19qHwn0BrO5VJkVRI8g3bkD/ADD644rtb2zh1CxmtLpN8MyFHU9wa85+DsFzdfCPSltbprdkn3MwGdyhgSv4jivTa8jNIKOOrR/vS/MuGsFc8fsp734U+K4tOu5TLoF/J+7dv+WRJr19HWSNXQhlYAgjuK5/xr4Vh8W+HpLGQ7JVO+GTHKsK5T4aeLZYXm8LeIZgl9Yv5UJfjeo4ArxIfuZ+zfwvb/I46b+r1PZP4Xt5eX+R6ZRRRXWd4H2qrp0d5FZqmpTJPPuOXRcAjPHH0q1VXTre4tbNYru5N1KGJMjDGQTwPwoAtUUUUAczaf8AJTNQ/wCwfH/6FXTVzNp/yUzUP+wfH/6FXTUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFeRfEa8sV8fW9t4nu9Uj0o2ZeJNPEgAk3clint0r1t13xsmSu4EZHUVx+sfDqHWTCZNe1i3MKlf3Myjdk55ytS0+ZP8ArYfRoi+GzeHmsrv/AIRqbUZY948z7cZCQfbfXb1g+FvCsfhe3mii1K+vxKwJa8kDFfpgCt6tJNNkIKKKKkoK5jxJ/wAjh4S/6/J//Sd66euY8Sf8jh4S/wCvyf8A9J3oA6eiiigDgfjbIY/hDrIX+NY1P/fxT/SrnwljEXwo0Hbxutgx+uTWP8fJBH8J7sFsb541HvyT/Sul+HcZh+HOiIw2kWq8V9BP3ckiu9R/+koy/wCXnyJvHURm8B6yoOP9EkP/AI6a4z9nuUP8K7eMDlJ5c/8AfZNd54qQSeEdVRhkNaSAj/gJrzn9nSQn4fSxnpHdOB+dFD3slrLtOL/Bg/4i9D1yvDrkfaP2p41bpFaZGPpXuNeHaL/pH7Ul86/MsdowJPY8UZLosRLtTl+gVOnqe414T8R1htfjV4VuIZjMnmHd+83YbzMkZ7YPbtXu1eCfFWLT7Tx94Zn0gRqDfP5rIcjzTJl8++7OaXD+uN5e8ZL/AMlYVfhPe65X4mymH4Z6469RbEc+5Arqq4j4ySCP4Ra9k4LQqo+u9a87Lo82Nox/vR/NFz+FlH4FRCL4UWGM/PI7HP4V22vJ5vh3UIxwWtpB/wCOmuW+DcRi+E+i7hjfEWH/AH0a7G9j82wnjIyGjYY9eK3zGf8AwpVZf33+YofAjyX9nVx/wiWow94rxgTXrTpCb6J2lKyhWCR+ZjcOMnb3x6149+zs5Fh4hhJwEv8AhfTivW5o7A6xbSTeX9vWNxBlvm2HG7A/Kt+IFbM6vr+aRNL4EeN+Nz5/7RnhuN+kaZGPxr3GvDda/f8A7UVgi/N5dqCR6da9yrTONKOFj/07X4thT3l6niHx4Hk+JfCtyeQLoDH417eOgrxX9oVQn/CNTD74vgM/hXs1u5ktYnbqyAn8qWP1y3CP/GvxCPxyK2s/8gK//wCvaT/0E15P+zqAfCOshjtX7YcnOMcHvXrGs/8AICv/APr2k/8AQTXk37PAjbwfrYmx5ZvDvz0xg5p4T/kUYn/FD82Ev4iPXooozp4iglMkZQqrl9+fx7143+z4+y68UW+MkXu7P6V7HpyWcenQppuz7KF/dbDkY9q8Z+Bn7nxj4st14QXBO38aWX65di4+UH/5ME/jie314t+0F/rfDP8A1/D/ANCWvaa8W/aC/wBd4Z/6/h/6EtLh7/kZU/n+TCr8DPZLX/jzh/65r/KvHv2i0/4k2hTZ4jvwSPXg17Da/wDHnD/1zX+VeS/tFp/xRNpLt5ju0Ib0pZC7ZrS9fzTCr8DPTdI8mS3hmSUmV4E3RmTO0Y4+XtWkehrA8LCwfT7WeIxm/ks4vOIb5iu0YyK3j90/SvGqq1SS8zRbHh/wn/0j41+MblOVDFOeud2P6V7jXh3wQHn/ABE8a3DcMLorgdMeY/8AhXuNe5xDpjuXtGC/8lRnS+E8R8F/8nLeJ/8Acf8AmK9urxHwX/yct4n/ANx/5ivbqWffx6f/AF7h+QUtn6nln7QUgHw3MfOZLhQK7fwWhj8D6Oh6rZxg/wDfNcB+0NIR4NsIu0l4Aa9H8NRiLwtpqLnC2yAZ+lGI0yegu85P8gX8RmpTJf8AUv8A7pp9Ml/1L/7prwDU5z4c/wDJO9F/69U/lXTVzPw5/wCSd6L/ANeqfyrpqACiiigArmfiHcXNr4Hv5bKWSKRVGWiBL474x3rpqxtZ8OprLSF9QvLYSReXiCQAD3GQeamabVkNOzueWeFZvA0mtac1td+IWv2ZSBO0+wvjvnivbK4XTPhdb6ZqcF6viLWpzC+4RyzoVb2I213VaNpohJphRRRUlBRRRQBzPw+/5FCH/rtL/wChmumrmfh9/wAihD/12l/9DNdNQAVXs0hjhYW8plUyMSxk34OTkZ9jxjtViqWlxafFbSDSvL8kzSF/LbI8wsS/47s0AXaKCcda4fxh8SLXQJhYaZC2o6lIDtii5Cn3qJzjBXkzOpUhTjzTZf8AG/je08I6cek9/KMQW4PJPqfaub8C+E9Qlv5PF/ix2a+lUvFC3/LNfp2+lJ4J8EXmo6l/wlHjLM17Id0Nu/SP0JH9K7Pxjqa6P4P1K9dgvlQNgn1xUYejPE1Y8y3ei/VnLCMq0va1NEtl+rPMfhMDr3xQ8WeIS5aMTfZ0Hpipf2jIBH4d0bVIW/0mxvlZV3/w4JLY7/MFGff3rW+A2mPafD8306hZtQuHmY+ozxUnxw0yx1DwDqDlI21SC2L24LfP5XmxeZgen3c/hX20sRGHEELfDGUYfJLlNrfujv8ASbgXej2dwOfMhRv0q3XKfDG/bUvhrolxIdzm2VWPuK6uvl8TTdKvOm+ja+5m8XdXPGbmb7b+1THDj/j0sRz1z8it/wCzV7NXjPh6Jbz9pzXbvkm2tQgx05VRz+VezV6uc2ToQXSnD8Vf9TOn19Tx3U/9H/aW05uvnWjDntXrd8kMmnzpdSmGFo2Ekgk2FFxyd3b614145Jg/aL8KPk4dGBx34Nev6xHp8+h3seteX/ZzwOLnzWwvlkfNk9hjNGbL91hp96a/BsKe8vU5P4xvs+FOsY53Q461P8JU2fCvQ+c7oM/qaofGtwnwt1BQcBgFx61vfD6Bbb4e6LEibFW1X5fTPNEnbJorvUf4RD/l58i14xTzPBGtKOP9BmP/AI4a4f8AZ7fd8LI17rdSf0r0LXoln8O6jE4yr2sqkeoKmvOv2fTt8A3MI4WO9kAHpRQd8orLtOL/AAYP+Ij1SvHfFH/Jyfh3/r2/qa9irx3xR/ycn4d/69v6mlkv8ar/ANe5/kOpsvU9aRIRqErrKTMUUNH5mQoycHb2zzz3x7V458R0aH49+DrgLhWDDcemea9ehi08a1cyQ+X/AGg0MYnw3zeWC2zI9Mlv1ryr4uDyfiN4NuOv+klcU8hf+1uPeM1/5KxVfhPYh0FVNV/5BN1/1yb+VWk5RfpVXVf+QRdf9cm/lXi0/jXqa9Dzf4B/8iZe/wDX/L/6FXdeL/8AkS9Y/wCvOX/0E1wvwC/5Eu8/6/5f/Qq9D8QW/wBr8N6lb/8APW1kUfipr280ajm82/5jKH8NHBfBU28/wl00Sz+WEnIysmz5gRhf/rd69Nrxz4HLp7fDuWz1UxlLXVPk8xsfvMjb+ORXsdc+dR5cxrL+8/xHT+BGJ4x8QJ4X8I6hq8nJtoSyL/ebHAr5/tvDOvXPgz/hYGoXksl7c3Bn2YxtjzgH9PyxXpP7Qkm34YPGGw0l1EAoP3vmrsPDmmRXPw10nTrqEBJNLhjkQjoTGM/rW/sqMMoTmv4k7N9UopPT5swrUlXbhL+mZvgHx/Y+KdLjilkSG/iUK8TN9/3HrXaV8pf2BfeH/Ht9ocLOt7bv59iQ2PMTOcfWvcvBXxGt9af+y9XjbT9ThUApMcCTHpXjYvD1MDX9hWd00nGXSSez9e6MqGIkn7Otv0ff/gnd1BZJDHbBbeUyx5OHMm/v61NkFc5yKqaVHYRaeqaT5f2bc23yzkZzz+uazPQLlFFFAHM2n/JTNQ/7B8f/AKFXTVzNp/yUzUP+wfH/AOhV01ABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXkPxb8RahYak9sNSfS7aG2SaBlbb9ok81QVz7KScV644Zo2CHaxBAPoa8W8RaL4i1nxr/wAI7qviK2Ns0BuVNzbJj72Aq5HOO9Q7uSSHootv+tV/wx2Pw71u51XUNZjF4b6whdDb3GcjJHzKD3xXdV518LJLy1uNZ0W6u4byLT5VWKWCMKmCDxx3r0WtHayt2RnG+qfcKKKKRZ5neG61/VvE0x1C5t/7Ji/0ZIn2qGCk5I79KW48RILbwNq+qu+Gnl8xkjLkk27joATWpqfhPW01PVZNCurRLfVo9k4nDbo+CMrj2PelutLTR9W8E6eh3rBcTLkjr/o70o6R+779bifxff8ApY6e31qzubm3ghaQvcQiePMTAFPckcH2PNSrqNu+pvYKX+0IgdhsOMH/AGsYqzgDsKXAznHNMZ5Z8eRNqXw4ktdNtZ7uZdQjR0iiZivyMc8DkdOfeux8EXMLeB9P2eYBbwBHDxsrAgcjBGa19SumsbFp47SS7YOi+VEMsdzhSfoAcn2Bq2AAMAYFd88Y54OGFtpFt39SeX3uYx7/AFC31Dwne3VuXaFrd8FoyD0PYjNeT/ADVrXT/B2rS3TuI11DZ8sbMQWAxwBmvZ78AabcADjy2/lXj/7OQB0fxBkZ/wCJif8A0EV6OD1ynFLzh+bIl/ER6/fajb6csRumYCaQRptQt8x+g4+teI+FL2Bf2kdYa4LK7IYowqEgnjrjpXu5x37V4j8Ml8/45eLpcbwhwG645FGU6YbFy/ufm0FT4o+p7Kuo27ao2ngv9oWPzCNh27en3sY/CvCfjTfaa3iTQYNPVo2g1BjOPJZBvLZY5Iwcn0r6AwM5xzXhvx2uGu7PQ7l7WW2aDU3jCyjBcKcBx7HqKnh5/wDClTXe/wCTCr8DPZ7PU7a+nnht2cvAQH3IQBkZ4JGD+FcH8ar2OX4Q6o0OSrSLEcqRghuev0rv7Bt+n274ALRKTj6V5z+0BIY/hTOFON9zGp9/vf4Vz5TG+ZUY/wB5fmOp8DNv4aTQ6f8ACHRZpWbyobTcxCknG49hzXUnULf7Al3lvJkA2nYc88DjGayPAMQi+H+jRhdoFqvGK6DAxjFcmNlzYqpLvJ/mVH4UeEfAzUrbTNe1+yumcS3F/sj2oWBPuQOPxr2m6uLCDVrMXCE3cgZIHEZOBxkZAwO3WvH/AIKgQ/EPxdbKPlWYsCf9417LLdsmqW9qLWV0lRnM4HyRkY4J9Tn9K9TiH/kYSfdRf/kqIo/AeML/AKV+1W38Pl2X54//AF17Pb6jb3V5c2sLMZbYgSAoQBn0JGD+FeL6GfO/ag1B35KWpC+3SvcsAdBTzzSVCPanEKfX1PEfj9fQXuiWDW5Y/YtQCSlkK4Ptkc/UV6noWuWV34XivYnkMMMQDkxMDwOcDGT+Fee/tExD/hA4JRwY7pDj15r0nwywk8KaW+0DfaRnH/ARRitcow77SmvyCP8AEZHrWp2w8G3uoFn+ztaO4PlnOCvHy4z3ryr4CXttp3w+1i+vt32Vr0g7Yy5II9ACe9eseJ5PI8Jaq+3OLSTj/gJrzf8AZ3TyvhdczhTITeSfIB1wq8D86WG0yfEPvKC/MJfxEen2t1ZQ2Np9lUxwTYWFRGR156Y4/GvGfhRcR2fxo8VWUpIllZigCkjhsnntXtljcNd2MU8lu9uzjJikGGT2NeM/Dz/Rv2hfF0KjIYMMnt8+aMr1wmLj/cT+6SCfxRPZDqNuNUXTyX+0NH5gGw42/wC9jH4V4z8crqO58XeGbGMlpUuVZkKkDkjv3r3DAznHNeJfGTE3xQ8HW44LOWz/AMCo4f8A9/T7KT/8lYVfhPX9K1C31C0JtS5EJ8t9yFcMBz1HP1ry7473kGrfCeW7s2YxR3SKd6FDkOB0IzXrsShYlA9BXm3x7iV/hRejptljYY/3xXPksrZnRf8AeX5jqfAzd8Lalpll4PsLyRWWRbKESusTMSNox0HNb+q6rbabpbXV0zrGwCqVjZjkjjgDNc78NdQe78H6bbvaSIsdnGRMR8j8dB7iuo1IhdLumYZCwucfga48TG2KnH+8/wAyo/CeJfAu/t7LWfFk90Xxc6iscbqhbLFpD2HH1r2xtRt11NLAl/tDoZANhxgf7WMV5D+zqgfT/ENz2lvuAe3U/wBa9owM5xzXp8Qv/hTqeVvwiiKPwI8R8J/uP2mvEKNyZo3I/nXskOo28+oT2UbMZ7cAyAoQBnpg4wfwrxrS/wDR/wBqe8VOk0Dls/7pNe34Gc45p57rVoy704fkFLZ+p4r+0HfwzaJo6Izfu9Qw4KkdNv516poeo203hW2vIy/kJbgkmNgcKOflIz2ryz4/kSXXhq3xgNdhs/8AAhXsdooWyhUDgRqP0oxumV4Vec3+KCPxyIo9TtpdLXUEZ/s7LvBMbA4/3cZqprXiHT9FgU37yr5qnZ5cLv2/2QcVrYGMY49KZMoML5APynqK8A1Oa+GziT4b6G69GtEI49q6iuZ+HP8AyTrRf+vVP5V01ABRRRQAVgeNtRu9L8JXl1p+RMijDAZ2DufwrfrhPid/b1po8mo6Pq32SCJNskJiDhiT1Oe1RPYqO5wPhzxbdrqVvDZa++pXJ1kRCDeHMkLRKWOB0AIr3mvCrHR9Q8I6xoWqx61YXbandJHNFbW6B2DKTkEDOOOa91rX7Nu2n3Jf8P8AMxj8Xy/NsKKKKk0OR+IF/cW9np1lazPAb+7WF5Izhgp64qt4befSfHeoaD9rmubVbZJ4/Obcykkg8/hWx4u0CfXtPgFlMkN3azLNC0gyu4etV/D2galb69ea1r01u95cRrEqWwOxFH1570oaP7/y0/Emeu3l+ev4FX4bajb3Xht7aFnMtrPIJQUIAy7dCRg/hXSyapaxaUdRdn+zBN+RGxbH+7jNYnw+AHhCLj/ltL/6Ga6fAxjHHpTKKdzqtraaat9MziBgCCsbE89OAM155qHxXstB1S506z0K4KxSMWKpt3MTknHuTmvT8AjBHFZ1kIdRjknuNNNvIJXjxMg3MFYqG+hAyPY1Mk2tHYyqxqSXuSt8rnj2peMfG3jNk0/SdOmsobksY5AhG4AdC3QVR+GF/F4f8evo/i/TJLbVrjIt5puQ30Ne/JGkahY0VQOgA6V5v8YfA8/iHRY9X0b5NW0w+dEy8FgvJH6V6OVUMHOs6WLV+bRSf2X002tfc5VhXGXtJPmku56Amo2z6nJYIW8+NA7DYduD0+bGK8y+O2uKng06VbEma6uVgdcEcYBOPXgjpXQ/C/xxF408MpJLtj1G2/d3MWeVI7/jXGePon8S/HPw/ocmBbWiC4b3Of8A9VenlmElh8y5a6t7K8n/ANuq/wDkdU5Xhp1PRvBH2S08DWEVpvEVrAEfdGykMBluCM9ap+LZdN1vwbqcsMbSTyaXdeS7QsG2gAsORxkheO+K64KFXCgAegqhezF7sab9kkaK4tZWa4A+RCCo2H3O4kf7prxY1pfWFWe97/jc0tpY84+COuw2vwlt3v3cLDctCNsZYjJAAwBXpt7qVtYCE3LOPOcIm1C2SfoOK8o+AE7Cx8QadLH5f2e+JWM9VyTmvX5MeWxIzgE16OeQ5Myqru7/AH6/qRT+BHiXwyvVufjv4yMzEyNIyx/Keiuw69uMV7KNStm1VtODP9oWMSkeWdu3OPvYx+FeTfBNRN4o8Y3hHzPqDL79Sf617HgZzjmtM+f+2uK6RivuihUvhPE/iZd2w+NHhMpkTRTbXOwjg+/Q165eXNhc6Re/bUMtpGjpcI0ZO5QPmGMc8eleT/HF2tPFPg66jwrC/VdxHbIzXrd/eNY6HcXsVrJePDAZFt4Rl5SBnao9T0p5ir4HCT/uyX3Sf+YQ+KR5n8bNatrv4Ti5s97w3FwiKWQoRzjoRmu48LXtvbfD7TLt2byY7NGYhDnoO2M1xP7QeP8AhXMOBj/TIuPxr0bw8qr4Y0xQAB9ki4/4AKVeyyij5zl+SBfxGR6rq1pFoX2iRnEV2vlxERMSSwOMjGR+NeW/AjWLSz0fU7Od3Er6oY1Cxswyd2OQOOh5NeySorwsrDgqa8Z/Z84fxTGRwL/IyPdqMGubK8V5OD/FhL44/M9fn1G3tr2C0lLiW4z5YCEg49SBgfjXlHif5v2lPDwHOLXnHbk17DgeleNajKtz+1NZwpw1vZfNn/dB/rSyX+JWfanP8h1Nl6nq1pcWE+sXq26H7ZCEjncxkZHJUZIwep6eteO/G7UYbnWfDElo77rbU1jclCuDlemRz+FezRXbPqs9obSVEiiRxcEfJIWLDaD6jbz9RXl3x9t1/svQbnZ80OpIQ3pkj/CjIJJZjTv1uvvTCr8DPToNStzoo1Dc/kJEXY7DnAHPGM9qz/Emq26eBb7UVZhC1ozqxQg4I4461q6eQ+m254IMS/yrC+Ilytl8PdYmYhVW2bkj2rzcPDmxMIf3l+ZT+E4r9n9hZ/DJZrncPOu3C/KTnJr06/vraCSGznLCS8DJEAhIJA5yQMDr3rjPgnAIfhXphx98Fv1Nd+QD1FdmcT58yrS/vP8AMVP4EeE/BjULKy1XxDoerozSHUw8EZiZgGDNg5AwO3Wvbf7RtxqYsMt9oKeZjYcY/wB7GK8X8CX8mi/GzxZYizluBNIhCxrkrllG76AMSa9ywM5xzW+fa451P5oxf3xRNL4bHhvxl1S38SeMvDfhO2kk3G9HnjYVGc479enavZdP1C0u4JfsZbZauYWDRsuCvUDI5HuK8jkD6/8AtQIMK9vpNvn/AHW2/wCNe0gAdBinmv7vD4bDrpDmfrJ3/KwQ1cmeJ/GZLZotG8Y6UZI5rK8EMkvllflzznIz6103ifwtoPibw7B4he4a2m8lWF1bIWJJwBkLyeTXaa/oVl4j0O40vUYw8E64I9D6ivGYPh78TdElbQNA1dY9CaUMtyZQGjX0x1q4Qw+Z4GGHrVFCVNv4tnF9n3T6GdSmpXUo3TEbx3rfw51tdH1K+h1SHG4Lvy6r/Q+1dT4c+LWn3+pW+mWGjTRRSvhTGMgEnk4qz4N+EVhoNxcahr0v9s6lcElpphnH0zXZaJa2Zskmh0oWDbmAjeMBlwcZ/GvFxOGw9CfJhqjklbdaX62629TGnQrwfuztHs9fxLbajbrqiaexf7Q8RlUbDjbnH3sYz7VFPrVlbXU9vK0gkgh85wImIC5xwQME+w5q/gZzjn1pMD0FYHecX4e1mz1r4ialNp7SMi2ManzImQ53ejAV2tcxZgD4mahgAf8AEvj6f71dPQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV5v8AE/wo/ime3gm1DRoLdFyI7+2Ejg+qtkEV6Oxwpx1x3rxXxVB4j1rxs/2/wpp97axwYheS+MYb5uuR39sVEtZJFJ2TZ0fwlM9h/a2hTPYPHp8iiM2FuI4yCOvHU16RXC/DbTNQ06K++2afY6dBIy+Vb2kvmkHuWfvXdVrK+l+yMo6X9QoooqSwrmPEn/I4eEv+vyf/ANJ3rp65jxJ/yOHhL/r8n/8ASd6AOnooooAq6lc3FpYtLZ2pu5Q6KIlbBILgE59gSfwq1UVz5/kH7Js83cuPMzjGRnp7ZqWgCvqH/INuP+ubfyrx/wDZy/5BHiD/ALCB/wDQRXsGof8AINuP+ubfyrx/9nL/AJBHiD/sIH/0EV9Bgv8AkU4r1h+bMpfHE9mkOImPoprxT4Nfvfid4yuF+6XAx/wKvabg4tZT6If5V4x8CR5viXxXcnlmudpI6feNLLtMvxcvKK/8mCfxxPa68U+PM1xceEbO4urQ2zQaiUTJzlQ2Ff8AEc17XXkfx/inb4b+ZdFNyXq7QnQru4z74rLIXbM6PqOr8DPTtDfzPD+nvnO62jOfX5RXmv7Rv/JLo/8AsIRf+gvXoPhOXzvB2kPjGbOIY/4AK8+/aN/5JdH/ANhCL/0F60ylcucUl/f/AFFU/hs9A8I/8ibpP/XpH/6CK2Kx/CP/ACJuk/8AXpH/AOgitivIxH8afq/zNFseI/C39x8cPGcDfJ8xwnvvNeyS3FwmpwW6WpeCRGZ593EZGMDHvk/lXjfgk/Z/2kPFEfXzd7Z9OSa9pbz/ALVHs2eRtO/Od2e2P1r2M/1xUJd4Q/8ASUZ0vhPEvD3/ACc7qf8A17H+le5V4b4e/wCTndT/AOvY/wBK9yp57/Eo/wDXuH5BS2fqeW/tBx7/AIXysFyVuIjn0+YV2ngaXzvAujuW3f6JGM/8BFcv8dYvN+Fl/g42srfkRW38MJRN8NdFcDA+zKKKmuSU32qS/FIF/EfoW/Hkph8A6y6ttItX5rjvgGpg+EqPHHljcSuF/vHC/wCFdJ8U5RD8LdekboLU9P8AeFZPwQjeP4SacRjc5kZc/X/61Knpkk33qL8IsH/EXod5YzTXFjFLcwG3lcZaInJU+leMeGv9H/ac1tD8nnRuQB/F3r2qDzfIT7Tt83HzbOmfavFLX/R/2rXQc+dbOT7fuyaMm1hiY/8ATuX4WYVN4+p7fXiPxOP2j45+EIX+ZV7D6mvbq8P8Y/6R+0foUS9Yogxz+NPIdMTOXaE/yCrsvU9wAwMCuB+NUZk+FWq4XdtQN9MGu+rjvizF5vws13nG20dvyFeflkuXHUX/AHl+ZU/hZT+D97cXHgDTInt28hLZSlwWyHPcY9q7DWn2aDftnGLaQ5/4Ca4j4IyzyfDPTg4QQJHhMZ3E55zXV+MJRB4N1aRui2r9PpW2Nh/wpzh/ff5hH4Eebfs3JnwNfzkfPJfNub1wq/417FXlX7OsRj+FpJOfMvpWHt8qD+leq1pn0ubM6z/vCpfAjxG4/wBH/aws9/yCS1bHvmJsV7dXiHiX/R/2o9DlPPmwquPT5SP617fWuc6wwsv+ncfwbFT3l6ninxwPmeNPCVufmVpslfX5q9ohGIIx6KP5V4r8XD5/xd8GwJ94Nz/30a9sUYUD2ozLTAYSP92T/wDJmEPikLTJf9S/+6afTJf9S/8AumvANTnPhz/yTvRf+vVP5V01cz8Of+Sd6L/16p/KumoAKKKKACszxFDLc6DdQwT29u7pjzLmMPGPqD1rTrhvifca6vh97bQtLt9RWUYlSWbYVGfSontYqO555pnhuTwN4q0zUra88Pz/AG28EEv2OxUSKGBPy88dO1e+V4l4f8Pasms6dLb+GNI05klVnuDfGZguOcKe5r22tfs2/roZL4m/JfqFFFFSWFFFFAHM/D7/AJFCH/rtL/6Ga6auZ+H3/IoQ/wDXaX/0M101ABVXT7m4uoHe7tTausroqFs7lDEBvxAB/GrVRW/n+W32rZv3tjZnG3PH44xQBLQRkYPIoooA8G8V21z8JPidF4k0a1Z9G1Li7giThOeQMd+4q/8ADKzv/GnxE1Lx3qkUsNsCYrGNxj5eg/T9a9mntoLqPy7mGOZP7siBh+RpYoYoIxHBGkSL0VFAA/AV9DPOnPDODh+8ceVzvvH079L9jL2fvX6D6qS3NwurQ2y2rNbSQu73G7hGBUKuPcMx/wCA1bqJvtH2tNvl/Z9jb853bsjGPbGf0r541PHfhJK0PxY8aWKYEKyFwPfcB/WvZZf9S/8AumvFvhVx8bPGoPBy3H/A1r2iY7YJCegUn9K9/PV/tq/ww/8ASUZUvhPIPgX/AMhTxb/2Enr2KvG/gHILm48U3Uf+rk1J9ufzr2Soz/TMZr0/9JQUvgR498fbdTF4auyTmDUkx6ckdfyr1Ce6uLbw291ZWpvLiO2LxW6tgysFyFB7ZPFebftDHyvA9nc4yYb6NsevWvR9Olnm8L28lmI/Pa2BjEmdu7bxnHani7yyrDy7Oa/JhH42eeftCc/DuHPH+mRfzr0bQP8AkWtM/wCvSL/0AV5z+0J/yTuHP/P5F/OvRtA/5FrTP+vSL/0AUYj/AJFFD/FP/wBtBfxGXz90/SvIPg3+68beMoG+8LoH9f8A69ewHpXjHwrlMXxm8a2g4TO/nrncv+NLLlzYLFL+7F/dJBP4ons9eK2ymf8AawuWI3COy6jt+7XFe1V494a/f/tJeIpF4EUCqQe/GKeUPlhiZf8ATt/i0gqbr1PV47m4fVJ7d7UpbxxIyXG7h2JbK49sD868z/aE/d+ALe4xkw3sbY9eteor5/2qTfs8jaNmM7t3Oc+3SvOfj5bfafhXc848qeN/r1H9axyWSjmVFv8AmQ6nwM7rw/L5/h3T5cY326HH4Vy/xkk8v4V6wM43Qla3fBknm+C9Kb1tk6/SuT+O10tt8MboMSPNkSMYHXJqsDTvmsIL+dfmEn7jNj4UWzWnwv0SNwA32cE49+a7CsLwTF5HgfSI8YxaR8f8BFbtcONnz4qpLvJ/mVHSKPDbm+udC/aeVLW0a4Go26o4DY2qc5b8MV7kSACTwBXinxFlbSvjx4RvUUf6RmJifTIH9a9W8T6gNL8K6lfH/ljbO4+oU4r1szg60cLOP2oJfNNoiDtzHlXwZRNX8f8Ai7xFknzbkxL6dd2f1r2qvK/2f7AweAZL6SPZJfXLyHPcZwD+VeqVjn01LMKkVtG0f/AVYdL4EFFFFeIaAaq6dcXF1ZrLd2ptZSxBiY5wAeD+NWqitvP8kfa9nmZOfLzjHagCWiiigDmbT/kpmof9g+P/ANCrpq5m0/5KZqH/AGD4/wD0KumoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAZOpe3kVQCWUgAn2rwPxzYapp0sTeIY9CtogWW2V9QmDuuc/dVCTXv8AXm3i+y16w+IEGuaRpFtqUDWhgcXMyrsOc/KGNQ17y/r+uw/ssk+D9t5eh3Nwh094pnG1rK6eYceu4Ag+1ei15R4LXxhZ+Kr+7n8P20VpqMymQQ3SFYVHfAPWvV61k7pMzjo2goooqSwrmPEn/I4eEv8Ar8n/APSd66euY8Sf8jh4S/6/J/8A0negDp6KKKAKupW9xdWJisro2kxdGEoXdgBwWGPcAj8atVV1K0kvrFoIrqS0YujebF94BXDEfQgYPsTVqgCK5QS2sqHoyEfpXjH7Or7bfxFAOgvic/gBXtT/AOrb6GvEvgN+58TeK7Y/KVuidnpyRX0GA1yzFx/wP8TKXxxPZ9QcR6bcueixMePpXkP7PcZa28RzjG1r8j36mvVtecx+Hr9wcFYHOfwrzD9nhP8AimdYl7yXxJPr1pYTTKcS+7gvxYS/iI9fryn42WVzH8K74XVwbtvtnmqxXGxC+VX8BxmvVq8x+MVm9p8KNUSW7luS87ShpDygZshB7DoK5Mndsxov+8vzKqfAzqvh5L53w90V927NqnP4Vxf7Rv8AyS6P/sIRf+gvXV/C3j4Y6H/17CuR/aPlC/DWCPHL38ZH4K/+NejgI2z6KX/Px/myJfwvkeh+Ef8AkTdJ/wCvSP8A9BFbFZfhiIw+E9KjJzi0j5/4CK1K8DEO9ab83+ZqtjxDRc2/7UmpR/c86Fmx/e+XNeyy29w+qQTpdFLeNGWSDb/rCcYOe2MH868bl/0X9rBD97zLT8sxivZJbR5NUguhdSIkSMrQD7shOOT7jH617Od6vDy704/qZ0+vqeMeHBv/AGm9VZPmC25BI7dK9xrw7wEPtH7Q3ieQcCJcEevSvcaefaV6Ue1OH5BS2fqcN8ZIvN+FesfLu2wlvpjvTvg7L5vwo0UlgxEODz05q18UovO+GGuoDjNo/wDKsf4GSiT4WaeAMbNyn35oXvZI/Kp+cQ/5efIufGWUx/CXW8fxxBT/AN9Cj4RQFfg/oqxkxvJbud2OhLtzVL47yiL4UXwP8ciKP1rb+HNuy/C/Rod5RjaYDL1GSef1pS93JIrvUf4RD/l58jpLGGa3sYorqc3EyjDSkY3H1xXjGsf6N+1Vpzn5FltgoPrlMV7PY272ljFBJO9wyDBlk+83ua8X8af6P+0p4blHJlCKR6dqMi1q1o96c/yCrsvU9vrw/Vf9I/altEPzLHZqRjtXuFeHWR+0ftTXDr0itMHP0FPJNHiJdqcv0Cp09T3Gua+IkRn+HWtxhdxazkGPX5TXS1j+LYvP8IapGTjdbOM/8BNeRhZcuIhLs1+ZpLZnA/ABLg+BFle8Mlvkolvt/wBWQeTn3rsPiNKYPhxrkgYKVtG5NcH+znBIPB13cNcyMjXBRYCflTHcfWuv+Lsoi+E+vZH37baPzFe3jKf/AAuuH/TxfmjKL/dfIyfgJF5XwnsyFK75pG+vIGf0r0muD+CsRi+EeiknO9Hb6fvGH9K7yvOzaXNmFd/3pfmXT+BHiHxBzb/tDeEZvueZJGm71+YDFe314j8Xf9G+MfgW56/6VGcfSVa9urszTXCYSX9xr7pMmHxSPD/iPuuPj14Xi6CPDDj3Ne4V4X4uha9/aX0iGKVozDAjtjuPSvdKeb6YfCx/ufm2FPeXqFMl/wBS/wDumn0yX/Uv/umvnzU5z4c/8k70X/r1T+VdNXM/Dn/knei/9eqfyrpqACiiigArgPiHpWtXMjXOl2+nPa+QUuJb26eHaPwBrv653x3pl1q/g+9tLCMSXDKCiFgoYjsSe1RPa5UdzxfwNBFeeNLOO1k0N5IZdxEWoTFiB1KBkAb8DX0VXiWop4z1OHRoY/C+n28mnTrLvhuowzbVI2jnvmvXtFuNQutKil1izWzu2+/Crhgv4itd4+hkr8131X+ZfoooqSwooooA5n4ff8ihD/12l/8AQzXTVzPw+/5FCH/rtL/6Ga6agAqrp9vc20DpeXRunaV3VyuNqliVX8AQPwq1VXT7SSyt3jlupLotK8geTqoZiQv0GcD6UAWqKKKACiiigAqrJbXLatBcpdFbZIXR7fbw7kqVbPsAwx/tVaqpJZyPq8F4LqVY4oXjNsPuOWKkMfcbSB/vGgDyPwv5elftJa5aD5TfQGQD1P3v6V63q8vkaNeSk4CQsc/hXkmviPSf2l9Fuidpv4PKyT1ONo/nXovj+5Np4A1mVW2kWrgEdjivpMxh7avhZL7cIfg7foYw0Ujhf2eLQReDdQuhnN1fyPk+3y/0r1yvN/gPZvafCmwMow0zySfUFzj9K9IrizufPmVZ/wB5r7tCqekEeY/tAWv2n4XTNu2+TcRv069v611eiR3OofDq2isbo2dzNYhIrgLuMTFcBsd8Hmsb40R+Z8KdW/2VVv8Ax4VZ8EK2t/CKwitrqWza5sfLS4j+/ESuNw9x1rapeWTQ8qkvxSEv4j9DmP2g9z+CbOBTl5LyMAevNemaJG0Xh/T43+8lrGp+oQV5j8eX/wCJboVuT/rL1eO5wRXq1muyxgUfwxqP0pYp2yvDx7ub/JBH42TV4x4Dia1/aG8WJJwZoy649Mr/AIV7PXj3h/8AcftK6wi8iWzyf8/hTyp/ucVHvD8mgnvH1PYa8X+HkrXXx+8ayP8AN5blFI7AOQP5V7Qehrxj4SQmX4r+OL0H5WuSm3v99j/WjLLLCYuX91L75IJ/FE9djt7lNUnuHui9vJEix2+3hGBbLZ75yPyrkPjJF5vwr1bp8qK3P+8K6+O0kTVZ7s3UjxyxIi25+4hUsSw9zkZ+grnfihbNdfDHXIkALfZ8jPswNcGXS5cbSf8Aej+aLn8LF+GV0t58N9GmQkhrcda5P9oMl/AtvbqcGW7jA9Oorc+DEm/4VaSM52R7fpzXM/H25xF4es8Z8++H4Yr28HT5c+suk5P7rsyk/wB0eo6BB9m8OadCcZjtY1OPUKK0Kjt08u1iT+6gH6VJXzNSXNNy7m6PHPj1G9nJ4a1qFMta6gqlvQH/APVXX/Ea6R/hJqlwzhVezzkn1FUPjhZLefC2/bdteBklVvQhhXGeP9ekf4C6RZ8yXWorHEqg8tX1uCpPFUMHbeNRx+Wkv8znk+Vy9D0L4RqF+FmibRjNspP5V2lY3hHS10bwjpmnqu0QW6Jj8K2a+axtRVcVUnHZyb/E2irRSCiiiuQoDVXTre4tbNYry6N1KGJMpXbkE8DHt0q0aq6daSWVmsEt1JdMGJ82X7xyc4/DpQBaooooA5m0/wCSmah/2D4//Qq6auZtP+Smah/2D4//AEKumoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK8g+Iotrj4hwQahY32s24si32K0dh5R3D5zj16V6/XjPxavY9M8WQ31hqGtQX0NpiZdMSPCxlgAXLA98VErKUb/1ox7xdv61R2Hw3t9Pgsrsabol9pKlxuW8Ykv7jNdtXnXwl1W81K11Fb+61SeSGRQRqXlh1yOwQDivRa1l0Ij1CiiipKCuY8Sf8jh4S/wCvyf8A9J3rp65jxJ/yOHhL/r8n/wDSd6AOnooooAoa1Dbz6WyXly1rF5kRMqvtIIkUqM+5AHvmr9UtWk0+PTmbWPL+yeZGD5oyu4uoT/x/bj3q7QAjfdP0rxH4OfuPit40tuu2UnP/AANq9vrxH4cf6N8f/GUA+QPIxC+o3k17+V64PFx/up/dJGU/iier+K/+RR1T/r2f+Veffs9f8iHc/wDX01eg+LP+RR1T/r2f+Veffs9f8iHc/wDX01PD/wDImr/44/qD/iI9Yry34tRW8Pwm1cWly1yrXTs7M+7a5cll9gDxjtXqVeX/ABek0+T4T6sdK8vyxcOJfLGB5ob58++c5riyj/kYUf8AEvzKqfCzo/hb/wAkx0P/AK9hXE/tGtu8LaPb9RLfjK+vH/167b4W/wDJMdD/AOvYVwn7Qzbm8J2/Qy37YPpgx/416+XK+f8A/b0n912Zz/hHrmjp5eh2CYxttoxj0+UVcqGzXZYwJ12xqM/hU1fMTd5Nm6PEPEf+j/tQ6PJ9zzoUXP8Ae+XFev3MVudatpnuWS4SGQRwB8BwcZJHfHH515B4/wD9H/aK8JSdfNaNcenzYr1+8k09dRiWby/t5hkMGR82wY3YPp0r3c21o4SX/Ttfg2ZU95ep5B8Kf3/xq8ZTPywIwfxr2+vEfgmPO8feLrlfutPt56/eNe3UuINMdy9owX/kqCl8Jz/juHz/AALq8e3dutX49eK479n2UyfDKMFs7J3X6c133iOLzvDWoR5xut35/CvNP2cpd3w/nix926c5p0Peyasu04/kwf8AERb/AGh5jF8LGVSMyXsSn6Yauz8IQJF8PdKiYmNPsKZOcFQVzn9a4D9o58+BrGDvLerg+nH/ANevS9EWOHwlp6T4MaWMYckcYEYzSxHu5NQXec3+CQL+IyzpccMWlwJaztcQquFlZtxYeue9eOfFH/R/jp4Jnb5VaePLDuBIK9l057N9OhbTNn2Ur+68sYXHtXjXxs/cfEbwZdDlkmAx2+/mjh/XG8veM1/5Kwq/Ce3V4d4V/wBJ/aW12Rvm8mPaCO3Ar3EnAzXh/wANx9p+Pvi+ZeAuOD+X9KeUaYfFy/ufm0FTePqe4VT1hBJot6hGcwOMf8BNXKgvl3afcL6xsP0rwoO00zU8a/ZvjjTRdWxOxm+0YeEtwnvjtXWfG6UxfCfVMHG8Kv1ya5P9nryo28QwIo8yO5IZu5Ga3/2gJRF8KbjIzvuYkH45r67Ex5uI0u84v8jnX8E3vhTF5Hwr0FAu3/RycfVmP9a6+ud+H8Xk/D3Q0Jz/AKGhz9Rn+tdFXzWOlzYurLvJ/mzaPwo8Q+PB8jxZ4Qu/u+Xcj5/T5ga9uX7o+leIftI/uLLQLsctHdcKeh4zXt6f6tfoK9TMNcswkv8AGvua/wAyI/HI8F1wQXn7UVoL24MCxRJsZW27mA4Wve68Chk0+X9pi8k1Ly/Li2onmrn95jjHv1r32jO9Hh4dqcQp9fUKZL/qX/3TT6ZL/qX/AN018+anOfDn/knei/8AXqn8q6auZ+HP/JO9F/69U/lXTUAFFFFABXL/ABHlaHwJfsk7wnaOUOCeeg+tdRXNfEEWjeCL8ahPNBCU+/AoLg9toPGazqfCyo7nnPhSy0QaxpsieDtZgudyn7TJIxRTj7x9q9rr568J+JNTHibT7WTU/FDQLcrblboQCMnbna2Fz0wa+ha3ltdGMd7eS/UKKKKg0CiiigDmfh9/yKEP/XaX/wBDNdNXM/D7/kUIf+u0v/oZrpqACqGkQ28NpItpctcoZ5WZ2fdhi5LLn2ORjtir9UtLk0+S2kOk+X5ImkD+WMDzAx3/AI7s5oAu0UUUAFFFFABVCaG2PiG1me6ZblbaVUtw+A6lk3Nt7kEKM9t3vV+qUsmnjXLeOXy/7Ra3kMOR8/lBk34Ppkpn8KAPJfjII9L8feENbf5fLuhGT7ZB/pXT/Gi+a1+FWoGM4aZVQfjWL+0LbL/whdnqJXLWV5G4Ppk4/rWf8Y9Xa++GGhpbfM2oSRHb3PAr7TB0/rEcBPtKSfyfN+pzyduY9B+GlobL4baHE67W+xxsw9CRmupqlo9v9k0Sygxjy4EXH0Aq7XyeJqe1rzn3bf4m8VZWOP8Aivbtc/CzXI413N9n3AfRgax/hwttd/Au1hvrprW3Nk8cs6PsMS4OWDdsetdT46jEvgLWVbobR/5Vx/wpnsF+Civrnlf2dHFJ9p81cp5QB3ZHcYzXqwd8mku1RfjEz/5efIxPjsd+ueEYhz/pec/lXtKjagX0GK8e+KoW5+Jfg+2HP77dgjjrXsVGYO2AwkfKT++QR+KQV4qhMH7VqjO0SWJyB3+Rq9qrxrVoRbftP6XOpJM9oVIPQYVv8aMlavXj3pzCp09T2RjhD9K8e+CDLc+IPF92CH36gw3jv3r164bZbSN1whP6V41+zmudN8QyeuoEY/4CKeBVstxUv8C/EJfHE9ahhtl166lS5ZrhoI1kgL5CKC2Gx2zk8+1U/GcXneCdXjIzm0k4/DNXoZNPOtXKQ+X/AGgsMZnwPm8vLbMn0zu/Wma9EZ/DmpRAZL2sqge+0149CXLWjLs1+Zo9jh/gTdLcfDKBVbPkzPGfbBrD+MsQvvG3hGybo10GwOvWrn7PRKeB7yBvvRX0mR6c1n/EORrn49eEbPOY1w2333V9dCHJnteS6c7/APJWYf8ALpfI9oooor4s6Dk/iZo8eveAb/Tnn8l5lHlHdjc4OVX8TxXingbSvEHjTxRoljrNi0dh4db94zqRkg8fqK+itTfT44Ijqvl+WZkEfmDI8zPy4984q2kaRklEVS3XAxmvbwObzweGnQjFO+z/AJW1ZtfIzlTUnccBgADoKKKK8Q0CiiigAPSqOjRW8OmqlnctdRbmIkZ9xJycjPtV49Oap6U9hJp6tpHl/ZdzbfKGFznn9c0AXKKKKAOZtP8Akpmof9g+P/0KumrmbT/kpmof9g+P/wBCrpqACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuS8R+BIdf1Se8F49v8AarJrO4QIDvXqpHoQea62ik0mByfgrwfdeGpL251LUhf3l3sVnWLYoVRheMnmusopCcKTjPsKpu+4kkthaje5gjkEck0aueis4BP4VgP4ruluDGPDerMA23eI1wffrXDC1j1uy8Z6tfrJ9ss7ox2zFiDCqxowA/Emobtr0Sv+X+Y+tu7seuEgLknA65rk9furefxn4TWGeKRhdz5COCR/o70rzahqHwrL2aNPfT2G1FB5ZiMVwCRz+FfEXhAXnhpkuxLL81tIJJJswuMEE+pzVPSTixJ3ipdz2qiqFvqck9zbxNp91EJoRKXdRtjP9xufvVKt47am9obSZUVAwuCBsbPYH1oGN1S6s7PT2m1FQ1uJI1IMe/5mcKvH+8R9OtXKqS3R8ubdZyyCORUC7Qd+SPmHsM/oaLK+e7s3neznt2VmURSgBmx3H1oAt14h4W/0b9pvXox83nIzZ9O/9a9jt7959MN21lcROAT9ncDfx2xXiUl6+lftRTTC0nmM9sP3MIBb5kXk/SvfybWGJj3py/Boyqbx9T2LxZ/yKOqf9ez/AMq8+/Z6/wCRDuf+vpq7Tx/fvp/grUZI7Sa63QMpEIB2cfePtXCfAa5e08Bw7bWacXd24Z4wCsXHVvanh9Mmrf44/qD/AIiPX681+LMtnf8Awm1p7FdqQySK+I9uZFbDfXnv3r0BbxzqjWf2WYIse/7QQPLJ/u59a4j4k3b3/wAPPE1mNNuLYQwPtmlUBJT6rg/jXn5ZLlx1F/3l+ZU/hZf+Espm+FehseD9nx+RNcF8eWM3i7wXbZ3f6Zu2fV4/8K6f4Gagbv4aWUJgmQW4KCRx8r8npXHfF26a6+KvhJDbyp5bFghHzNhz0+u3j619BgY8me1X/K6j/BmUv4S+R7woCqAvAAwKWqSag76P9uNlcK+wv9mKjzPpjOM1J9sf7BHcfZZtz4zDgb1ye/0r486Dxr4u/wCj/GLwVcj5AHXL+/mGvXdQu7OK6WCUD7U8EjxMUzhQBu+bt1FeQ/G7/koXg/8A66j/ANDr1fxDem0tHUWUs3mQyZmRRti47ntmvoseubB4P0a/8mMo/FI8t+AKeZf+KbkjJa+K7vxNe1V4v+zxIxsdfHlPtkvS/mY+UdePrXr1tePPeXMDWs0SwEASuBtlz/drLiB3zKou1l+CCl8CE1Vd+kXa4zmFhj8K8k/Z1bZoerW2cGK6IK+lerC7a9gvopLWa3ERaMNIABIMfeX2ryD4EztaS+LFSJ5hBdsVRB8zc9BV4LXKsUvOD/FhL44lr9ol86Z4dt8/62+Py/3sbf8AGvWbMJb6JAJVwkduu4YzwF5rxf4+3jXE3g0tbyxlrkyGJh84JKfLj14r2W5vHstGW4SyuLlgi/6PGoMnPbGccUsd7uV4Rd+d/wDkwR+OXyJtPntrrT4ZrEBbd1ygCbcD6dq8Y/aH/cXfhq7PCx3OCw6jvXssV2fs1s4s5k84gGPaAYv96vG/2lCf7J0PEMhxdE+bj5Rx0+tHDr/4VKS73X4MK3wM9tkOI2Psa8S+DwM/xW8YXJG4mTbuHTqa9cXUnl2Qm1mZZLXzTcADywcfdz615L8Bx5viPxZcdCb1lx/wI1WXrlwGLflFf+TBP4onttNlXfC64zlSMVXsb17xJS9pNbeXIUAlAG8D+Ie1Nsr57uxa4eznt2UsPKlADHHf8a+eNTx/4EkReKPFsB4YXZ+X8a0/2i5CPhzDCG/1l4ny+uM/41zvwov5LDx/4sZLO4lZpi/2dQPM5b0zWx+0TLu8L6LGVI869Gc9R0/xr7mUb8RUn35X/wCSnN/y5Z6b4Vi8nwdo8e3btsYQR77Bmtasi0uW0/QtKSO1muQ0UUR8oA7BsHzH2q61466olp9kmKMhc3AA2D2J9a+LrPmqSfmzoWx5H+0rEW8F6XIAP3d9yfYqRXrWkyifRrOUEkPCjAnvxXk/7RM7S+Cxbm0nCwTxyC4x+7JJxjPrzXoHg3U3vPDOno1rMqrYQuJyBskygPymvbxPvZPh32lNfkzOP8Rnk/hq5tB+0R4imv0EiLIscZ2btrEcfToea98rwf4bTf8AF5PF139nef8AeBRGgBI5PPNe2W988+lm7aznicKx+zuBvOO2PejP9MVCPaEF/wCSoKXwlymS/wCpf/dNV4755NLW8NnOjlN32dgPMHtj1qpresS6ZAvlaXeX3mKc/ZlB2cd8mvnzUz/hz/yTvRf+vVP5V01cv8Nm3/DfQ2Klc2iHB6jiuooAKKKKACszxDosXiDRJ9OmkaISDiRRkqR0NadFJq4HnJ+F1yfEFvdnWs2fnRXVzB5HzSTRrtDBs8AjrxXo1FFPpYVkncKbJLHCm+V1RR1LHArK1bXJtMmWOLR76+DDO+2QED8yK4/xBqEniHxR4a02+sLuzs7maUzQXA2mTauRnB6UK7aSG9E2z0WORJUDROrqehU5FRy3dtA22a4ijb0dwD+tcd4IX7D4r8T6VAzfY7a4jaGMnIj3RqSB7ZrH1bTdSPjTV9X1PQFvtMhhQRvLNtwoBLFRnmldaPo1cNdTqPh6wbwdCVIIM0uCO/zmunrhPhFqiaj4Hh8ixntoEdzE0igK4LH7v0rr5L900k3gs7h3Cbvs6geZ9MetMC5VPTLqzu7eR9PULGs0iMBHs+dWIbj6g896Lm/e301bpbK4mYgHyIwN4z7e1EV2fJjZbKaPzJihXaAV6/Ofbj9aALlFVJr14tRt7UWk8izBiZ1A2R47N9aU3jjVFtPssxQoX+0YGwe2fWgC1RVVLx31SS0NrMqIgcXBA8ts9gfWpI5y8kymGRfKbALDh+Acj88UATVTkurNNat7WRR9tkgkkiby8kIrIGG7tyy8d/wpbO+e6s5J3s54GRmAikADNjuPr2qCLUnlhSdtMukcwyPtZBuXaR8nXq3b6UAYHxW0s6v8M9YgSPzJFgMiL/tLyP5V4dZay/jG78CaJFIHltCpnTsMH/CvpPVLgx6WSbGa6EoCNDGoLANwc59M815F4G+F+oeDPHlxrV9afaIJJSlslthjGGP3jnoAK+syfMKFDB1Y1X70buPm2uX/AIJhUg3JWPa1G1QB0AxS1E8xS5iiETsJAxLgfKmMdfrmoheudVaz+yThBEJPtBA8snONufWvkzczPG3/ACIus/8AXnJ/KuM+El1Z2XwXF1qah7OFJXnUx78oMk/L347V1PjC8eXwrr9sbSaNYrJyJmA2PkHgVzPwXuNnwijkNtJP5Zk/cqATLjsB3zXuU/8AkT1P8cfyZm/4i9DE8eSm4/aA8J2o+aNYw2333GvaK8O1G7bVv2gtHupLG4he2tS4t5ABICD6Zr2RdQdtH+2myuA+zd9mKjzPpjOM081aVHCx7Q/NsVPeXqXa8a8byraftBeFJJDtEqsgI7k4H9a9Xn1KSGytp1sLmRp3VWiRRuiz3bnoO9eQ/FT938bPBEi9TL/7OtPIVzYqUe8J/wDpLCr8J7Dqr+VpF25ONsLHPpxXmP7PcW3wVey7QPNvZDu/vc4rt/GmqSaf4bvhHayy7rSVvNUDZGQp+9XFfs9yN/wryNTDJiSWSQy4+XO8jH14pYdcuUV5d5wX4SYP+Ij0uK6s31i4to1AvI4keVtmMoS235u/Ibjt+NT3SeZZzJjO6Nhj8Kgtrsz6hdQmymh8naBO6gLKCM/Ke+KdZ3jXb3CSWk0AifYDKABIPUe1eGnZ3NTyv4Bzr9l8RWYPzQX5JXHTOf8ACotaRL79pbSUYBvstvvGex61V+DUj6Z4n8bQ+TJI8U3miFR8z4zwB6mq2m3s1z+0ZqGprY3D+TZBjbqB5inZ93GetfcVoqOY4qqv+fbf3xj/AJnMvgivM92oqu1yy20Uot5SZNuUA+ZM+v0ptzePb3lrAtrNMtwxDSxgFYsDq31r4Y6RupXVnaQxNfqGRpkRMx7vnJwv0571crOv9Ra2vra2Gm3N0sx5mjUFIvdsmp/tj/2oLT7LNs2b/tGBs+mfWgC1RVW0vXuZ7mNrSaAQSbFeQACX3X2pLK+e7jnZ7Oe38mRkAlABkA/iHsaALdFVLS+e5sXuGs54GUsBFIAGbHp9e1Jd372ulm7SzuJ3AB+zxgGQ5IHT2zmgC4elVNMurS8sVm05QsBZgAE2cg4PH1ovr57O1SZLOe5LMAY4gCwz3P0ohuiUh22csYkYgjaBsx3P1oAt0VVa8ddVSzFrMyNEZDcADy1OcbSfWobjU5ILqeFdPupRFD5okRRtkOfuDnrQBk2n/JTNQ/7B8f8A6FXTVxXh7UpNT+ImpSy6fc2JWxjGy5UAn5uvBNdrQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXG3/gKS4vtRey1eazs9UYPd2yxqQ7AAZBPIyAOldlRStrcDFk8PebpcmmPcsLEwiKONFCmPHfcOa5W80G9sPHfhKbUNWkvwlxPHEjRqoQeQ57dTx1NeiVzHiT/kcPCX/X5P/wCk70Wu7sLWVjp6KKKYFXUpbyGxZ9NgS4uN6ARu20FS4DHPsuT+FWqq6kb0WJOlrE1zvTAmzt27xv8Ax27se+KtUAFeIayfsv7VFhJ08+3Rcnv8gHH5V7fXiHj0fZf2jfCk3/PbYDn6kf0r38h1rVY96c/yv+hlV2XqekfEiYQfDvWHOf8Aj3YcVz/wIi8r4U2WcZaVz/KtD4wT/Z/hZq77tv7sDP1NJ8HoPs/wv0sYxuUtx7miPu5JLzqL8Ih/y8+R3Fcj4yF3efDvXU1G2WJtkyxqjbt0YJ2t9SOcV11YGsR3tx4R1ePUhErlZhH5X/PPnZn3xjNeRhZcleEuzX5mktjkfgDMZfhbbgkHZM6jH1rm/iB/pX7SXhOBPmKQLlT0zmQ1q/s5Tbvh1JFj7l09ZOuf6Z+1TpK/e+zW4PH8Pyt/8VX2EY8mcYyXaNR/h/wTn/5dx+R7lRRRXw50niHxu/5KF4P/AOuo/wDQ69Q8W3N5Bo94IoFNp9jlaWbd8yMB8oA755ry/wCN/wAvj7we7cKJhk/8Dr0P4hXF7beFr94vKWy+xyiZm++G4249utfT4iPNh8Au9/8A0oxW8jkf2eIseBLmfH+uu2bPrXrVeZ/AKHyvhXbNtwXnkJ9+lemV5+dy5syrP+8/wKp/AiO4/wCPaT/dNeMfAP8A5DPiz/r9P869nuP+PaT/AHTXjHwD/wCQz4s/6/T/ADrpwH/Itxf/AG5/6UKXxxI/jSPtHxM8G2o6+YH56ff/APrV7bKXWFzEoZwpKqTjJ7CvE/iZ/pXx/wDB1qPnAiUlffc5/oK9sl3+S/lY8zadu7pntSzTTB4SP91v75MIfFIisZLmWxie+iWG4YfvI1bIU/WvKP2jIt/gO0kz/q7xT+fFer2JujYxHUBGLnH7wR/dz7V5t+0HDv8AhXPJgfu7iI59MsBWORS5czoP+8vx0HV+BnaadcB/ANpccgNp6P7j92K81/Z5TdaeJJ+0moMQe9dnod1v+Cmn3G45GjRZY+oiGa5T9naL/ijb65xzPeMd3rXdGPs8vxi/vxX4snecT16iiivmDY8Q+Ho+z/H/AMTQHnKs2R9ak/aIk3N4Vtx1a9JI7HlBTNAP2T9pzWEHyiaPgDvxTfjr/pXjXwhZn5gZt2z/AIEP8K++pq+c4ep/07T/APJGcr/hteZ7ZAhjtokPBVAD+VSUUV8E3d3Oo8z+P8W/4SXz5/1c0J+v7wCui+HU3m/CzQWxjbpsS/kgFZnxrh8/4Sawu0NtRX59mBo+Ftzu+DOlyhj8loVye2OK+htzZJDyqv8AGKMv+XnyOD+D0l4/jHxTd6fAlwzagY33tt2puOTXvNeGfAtb1z4kudPWJpJNVO9pehTnOPevc6jiF/8ACjNdlFf+SoKXwBTJf9S/+6afTJf9S/8AumvANTnPhz/yTvRf+vVP5V01cz8Of+Sd6L/16p/KumoAKKKKACiiigAooooAKwvEnhr+3Xsrm3u3sr2xkMkFwihtpPUEHgit2ikBzmj+Fp9IjvJY9TeTUL6cTXF08andgAYC9AMCor/wjc3F1dPZ6xNbQXwAuodgYPxg4J+7n2rqKKdkByXwxtEsfAVnaw52QvIi59A5rra5n4ff8ihD/wBdpf8A0M101ABVXT5byWB21CBIJBK6qqNuBQMQp+pGDVqqunm+MD/2kIhL5r7PK6bNx2fjtxn3oAtUUUUAFFFFABVWSW8GrQRR26NZNC7SzFvmWQFdqgdwQWOfYVaqrIb7+1oBGsX2DyX80n74kyuzHtjfn8KALVFFFABRRRQBl+KIvO8JatGBktZy4H/ADXmnwOub2L4SX39mwLc3sM05ghkbaHf+FSewzXrF8nmafcJ/eiYfoa8h+Ck14vg7xHb6QIWv4LmTyFmJ27znbux2zXu4Z82U149pQf5oyl/EQ20la8/akukYAi2tABj/AHATXs9eNeEYhd/tGeI7s8tBEEyOg4xXstGdWVSjBdKcPyuFPZ+oV4n8WP8AktHgj/rof/Q1r2yvE/ix/wAlo8Ef9dD/AOhrVcP/AO+v/DP/ANJYVfhPSPiDJ5fw81lsZ/0Rx+lc98CrX7L8J9NAbPmF5PpuYn+taPxbuVtPhbrEjZwYdvHvxR8Io/L+Feh/7VsrfmKUbxyaXnUX4Rf+Yf8ALz5HVRy3h1WeKSBFs1iQxTBvmdyW3AjtgBfzq1VWM339qTiVYvsXlJ5JH3y+W3Z9sbcfjVqvBNTxf4dStF8fvF9qv+qMRcj3DqP60vw2mOpfHDxhdsB+5do1I9A2Ki8Af8nF+Lv+vZv/AENKtfBdFPjDxjKQDIb1gW7kbq+7xlo08RPr7Kmvvscsd16s9iooor4Q6irfy3kUUZ0+BJ3MqK4dtu1CfmP1Aq1VW/N8Io/7NERfzV3+b02Z+bHvjpVqgAooooAKKKKAA+1VdOlvJrNX1GBIJ9xyiNuAGeOfpVo+1VdON6bNTqYiW43HIi+7jPH6UAWqKKKAOZtP+Smah/2D4/8A0KumrmbT/kpmof8AYPj/APQq6agAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArmPEn/I4eEv+vyf/ANJ3rp65jxJ/yOHhL/r8n/8ASd6AOnooooAiuY5ZYCsEvkvuU79ueAQSMe4yPxqWqupWK6jYtbPNJCpdH3xNtb5XDYz6HGD7E1aoAK8Q+MX+jfFrwbef3WC89Pvn/Gvb68Q/aCHkat4WvByVuduPxHf8a9/h7XMIx7qS++LMqvwHU/HWbyvhXfrnHmMq/Xmt74bQ+R8N9FTGD9mBP5muT/aCm2fDuJARia7Rfr1rufBsPkeC9JjxjbbJwfpRV93Jaa7zk/uSQL+I/Q26zr6CUaJfJPN5pdZCp242qc4H4Vo1Rt9OW0sbqFJpJRNJJKTK27aXJOB7DPArwoO0kzU8n/Z2bZo2s23/ADxvGFU7T/TP2sLv+IQWmRjt8qf41N8BH8nXPFlof4b58fgxHSofBX+mftMeIrkciG3aPI6fwD/2WvvMQuXHY6p/07/PlOVfDFeZ7lRRRXwJ1HiH7Q4MF14ZuxyUusYPTrmu3+LkksHw51S4ScLEsBDJtzuJIwc1yX7R8W7w3os3/PK+zjHXIFXvjEqzfChdQM0iM1qqCIN8rbwp5HcjFfYUY+1oZf8A45L/AMmTOd6OZt/BeDyPhZpgxjdub8zXeVynwwh8j4Z6IuME24JH1Jrq6+ezKXPjasv7z/M2h8KGyrvhdfUEV4p8Cm8jxV4utj2vWOT/ALxr209DXiHwp/0b4xeLLX1kZ+eP4j2r0ct97AYuP92L+6RE/iiJ4mP2z9qLQ06/ZYVPHbhjz+de3sCUIU7SRwfSvD4/9N/awnA+YW9qCMdsIn+Ne3yp5sLxklQylcjqM0Z1pHDQ7U4/jdhT6+o2BJI4EWaTzXA+Z8Yz+FcF8cYPP+EuqDbnYUf6YYGu5sbVbGxitkkeVYxgPIcsfqa4/wCMn/JKNa/641wZU2sfRa/mj+ZU/hZk+H73H7OlvNvHy6Zsz9Bj+lM/Z8g8v4XRPggyXMh579Kx9Nn+z/ssrJkDFo45/wB411PwRg8j4V6cMEby7c+5r3cclDBYm3Wtb7rmcdZL0PQKKKK+RNzxCX/RP2oov4ftEXbvxR8Vv9J+N/g216jarHHXO9v8KXxP+4/aZ0Vo+C0Az+VJ48/5OT8I/wC6n82r7+jrXo1P+nD/AATRyvZrzPb6KKK+AOo5L4pwfaPhb4hXGdtjI/5KT/Sub+D0/nfAyAE5MaTqfb5jiu18a2/2rwHrlvt3ebYTJj1yhrzn4HT+Z8HbuPOfKklXHpnJr6TDe9k812qRf3poxf8AE+RW/Z+jlk0nXBDN5RGokk7c5HpXtdeH/AaxW/0fWkeWSIR6n5gMbYJI7H2r3CsOIP8AkZ1fl+SHS+BBTJf9S/8Aumn0yX/Uv/umvCNTnPhz/wAk70X/AK9U/lXTVzPw5/5J3ov/AF6p/KumoAKKKKACiiigAooooAKKKKACiiigDmfh9/yKEP8A12l/9DNdNXM/D7/kUIf+u0v/AKGa6agAqK3jljjYTzeaxdiG24wCeB+A4qWqun2K6fA8STSSh5Xl3SNkgsxbH0GcCgC1RRRQAUUUUAFRNHKbxJFmxEqMGi2/eJIwc+2D+dS1VksVk1eC/M0oaGF4hEG+RgxU5I9Rt4+poAtUUUUAFFFFAARuUg9DXifwYt57bWvGmmxT+TP9oJSQLnaeQDg9ete2V4Z4StvO+MPjvQ5ZZLeG7t5AZIjtdcnG5T2ODXvZbeWDxVP+7F/dJf5mU/iiy18Jne8+Lnje5kO7bcuoJ9N5A/Svaa8c+AxS7u/FGpRnclxfttb1Gc9a9jpZ/wD7/KP8qivuigpfCFeM/F+EQ/ErwXfHOVuhHz05YH+lezV4z8fJDaXPha8UZMeoqOelGQXePjFdVJffFhV+A6H44S7fhRfjP39g/UVv/Di2az+G+hQPjcllEGx67RXIfHm7WP4XopbBnljUAc56V6D4ai8jwvp0eMbbdBj0+UU6145PTj3nJ/ckgX8R+hfWOUXUkjTZiZQFj2/dIzk59+PyqWqsViseqz3omkZpokjMZb5FCljkD1O7n6CrVeCani/h5BpH7TOtws2Pt9ozKD+Df+y1L8DXW71nxXfQndDNfNtPrzmsb4vXw8F/FzR/FHlyuslrJGwQdTtK/wDs1dP+z5pptfh9JesjKb65aQbh1AOBX3WN/wCRU8U/twpx+cW7/kjmj/E5e1z1WiiivhTpIriOWRFEE3lEOCTtzkZ5H41LVXULFb+KNHmkiEcqSgxtgkqc4PsatUAFFFFABRRRQAVFbRyxQhZ5vOfJy+3GfwqU81V06xXTrJbdJZJgGJ3ytluTnrQBaooooA5m0/5KZqH/AGD4/wD0KumrmbT/AJKZqH/YPj/9CrpqACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuY8Sf8jh4S/wCvyf8A9J3rp65jxJ/yOHhL/r8n/wDSd6AOnooooAp6rZWuoae1vfsVhMkbEh9vKurLz/vAVcqnqtzZ2mntNqQDW4kjUgru+YuoXj/eIq5QAV41+0ZF/wASLQrj/njfZ/PFey15T+0Rb7/hqs46w3cZH417eQy5czo+tvv0M6vwMyvjrdfafA/huJT/AMfNxFIB6/KP8a9e0aIQ6HYxjgLboP8Ax0V4P8R7v+0ND+G0AOfPijLD3CoP55r6AtU8u0hT+6ij9K6szj7LL8PT85v/AMmt+hMNZt+hLVLT7K1sre4SyYssk8kr5fdh2Ylh7c9qu1T025s7qGZrBQES4kjkwu394GIb9e9fNGx438Jz9i+Lvi6zbj940mD16k0nwgX7Z8YPGt512ShQfYs3/wATTPDr/wBmftD+J4xwJoWYf985qx8AE+0ar4r1Hr594Ez9Cx/9mr9Ax2lDE1v5qdL8bf5HLHdLzZ7ZRRRX5+dR5T+0PDv+GyzjP7m6jP5mud+Kxtbn4M+GL53xdPawRoofgho13cd+RXafHS3+0/CbURjPlskn5HNeW+OL2G9+D3gS3Khp5Sqo23kBCFIzX3WTR9rh8K/5asv/AEm/6HNU0cvQ968FQ/Z/BGkRYxttU4P0rcqno8Qh0OxiAxst4xj/AICKuV8XXlz1ZS7t/mdC2CvEfCH+g/tJeIoT/wAtU4z3717dXh7H7B+1AewuYNx9+K9nJvehiafem/waZnU3T8xng0/bv2mfEN118iFo89P7o/8AZa9wmRZIXSThGUhuccYrxH4Pj7b8XvG16ecTYB+rv/hXt0zIkDtL9xVJbjtjmnxBpio0/wCWEF/5Kn+oUvhuQ6fbQWenw29oS0Ma4Qlt2R9a5D4yf8ko1r/rjXX6dPbXOnwzWIAt3XMYC44+lcx8V7b7T8K9fXrss3k/IZrzstajjaLf80fzLn8LPNLi48j9lG2XOPNiKf8Aj5r074WwfZ/hjoi4wTb7j+JNeNXl4Z/2WtMAPKXJjb6CRv6V7n4EUJ4D0ZVGB9lSvos5ThhJx71p/gY09ZfI36KKK+OOg8R8W/8AJy2h/wDXBf5Unjz/AJOU8I/7qfzak8ZyrB+0loTv0MKil8Wf6d+094fiX/l0iRjj6E/1r7+h/wAuZdPYS/U5X19T2+iiivgDqKup24u9Kurc8iWJk59xXinwGu9vwz8QRNz5MzsB7bK90cZjYe1fOvw0uP7K0fx9Zk4+zl+D25Ir6bKo+1wGIp+dN/i1+pjPSafqbfwH0+2vvDWpTXjFY31LzY8Pt+YdPr1r3CvH/gWbOw+FtvNqCgie+ZUyu75s8fyNewVx59LmzOt62+7Qql8CCmS/6l/900+mS/6l/wDdNeKaHOfDn/knei/9eqfyrpq5n4c/8k70X/r1T+VdNQAUUUUAFFFFABRRRQAUUUUAFFFFAHM/D7/kUIf+u0v/AKGa6auZ+H3/ACKEP/XaX/0M101ABVPTLK1sbaSOyYtG00kjEvu+ZmJb9SeKuVT0y5s7q2kfT1AjWaRGwu35wxDfqDQBcooooAKKKKACqcllavrVveux+1xQSRRrv4KMyFuO/Krz/jVyqctzZrrdvayKPtskEjxHbyIwyBue3LLxQBcooooAKKKKACvA/EBtbT45a/a3xZYNQ0eYSFW2nb5TMee3Ar3yvnD9oqKXS/F1jqVsu03llJbu+OoI2kfkTX0vDcFWxcsO/txa/X9DGtpG/Y7X9nWxFt8O5bgdbm6dvy4/pXrVcN8GrFbD4U6Oi8+bEZj9WOf613NefnFT2uY1p/3n+GhdNWggryP9oS2EnhfSro5/0bUI29ueP6165Xl/7QMZPwunlX70VxEwPp84rTI5cuZUfOSX36Cq/AzF+OLm98B6DbxkZuJ48enSvYtPj8nTbaMfwxKP0rwfx7fPfWPw8tj8xneJmPcnivfoxtjVfQYrqzSLpYGhSfeb/G36Ew1k36FWKytY9YuLyNibqWJI5F35AVSxXjtyx5q5VOK5s31m4to1H2yOJHlO3koS23nvyGq5Xzhsc3408DaT4606G01lGxDIJEdDhh6j8a2dK0u10XS7fT9PjEVvboEjUdgKt0VvLEVZUlRcnyrVLoKyvcKKKKwGU9SsrW+hiS9YqqTJImH2/MpyP17VcqnqdzZ2sMTagoZGmREyu75ycL+tXKACiiigAooooAD0qnpdnbWFgsFixaEMxBL7uScnn61cPTmqel3Nnd2Cy6coWAswAC7eQeePrQBcooooA5m0/wCSmah/2D4//Qq6auZtP+Smah/2D4//AEKumoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK5jxJ/wAjh4S/6/J//Sd66euR129trnxr4Xjt545XhvZ1kVWyVP2eTg0AddRRRQBU1S+h06wa5uopJYw8aFY03nLOFBx7Eg+w5q3VXUr06fYtcLby3JDovlwjLHc4XP0Gcn2Bq1QAVwPxstftXwn1XH/LJRL+Vd9XPePrI6j8P9atFG4y2jgD8K7svqeyxlKfaS/MmavFo+fobv8AtvVPhrag7vKt9xHpiV1/9kr6ir5I+DCzaz8TdFSUZj06FgMf3dzN/NzX1vX0fFcFRxFOguib/wDApNmNDVNhVTTr6G/hme3ikjWOeSFg6bcsrYJHqCe/erdVbC9N9FK5t5YPLmeLEowW2tjcPY9RXxx0HhPiycaJ+0Bc3DHYs2nsxOeuVrof2dINvg3U7gjmfUXIPttX/wCvXH/tHQy2HirT9QgO1ri2MZYDsDXpnwNsTZfCnTiy4eZnkb8WOP0Ar73MJR/sGnV6z5I/+A8xyw/itHodFFFfBHUcn8UbX7Z8L9ejAyws3ZR7gV88x339p+FPh9pg5aK6mDfQykivqLXrMah4ev7Ruk0Dr+lfIfw2Mt38QdD0654S3uThT2Oef1r77hlqWCqt/wDLt833wkjlrfEvM+yYk8qFIx/CoX8qfRRXwO51BXhfxCk/sr4+aPfsdqy2+zP4V7pXgf7RqSWWpaHqsAwY9wLe9fRcOJTx3sn9uMl96Mq3w3ND9ntDcXHifUiOZr4pn6c/+zV7TK4ihd3BKqpJAGSQK8g/ZuAPgfUJcfNJfsze52rXsEr+XC77S21Sdo6n2rLiF3zOquzS+5JBS+BENhdRXthFc26PHHIuVV12kfUdqz/F1r9u8G6ta4J860kTA91NaNjdG9sYrgwyQGQZ8uQYZfrT7hPMtpEIyGQjH4V41KbhUjNdGmaPVHyvZ3Ym/ZvkhyMwapsx9ef619HeB/8AkRdH/wCvVP5V8mrdtaaLe+FMncNWB2n/AGTt/pX2FolsLTQLC3UY8u3jXH/ARX3HFMFSpJfzTlJejSOahq/kXqKKK+DOo8H+Lt7Fb/GHwwUSRZI5ELyFPlIJ6A1YsmGq/tV3Uq8pb2g564IRB/jR+0JMyR6dcrbyobGdCJyPlbPOAaqfBi4XX/ix4m1pDujCgRsfQkj+QFff4f8A5E/1n+WnOH3yX+Zyv+JbzPe6KKK+AOoD0NfLun3f2OD4nyA4Ys6r9TIa+oj0r4/8R339i6z410mbInvL7ag9V8wnP5V9lwvT9s61Nf3PwkrnPXdrM94+E7Q6N8JtFe4hdxcv8ojj3YLE4J9uOtekVyvhPdoXw+0KH7NLKTDGhWIZK7hnJ9q6qvmswqe1xdWfeT/M2grRSCmS/wCpf/dNPpkv+pf/AHTXEUc58Of+Sd6L/wBeqfyrpq5n4c/8k70X/r1T+VdNQAUUUUAFFFFABRRRQAUUUUAFFFQXN9a2bRLdTxxNM2yMO2Nx9BQBgfD7/kUIf+u0v/oZrpq5n4ff8ifD/wBdpf8A0M101ABVTTb6G/t3ltopIlWaSMiRNpLKxUnHoSOverdVdPvTf27yNby2+2V49sowTtYjcPY4yPY0AWqKKKACiiigAqnJfQR6zBYtFIZ5oJJUkCZVVUqCC3YksOO+D6VcqrJelNXgsfs8rCWF5TOB8ibSo2k+p3ZH+6aALVFFFABRRRQAVw3xW8G6X4r8JyS6s9zENOVrlXtUDyYAOQF75Hau5qrqd6dN0m6vVt5bk28TSCCEZeTAztUeprfD4irhqqq0naS2Ymk1Zlbw5osPh7w5Y6TbO8kVpCsSu/3mwOprToByAelFZznKpJzk7t6j2CuK+L1r9q+FusLjOyHf+XNdrWT4qshqPhPU7QruEtrIuPX5TXRgqnssVTqdpJ/iTJXi0fP2j6lF4g8U+ALQAkwRBiCOmK+l6+RfhFcSS/FzRYJRgW5eNR7YNfXVfS8V0lQxFOktlFv75NmNB3TZUivoZNXuLJYpBNDEkjyFMKwYsAA3cjaeO2RVuqsd6ZNVns/s8qiGJJBMR8j7iwwD6jbz9RVqvjzoCiiigAooooAqajfQ2EMT3EUkiyTJGojTcQzHAPsPerdVdQvTYxRuLeWffKke2IZK7jjcfYdTVqgAooooAKKKKAA8CqmmXsOoWK3FtFJFGWYBZE2Hg4PFWzVXTr039ms7W8tuSxHlyjDDBxQBaooooA5m0/5KZqH/AGD4/wD0KumrmbT/AJKZqH/YPj/9CrpqACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKparPqMFqG0m0ju5t3KSS7Bj1zV2igDDs5dc1FJrfVrCKwjdCFlhuA7ZrzKG1n0f4hQRaNbi6nXVpdqTS7d3+jyZJavaa4nVtHtdP8feHru3DCW8v53ly2Rn7NJ0pW96/l/kTJXt6/odPbz6k9xbrcWUccTQhpnEuSkn90DuPepVlvDqbxtboLQICs2/5i3cbatUUyiheSan9ln+www+csqCLzH4ZNy7yfQ43Y+gqSymvpbN3vrZIJwzBY1k3Ajsc+9Ra5cS2uktLBdwWbiWJfOuPuAGRQR9SCVHuRWhQBTt5r99MMlxaxx3eDiESZXPb5qZqhvW0pltLWOeaQBHjeTaADwefar9FNOzuB5B8PPhXqfgbxNqGreXBcmeYxQIJNvlwkk7vr04r1W6lvY7i3W0tkliZiJnaTaYxjqB3q1RXXjcbWxtb21Z3ei+4mMVFWRVWW8OqNE1ugsxHlZt/wAxb02/1qrpc2sveXkerWsEcCyt9mlik3F0z8uR2OK1Kz9HuJbm3uGmu4LspdSorQdEUMQEP+0Oh964yjgvin4C1X4gWccEMMFu9rOPJlaTPmIeufSu08N6bPofhO10/wAlPOtIfLRQ3DkdDntmtmiuypja1TDQw0n7kW2vmSopPmKaTX50fzXtI1vthP2cSZXd6bqf5t59hjf7On2k43xb+BzzzVmiuMoqXr3ge3S1tkmjkfbOzSbfLT1Hr9K8b0f4Lano3xf/ALdheFtJFy06/Ph13c4x7E17fWfPcSpr9pbrdwJFJFIzW7f6yQjGCvsM8/UV34TMMRg41I0XpNWZEoKVrlvfN9r2+WvkbM793O7PTFRW8t495cJc26RwIR5MivkyDvkdqtUVwFlW0lvJJbgXlukKJJiFlfd5i+p9PpXD/EfwTqPxA8JvaSRw2l7BMXt/3m4OO2T2zXoVFdGGxFTC1o1qTtKOqFJKSszhfh14OvfAXgD7DGkd1qTMZXTftVnJ6Z+ldZfTajHpBksLWOW+2jELybV3d/m9qvVHcMUtpWV1QqhIZui8dTSxGIqYmtKtUfvSd2CSirIq2smo/YbQ3cEX2lsfaAj/ACp9PWpJZbwajDHFbo9oykyzF8Mh7AL3pukzSXGk28s1xFcuy5M0P3H56irlYDPDrz4IXtx8Xn1tZIRpMtz9qYbvm3E5Ix9c17XE0vnSI8SpEuPLYNnd68dqmor0MbmOIxqgqzvyKyIjBRvYq2Mt5KkpvrdIGWQiMJJu3L2Pt9KSymvpLFnvbVIbgFtsaybgR2596t0V55ZwXxE8Lax408K3mmrBbK5RHt90n3ZP4sn0rK+FfgHWPh94bufOggudRu7gF0EuAkfTr+v416FBcSvr11A13A8aRqVt1/1iE9z7GtCvRjmOIjg5YJP3G7kci5uYq3st5F5P2G3SfdIBJufbsXuR6/Shpbwamka26G0KEtNv+YN2G2rVFecWVVlvDqjxNboLMRgrNv8AmLem3+teNeNPgxqfib4pNrNuYIdNldGlZnyxIAzxXt9Fd+BzCvgKjqUHZtNfeTKCmrMy3XU7fT0i0+3hDQusaq78NEBjPsas2818+mGS5tUju9rEQrJlSew3e/FRaxcS20EDQ3cFqWnVS0/Rwc/KPc1oVwt3d2UVI5b46Wsstsi3hXJhEmVDem6qmtXOsQQL/ZOnw3ZZT5nmT7NvH61rUyX/AFL/AO6aQHNfDYsfhvohcbW+yJkA9Diuormfhz/yTvRf+vVP5V01ABRRRQAUUUUAFFFFABQc7Tjk9qKKAOdOo+KvtBUaFamLdgP9sGcZ64xXP+N9JUa5oOozSSNM1+iiMt8sfynOK9CqhqmjWurtateBibWYTR7Wx8wGP60LRp9mhSV013TOd+Gst6/hp0ubZI4Enk8iRZMmQbznI7V0sk18NKMsdrG17syIDJhd3purF+H3/Inw/wDXaX/0M101AynczX6aasltaxy3eBmFpMKD35qOzk1X7OhvYIfNa4YMEfhYsnafc428VoVn6Lcy3NnK893BdstxKgeD7qgOQFPuAMH3BoAmmlvV1GCOG2R7Vg3nSmTBQ9sDvmgy3n9prGLdDabCTNv+YN6batUUAVUlvDqckb26C0CApMH+Zm7jb2qWN5zJMJIlVVbERDZ3jHU+nORUtFAFS0mvpLOR7y2SGcM2yNZNwYdjn3qok+uM8TvZ26L9nlMkXm5Pmgr5YB9CN2T9K1qzprmVfElpbLeW6RPayu1q3+tkIaMB1/2RuIPuy0ATXs19HZq9lbJPOSu6NpNoA78+1LeS3sYh+xWyTbnAk3Sbdi9yPWrVFAETtMLiJY41aJg3mOWwV6Y4755qIS3v9qtEbZBZ+WCJ/M+Yvn7u30x3q1RQBVhlvG1CaOa3RLZQPKlD5LnvkdqivpNU/sm+NhBCL5Uf7Isj/I7Y+XcewzV+s/X7iW08O6hcW93BZSxW7ulzc/6uEhSQzew6mgB9nNqEmliW9tI4bzB/crJuXPb5qFm1A6R5rWkYvtmfI8z5d3puq4pyo78daWgCjPPqK2Vs8FnHJcO6iaMy4Ean7xB74p9892GhjtbZJ4pH2zln27ExyR6/SrdFAHj/AIX+El74Z+LEuuosE+muWaMl8PET7d69b3Tfaynlr5GzPmbud2emPpUtFduMxtfGzVSs7tJL5ImMVFWRQtJNUfWL1buGGOwUILV1fLuedxI7dqls5bySScXtukKq+Iir7t6+p9KhguJX8Q3du13A8UcETLbL/rIyS+Wb2OAB/umtCuIoqmW8/s6SQW6fagjFId/ys3YZ96Y82oDSBKlpG19sBMBk+Xd6bqu0UAQNJci2iZYVMrbfMTfwvrz3xTLmW8S8tUtbdJYHYieRnwYxjggd+atUUAZeqza0l5aR6TaQSQM4+0Syy7Si5GcDucZq15t5/aYj+zp9k2ZM2/5t3ptqHWbiW2t4Ghu4LUtcRoWn6MCwBUe56CtCgCray3kk9yt3bpFGj4hZX3GRfUjt9KSymvpEnN7bJAyyMIgsm7enYn0J9Kt0UAVLWa+ksXe7tkiuAW2xrJuBHbn3pLua+j0sy2drHNeYGIWk2qTkZ+b6Zq5RQBUvpb6K1RrG2SeYsAyPJtAHc5qOzk1P7PD9uhh81nbzTG/CrnjHrxV89DWfolxLdaWks93BduWYGW3+4cE8fh0oAmaW8GqJEtuhszES0+/5g+fu7fTHeop7jU0up1t7KOSFYd0TmXBeTP3SOw96v0UAcV4en1K4+ImpNq9lHaSixj2pHL5gI3dc12tczaf8lM1D/sHx/wDoVdNQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVg+JNEv9UutLvNJu4La506d5VM8ZdW3RlCMAj+9W9RQBzP2Txt/0FdH/wDAOT/4uj7J42/6Cuj/APgHJ/8AF101FAHFa14d8X65pbWN1rGlJG0kUhKWb5zHIrj+L1UVf+yeNf8AoK6P/wCAcn/xdReLdZ1CDWtH0PR50trnUmkZrh037EQAnA9eRUnhDWb+8u9V0vVpEnudNmCeci7fMUjgkdjxSTuJuwv2Txt/0FdH/wDAOT/4uj7J42/6Cuj/APgHJ/8AF101FMZzP2Txt/0FdH/8A5P/AIuj7J42/wCgro//AIByf/F101FAHM/ZPG3/AEFdH/8AAOT/AOLqhpHh3xfo8FxFb6xpTCe5luW32b8NIxYj73TJrtGO1ScZwOgrj/D/AIl1bU/G97YX9qtpaparLDEeXGTjLH+lC1dgeiuW/snjb/oK6P8A+Acn/wAXR9k8bf8AQV0f/wAA5P8A4uumooA5n7J42/6Cuj/+Acn/AMXR9k8bf9BXR/8AwDk/+LrpqKAOZ+yeNv8AoK6P/wCAcn/xdUJ/D3i+fXLXVG1fShNaxSRIos32kPjOfm9q7WuP8QTeJ4p7+9gvLfT9Ps0DRBkDmfjJznp6cUm0twLX2Txt/wBBXR//AADk/wDi6Psnjb/oK6P/AOAcn/xdafhzU5NY8O2V/NH5ck8YZlHrWnVNWdhJpq6OZ+yeNv8AoK6P/wCAcn/xdH2Txt/0FdH/APAOT/4uumopDOZ+yeNv+gro/wD4Byf/ABdRz6d40nt5IX1bSAsiFSRZv0Ix/frqqo60+oJpMx0dI3vMYj8w4Ue5+lJuyA5zS9D8Y6TpcFjBq+ktHAu1S1m+T/4/Vv7J42/6Cuj/APgHJ/8AF1Q8Ma9qcniq50TULyHUhFAJWuIVC+W39w4rtafS4k7nM/ZPG3/QV0f/AMA5P/i6Psnjb/oK6P8A+Acn/wAXXTUUDOZ+yeNv+gro/wD4Byf/ABdH2Txt/wBBXR//AADk/wDi66aigDiofD3i+DW7nU11fSjNcRrGymzfAC9MfNV/7J42/wCgro//AIByf/F1i+KfHV9ZeLNM0rRYkkge5WK8nbkLn+Ee9egUk7q6FfWxzP2Txt/0FdH/APAOT/4uj7J42/6Cuj/+Acn/AMXXTUUxnM/ZPG3/AEFdH/8AAOT/AOLo+yeNv+gro/8A4Byf/F101FAHFat4e8X6vDBFcavpSiGdZ12Wb8lc4/i96v8A2Txt/wBBXR//AADk/wDi6zPHHia50zX9L0u11RdNW4VpJpjB5pAHAwK6fQJWm0mN31JdSJJ/0hUCZ9sDpQtVcHo7GX9k8bf9BXR//AOT/wCLpGsvGrKVOq6PyMf8eb//ABddPRQBleGNHfQPDNhpckwne1hWNpFXAYgdcVq0UUAFFFFABRRRQAUUUUAFFFFABRRRQBx2m+H/ABVo1obPTtW0z7MsjunnWrlgGJOCQ3vVv7J42/6Cuj/+Acn/AMXXTUUAcz9k8bf9BXR//AOT/wCLqho/h3xfo1pLb22saUyyTyzkvZvndI5cj73TJrqtUvf7O0m5vCM+TGXx64FcFaeJPEFimgapql5DcWmsziJrZYtvkbgSuG79O9C1dvT8dhSdlf8ArTc6L7J42/6Cuj/+Acn/AMXR9k8bf9BXR/8AwDk/+LrpqKBnM/ZPG3/QV0f/AMA5P/i6Psnjb/oK6P8A+Acn/wAXXTUUAcz9k8bf9BXR/wDwDk/+LrPm8OeL5vENrrDaxpQntraW2RRaPtKyMjEn5uuYx+tdtXHePvEuraDYq2kWgIEsIluZPuqryqhAHc4NLql3Ha5b+yeNv+gro/8A4Byf/F0fZPG3/QV0f/wDk/8Ai66SJi8KMepUE06mJao5n7J42/6Cuj/+Acn/AMXR9k8bf9BXR/8AwDk/+LrpqKAOZ+yeNv8AoK6P/wCAcn/xdUNd8O+L9f8AD9/pF1rGlJBfW728jJZvuCsCCR83Xmu1rH8Q/wBtPbwQeHzFHJLIFluJOfJTuwXuaQFBbPxqqgDVdH4GP+PN/wD4ul+yeNv+gro//gHJ/wDF1D4W1nUZfEOqaJqdwl61jtIukTbnI+6QOM11lPpdCucz9k8bf9BXR/8AwDk/+Lo+yeNv+gro/wD4Byf/ABddNRQM5n7J42/6Cuj/APgHJ/8AF0fZPG3/AEFdH/8AAOT/AOLrpqKAOKh8O+L4NeutWXWNKM11BHC6mzfaAhYjHzf7Zq/9k8bf9BXR/wDwDk/+LrG8S654i0W5nv5ru0t7dbhY7WxIDNcocZOeoOSenpXd28hmtopGXazoGK+mRQtVcV7Oxzv2Txt/0FdH/wDAOT/4uj7J42/6Cuj/APgHJ/8AF101FAzmfsnjb/oK6P8A+Acn/wAXR9k8bf8AQV0f/wAA5P8A4uumooA4rVvDvi/WLeGK41jSlWGeOdSlm/LIwYD73Tir/wBk8bf9BXR//AOT/wCLqfxf4j/4R3RJJrePz76QFbaAHl2x/IdaZ4F1i913wfZ6hqgUXUoPmBBgA+lJO97dBN2aXcj+yeNv+gro/wD4Byf/ABdH2Txt/wBBXR//AADk/wDi66aimM5n7J42/wCgro//AIByf/F0fZPG3/QV0f8A8A5P/i66aigDmDZ+NSMf2ro//gG//wAXVHRvD3i/RdNWyttX0p41ZmBezfPzEk/xe9dH4h1L+yPD17fggGCFnBPqBXLeA9avNZitri+8RpdTSRB5LMWvl7SRngnrQtW12B6I1fsnjb/oK6P/AOAcn/xdH2Txt/0FdH/8A5P/AIuumooA53Q9D1a21+61XWr21uJZoFhVbaEoFAOc8k10VFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAcf4x0zURr2ieINJsH1GTTmkSW1idFd0cDlS5C5BUdSKk8GaZqEV7q+sarZNYTalMrJbO6s6IoIG4qSM89ia6yilFW/ruJq4UUUUxhRRRQAVzNrpV7H8R7zU3gIs5LNY0l3DlgemM5rpqKOtxNXVgooooGFFFFABXnHimfxNqfiZrGfwtqVz4fg2sGsprbN03XnfKpCj6c16PWZb6/Z3kcr2Be6WG4NvJ5KltrjrnHpS+0gexZ0xzJpsDGxlsPlwLaUruj9jtJH5E1aozRVPViWiCiioPtP+mG38qX7u7zNh2fTPrSGT1Q1o6kulyNoqxPdrgqkvRx3H1Iq/RSeoHCaFpGoXPjNNaOjS6DAsLJPDK8Za4c/wAWI2YY+pBru6KKfSwkrNsKKKKBhSMu5CuSMjGR2paKAPLtc+GV5DcWDaJqmpzJ9vE86tLHiMZyWGQD/OvUEUrGqlixAxk9TS0ULRWFbW4UUUUDCiiigDmvEH9pWmsQXtpoaaxbiMoyQiMToc9QZGVdv40vgrR7vSdLuTfp5Ml3cvOINwbyQei5HGfpXSUUlp/XzE1d/wBegUUUUxhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBT1eyOo6PdWikAzRMgz6kV55Z6R4h1SHw7o2o6FNYw6NcCWa9eaJo5ggIXYFctznPzAV6fRQtHf0/DYUlzK3r+O4UUUUDCiiigArm/Hul3mseE5LPTYTPO1xbuEDAcLMjMckgcAE10lFHb+thp2GQqVhRW4IUA/lT6KKCVorBRRRQMK5nxxqPiOx0dF8JaRJqN3M4RmSSNfIXu2HZQx9BmumqldatZ2eoWtjPMFuLssIY+7YGT+gpNX0DY5/wLBJZ2ktvNoGp6dKx8ya61B4Ga4c9T+7kf9cV1tQWlz9qtxL5UkOSRtlQq35Gp6pu4krBRRUN3cfZbZpfKkl2/wAESFmP4CkMmopFbcgbBGRnB4IpaAPP/E1nrur/AGvTLvw+Lxnk/wBB1KB41S3Tj7+5g4YHP3VPau10q2ms9Jtba5l82aKJVd/7xA61booWisJq7uFFFFAwooooA5XxP4KXXb4alFqV/a3UNu8cSQOoU5HowPPvR8OtCvvD3hGGz1SSdrgMSVmZW289ivFdVRSWl7A9XcKKKKYBRRRQBQ1uC5udGuYrFIJJ2QhEuF3Ix9CK5Kz0/VdY8Q6XdXGhy6JHpqkSM7xYmPogRm+X64+ld5RQtHcUldWCiiigYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQA11DRsp6EEV4Zp9smjaDqJsJJYJm8RSo4Epzt3HFe61mN4b0ZrmW4bTLUyzOHkcxDLsOhPvUcr5r/wBbp/oKWsbf1s1+p5J9gmm8PW+p/wBo3i3custblxO3EZJyuM07XtR1Tw5D4ksdFuZvKjmswDJIW8pZHw5z1AxXr40bTRbrALGARLJ5oTyxgP8A3sevvTm0nT2e4drOAtcqFmJQfvAOgPrTtpb+un+T+8Vv6+b/AMzhfBtlqVj4nUG9tFtJLfL2sVy0rMez8k4rO+Id/eW+t6slvdTRKunBlCORtOeor0XTNA0nRmY6Vp1vaF/vGGMLn8qkutH069keS7soJnkTY7PGCWX0PtTkr28v+CCVk/l+h57pUL6H458NQ2lzcNHqenO90sspYO67cNz0PzGrvj+0vLnXrNobuOW3jhcyaebgxM3T5wQRnH9a7g6ZZG5guDaw+dbIUhfYMxqeoB7DgVDqeg6VrOz+1dPt7vy/uGaMNt+mactbW6X/ABb/ACuEVbfyM7wRqMWpeF4JIPPwhKHz23Nke/euhqK2tYLO3WC1iSGJBhURcAfhUtOTu7hFNKwUUUUigooooAKKKKACiiigAoorzPxx4w17wx4qg0+zuYJIdVAS28xBm0bux45H1pX1S7hsm+x6ZUEV9azyTJDcRu0BxKFbOw4zz6VF9lnm0cW0925maIK9xGArE45IwMCvMLa1/sbRfiHFYPIXjBIdmLMT5XJz60N2v5K/5Dir282ejweI9LvXmi028hvLiIEmGKQbiR2rIv8AVb290e7kvbS+0VLdC/nJKNzY7DFcw9tBZHwFNYxJFK8iq7RjBYNGd2fWvTp7eG6haG5jWWNuquMg05R0a82vuIjK9n5J/f8A8MZHhG3v4PDsB1W7luriQeYWlOSoPIH4Vt0iqFUKowAMADtS027saVkFFFFIYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXnPjjTbW4+JfhS4uAww03zbyoyI2I/UV6NVS/wBKsNU8r+0bSG58l98fmoG2N6j0pNapiesWu54zoX2jXL3w9aXt9dGGVLoyBZmG/DHGaeILnTvDtrqsWoXcl3FqzW8bPMxHl7iAuO9evwaFpdrJE9tp9vE0IIjKRgbM9cemacdG01rcQNYwGISeaEMYwH/vY9aErW/rrf8ALQnlev8AXQ8bsX17Wra71OS/trW9iviizzXLK0QDjC7M4wR7d69B+Ilzc23w4upo52ScImZI2xzkZINbcvhjQ59RF/NpVo90CCJmhBbP1q9d2Vtf2rW17BHPA3WORQVP4UfZSKStK5461rLqFr4qvp76786xiD2+2ZgI2C5zjNd81xd6j8L0nGoCzuprFW+1McBGIHJreXRtNWO4RbGAJcjEwEYxIPf1qYWVsLIWYgj+zBdnlbRt2+mPSh6xcfQI6ST7X/T/ACPOfA90dN8Sw6bexyrdXFtv3xXJlilweW5JwT1/GvTaztN8PaRo8jyaXpttaO/3mijCk1o1Td0KKtcKKKKRQUUUUAFFFFABRRRQAUUVz/ja61LT/Cl1qGjXcdtcWY88+aoKyKvLIcjjIyMjmlKSirsaTbsjoKhnvLe1aNbiZIzI21AzY3H0Fcl8OPEepeLtLn1u+kSO3mfbb2agZhA/vHGcmqvjbSIx4g0bUZJppJDeqERn+WMewpu6aT62/Ez5vdcl0Ot1DX9K0qZIdSv4LaST7iyPgmqt5rd7FeJFZ6PPeW7gEXMUg281yVvbQ6j448af2jCk3kwRRxeYoO1PKzx6ck1v/DiSSXwBppmzlVdRn0DkD9KUdVd+T++5Tdnb+uhW0qG/k8bT+Xq15LZ26ZlglfK7z0A+ldjUUNrBbySPBCkbynLsq4LH1NS0+iQdWwooooGFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXP33gnSNSvb26v0lnmvECFnYfugOyccV0FFKyAhs7VbKyhtkkkkWJAgeQ5YgepqhD4b0+GXVH2O/wDahzcq5yD8u3A9OK1aKb1vcFpsczpXgTTdKv7e6W5vbr7ICLaK5lVkgyMfKAo7HuTXTUUUCskFFFFAwooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArM13QbTxDZJZ6i0pt1lWRo42wJNpyFb1Ge1adFAGVpfhyw0a/urrTleH7UQZIQR5eR3Axwam1PR7XVntmut+baUSx7Djn3q/RQKyOc1jwTYaxqUl8bu+sppohFP9klVRMg6BsqfXtituwsbfTNPhsrNNkECBEX0FWKKForIfW4UUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFVtQ1C00rT5b7UZ1t7aEbpJX6KM4qzXE/GL/AJJB4h/69h/6GtAE3/C2fAv/AEMtl/30f8K1NF8aeHfELypourW940S7nEZPyj1rzz4M+FPDOofCnSLnUdJsJ7h4zvkljUsee9ekaf4a0HTEmOl6ba2olUrI0CBcj8KALOl63putRPJpV5FdJG2x2ibO0+lXq5D4e2HhKwsL1PBUivA1wxuMOWxJ3qS++JvhLTdZfTLzV4o7iM7X4JVD6FugNAHV0Vz+h+ONA8SahNZaPfC4mhXc2FIBHse9dBQAVDc3ltZReZeXEcCf3pHCj9amrh/FPw4tPF3iaK/8Q3002lwxgDTg5SNm9WIPNAHY2t7a30fmWVxFcJnG6Jww/Sp68N8KWMPhr9oS50bwU8h0NrESXtsshaKCTPGM55x/OvcqAIbm8trKLzLu4jgT+9I4UfrTbS/tL9C9ldQ3CjqYnDAflXA634CufGfj+SXxSWl8P2sQ+zWiSlVlc9S+K4zWdKh+Evxd8PN4UeSDTNcmEFzp5csi5OMqDQB7zRWfLrumw65Ho8t3Gt/LH5qQE/My5xn9K0KACsKTxt4biuJIH1i2EsTFXTdkqfQ1unpXKeE/Bum6VoKfa9MtmvbgmW5eSJXZnJyeSKALKePvC0jER63asV6gPnFWrbxZoV5Zz3drqlvLBbttlkVuEPvXk/wZ0ywn8ceOFmsbaRY78hA8KkKM9BxxXpNl4UsdP8T6lLbadbx2N9bxtJGIxsaUFgfl6fd20AbGj65pviCza70a8jvLdZDGZIjkBh1H6ir9eR/BjVtO0bwfrCXUyQA6/eCONR2BXoB2FepafqVnqtoLnT7hLiE8bkOeaALVFZOoeJdN029WzmlaS5Zd3kwqXYD1IHSrWl6tZazZi6024WeLcVJXsQcEEdjQBcopGIVSWOABkmsSHxn4euLq4t4dVt3ltl3SoG5UZx/OgDcorNtfEOk3unS39tfwvawkiSUNwhHUGqlr4x0a7uIYY7hkNwcQtIhVZf8AdJ60AbtFUNT1qx0ny1vJgskxxFEvLyfQd6ZpWv6drLSx2U+ZoT+8hcbXT6qaANKiszUfEOn6ZcrbXErPcMMiGJS7Y9cDtS6R4g07XDMNNn80wELKNpBQ+hoA0qKxrvxXpVndyW7SvLJD/rfJjLiP/eI6VbOtacNL/tI3cf2PGfOz8ooAvUVh2vjTw9fWhubPVIJ4vMMWYznLAZI/KtHTtVstXtvtGm3MdxEDtLIc4PofSgC3VbUNRs9KtGutRuI7eFerucCrNeQ/FvxDpT+LfBum3F/EYE1bN9ATwFAGN340Ael6T4j0jXJJo9Kv4rmSDHmop+ZM9Mg1p1y+j6Z4U024v/FOleShv/muLoSHa+OO9XbXxbpN1cRQiZ4jN/qmljKLJ9CetAG3RWTq/inRdBlji1bUYbWSUgIrnBbJwKdF4k0ibVF0+K/ha6bO2INy2OuPWgDUooqjqus2Gi26zajcLEHbai9Wc+gHc0AXqKzNO8Q6fqd01tBIyXKpvMMq7H2+uD2pl/4k07T7r7LLI8twBuMUKF2UepA6UAaksqQxNJKwVEGWY9hWbpPiXRtduLiDSNQhu5bXHnLGc7M9M1YsNRsdZszLZypcQtlWGOnqCK8v8H3GnaF8ZviDv8mzt1NntRFCjJiB4A96APXKKoaZren6wsh066SYxHbIoPzIfcVDqPiPTdMu47SeVnupAWWCFS74HfA7UAatFZ1lr+mahp0l9a3SNbxEiRumwjqCO1UoPG/hy5tpZ7fVreSKFtrsrZwaAN6is2XxFpMOjLqr30P2JxlJQ2Q/09TUVh4o0vULz7JFM0dyU8xYZkKMy+oB6igDXorDj8aeHZtQlso9Wt2uIULyR7uVA61asPEGl6ldNbWd5HJOq7jHnDY9cHtQBpUVwPi74jaTovirRtGN+sc01z/pHoiDqCa7TT9Ss9WtBc6dcJcQkkB0PGRQBaopruscbO52qoJJPYVh2/jfw3dTTQ22rW8skABkVWyRk46fWgDeoqhp+t6dqpdbC6jlZDhkBwy/hTtT1ey0e3E1/MI1Y7VHVnPoB3NAF2isvT/EWnajcPbxStHcINxhmQo2PXB6iqy+NfDbaj9gXWbU3eSPJ3/Nke1AG7RWLZ+MfD1/qQsLPV7aa7Jx5KPlvyp9r4r0K+1R9NtNUt5rxCQ0CNlgR14oA16KxLzxdpFldy2zztJJCMzeUhcRD/aI6VJd+KtEsNKi1K71GCKzmGY5mb5WoA16Kxf+Ev0HdbD+04B9qx5RLcNnp+dbXWgAoqC9vrbTrR7m+mSCFBlnc4ArH/4TbQfKdheZZOTEFO/GM52+lAG/RWSPFGkNo0WqfbEFrMdsbHgu390D1pdO8Sabqd41nBMyXSru8iVSjkeoB6igC/PeW1syLc3EUTSHCB3A3H0Gamrz/wCIGneDdV1nSv8AhJ9Ve0u7OdXgijl27iTxkYrqdY8VaJoEqR6vqMNrJIQEWQ4JzQBr0VkS+K9EgmWOXUIVLOEDE/LuPQZ6ZrRubu3s7R7q6mSGBF3NI7YUD1zQBNRUNrd299apcWcyTQyDKuhyCKmoAKKrX+oWumWjXN/OkES9Wc4/CqFl4p0u+vls0maK4cbkjmQoXHquetAGxRWRrXivQ/Du3+2tShsywyokOM0T+KtEt5Qk2oQochck8AnoM9KANeisu88SaRp7lbu+jTGNxzkLn1Pan6jr+l6VYJe6hfRQW0gykrH5W4zxQBo1HPPFbQPNO4SNBlmPQCsdPGegSWkV1FqUTwSrvV15GM4z+YrWjktr+1DRtHcQSDqMMrCgClpHiPSNeNwNHv4bv7M+ybyjnYfQ1dgvLa5kkS3uIpWjOHVHBKn0PpXmPwxS2sPGXxDCrHb20WqdEUKqDb6CtXwBpng/S9a1+68L6rJeT3Uvn3geXeI888cD3oA7+ivO4fijoc3xHu9MOpxx21raLvZ8hTIWPT8MV1WqeMNA0WCKbVNUgtkmUNGXbG8HuKANqiszVvEmkaHYx3mrX8VrBIPkeQ4DcZ/lVyzvLe/s47qzlWWCVdyOvRh60AOurqGytZLi6kWKGMbnduiiqejeINK8QwSzaLfRXkcTmN2iOQrDtVa88R6E0k1jc3UMuPklQjcoPo3avPfgEETT/FIiCrGNduAoXgAZ4x7UAeuUVhXXjHRrS4mie4Z/s/8ArnjQssX+8R0rYtrmG8tkuLaRZYpBuV1OQRQBLRUVzcw2du89zII4kGWdugFYsPjjw3cWkl1Bq1vJDE2x3VuhoA36KpHWdOGk/wBqG8i+xbN/n7vlI+tUbLxdpF9dQ28c7RyXAzAJkKeb/u560AbdZN/4p0TTNUh06/1KGC8nYJFC5+ZiegFW9Q1Sy0q387ULhIEzgFj1PoB3ryD4r32mal4s8CXNgYnm/tYrIwTD42rgHvQB7VRWPfeLNC03U49OvtSghvJWCpCx+Yk9KdrHinRdBmhh1fUYbWSYgRpIcFs8cUAa1FMM8Qt/PLqItu7eTgAetYcfjXRJSGW5byC2wXBQiIn2bpQBv0jusaF3YKqjJJOAK4Xx78QtM8N3Wm2BvVS6ubtFYDoqdyTW3f6z4e1rwvetNqcZ06QGCaeNyNpI6ZxweaANu3uYLuES2s0c0ZOA8bBh+YqWuS+Gum+H9J8HpZ+Er173T453/eu+4l+MjP5Vr3/iXTtPuvsskjy3AXc0UCF2UepA6UAa1FZqeItKk0ltSF7GLRPvyE42H0PpVS18a+Hr6zN1Z6pBPEJDFujOfmHUUAbtFVdO1Oy1a1+0adcR3EWSpZDnB9DVqgArM1nxJpHh6NH1q/hs1f7plOM1eubqCyt3nu5UhiQZZ3OAK8n+NesaNrHwxumtpIZp0ljMbMnzAbuqkj+VAHrUM0dxCk0LB45FDKw7g96fXMW/ibRvDvhbS21rUIbMPaxlfMOM8CtTUvEek6RpkWoalfRW9pKAY5XPDZGRj8KANOiqtrqdne6at/bXCPasu8S5+XHrmsqPxtocskYF0Vjlk8uOdkIjds4ADdKAN+iis/W9bsfD+ly3+qTiGGNSST3x2FAGhRXD/Dzx9pfibQ7QnUI2vbmSQpCT8+AzEf8Ajorq9T1ay0i286/mEak4UdSx9AO5oAu0Vl6f4i0/UrlraGRo7hRnyZkKMR6gGtSgAorP1bX9K0GJJdYvobONzhWlbANUZPHPhiGzju5dbtEt5fuSl/lb8aAN6oZ7y2tnRLi4iiaQ4QO4BY+1Zlz4v8P2enQ391q1tFaTnEUzvhX+hrkvGEfgXxLqui3mr62Y57eVZLVYZtokJ6cY5oA9GorI1fxXoehTxw6tqUNrLIQESRsFs9KJPFWiQzrFLqEKlnEYJPy7j0GemaANeqWqavYaJZm61W6jtYB1kkOBVtpESMyOwCAZLE8AVw/jnXtB1XwLrluJ4LhhZTeXvTK7gp6E8ZoA7DTdTs9Y0+K+0y4S5tZl3RyoeGFWq4L4J/8AJH9B/wCvZa6K58XaTbXUsBmeUwnEzRRl1jPoxHSgDborMu/Eej2Gmx395qEENpJ92Zm+U/jVQ+OfDIsFvTrdp9lZtom3/KT6ZoA3qhuLu2tApup44dxwvmOFyfTmsx/F/h+PSl1N9WtlsmO1Zy/yk/WuS8ct4E8WWemya5rvlxwzLLbtBNt3nPHbmgD0bOelFY+qeJtD8OW8P9rajDaIyDy/Nb7w6UTeLNDgK+bqMKhtvzZ+UbumT70AbFFIrq6B0YMpGQQeCKxZPGGhQ3Rt5NRiVlbYWP3Q3pu6ZoA26KydL8T6Xq9/NZWU5aeFQ7IyFcqejD1Fa1ABRRRQAUUUUAFcT8Yv+SQeIf8Ar2H/AKGtdtWB458Pz+KvBGp6JazRwTXkQRZJM7V+YHnH0oA8t+EXw503WfhjpV9cXt9HJKhLLFMVUc9hXrGh+Hbfw3pUtraTTzIxLFp33HpVL4eeF7jwb4G0/Q7yeO4mtVKtJECFbntmuldd0bKO4IoA8I+A/nHwL4u+yyCOb7ZNscnG07etc/4b1jwhJ8ErjStVhW48TTNMsiGIvLPMXO11IHIxjkccV3Oj+F/+FSfDXxRN4iu0u4Ll5Jh9lDZAYYA571zXgfwt8U7Xwbpcmj3OiC1MIlthdQK8oRvmUFvofwoA9b+H2hLo/grSUubOOG+W1UTMEAbPvXU1598OfHOr67q2p+HvFNnDb6vpYVpGt2ykinjPt9K6Lwvp3iCwN9/wkmpw3/mzFrfylI8tOynNAG/WdrekQa9pUlhcyyRxyH5mhbaw/GtGvO9c8M+NNK8SXeteCtThuI7whptNvj8gbGMqe1AHITPH8Gvifpenafm50zxE2JjNzLHIDjIPccj9a9zryjR/h54i8Q+OrTxZ8RpbUS6em2ysLU7ljPPzMe/Wu3GneIf+E6N+dTh/sH7MEFltO/zcn5s9MdKAL2va9Y+HNJlv9Sl2RoPlUctI3ZVHcn0rhfDPhzUfF3iiLxl4xs/srWxI0ywc5MK9nb/aNR+NPAnjbXPGsGs6Jrumw2tqv7i1vIWkVG/vYxjPvVzTNI+K8Wp27ap4k0KayWQGaOKzKsy9wDjg0AdpLoWnTa5HrElqjX8UflJOR8wXOcfrWhXP3OneIZPG9tfW+pwx6Glvslsip3vJk/NnpjGK6CgApD90/SlrN1k635Kf2Atg0mf3n21nAx7bRQB5X8FP+R68d/8AYQP869lP3T9K8p8G+AfGvhDXtY1KK70O5/tafzpI380bDnoCBXpV9/an9ln+zhafbsDict5ee/TmgDzP4F6VatoniG9ljEksmu3cfzjIUBh0+uaj+ElxLbah42ih3NHb3ztFEOgOCcAVu/Dzwj4m8GaVqlldT6Vci6upr2JozINsshHytkfd47c1F4A8FeJPCmv6td6lc6XPb6pOZ5Fg8zdGfQZGCKAOS+DWq6rfrretS6c2oXtxeOjyvIAUUHhRnoK7fwPomsaZ4w8SXl3arZ6XqEiTW1urhtsm0BzgdMkZ/Gl0vwbeeDNd1G98LrFPZak/my2Uj7fLk9VPTFdNpdpfi8mvtUlTzZUVFgiJKRqP5nnrQBqEZGDyDXkL6LZP+04sSQJHEmh/aWjRcK7iQLkjv941662dp243Y4z615vJ4R8ZD4nP4vhn0PcbE2K27mXGzeG3E468UAcj8XbGPw7eaBoeh2zQWWr6mJLtUbAmOfu59663xnpeva/4XisdJ0NLS6t5Ee2lMqgRbT2xXReNvBNt420SG2vH8i7tpFnt7iP/AJZSDuPanJB4mu7EaferawDaEku4nJLjuVHY/WgDnfFcnh6LxloE2oNcXfiaziH2eytTktnqWHQDJPJrGF5qg+P2jSXtgmmG7sJldI5t/mqrDBbHcZ/Wty/8A6nZfFFfGmizQ3bPbLbTWdwcHAULuVvXjvSa14N8RX/jLTvFEUtqbq3je3NpuIRI2HJB/vZ/lQBleJ4/GPhv4gXfiHwvpsOvWV1Esc1uJFEkJHpn1qqnj2H/AIV/4w1vT9Nm0rXreAm5spVwYpNpAceo75rq9H8OeJfDutX93a3Fve2dwiAWsjEMGGcsD071fsvB63N/rF/r8dvJJq0It5YIhlBGBjBz1J70AZ3wetY2+Fek3Mw824voBPcSvy0jNyST+Nc34FuWT4veLvC7r5ulLtnjgflULDkAeneum8NeHPEHgfRRoekmDUrCJj9kknfY8Kk52t6gdsVN4d8EXPhv+1NVgmt7vX9Uk82aafcIx2CjHOAKAOX+Cei2Mc/iu5EKkrrU0UaEfKigDoO3X9Kk+FTGH4l+P7OMlbeO+UpGOi8dhWx4A8I+J/CTayt7PpVxHqNxLeL5RkBSVgMKcj7vH1qDwX4J8T+HPG2ta1f3OlSw61MJZ44fM3RkD+HI5/GgD0evKPirptk3jrwAzWsRafWGEpKD5xtHX1r1evPvG/hHxP4k8TaJqGnXGlQ2+i3f2qFZzJukOMYbAwOnagDn/iTeMnxF8H+FbaM2+mXEjTTxxjCyYPC/59a7D4n2UDfDTVXRBHJaQeZbunBjZSMEelN8TeCrjxZYaZd30tvaa7psvnQz24JjBz93nnaRjNM17RPEfi7Rm0TUvs1hZzbVu5on3NKoOSFHbOO9AHm/je/bXf2WItfvolbUVS2ZZ2X5lPnIM5r1zTvB2jwjSrv7MGurCELDMT83Tkn1rm/Hvw91TxB8P/8AhDvDkmnWWmlI1Mk+/euxgwwAMc7a7PQk1iOx8vXhZecmFQ2ZcqQB33DrQBp143Dcy6/+0/d2OosXtNHsA9tC33d7bTvx684r2SuJ1/wNJJ44tPGPh+VIdVhiME8UhwlzFnOD6H3oAt634estP1i98ZxiV9Rt7B4lQN8pAGelc38DJX1Twjca1fMZr68uXMkr8nGeB9K7KGy1TU7yKfWFitoIg2LWJt28kFfmPTGCeKwtB8J6p4GkvYfDqw3um3UpmS2lfY0DHqAemKAOetr+bRf2lH0axLJY6lYmeWEfdVwudwHqad4R0y3u/wBoHx3c3CeY0C2gRW5XmFecV0ujeCrm08S6h4q1KWC51y7j8uIc+VAgGAo7/U1Q8L+EPFWj/EDWvEOoXGkSR6z5XnRQmTMflptG3I56d6AMPSZGsP2ivEUVoCsZ0yOQxL0Zvm7etZnwi1XVdQ1fxJrMunNf3j3hh3vIAYkGcKAeldPY+CPFdt8VLrxbLc6QY7qJbd7dTLlUUnBBx15rSsPBl54S8TajqvhhYprbUzvubGRtu2QfxIenrnNAEXhLQdWtvHHiC9vrKO10jUY0ZLfeG/e/xHHvzXO+BvD2nXPxS8cwSW6fZo5ljWEDCgMozxXo1ra6wZbi/uXgF08WyG33Hy078nqTXKeGPCXi/Q/GOr6zcT6LLHq8yyTxoZcxgDHy8c9O9AHFeIomsfjd4d8K2Fiz6Rp9obiCz3YWVyTzz1x/Suz8SaX4h1zxF4f1Cx0pbKWwuwZ5jKMmAqQy8de35VseL/A417WdM1/TplttZ0piYJG+7Ip6o2O3Jq/5Ovao0S3yQWEMTh2EUm5pCOQM9hn8aAOCv9B0+b9pHT1FuiL/AGZJK6oMB2BHX1p3i4Cy/aF8G/ZAIfPtZVkCDAccjmteTwl4tk+KEHioz6OI4oDa+RmXJjJGTnH3sD6VH4m8E+KdY+JGleJrK50mOLSQyQwymTMisf4sDg/SgCj8RNMsn+LHgbfaxN511L5uUHz8Dr616bZx2dtvtbFYo/LOWjjAG3PtXL+L/Cd/rWqaDrNhJCt/o8pkETk7JMj5hmtrRLC7hnu77UtiXN2wJijOQiqMAZ7mgDWZQylWGQRgg968m8PaRYL+0Z4iC2kSrFpcLooXgMWGTivWq8jsk1I/tHeIJdLeImPSod8UuQJBuHcdD3oAj+Jbt4Z+JfhTVNIYQy3lyLa4iTgSqTjJFO0rUpvEX7R2rWmoBja6PaoLWB/uhiOXx6mukbwNd6546tfEviWaLFiMWllF8yof7zE9/pU+seCph44h8X+H5Y4tRWHyLmCUYS5T3I6MOxoA53453D6LpOj67p5MV9b6hGgdOCyN1U+oqj4t0+x8P/EPwl4s+xxJFfn7JdsVGFMi5U/XPH411WseEdQ8a6lp8niYQ2unafN56WcTb2lkHQsemB6Vo/EDwkfF/gu50i2dYLj5XtpD/wAs3Ugg/pQB57HLa6D8ebTU1soItN1vdYRyhcATL90g+rHiugm0+00vQfEvjDTLGMX1z5hhdE52L8oYfXG78at+JPhzJq/w4stDs7rydRsWilt7wnmORSDuzXZQ6XbRaKml7AbZYRDtPdcYoA8o+DlxqDfDqO5/sg38moM8lxcPKMyEk9c1oab4YvtP+FPim08S2kJRRdz2URIfyozGSo9iDmtrw14V1bwJBPpugrDe6XJM0sEc0m1oNxyR7ir2r6J4huvDOoWVlc2L3WprIk7XJcJErJtwgUdh60Ac38MPCWk6x8I/Dsmp24uJCq3QdjyHB459sV6gBhQB0Fcj8O9A17wr4as9D1mXT5rexgEUUtqX3sc/xBhjuelddQB5f8XYrsa14SuSXl0uLUQby2jyzSL67RywFO1KzXX/AIu6Fe6HblrOzt5RfzCMqjK2Nqcjk9aX4hS3Ou+ONE0Dw7ObXWrPdei5kGYo0PBDL/FnFN1I/Ejwnpc+r3Gp6PqdraqZJrVbbymZR1wwHWgC58QrXwhbQ6Pa6y0kU0F0JbCztM75ZB2Cj+tc34v1HVm+Inge8m0saYr6kIFk80GSSNgcqwHbFampeGbrx3qPhj4gaFNHHPbQ7xZXI+V1bqM9jV/xX4S8ReJbzRtYBtYLrR7tLmCz3krJg/MGb1xnGKAM/wCOdrat4a067EUZnXU7dfNAG4fOOM1N8edPtbj4cyTywIZluYVWXHzKC3Y0eLfAfinxHokGnW91pcKC8F9I0xkLCTfu2jAxtzxV/wAd+FvFfjLwvFpKTaRbFmSSeQmU/MpzheOn1oAzvilpdpp/7P8Aqa20Sq1vaROkmPmDb0+bPrzXSaTpNt4r+F+nWGshpobqyjEvzYJ4Hes/xj4W8TeKfhs/hsTaVBcXUXlXUxMhVQrKVKcZz8vOang8N+J1+Gx0BdTtbHUooVhgvLTfgAdzkZB+lAHTaJotn4f0eDTNNQpbQLtRSc4q/WT4Y07UdK8O2tnrN/8A2heRJiS4OfnP41rUAcV8Tx4al8PQweLLmSKJp1aCOInfJIOgAHWuJ+IWo6pJB4aul0c6fBDfwpBcSSjztpGMFR7e9dh8RvAN14uvdG1LTruOG70iYyxxTDKS5xwfyqHxf4V8ReMdLtPONrZTWM6XEUCuWEjqejHoB6UAZvx+tLW4+Cer3UkMb3EIt9kpALITNGDz9Cam+ImkWen/AAH1KOCIbotP3rIR827bnOfWk8YeBfFPirwPfaDHcabbDU5EluHlaRjGysrALgYx8n61qeKfDXijxH8OZPD3m6TDc3MJgnlzIUVMYBXjOfrQBnaTp1uvwF3yr50sumb5JZOWY7euad4Yhi1P4A2x1CNbgppUhXzBuwQhwf0q5b+GPFVv8NV8NrNpDXKwfZvOJk27MYzjGc0mhaDrfhj4XX2j61LYzJaafKkMtrvyw2N94MP5UAV/gvpNi/wX0QPbRv8AaLdvNLLnd87Csr4QXlxa+MfFnh4TmaxsZw8GTnZk/dp/wiTxHH8GtHjsDaTJNAxhklYqYcuwwQOoHX8a6bwd4GfwZpN81pcR3mrX0hmmuJwQrOe3HOKAMP4aIsnjz4ho6hlbVsEEdflqLwNaW9t8bvHlvbwpHCI7XEargcxjPFaHg/wj4r8O+JNe1K7n0iZNZna5dIzKDG+PlAyOmetL4Y8I+KdK+Ier+I9Rn0l4tXEazwwGTdGEUAbcjnp3oAxtH0fTpP2hvEMMllA0S6ZbsEKAgElsmrfx0tNOuvgnrVzFDDI1usQhkCj5P36AgHt3FbN54U1Sw+Ilz4p0QwTm9tFtpoJm2lSpO1gfTmrGveB/7f8AhnfeF7m52PeJlpQOFfeHH4ZAoAyfidawXHwK1F54UkaLS98ZYZKny+orH1HW7zw9+zXDf6axS4WyjVXHVcjGa1vFXhrxZ4n+Ht14cK2do5tvKEqSZE2BgD2B75rR8PeD76T4bjwv4vW0kj+z+Rm1ZjxjGTnv9KAJPh5ollD8N9MV4lme6tVlnkcZaR2XLEn6mvL/AAPf3Gg/Cz4gXOmKwlt9VuVj28lRnGfwr03w/oviXw1oUWgW7W13bW6+VbXjvhkj/hDL3IHHFYXw7+HuveHrXXdM8QtY3Wm6rdSzMQT5rbz6dOaAK/wtkvv+Fa2wGifbRfIzXEzSrmUt1zXU/DHR9Y0LwmbHXgqypcSGFFfdtjJ+UZ+lQ+GvDmteCbBtI0hYL7ThIWt2lkKtCD2PqPpXUaTZXFnav9tn8+eWQyOR90E9h7UAXJYo54mjmRXRhgqwyDXj/wAOvDunXnjzx7BPbqbZL0QrCB8qqUBOB+Neu3f2n7LJ9hERnx8nnE7c++Oa8/8ACHhDxb4d8U6xqd1Po00OsXQnnSMyho8KBhcjnp3oA5D4ph9K8WeB/CGmW7ro8kzSNAGwJiuCEJ9Pb3rq/G2l+IfEWl2MWk6KlneWV3FLDMZQPLVWG4DHquRXQeOvA9v4ytbJxL9m1HTZxcWVyP4HHY/7JwM1P5PiPUrYWd8ltZpgCW4ikLM477R2z70AcDpd1P4i/aCv7DVmMltpFsDBA33d+PvY70fGWyt4vGHgK4ihVJW1UqzKMZGBXWap4Jmg8ZxeK/D0iJfiLybiGU4W4T69jWB488G+L/F+qeHtStTZWzaXdGb7NK5KjgckjqfpQAfGextRN4XvBBGLg6zEpl2/MRg8ZpP2gLS3fwTY3LQoZ01S3VZCPmALHjNdN4x8J33ivQ9NEktvDqNhcpdKFJ8pnXtzziud+I3hDxd478P2ttH9jspba6jm8oyZWQr3J9KAM7456te6f8L9Is7GZ4Bqd1DaTSIcFUK5P54xXe6n4I0nWvCdrocyNDZwhGRYjjlcEVS1zwQ3jP4e/wBgeKTDHcbVKzWZOI3X7rDPParFja+Kl0qPSrw2uY4/La/DklwOMhfWgDkfi1pVkmpeDF+zRsTqixszLksoA4PrXo/9n6UIZtOS2twpUSPAEGOcgEj8D+VYHjPwbPr+n6R9guFW70i4WeEzZxIQMYP1xVmOw8QGS91RVso9RuI44I4ZWYxoiFjkleckufwxQBxfwjujpXwm165t48m21K9ZEX2xirvwMkfU/B8+s3zGa+vLhzJK/Jxnp9K0/hv4N1rwlpN9pWuTafdWt1cS3Ia337t0hGVIYYxil0DwpqngaS8g8PLDe6bcymZLeV9jQMeoB6YoA5lZ/sH7Rtx4fjjDaZqmnmaa3YZQOFzux70vwO0WyQ+L5xCpK+ILqFEIyqKG4AHaum0/wVqNpr2peKppbO58Q3iCOISbhDAg4Cgjnp3qv8PvB/ibweutJeXGlXC6lezX6mLzAUlkOdpyPu/rQBj/AAjdo/G3ji0QkQR6gCkeeFyvavWa848DeCfE3hnxZrGp6hc6VNBq83nSpD5m6M4xhcjn8a9HoA8i+JF/cah8XfCfhiWRl0y5bzp4wcCXB+6farvx3060X4V3EiW8atDNFsKrjHzV0fjPwQviS807VbGcWuraXKJbaYjg/wCy3saw/iD4Z8W+OPB0mlRraWUm9GI8zcJSD69hQBW+JllbXH7Pl7PPBHJLDpsZjdlyUOV6GtDxTaQXXwDk+0QpL5eio6bhnafKHIrRuPCmo698L5/DPiCS2iuJ7YQGS1LFRjGDz9KzNY8N+K9Y+HcvhfFpbMtoLcXKSE+aFAAwO2cc5oA838Vavf2HwB8LWdi0kcd/NFDM6HHyk8rntmvQdf0vVda+G82g6f4fSJmtdtq/mqBHIB8rfgeaNM+G15qfwtj8J+MDajyVHkTWjMWjYchue49q6KwtvFVtpkelyCzJjj8v7fvJyOmdvXP6UAbOgR3sPhvTY9WIa+S1jW5IOQZAo3frmo/ElrBdeG9QW5hSVVtpCA4zg7DV2xtRZafb2okaQQxrHvc5ZsDGT70t5breWM9s5ws0bRkjsCMf1oA85+DFlptr8LNIv5oII5gXAnKgHJkKjn3zj8azdO1GbxB+0Zf2V/uNppNput4H+7vP8eK3vDfg3WdG8P2vhiZ7dtMtrkTC6U/OyLJ5ipj13Ac9MZq9rPgqb/hNbfxb4flji1KOMxTwyj5LhD2JHQ+hoA5v46XUmhaLpmvacTFfW14gDpwWUkZU+1eo2shms4ZG6vGrH8RXF6x4R1DxrqNg/iZYbbT7GUTLZxNvMrjoWPTFdwqhVCqMADAFAGL4t8O2fibw3eaffQJKJIWCFlyVOOCK8ftbW38RfBGTw9FZQtqttK9oqhAWjZMuD+O3H4173XDeH/h+2i/EXV9f88G1vVBit1/gc/eJHvQBz2hHS/iD4D8N6ZdWcOWmBuolX/VeT8zD2yV2/jT/AIz6XY2mgaI9taQxPHqcCKyIAQu4cV0ng/wJ/wAIv4l1u/WYNb30xe2hH/LEHlh+Jqr8R/CPiPxhHa2umXGmW9rbXCXAa48wuzKc44GMUAZvx5061ufACzSwIZxewIsuPmUFuxpvxa0y1074A6mLaJVe3t4HjkA+YN5iDdn15NaPjzwr4r8ZeG7fS45tItsSRzTOTKfnU5wvHT60/wAbeFfE3i34ct4cWbSoJrqMR3UxMhVdrKy7OP8AZ5zQBx3xL1/Urb4beELK3uHjGrzQW9zKpwShGSM++MV3fjHRNPg+FOq20drGI4dOkKYXkEIec1Uu/h7ceIfh9baB4lltVurLYbW5s93yMn3W+b6dKl1jSfFuseDbzQpPskUstq0P2tXz5nGOnbPvQBxek65deHf2U4dQ0/cLlNPCxuv8BP8AF+Fd78MrCBPhjpG5BI93aia4dxkys3JJPfrWf4G8E6nYfDUeE/FyWM1sIPIAgLElf9rPGfpVnw/ofiXwjoEeg6ebbULW3ylpczPteNCcgOO+M9u1AHG+BoI9a8W+N/B+oR+fpkLBoEkGREXBB2+nrVHw1ZWd78KNY8GzWcJ1G2u202NSuWTzDtWT8AS30WvTvBfgqHwqL66ll+06lqMvnXVxjGT6D2FZ9n8P2tPi5deK0nAtJ7f/AI9x/wA9sY3kf7pNAHJeD3s/FXwrsPDd/ZwpeQ3H2G6i2coUOC2PXAzWl8aNE02w+GKLaWUMX2e6gSIqgBUbu1dDofgT+x/iFq2vxyj7LfAOluP4JCMM341H8S/Cuv8AjLRRpOkz6db2zSJK0lzv35U5wABjFAGZ8ZrG1uPghqs80EbzQ2kRjkZeUO9OhpPEWj2dl+z7dpFEpK6QsnmEfMW2A5zV3xj4X8V+Kvh+/h0TaRA91CI7mbMpC7WBGwY9AOtS6x4b8T6p8Mz4bEukpdS2/wBllmzJsEYUAEcZ3cfSgCroTahf/AaP7Jc+XetpjCOZ3xtO3g57fWuOtvs97+z2uix2U0muzW3lLH5LeYZ/7+cdM85ziunnW68A/B+407xV9nu40tzaR/YCwaTeNo+9jB5qvoPhX4kWOiWkdr4j0tFSICNJrMOyjHALY5oA73w7pA0/R9PN3DH/AGkllDDcTAcsyoAefrmtiuK8B+MNR1zVNZ0LxBaww6ro0iJM9uSY5Qygqwz0yO1drQAUUUUAFFFFABRRRQAUUUUAVdT0201jTZ9P1KBLi1uEKSRuMhga4FPhReacgtfD/i/VtP04DC2ok3iMeik8gV6RRQBznhLwRpfhCKY2PmT3dyc3F3cNvllPuTXR0UUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFADZFLxsgYqWBG4dR71x2mfDi20zxdJ4ij1fUZb6YBJjJICJEByFIx0rs6KACiiigAooooAKKKKACiiigAooooAwda8I2Or6rb6sjSWeqWqlYryA4cKf4T2I9jVa88K3ms25tNc1eWezb78MShPNHox64+ldPRQBBZWdvp9lFaWUSwwQqEjjUYCgdqnoooAKKKKACiiigAooooAKKKKACiiigArK8Q6H/AMJBpjWTXtzZxyAq5t2ALKRgg1q0UAc/4O8I2/gzRxpdheXNxaR4ESTtu8oZJwPzroKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDP1vQ9P8AEWkTabq9utxazDDI38x6GsuDw5qllbraWOvTi2UbV81Fd0HoGI5/GukooAxvD/hfT/Dv2mS0DSXd4/mXV1KcyTN6k/06CtmiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD/2Q==)

对于处理增益（PG），可以认为傅里叶变换是信号通过多个窄带滤波器，故而，频谱上的基地噪声会小于时域中的噪声，当N增大一倍，噪声可以衰减3dB。

对于等效噪声带宽（ENBW）

等效噪声带宽等于频率响应幅值平方对频率的积分与最大频率响应幅值平方的比值

由于噪声功率相等，输入噪声功率密度平稳（见5.2.1节），故而ENBW可以等效为下式

分式多项式是通过窗口的属性定义的，对于矩形窗口为1，例如，对于Hann窗口为1.5，对于SFT5M则为3.885。

要使用的窗口的选择、相关参数和要使用的重叠区域是通过相应的函数块特定结构与初始化参数来实现的，例如ST\_CM\_MagnitudeSpectrum\_InitPars。

综上所示，一个信号的误差可以由以下的公式给出：

真实信号的功率

噪声信号功率

## 其它信号处理方法

### 功率谱问题

如开头所提到的，自然界中存在着除确定信号之外的随机信号，它不具备确定的数学表达式，所以想要处理这种信号只能通过计算它的概率密度函数，然后得到信号的功率谱。

确定信号分为能量信号和功率信号，而随机信号一定是功率信号。根据狄利克雷条件，能量信号可以直接进行傅里叶变换，而由于功率信号不满足在一个周期内信号绝对可积，因而不能直接进行傅里叶变换。对于无法做傅里叶变换的信号，需要先求自相关函数，再做傅里叶变换。

对于任一离散的随机序列，如果已知在时刻的状态，即一维随机变量小于或者等于的概率，则该随机序列可以用一维分布函数描述

离散随机信号在任意两个不同时刻和上的相关性由自相关函数来描述。

可以使用基本的数字特征（量纲）和上述的定义来分析一个随机信号序列。当随机序列的均值是一个与时间无关的函数且自相关函数只与时间差有关，那么随机序列就是一个平稳随机序列。

实际中往往只能得到随机信号的有限个或者一个样本函数，需要使用各态遍历随机信号，此类信号其所有样本函数的统计特性和单一样本函数的统计特性一致。对于各态遍历随机信号来说，其自相关函数可以如下表示：

由维纳-辛钦公式，可以证明，当自相关函数绝对可和（有界输入对应有界输出）时，平稳各态遍历随机信号的自相关函数和功率谱是一对离散时间傅里叶变换对。

将随机信号作为输入，输出是其与系统单位脉冲响应的卷积，用同样的方式可以得到输出信号的功率谱。

实际应用中很难得到平稳各态遍历随机信号的一个样本函数的全部观测值，只能得到有限个观测值，这些观测值得到的功率谱只是随机信号真实功率谱的估计，对于估计质量的评价有很多方法，这里不再赘述。遵循以上步骤，便容易对功率信号（包括高斯白噪声等）进行频域上的分析。

TF3600提供了FB\_CMA\_PowerSpectrum函数，可以计算随机信号的功率谱。

图示

低可信度描述已自动生成

### 倒频谱问题

所谓倒频谱，即是信号功率谱对数值进行傅里叶逆变换的结果。可以这么理解，对功率信号求其功率谱，在功率谱之上对其求对数，最后在做傅里叶逆变换。

该分析方法方便提取、分析原频谱图上肉眼难以识别的周期性信号，能将原来频谱图上成族的边频带谱线简化为单根谱线，受传感器的测点位置及传输途径的影响小。

对于存在低频信号和高频信号的系统，在调制后的信号中，会因为高低频率的卷积而增加了一对分量，它们是以高频信号特征频率为中心，对称分布于两侧，称为边频带，如下图所示。

图示

描述已自动生成

倒频谱能较好地检测出功率谱上的周期成分，能较明显地显示出功率谱上的周期成分，将原来谱上成族的边频带谱线简化为单根谱线，便于观察，而齿轮发生故障时的振动频谱具有的边频带一般都具有等间隔的结构，利用倒频谱这个优点，可以检测出功率谱中难以辨识的周期性信号。有关倒频谱的详细内容可以参考第三节中的齿轮振动分析。

TF3600提供了FB\_CMA\_PowerCespectrum函数，可以计算随机信号的倒频谱。

### 解析信号（复数信号）

傅里叶变换的定义，我们从中可以看出，在频域中，由于奈奎斯特采样角频率必须大于两倍的信号最大频率，所以傅里叶变换会产生正负两个频谱。虽然负频谱没有意义，但这会影响后续计算的复杂度。因此，我们需要引出希尔伯特变换。希尔伯特变换可以把所有频率分量相位变90度。它可以理解为一个滤波器，其物理意义就是把信号从双边谱变成单边谱，避免频谱浪费。下面给出希尔伯特变换的定义和解析信号的定义。

可以看到，解析信号是实数信号与虚数信号的组合，而虚数信号来自原实数信号的希尔伯特变换。在连续时间上，希尔伯特变换是原信号与的卷积；在离散时间上，希尔伯特变换是原信号与离散冲激函数的卷积。

TF3600给出了FB\_CMA\_ComplexFFT函数，它主要是用于逆傅里叶变换，同时也可以对复信号进行傅里叶变换。

## 齿轮振动分析

齿轮振动可以采用倒频谱的方式进行分析，对于啮合的齿轮，我们关心它的两种振动，齿轮轴的转频振动信号（低频）和齿轮啮合振动信号（高频）。不加推导地给出齿轮的振动方程：

齿轮的啮合刚度变化规律取决于齿轮的重合系数和齿轮的类型。直齿轮的刚度变化较为陡峭，而斜齿轮或人字齿轮刚度变化较为平缓，较接近正弦波。

从频域上看，信号调制的结果是使齿轮啮合频率周围出现边频带成分。信号调制可分为两种：幅值调制和频率调制。

### 幅值调制信号

幅值调制是由于齿面载荷波动对振动幅值的影响而造成的。比较典型的例子是齿轮的偏心使齿轮啮合时一边紧一边松，从而产生载荷波动，使振幅按此规律周期性地变化。齿轮的加工误差（例如节距不匀）及齿轮故障使齿轮在啮合中产生短暂的“加载”和“卸载”效应，也会产生幅值调制。

幅值调制从数学上看，相当于两个信号在时域上相乘；而在频域上，相当于两个信号的卷积。这两个信号一个称为载波，其频率相对来说较高，齿轮啮合频率成分通常是载波；另一个称为调制波，其频率相对于载波频率来说较低，齿轮轴旋转频率成分通常是调制波。载波信号、调制信号都不是单一频率的，一般来说都是周期函数。

对于，它可以反映因为齿轮故障而产生的调制幅值。则k(t)为载波信号，它包含有齿轮啮合频率及其倍频成分，为调幅信号，反映齿轮的误差和故障情况。由于齿轮周而复始地运转，所以齿轮每转一圈，就变化一次，包含齿轮轴旋转频率及其倍频成分。时域上两种信号的乘积等于频域中两个信号的卷积，这种高频与低频的幅值调制就会造成边频带现象，即在频谱上形成若干组围绕啮合频率及其倍频成分两侧的边频族。为处理这一类问题，需要使用到倒频谱功能。

### 频率调制信号

此外，由于齿轮载荷不均匀、齿距不均匀及故障造成的载荷波动，除了对振动幅值产生影响外，同时也必然产生扭矩波动，使齿轮转速产生波动。这种波动表现在振动上即为频率调制（也可以认为是相位调制）。对于齿轮传动，任何导致产生幅值调制的因素也同时会导致频率调制。两种调制总是同时存在的。对于质量较小的齿轮副，频率调制现象尤为突出。

频率调制即使在载波信号和调制信号均为单一频率成分的情况下，也会形成很多边频成分。调频的振动信号包含有无限多个频率分量，并以啮合频率为中心，以调制频率为间隔形成无限多对的调制边带。

### 边频带

边频具有不稳定性。幅值调制与频率调制的相对相位关系会受随机因素影响而变化，所以在同样的调制指数下，边频带的形状会有所改变，但其总体水平不变。因此在齿轮故障诊断中，只监测某几个边频得到的信息往往是不全面的，据此做出的诊断结论有时是不可靠的。如下图，复杂的调制波和载波在时域上的叠加波形在频域上显示出了边频。

手机屏幕截图

中度可信度描述已自动生成

我们使用脉冲信号模拟高频的载波，使用一个正弦函数来模拟低频的调制波，使用功率谱和倒频谱两种算法来对信号进行分析。

此处的相关步骤和函数的使用请参见4.3和4.4节中关于功率谱和倒频谱使用的示例，这里只给出结论。上图是倒频谱的结果，下图是功率谱的结果。可以看到对于高低频的调制信号，使用功率谱会出现复杂的周期性边频带，而使用倒频谱则便于辨识提取。

