***DEPARTMENT OF COMPUTER SCIENCE***

**University of Karachi**

***MCS Final (Morning) 2019-2021***

Logo

Description automatically generated

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group Members:** | **Sobia Mustafa (P19101068)**  **Maria Javed (P19101033)**  **Rida Hashmi (P19101055)**  **Safia Arshad (P19101061)** | | | |  |  | | | . | |
| **Submitted To:** | **Sir Tahseen Ahmed Jilani** | | | |  |  | | |  | |  |
| **Course Title:** |  |  | **Data Warehousing and Data Mining** | | **Course No:** | | | **626** | | |  |  |
|  |  | |  |  |  | |  | | |  |  |

**Abstract**

In this report, we describe and analyze the performance of six iris encoding techniques. Principle Component Analysis (PCA) Encoding Method, K-Mean Clustering, K Near Neighbor, Random Forest, Decision Tree and Naïve Bayes. The classification tree method is a method of test design as it is used in various fields of software development. PCA is a method used to reduce the number of variables in your data by extracting a key from a large pool. Naive Bayes is a Bayes theory-based classification technique that assumes freedom among predictors. KNN (K - Nearest Neighbors) is one of the many (supervised learning) algorithms used in data mining and machine learning, a ranking algorithm where learning is based on "how many similar" data.

**GROUP PROFILE**

**Sobia Mustafa**  smustafa2233@gmail.com

P19101068

**Maria Javed Ur Rehman** mariajaved722@gmail.com

P19101033

**Rida Hashmi** ridahashmi01@gmail.com

P19101055

**Safia Arshad** safiarain123@gmail.com

P19101061

**Batch** MCS (Final Year), Morning

(2020 - 2021)

Contents

[**1.** **Introduction** 7](#_Toc94725107)

[1.1 IRIS DataseT 7](#_Toc94725108)

[1.2 K-Mean Clustering Analysis 7](#_Toc94725109)

[1.3 Principal Component Analysis 8](#_Toc94725110)

[1.4 K-Nearest Neighbors Algorithm 8](#_Toc94725111)

[1.5 Random Forest Model 8](#_Toc94725112)

[1.6 Decision Tree Algorithm 9](#_Toc94725113)

[1.7 Naïve Bayes Algorithm 9](#_Toc94725114)

[**2.** **Proposed Algorithm** 10](#_Toc94725115)

[2.1 K-Mean Clustering Algorithm 10](#_Toc94725116)

[2.2 Principal Component Algorithm 12](#_Toc94725117)

[2.3 K-Nearest Neighbors Algorithm 14](#_Toc94725118)

[2.4 Random Forest Algorithm 15](#_Toc94725119)

[2.5 Decision Tree Algorithm 17](#_Toc94725120)

[2.6 Naïve Bayes Algorithm 19](#_Toc94725121)

[**3.** **Materials and dataset** 22](#_Toc94725122)

[3.1 IRIS Dataset 22](#_Toc94725123)

[3.2 DataView Of Methods used 23](#_Toc94725124)

[**4** **Technologies Used** 26](#_Toc94725125)

[4.1 Introduction toR 26](#_Toc94725126)

[4.2 Introduction to RStudio 27](#_Toc94725127)

[4.3 Why we use RStudio? 27](#_Toc94725128)

[**5** **Analysis Phases** 28](#_Toc94725129)

[5.1 Initial State 28](#_Toc94725130)

[**5.1.1** **Installation of Packages** 28](#_Toc94725131)

[**5.1.2** **Installation of Libraries** 29](#_Toc94725132)

[5.2 Second State 29](#_Toc94725133)

[**5.2.1** **Insert Data** 29](#_Toc94725134)

[**5.2.2** **Convert IRIS data to Unlabeled Data** 30](#_Toc94725135)

[5.3 Last State 30](#_Toc94725136)

[**6** **Experimental Results** 31](#_Toc94725137)

[6.1 experimental Result of K-mean 31](#_Toc94725138)

[**6.1.1** **Scatter plot** 32](#_Toc94725139)

[**6.1.2** **Confusion Matrix** 33](#_Toc94725140)

[**6.1.3** **Model Evaluation and visualization** 34](#_Toc94725141)

[**6.1.4** **Plotting cluster centers** 35](#_Toc94725142)

[**6.1.5** **elbow Plot** 36](#_Toc94725143)

[**6.1.6** **Visualizing clusters** 37](#_Toc94725144)

[**6.1.7** **Conclusion** 38](#_Toc94725145)

[**6.2** **Experimental Result of PCA** 39](#_Toc94725146)

[**6.2.1** **scatter plot & correlations** 40](#_Toc94725147)

[**6.2.2** **elbow graph** 42](#_Toc94725148)

[**6.2.3** **confusion matrix & misclassification error** 44](#_Toc94725149)

[**6.2.4** **Conclusion** 45](#_Toc94725150)

[6.3 Experimental Result of KNN: 46](#_Toc94725151)

[**6.3.1** **Scatter plot** 46](#_Toc94725152)

[**6.3.2** **Correlation Matrix** 47](#_Toc94725153)

[**6.3.3** **Splitting the dataset** 48](#_Toc94725154)

[**6.3.4** **Confusion Matrix** 49](#_Toc94725155)

[**6.3.5** **Conclusion** 49](#_Toc94725156)

[6.4 Experimental Result of Random Forest 50](#_Toc94725157)

[**6.4.1** **Splitting Data in Training and Testing** 51](#_Toc94725158)

[**6.4.2** **Confusion Matrix** 52](#_Toc94725159)

[**6.4.3** **Random Forest model** 52](#_Toc94725160)

[**6.4.4** **Plot Random Forest Model** 52](#_Toc94725161)

[**6.4.5** **Model Evaluation and visualization** 54](#_Toc94725162)

[**6.4.6** **classification Accuracy** 55](#_Toc94725163)

[**6.4.7** **Conclusion** 55](#_Toc94725164)

[6.5 Result of Decision Tree: 56](#_Toc94725165)

[6.6 Experimental Result of Naïve Bayes: 56](#_Toc94725166)

[**7** **References** 57](#_Toc94725167)

Figure Contents

[Figure 1: k-Mean cluster centroid 10](#_Toc92479160)

[Figure 2: Random Forest Algorithm 15](#_Toc92479161)

[Figure 3: Bagging and Boosting 16](#_Toc92479162)

[Figure 4: Tree Representation 16](#_Toc92479163)

[Figure 5: Random Forest Algorithm 17](#_Toc92479164)

[Figure 6: Scatter Plot between sepal length and sepal width in K Mean Clustering Method 32](#_Toc92479165)

[Figure 7: Scatter Plot between petal length and petal width in K Mean Clustering Method 32](#_Toc92479166)

[Figure 8: Model evaluation plot of sepal in K Mean Clustering Method 34](#_Toc92479167)

[Figure 9: Model Visualize plot of sepal in K Mean Clustering Method 34](#_Toc92479168)

[Figure 10: K-mean with 3 clusters 35](#_Toc92479169)

[Figure 11: Elbow Plot Of K-mean cluster 37](#_Toc92479170)

[Figure 12: Cluster iris of k-mean 38](#_Toc92479171)

[Figure 13 Scatter plot PCA 40](#_Toc92479172)

[Figure 14 Elbow graph of PCA 42](#_Toc92479173)

[Figure 15 Scatter plot of Sepal in PCA 46](#_Toc92479174)

[Figure 16 Scatter plot of Petal in PCA 47](#_Toc92479175)

[Figure 17 Correlation Matrix of PCA 47](#_Toc92479176)

[Figure 18 Error plot of PCA 49](#_Toc92479177)

[Figure 19: Random Forest Model Plot 53](#_Toc92479178)

[Figure 20: Plot of RFM between petal, sepal, and mean decrease Gini 53](#_Toc92479179)

[Figure 21: Plot to see the margin between RFM, Testing and species 54](#_Toc92479180)

[Figure 22: OOB Error in RFM 54](#_Toc92479181)

# **Introduction**

## IRIS DataseT

This is the "Iris" dataset. Originally published in UCI Machine Learning Repository: Iris Data Set, this small data set from 1936 is often used to test machine learning algorithms and concepts (e.g., Scatter Plot). Each row on the table represents an iris flower, which includes its species and its vegetative parts, the sepal and the petal dimensions in centimeters.

**Attribute Information:**

1. sepal length in cm
2. sepal width in cm
3. petal length in cm
4. petal width in cm
5. class:

* Iris Sentosa
* Iris Versicolor
* Iris Virginica
* **Why we use IRIS dataset**

Iris dataset is often used to test data mining, classification, and clustering examples and algorithms. That's why we choose the IRIS dataset to implement our machine learning techniques.

## K-Mean Clustering Analysis

The k-mean algorithm is used to create and analyze clusters. In this algorithm, the 'n' number of data points is divided into 'k' clusters based on some similarity measurement criteria. However, the results generated using this algorithm mainly depend on the selection of the initial cluster centroids. There is a wide range of techniques for finding subgroups of observations within a clustering dataset. When we cluster observations, we want the observations to be the same in the same group and the observations to be different in different groups. Since the response variable is not, it is a non-supervised method, which means that it tries to find the relationship between the observations without being trained by the response variable. Clustering allows us to identify which observations are identical, and possibly classify them. K-Clustering is the simplest and most widely used clustering method for dividing a data set into sets of k groups.

## Principal Component Analysis

Principal component analysis, or PCA, is a dimension reduction method often used to reduce the dimensions of large data sets, by converting a large set of variables into smaller ones which are still more in the larger set. More information is available. Reducing the number of variables in the dataset naturally comes at the cost of accuracy, but the trick to reducing the dimension is to trade a little accuracy for simplicity. Because discovering and imagining small data sets and analyzing data makes it much easier and faster for machine learning algorithms without any variable process. The Principal Component Analysis (PCA) feature is a method of extracting orthogonal linear estimates to capture fundamental variations of data. By far, the most popular dimension reduction approach is the principal component regression. (PCR).

## K-Nearest Neighbors Algorithm

K Nearest Neighbor is a simple algorithm that stores all available cases and classifies new cases based on similarity measurements (e.g., distance functions). KNN has been used as a non-parametric technique in the early 1970's for statistical estimation and pattern identification. It belongs to the supervised learning domain and seeks intensive application in pattern identification, data mining and intrusion detection. It is largely disposable in real life scenarios because it is non-parametric, meaning it makes no basic assumptions about the distribution of data (unlike other algorithms like GMM, which assume a Gaussian distribution of the given data). Are). We are given some prior data (also called training data), which ranks the coordinates in groups identified by a feature.

## Random Forest Model

Random Forests or Random Deciding Forests is a pair of learning for grading, regression, and other tasks that build up a large number of decision-making trees during training. For classification tasks, random forest production is mostly selected by the tree class. For regression works, the average or average forecast of individual trees is returned. Random decisions are appropriate for the habit of fitting more than the training set of forest deciding trees. Random forests generally perform better than deciduous trees, but their accuracy is lower than gradient boosted trees. However, data features can affect their performance.

## Decision Tree Algorithm

The decision tree is a flow chart-like structure in which each internal node represents a "test" on an attribute (for example, whether the coin turns on the heads or tails), each branch of the test results Represents, and represents each leaf node. A class label (decision taken after counting all attributes). The paths from root to leaf represent the principles of classification. In decision analysis, an outline of the decision tree and its closely related influence is used as a visual and analytical decision auxiliary tool, where the expected values ​​(or expected utility) of the competitive alternative are calculated.

## Naïve Bayes Algorithm

In the statistics, the bayes classify Bayes as a family of simple "probability classifications" based on applying Bayes' theorem with assumptions of strong (null) freedom between features (see Bayes classifier). ۔ These are one of the simplest models of the Bassian network, but combined with kernel density estimates, they can achieve high accuracy levels. Naïve Bayes classifiers are highly extensible, requiring a number of parameters linear in the number of variables (features / predictors) in the learning problem. The maximum probability training can be done by examining the closed form expression, which takes linear time, rather than through expensive repetitive estimates as is used for many other types of classification.

# **Proposed Algorithm**

## K-Mean Clustering Algorithm

algorithm proceeds to update the centroids and their clusters for balance while minimizing total differences within the clusters. It is mainly used in scenarios with real valuable properties as it relies on Euclidean distances to detect cluster centroids.A screenshot of a computer

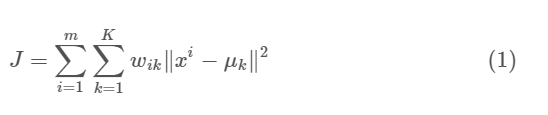
Description automatically generated with low confidence

Figure : k-Mean cluster centroid

Here's how the K-Mean algorithm works:

* Specify number of clusters K.
* Start the centroids by first shuffling the dataset and then randomly selecting K data points for the centroid without any changes.
* Keep iterating until there is no change to the centroids. i.e., assignment of data points to clusters isn’t changing.
* Compute the sum of the squared distance between data points and all centroids.
* Assign each data point to the closest cluster (centroid).
* Compute the centroids for the clusters by taking the average of all data points that belong to each cluster.
* The approach k-means follows to solve the problem is called Expectation-Maximization. The E-step is assigning the data points to the closest cluster. The M-step is computing the centroid of each cluster. Below is a breakdown of how we can solve it mathematically (feel free to skip it).

The objective function is:



Where wik = 1 for data point xi if it belongs to cluster k; Otherwise, wik = 0. In addition, μk is the centroid of the xi cluster.

It is a matter of reducing the two parts. We reduce Jwrt first. wik and treatment μk fixed. Then we minimize Jw.r.t. μk and treatment wick fixed. Technically, we differentiate between Jw.r.t. Sell first and update cluster assignments (e-steps). Then we differentiate between Jw.r.t. μk and recount the centroids after cluster assignments from the previous step (M-step). Therefore, the e-step is:

Text, letter

Description automatically generated

In other words, assign data point xi to the nearest cluster as measured by the sum of the squares of the cluster's centroids. And M stage is:

A picture containing chart

Description automatically generated

The translation is to re-compute the centroid of each cluster to reflect the new assignments.

## Principal Component Algorithm

Steps for PCA algorithm:

1. **Getting the dataset:**

First, we need to take the input dataset and divide it into two subdivisions, X and Y, where X is the training set, and Y is the validation set.

1. **Representing data into a structure:**

We will now present our dataset in the framework. As we will represent the two-dimensional matrix of the independent variable X. Here each row corresponds to the data items, and the columns correspond to the attributes. The number of columns is the dimensions of the dataset.

1. **Standardizing the data:**

In this step, we will standardize our dataset. As in a particular column, high-variable properties are more important than low-variable properties. If the significance of the attributes is independent of the variability of the attribute, we will divide each data item into columns with a standard deviation from the column. Here we will name the matrix Z.

Text

Description automatically generated

1. **Calculating the Covariance of Z:**

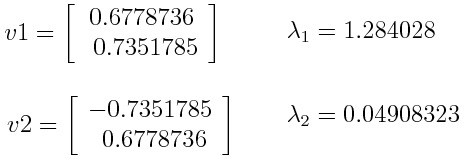
To calculate the symmetry of Z, we take the matrix Z, and move it. After transponding, we will multiply it by Z. The output matrix will be the covariance matrix of Z.

1. **Calculating the Eigen Values and Eigen Vectors:**

Now we need to calculate the eigenvalues and eigenvectors for the resultant covariance matrix Z. Eigenvectors, or covariance matrix are the axis directions with high information. And the coefficients of these eigenvectors are described as eigenvalues.

Text, letter

Description automatically generated

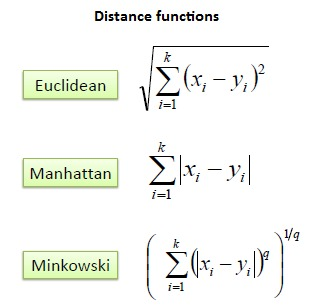


1. **Sorting the Eigen Vectors:**

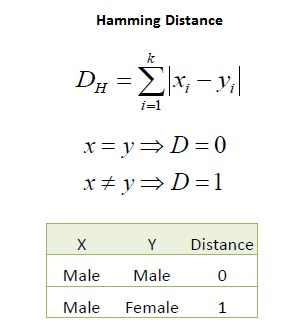
In this step, we will take all the eigenvalues ​​and sort them in descending order, which means from the largest to the smallest. And also arrange the eigenvectors in matrix P of eigenvalues. The resulting matrix will be named P \*. Calculating new features or principal components. Here we will calculate the new features. To do this, we will multiply the P \* matrix by Z. In the resulting matrix Z \*, each observation is a linear sum of the original properties. Each column of the Z \* matrix is ​​independent of each other. Remove lesser or less important features from the new dataset. The new feature is set, so here we will decide what to put and what to remove. This means that we will keep only relevant or important features in the new dataset, and unimportant features will be removed.

## K-Nearest Neighbors Algorithm

A case is classified by a majority vote of its neighbors, the case being assigned to the most common class in its K nearest neighbors measured by distance function. If K = 1, then the case is assigned only to the class next to it.



It should also be noted that all three distance measures are only valid for continuous variables. In the example of explicit variables, the hemming distance should be used. It also raises the issue of standardization of numerical variables between 0 and 1 when the dataset is a mixture of numeric and categorical variables.



The best value for K is chosen by examining the data first. In general, a larger K value is more accurate because it reduces overall noise but is not guaranteed. Cross-validation is another way to determine the previously good K value by using an independent dataset to validate the K value. Historically, the best K for most data sets has been between 3-10. It produces much better results than 1NN.

## Random Forest Algorithm

Before understanding the workings of random forest, we must consider the technique of weaving. Assembling simply means combining multiple models. Thus, a set of models is used to make predictions rather than individual models. Ensemble uses two methods:

1. **Bagging:**

It creates a different training subset with alternatives to sample training data and the final output is based on majority voting. For example, Random Forest

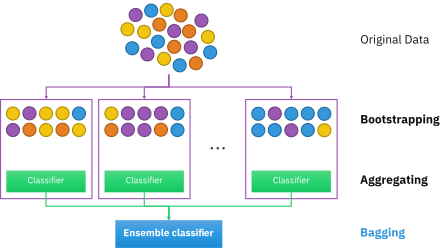


Figure : Random Forest Algorithm

1. **Boosting:**

It combines weak learners with strong learners by creating sequential models so that the final model has the most accuracy. For example, ADABOOST, XGBOOST.

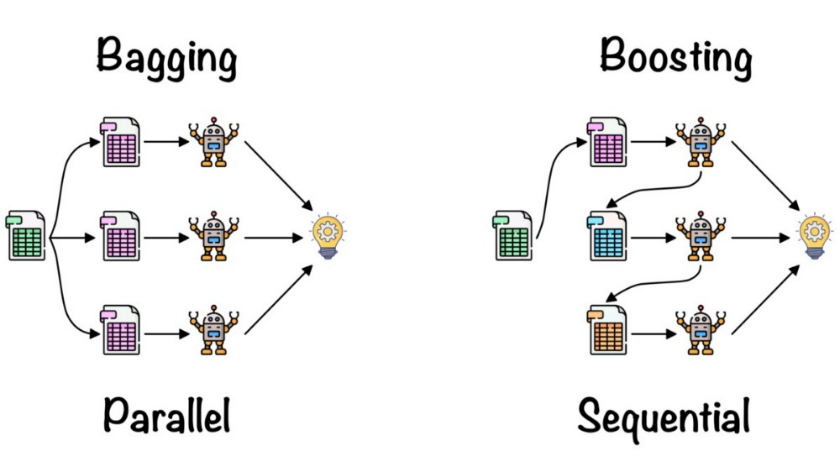
****

Figure : Bagging and Boosting

We can understand the workings of random forest algorithms with the help of the following steps.

**Step 1**: First, start with the selection of random patterns from the given dataset.

**Step 2:** Next, this algorithm will create a decision-making tree for each sample. Then he will get the result of prediction from every decision tree.

**Step 3:** At this stage, voting will take place for each of the predicted results.

**Step 4:** Finally, select the result of the most voted prediction as a result of the final prediction.

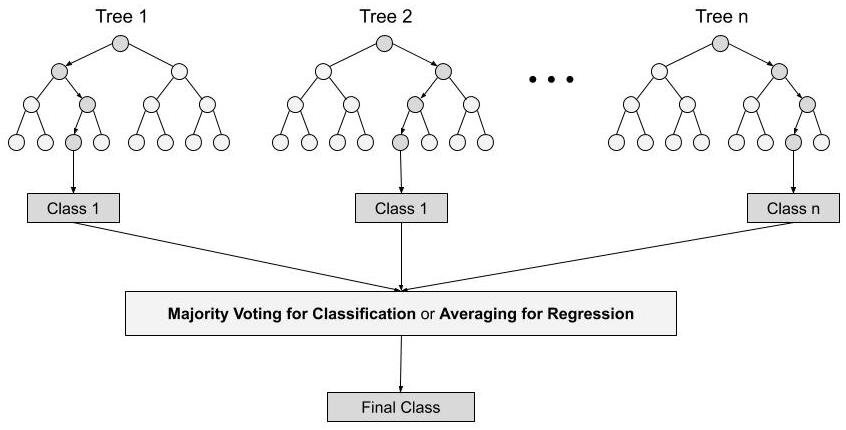


Figure : Tree Representation

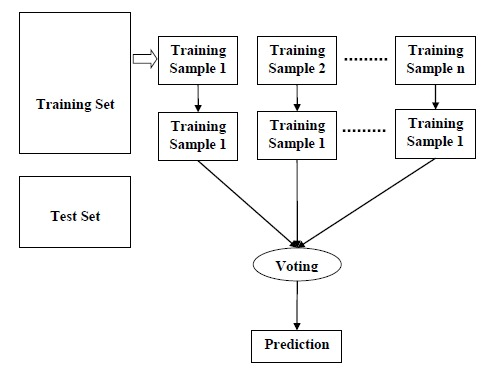


Figure : Random Forest Algorithm

## Decision Tree Algorithm

In the decision tree, to predict the class of a given dataset, the algorithm starts from the root node of the tree. This algorithm compares the root attribution values with the record (actual dataset) attribute and, based on the comparison, follows the branch, and jumps to the next node.

**Step-1:** Start the tree with the root node, called S, which contains the complete data set.

**Step-2:** Find the best attribute in a dataset using attribution selection measurement (ASM).

**Step-3:** Divide S into subsets that contain possible values for best attributes.

**Step-4:** Create a decision tree node, which has the best attribute.

**Step-5:** Create new decision trees again and again using the dataset subsets created in Step-3. Continue this process until you reach a stage where you can no longer classify the nodes and the final node is called the leaf node.

**Attribute Selection Measures**

* When implementing the decision-making tree, the main problem arises how to choose the best attribute for the root node and sub node. Therefore, there is a technique for solving such problems which is called attribution selection measurement or ASM. With this measurement, we can easily select the best attribute for tree nodes. There are two popular techniques for ASM, which are:
* Information Gain
* Gini Index

**Information Gain= Entropy(S)- [(Weighted Avg) \*Entropy (each feature)**

**Entropy:** Entropy is a metric for measuring impurity in a particular attribute. This explains the randomness in the data. Entropy can be calculated as follows:

**Entropy(s)= -P(yes)log2 P(yes)- P(no) log2 P(no)**

Were,

S= Total number of samples

P(yes)= probability of yes

P(no)= probability of no

**Gini Index:** The Gini index is a measure of purity or cleanliness that is used in the CART (Classification and Regression Tree) algorithm to create a decision tree.

**Gini Index= 1- ∑jPj2**

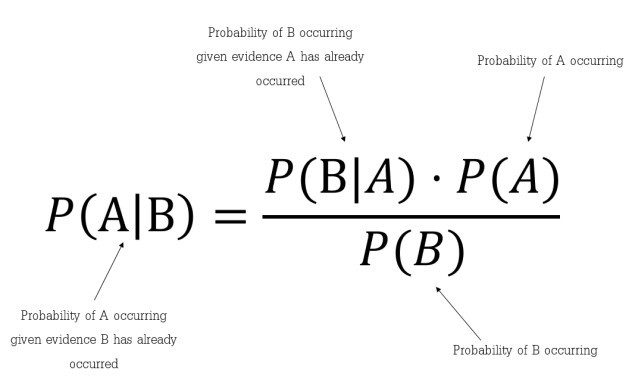
**Pruning:** (**Getting an Optimal Decision tree)**

Pruning is the process of removing unnecessary nodes from a tree to get the best decision-making tree.

* A large tree increases the risk of overfitting, and a small tree cannot capture all the important features of a dataset. Therefore, a technique that reduces the size of the learning tree without reducing the accuracy is known as pruning. There are basically two types of deforestation techniques:
* Cost Complexity Pruning
* Reduced Error Pruning.

## Naïve Bayes Algorithm

Bayes Theorem is a simple mathematical formula used to calculate conditional probabilities. Conditional probability is a measure of the probability of an event occurring that caused another event (in terms of assumption, conjecture, claim, or evidence) to occur. The formula is:



Which tells us: A is B in view of how many times it occurs, the written P (A | B) is also called later probability, when we know: How many times B occurs when A occurs, P (B | A) is written and what is the probability of A being on its own, written P (A) and how likely is B to be written on its own, written P (B).6-

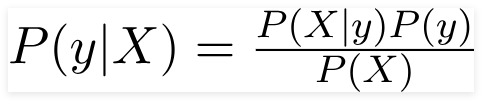
**Assumptions made by Naïve Bayes:**

The basic premise of Naïve Bayes is that each feature makes one:

* independent
* equal
* contribution to the outcome.

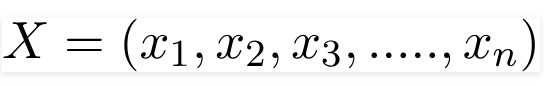
Let's take an example to get a better conscience. Consider the issue of car theft with color, type, originality, and purpose, theft can be either yes or no.

**Bayes theorem can be rewritten as:**

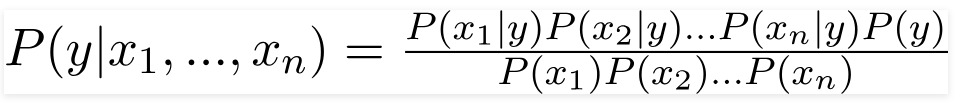
****

The variable y is the class variable (theft?), Which represents whether the car was stolen or not. Variable X represents parameters / properties.

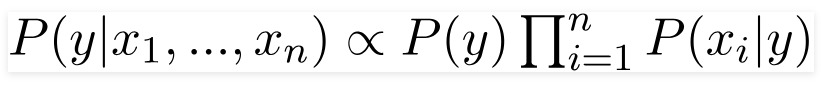
X is given as,



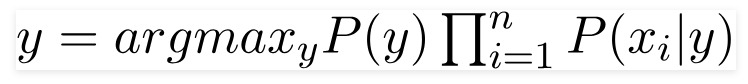
Here x1, x2….xn represents attributes, meaning they can be mapped to color, type and actually. By replacing the X and expanding using the Chinese principle that we get,



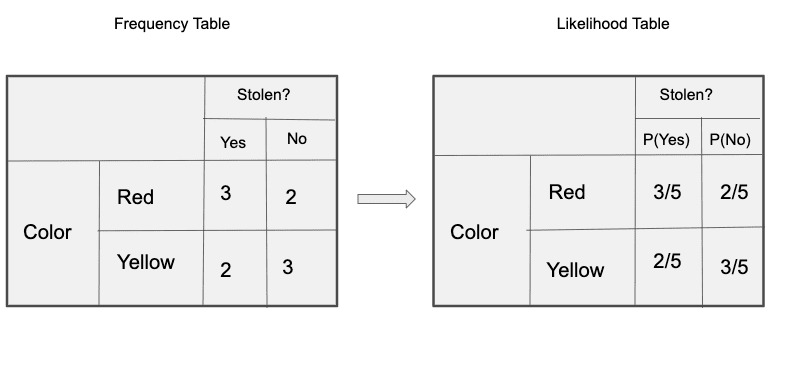
Now, you can look up the dataset to get the values for each one and convert them into equations. For all entries in the dataset, the denominator does not change, it remains static. Therefore, the denominator can be removed, and the ratio can be injected.



Among them, the class variable (y) is just two results, yes or no, there are cases where the classification is multiple approaches. So, to find us with at least one part to find.



Using the above function, we can get the class by looking at the predictors / features.

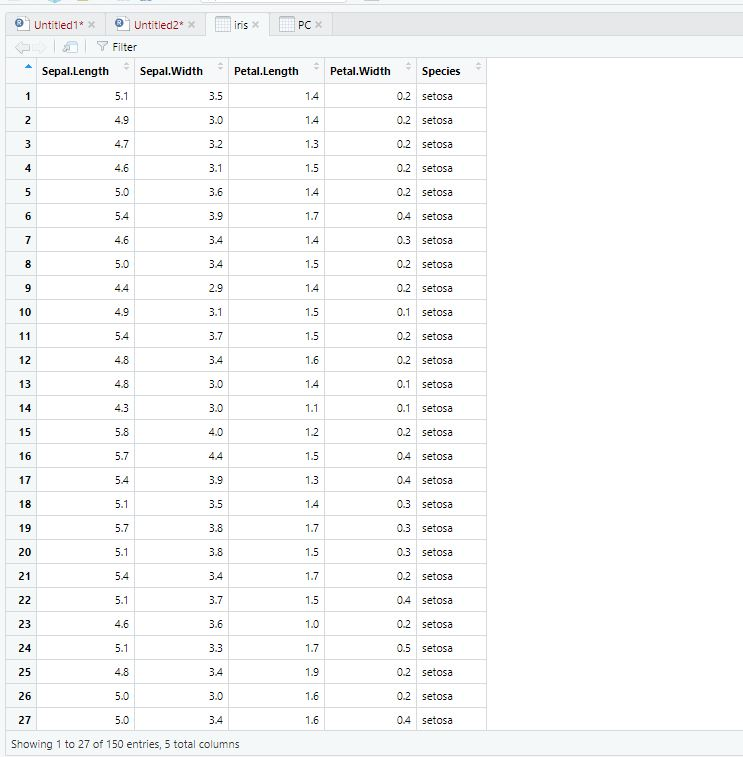
Subsequent probability P (y | X) can be calculated in advance by making a frequency table for each attribute against the target. Then, use the Naïve Bayesian equation to sort the frequency tables into the probability tables and, finally, to calculate the subsequent probability for each class. The most probable class is the result of prediction. Below are tables of frequency and probability for all three predictions.

# **Materials and dataset**

## **IRIS Dataset**

Global data was collected using a number of measurements in taxonomic issues, and reports and data were updated from the Kaggle website.

**Data View**



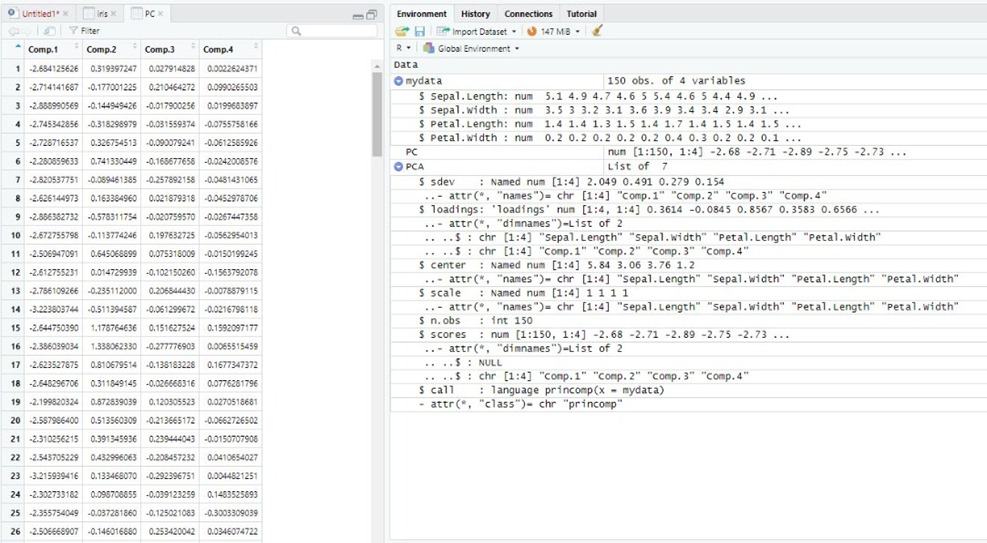
## DataView Of Methods used

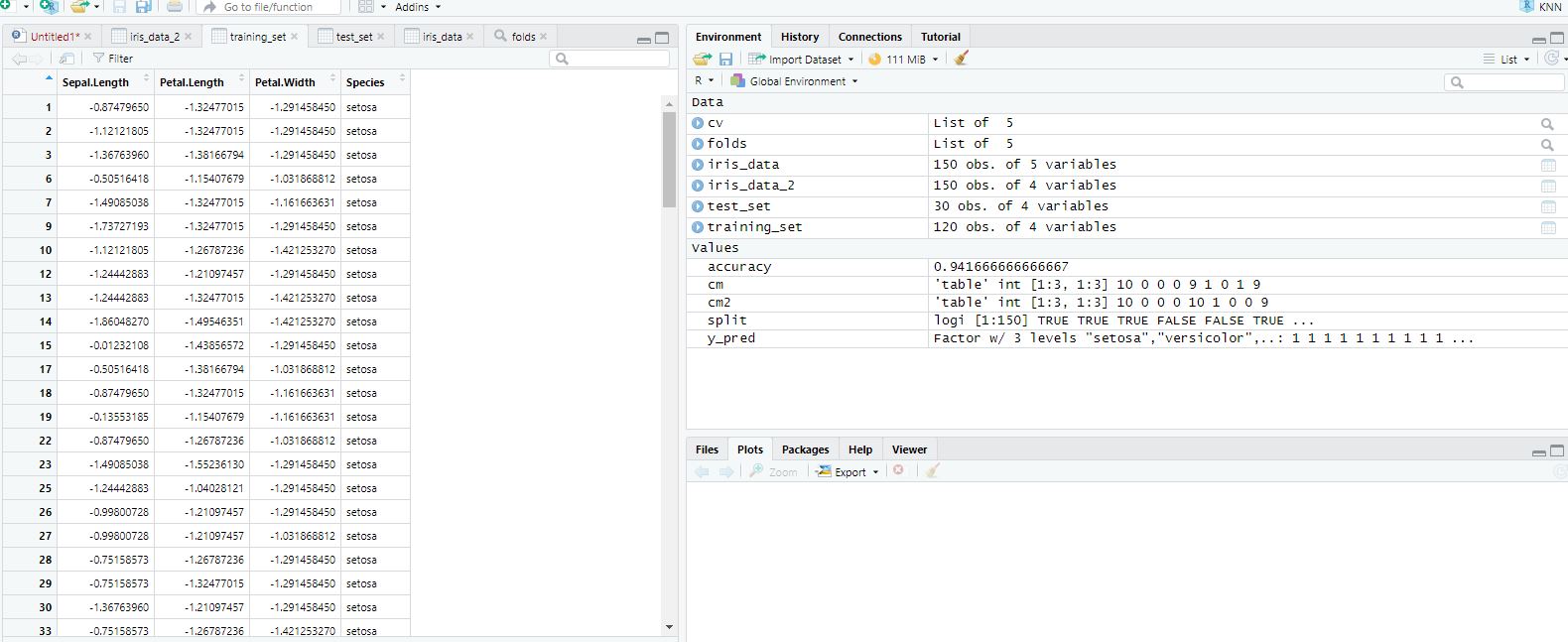
**Data View of K-Mean Clustering**

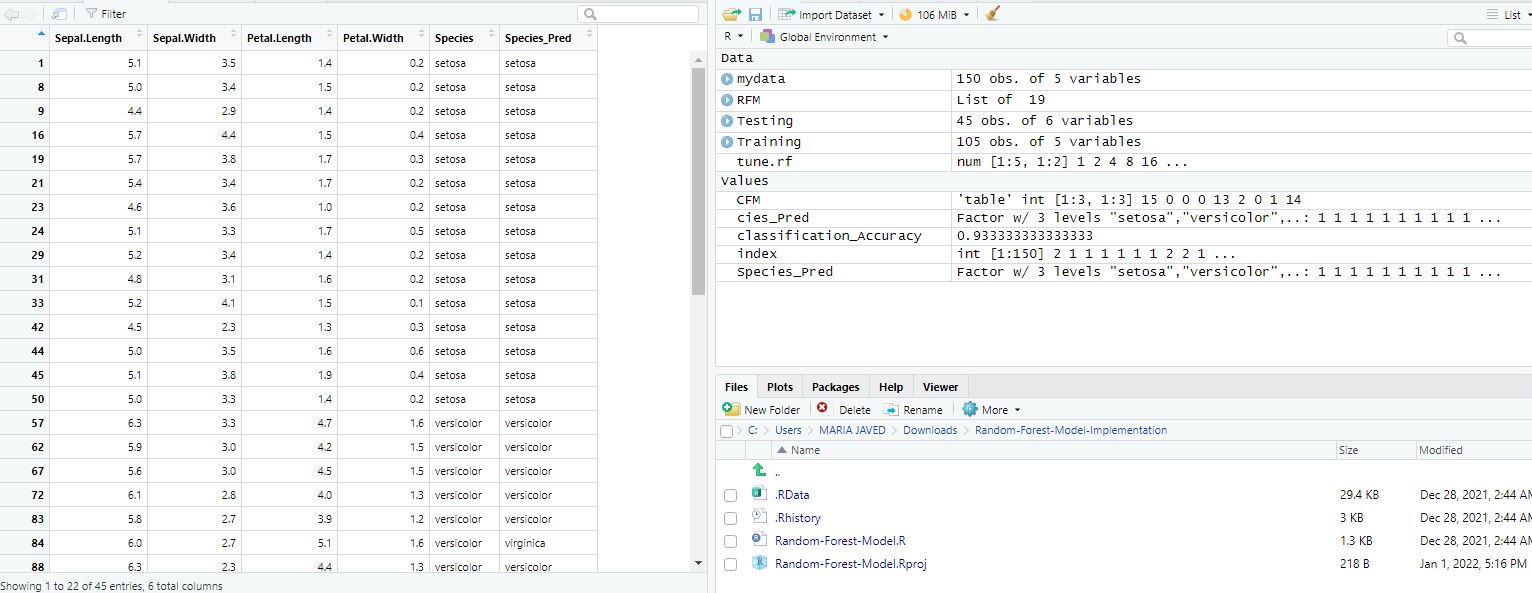
Graphical user interface, text, application

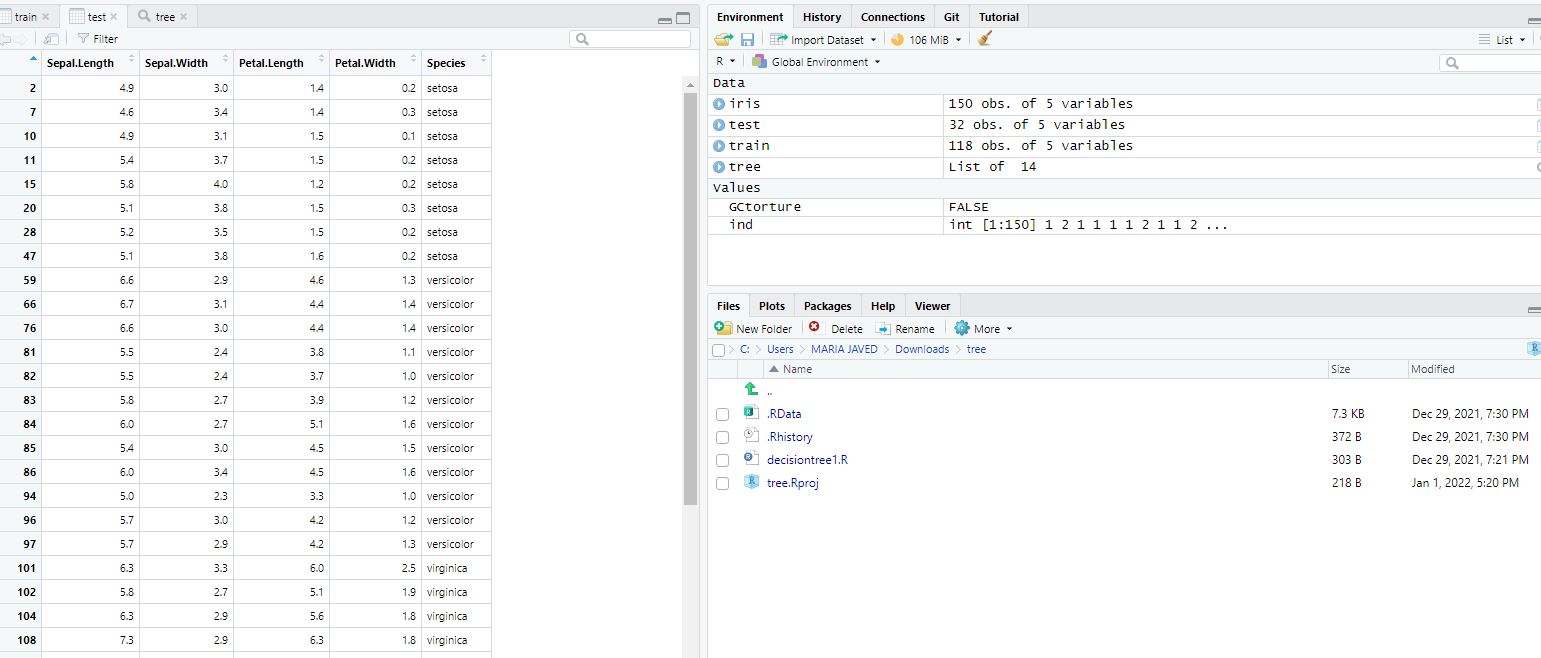
Description automatically generated

**Data View of PCA**

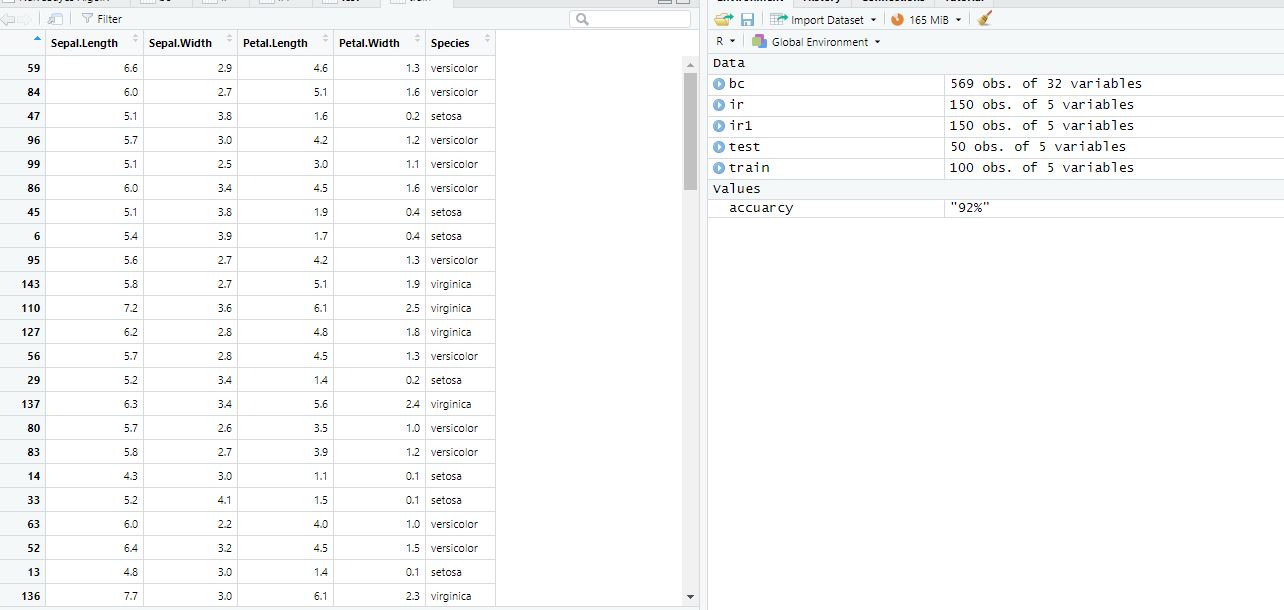
****

**Data View of KNN**

**Data View of Random Forest**

**Data View of Decision Tree**

**Data View of Naïve Bayes**

****

# **Technologies Used**

## Introduction toR

R is a language and environment for statistical computing and graphics. This is a GNU project similar to S Language and Environment, developed by John Chambers and colleagues at Bell Laboratories (formerly AT&T, now Lucent Technologies). R can be thought of as a different implementation of S. There are some major differences, but most of the code written for S runs unchanged under R.

R provides a wide variety of data (linear and nonlinear modeling, classical statistical tests, time series analysis, classification, clustering,) and graphical techniques, and is highly scalable. The S language is often the vehicle of choice for statistical method research, and R provides an open-source way to participate in this activity.

One of the strengths of R is the ease with which well-designed publication quality plots can be created, including mathematical symbols and formulas where needed. Defaults are considered in the selection of minor designs in graphics, but the user retains complete control.

R Free software is available in the form of source code under the terms of the GNU General Public License of the Free Software Foundation. It compiles and runs on a variety of UNIX platforms and similar systems (including FreeBSD and Linux), Windows and MacOS.

**The R environment**

R is an integrated suite of software facilities for data manipulation, calculation, and graphical displays. It includes.

* An efficient data handling and storage facility.
* A set of operators to calculate rows, specifically the matrix.
* A large, integrated, integrated set of intermediate tools for data analysis.
* Graphical facilities for data analysis and display on screen or hard copy.
* A well-developed, simple, and efficient programming language that includes conditional, loops, user-defined recreational functions, and input and output features.

## Introduction to RStudio

RStudio R is an integrated development environment (IDE). It includes a console, a syntax highlighting editor that executes code directly, as well as tools for plotting, history, debugging and workspace management. RStudio is available in open source and commercial editions and runs on desktop (Windows, Mac, and Linux) or browsers connected to RStudio Server or RStudio Server Pro (Debian / Ubuntu, RedHat / CentOS, and SUSE Linux). RStudio R is a free and open-source Integrated Development Environment (IDE) for R, a programming language for statistical computing and graphics. RStudio was founded by JJ Allaire, creator of the programming language ColdFusion. Hadley Wickham is the Chief Scientist at RStudio. RStudio is available in two editions: RStudio Desktop, where the program is run locally as a regular desktop application. And RStudio Server, which allows access to RStudio using a web browser while running on a remote Linux server. RStudio desktop pre-packaged distributions are available for Windows, OS X, and Linux.

RStudio is written in the C ++ programming language and uses the Qt framework for its graphical user interface. Work on RStudio began around December 2010, and the first public beta version (v0.92) was officially announced in February 2011.

## Why we use RStudio?

RStudio helps the world realize data regardless of the ability to pay. The main goal of RStudio is to create free and open-source software for data science, scientific research and technical communication. It allows anyone with computer access to participate freely in the global economy, which rewards data literacy. Increases the production and use of knowledge; And facilitates collaboration and reproductive research in science, education and industry. We spend more than 50% of our engineering resources on open-source software development and provide extensive support to the open-source data science community.

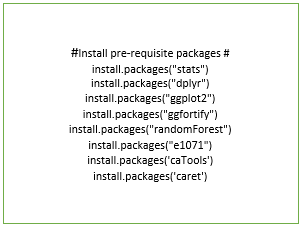
# **Analysis Phases**

## Initial State

### **Installation of Packages**

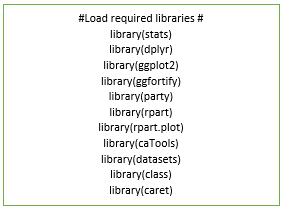
Why we need that package?

* **Stats** The package contains the necessary function to perform the analysis of the meaning of K.
* **Dplyr** Shortcuts required for subdivision, summary, rearrangement, and data sets. Dplyr is our outgoing package for high-speed data manipulation.
* **ggplot2** R's popular package for creating beautiful graphics. ggplot2 lets you use graphics grammar to create layered, custom plots.
* **e1071** A package provides functionality for statistics and potential algorithms such as physical classifier, navy bise classifier, bagged clustering, short time foyer transform, support vector machine etc.
* **random Forest** Packages are used to create and analyze random forests.
* **caTools** Access control is easy to provide and related classes are easy to find.**caret Use to work on large datasets, we can use some machine learning packages directly.**

****

### **Installation of Libraries**

Following are the libraries which used:

****

|  |
| --- |
| Second State |
| **Insert Data** |

Table

Description automatically generated

### **Convert IRIS data to Unlabeled Data**

#Load required libraries #

library(stats)

library(dplyr)

library(ggplot2)

library(ggfortify)

## Last State

Implement the following methods:

* K Mean Clustering
* Principle Component Analysis
* K Nearest Neighbor
* Random Forest
* Decision Tree
* Naïve Bayes Classification

# **Experimental Results**

## experimental Result of K-mean

The PCA creates a new coordinate system by converting highly integrated variables into orthogonal or unrelated variables. The dataset contains 150 observations that are evenly distributed among three species - Satosa, Versicular and Virginica.

# Loading data

data(iris)

# Structure

str(iris)

Calendar

Description automatically generated with low confidence

summary(iris)

Text

Description automatically generated

df <- iris

head(iris)

Table

Description automatically generated

### **Scatter plot**

# make a scatterplot.

ggplot(iris,aes(x = Sepal.Length, y = Sepal.Width, col= Species)) + geom\_point(aes(col=Species),size = 3)

Chart, scatter chart

Description automatically generated

Figure : Scatter Plot between sepal length and sepal width in K Mean Clustering Method

ggplot(iris,aes(x = Petal.Length, y = Petal.Width, col= Species)) + geom\_point(aes(col=Species),size = 3)

Chart, scatter chart

Description automatically generated

Figure : Scatter Plot between petal length and petal width in K Mean Clustering Method

As we can see, setosa is going to be clustered easier. Meanwhile, there is noise between versicolor and virginica even when they look like perfectly clustered.

# Fitting K-Means clustering Model

# to training dataset

set.seed(101)

irisCluster <- kmeans(df[,1:4], center=3, nstart=20)

irisCluster

Table

Description automatically generated

The 3 clusters are made which are of 38, 62, and 50 sizes respectively. Within the cluster, the sum of squares is 88.4%.

### **Confusion Matrix**

# Confusion Matrix

cm <- table(df$Species, irisCluster$cluster)

cm

A picture containing text

Description automatically generated

Therefore, out of 50 cetosas, 50 centsosa is classified as Virginica. Out of 62 Versicolor, 2 Versicolor is classified as Setosa and 48 Versicolor is correctly classified as Versicolor. Of the 36 Virginicas, 19 are classified as Citusa and 14 as Versace color.

### **Model Evaluation and visualization**

# Model Evaluation and visualization

plot(iris[c("Sepal.Length", "Sepal.Width")])

Chart, scatter chart

Description automatically generated

Figure : Model evaluation plot of sepal in K Mean Clustering Method

plot(iris[c("Sepal.Length", "Sepal.Width")], col = irisCluster$cluster)

Chart, scatter chart

Description automatically generated

Figure : Model Visualize plot of sepal in K Mean Clustering Method

plot(iris[c("Sepal. Length", "Sepal. Width")], col = iris Cluster $cluster, main = "K-means with 3 clusters")

The model showed 3 cluster plots with three different colors and Sepal. Length and Sepal. Width.

Chart, scatter chart

Description automatically generated

Figure : K-mean with 3 clusters

In the plot, the cluster centers are marked with the same color as the cross marks.

### **Plotting cluster centers**

# Plotting cluster centers

Iris Cluster$ centers

Text

Description automatically generated

irisCluster$centers[, c("Sepal. Length", "Sepal. Width")]

Text

Description automatically generated with medium confidence

Finding the center of cluster one, we can conclude on average that the length of all observations inside the cluster is approximately 6.850000cm, the width of the sepel is approximately 3.073684cm, the petal length is approximately 5.742105cm and the petal width is 2.071053cm. ۔ Looking at the center of the average 2, the length of the sapling is 5.901613 cm, the width of the sapel is 2.748387 cm, the length of the petal is 4.393548 cm and the width of the petal is 1.433871 cm. Looking at the center of the average 3, the length of the apple is 5.006000 cm, the width of the apple is 3.428000 cm, the length of the petal is 1.462000 cm and the width of the petal is 0.246000 cm.

# cex is font size, pch is symbol

points(irisCluster$centers[, c("Sepal. Length", "Sepal.Width")], col = 1:3, pch = 8, cex = 3)

### **elbow Plot**

# If we wanted to know the exact number of centers, we should have made an elbow method.

tot.withinss <- vector(mode="character", length=10)

for (i in 1:10){

irisCluster <- kmeans(df[,1:4], center=i, nstart=20)

tot.withinss[i] <- irisCluster$tot.withinss

}

# visualize WSS Plot

plot(1:10, tot.withinss, type="b", pch=19)

#screeplot or elbow graph

screeplot(pc, type="lines")

Chart, line chart

Description automatically generated

Figure : Elbow Plot Of K-mean cluster

The final cluster model is created using the final model k mean and k = 3. The nstart value is also defined as 20 which means that R20 will test different random starting assignments and then select the lowest one within the cluster variable.

### **Visualizing clusters**

# Visualizing clusters

clusplot(iris, irisCluster$cluster,

color=T,

shade=T,

labels=0,

lines=0,

plotchar = FALSE,

span = TRUE,

main = paste("Cluster iris"),

xlab = 'Sepal.Length',

ylab = 'Sepal.Width')

Chart, diagram

Description automatically generated

Figure : Cluster iris of k-mean

Therefore, 3 clusters are formed with different sapling lengths and sapling widths. Therefore, K-Means clustering algorithm is widely used in industry.

### **Conclusion**

If we observe carefully, we can see that the values of apple length, apple width, petal length and petal width are all different but cluster 2 and cluster 3 have the same value which is the center of these clusters overlapping. There is overlapping so we suggest that these clusters are non-existent.

Graphical user interface, text, application, email

Description automatically generated

# **Experimental Result of PCA**

PCA creates new coordinate system by converting highly correlated variables into orthogonal or uncorrelated variables.

data("iris")

str(iris)

![Calendar

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMyOQAAkpIAAgAAAAMyOQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAxOTo1ODoyOAAyMDIyOjAxOjA0IDE5OjU4OjI4AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMTk6NTg6MjguMjg2PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAH8CvQMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APoiD/j6l/3F/m1WarQf8fUv+4v82rE1u7vYNYiXQZ7qe9O3zbLyRJb7MjLO5K+UcdMNkjJ8uTGK2pU3Vlyp2/r8BXsjpKbI6xRtI5wqgsT6AUy2a4e1ja8jjiuCoMkcUhkVW7gMVUke+B9K4/xRe2y+IJrXWdRuLGBbHzLBIbp4jczZfeAqHMpAC/IQw5+6c1VCg6tTk7dtfu7/AOWoN2R2FrcxXtpDdWz74ZkEkbYI3KRkHB5qWvKvEGqLD4Y0eytpHh1AaOstsza1NYCRtgwI0jB8+QED5CMAEc/NV/W10W/uvDGv6rrEsNjNC6y3sesS20IYx/LhkkVVJORxjOMHNd/9nWs23Z81tE3pdrr1t5a9COc9GqG8vLfT7SS6vZkggjGXkc4Arh/Hep2yW1lZ2s7CSa2Z7WdtemsEk4AUI8eTPISQQpBz1zzzcjvxqeneD7u4uI7i3klU3Em4FTN5TBc44zv/APHsd6xjgpezjVls7/hd6ave3VLXuPm1sdBP4g061jje5mki822e6VXgkDeWgBYlduQRuHBGfaprrV7Ky0+K9uZ9lvK0ao+xjkyEKnAGeSw/rU8trBOczwRyHYyZdAflb7w57HAyO9YHi60VLO0vYJ7u3mt7q3jQW93LFGVaZFIaNWCuMEj5gawpQo1Jxhqrvy+X/D6+g3dI6Squoaja6XbC4v5fKiaRIg20t8zsFUcA9SQK5/VbJ9X8bf2fNqGoW9p/ZZkMVndvBl/NwG3IQwI9iM9DkcVJ4qshDp1jdx3d8lxa3NtErR3sqBw0qK29FYK+QT94HrVww8OeEZS+Lt57a/8AA089gu9Tpqp32rWWnSLHeTeWzxSSqAjNlUGWPAPQH/CuT8eXtpa3sD3etQxFISV0ttYl06Sck/fR42DO2AVCEEEkcr36+KOC8tYJpbblovlW4TLorAZU579iPapdBU6cKk72lfy/r7rdmF7uxD/bWn+dZxtcbTfJvtmdGVZeMgBiMbsc7c5wCccGr9YHjNEj8F3qRKqyLGotVUAYlyPKC++7bit2Pd5a+Z9/A3Y9aznCPs1OPVtfdb/MfWw6iiisBhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAVoP+PqX/AHF/m1WarQf8fUv+4v8ANqxNbtL2fWIm0GC6t70bfNvfOEdvsyMq6EN5px0wuQMjzI85ralTVSXK3b+v6/yFeyOkoqK2W4S1jW8kjluAoEkkUZjVm7kKWYge2T9a4jxzZ2curxXX9mHVNRihCwW15ost7bN8xOFkVdsLk4BctgDBKnANXh6CrVfZ3+aV/wDIG7K53DXEKXCW7zRrNIpZIywDMBjJA6kDI/MVJXC+KdC0V/E+l6xrnhuG9ha3liuSmlG9fedhQMqIzEABwGIwPxq9qPh2x13xin9qaZ9q07+ydgSeJvJ3GTIBU8bgORkZHbFbfVqXLGTk7NNvTqnstdfwFzM6LUdSt9Kszc3ZbbuCKqKWZ2JwFVRySTVXVJoZtCU6jpNzcx3BjSSzESyOm5gMsFJHyk5JBOMZHSqOvrFp1zoV1IRFp9lclZS3Kxho2RGJPQAkDP8AtUni/RbXUbW1u/7Nhur62u7cwTeQHliXzkLFWxlRgHOO1KlTgpU23u9/ntv83r1XzG3qb9vAltbxwRlykahVMkjOxA9WYkk+5Oah1C9+wWwm+zXFzmRI9ltHvYbmC7segzknsAa5/VfDtprnjb/icad9ssP7LMZWZC0JYy5wR90sByM8jqMVJ4q0CyutOsZYtLhuLuyubYW0vkCSWFBKm7a2CwG0c+3WlGlSc4Kcn72+nfzv94XdjpqoXurwadfW1vdxTJHdMI47nbmISHojEHKk9iQFJwM5IB5bx5ZWN1ewSz2DajdxQkQW11okuoWr5OT9xcRucAbywAB5BHTT8Vzb/B4snVba/wBQVILa2DAkTHBwuOu3BYkdApPSqp4aL9m3rzeVrefn37BzbnS0UighQCcnHJpa4CipcaZaXV9b3lzD5s1tkw72JVCf4gudu7tuxkAkZ5NW6KKpybSTewBRRRUgFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBWg/4+pf8AcX+bVDql9d2LWQs7BrwXF0kMpVyvkIQcyHg5Ax0469amg/4+pf8AcX+bVZoAz9W13TdFjQ6lf2trJNlbeO4nWMzsBnauTyfYZqkvjLRLfS9Muta1TT9Jk1KBZoYbu8SMtkAkLuI3Y3AcCs7XLHVE8R3lza6Q2qw6hpos0/exIluwLk+ZvOdjbl+6GPy8jpWLrejeK7jw1YaFZxXkNu+kC2lexa0O2fZtKzmbJ8vp/qgW+9yOMgHU6p468K6JqqabrHiLTLG8ZDJ5VxdJGQvHJJOFznjOM84zg1d1TxJoehxwya3rOn6ck/8Aqmu7pIhJ/uliM9e1c7LDq1rN4b1ePQb65e0spbW4sYZbcTRM4jwSWlEZH7s9HJ5Hvh/jODxHqPk2ukR30Vnc27pM1j9k8xJG4AlM+R5WCc+WGbI49wDryI54cHbJHIv1DA/zFcf4n8c6P4NmsdGtLjQ4LuQYS1vtSSxit4gpILEKxUHGFG3n8K0NDk1ew0Xw/YvosgxCIL15LmMG12JgNhS28MRgAHIByfSp9U0+6ufFehXkMW63tPtHnPuA2bkAXjOTk+lO7tYCWTxLpVhpsV1req6XYb4Uldmvl8oBuAVdtu5SeA2Bmn6n4l0LRIYZdZ1rT9PjuBmF7u6SISd/lLEZ6jpVKbRDcfEBdUuLOKW3TS2tlmcKxVmkyygHnBXr2NZ3jOz8QXXk6foSXkWny27wu+mi1Do5+UCT7RkCLBOfLUvxx6FAdHca3pVpcRQXWp2cE0wBjjkuEVnBBIwCcnhWP0U+lVbvW/DVla2+vX2p6VbwTxiODUZriNVkRvmCrITgg4zgHnrXIW3hTULtLFtQ0ZV8m002B0uGicgwTs0nRiMYCsPXjuMCC78K+ILb+yb23GqKbe3ubaa30prIzL5k28N/pIMZUqOcMD0684abWwHe6tqNzZWttLp1idQM1zFEwR8bI3bBkyAchQc/TuKtXd9aafEst/dQ2sbyLErzSBAzscKoJ7kkADuap+G7EaZ4Y06xWO6jFvbJGEvGjaZQBjDmMlC3+7x6UzxEkkmnwCHQ4dbYXcJNvM6IIxvGZgXBGU+8AOSRxzSA1qKKKACsjVvElpo99aWlxBeSSXUqRK8VsxjUu20FpDhOvbJbvjFa9cn42fVZTp0Gl+Hr/UxDewXUktvLbIoVHyV/eyod2PbHvQBra3rj6RJaRQaVe6pcXTMEhs2hVgFGSSZZEXH459qZqXiP+zmt4Y9Kv728miMzWdsIjJFGMBmYs4XgkDAYknoDVDxPbprGg232zwdNq87/ADR28ptt9lIV4Yu0mFIz96MsR2zVZbHXNDu7HUjZy67df2YljdLbzRo3mqdwkzKygqSWyc7umFPNAHU2F9b6lp8F7ZP5lvcRiSNsEZBGRweR9DUWq61pehWq3Ot6lZ6dAzbFlu51iUt6ZYgZ9qg8NaZLo/huysLllaaGP94UJK7icnBPOMk4rO1yC/tPFFhrdnplxq0UNrNbNbW0kSyIzsjBx5ropGEIPzZ6YHWgCfU/F2naTqtpBf3Frb2NzaSXRv5rlUiQKyAcngg+YOc/nmrmoeI9D0iygvNV1nT7G1uMeTPc3SRpLkZG1mIB454rjLTQdY0G80bUDosmrG0gvd0FvLCHgaeZXRFMjKvyrkEgjgHGeAXS6JqmleHtKit9L1aTV4IJQt5o09r/AKIZHDNEVuXVGXoB8rcLxtOKAPQIZo7iFJoJFlikUMjowKsD0II6in1jx3WuW2n6Qtxp8N7dzMkeoPBMI0t/l+aRQ3LDIxtHPNbFAFLVda0vQrVbnW9Ss9OgZtiy3c6xKW9MsQM+1YHi74gaX4YjsYlvtJa8v3HkR32pLaxiMgnzWfDEJ8uAQpySB3qfXIL+08UWGt2emXGrRQ2s1s1tbSRLIjOyMHHmuikYQg/NnpgdazrDw1qdpaeGUkjDm01Ke7uFV1xbxyLMVQdM7fMVeM/lQB1WkXzalo9reubRjPGH3WVz9ohIPQpJtXcPfAq5RRQBma3rR0aK28vTrvUp7qbyYre0MQdjtZicyOigYU96vWkz3FnFNNbS2skihmgmKl4z/dJRmXI9iR71k+K7W2u9IEV34YPiVN4K2gWA7WwcP++dVGPUHIzxU/hq0v7DwzYWuryCS9ihCykSGTB9N7ctgcbjycZoA0DcwC6FsZoxcFDIIt43FQcbsdcZOM1R1HxHomkWwuNW1nT7GAymES3N0kamQZymWIG4YPHXiqfiWxvWksdV0a3FxqFi7KsRcJ5kcg2spJOAAdrf8ArN1qw13TtL0uw0IXrwjcLy404Wv2neRncPtH7vazFi3BbpgdSADoLnX9Hs7RLq81Wxgt5IjMk0tyio0YxlwxOCvzLz05HrVLXfFmm6Pokd8l9p0r3Sg2Mc2oRQLeMcYCOxwc57ZrnPC/hnUrabwt/aumFP7GtLq3kkmaJ8OWQJIu09GAbBABAyCFzium8SaW914Nv9N0q3Te9uY4YU2ovsB0AoAt6pruk6Fax3Gu6nZaZFI2xZLy5SJWbGdoLEAnAP5VS1PxXp+l3Gmme4tlsL6OWU373CrFGiIGDbjwQc9ciqvi0a+VsY9DS98hiy3MmnfZvtKcDbj7T+72dd3BbpgdSOd03Q9Y03S/Cb3Ph+a9m0H7QksQlt/MYldqyRkuF5ycZKEDOQOlAHUeIPEV1YeF213w7bafrFrHA1yzPfmJXiC7t0bJHIHz+A9607jV7Gx0hdS1W7t7C12K7zXMyxomcYyzYHfFc3HoGpD4Y6tpzQAX9/HeSJarIuI2mZ2WPdnbxuAJzjOecU3xdoWrXlnoNzpb3izaXL5ksVibfz2zEUyn2hTESCe+OCcHPUA6G68SaHZaTDql5rOn2+nT48q8lukWGTIyNrk4OR0wan/tbTf7JGqf2ha/2e0YkF55y+SUPRt+cYPrmuJj0a5sPDdh9n0bxPLfxz3E0c63Gni7tXkYlmK+YLdlbccKAwHHAPI6CVNWfwHt1bSLfW9TMA82wdkRLhs/dYsCgOOT2yDjjFAHQAhlBUggjII70tNj/1S5QJ8o+Ufw+1OoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAK0H/AB9S/wC4v82qzVaD/j6l/wBxf5tVmgDl/Fnii/0bUdN07R7Oyuby+kAUX12bdCu9VIUqjlm+bPTgAnnpXToWMamQBXwNwU5APscDP5VyfjzRtW160tbGw0zT7228+OWSS5vXgkt2VuHTbG2SOuQykEcZzx09pFJBZQRTzGeWONVeUjG9gMFse/WgDL1XxE2n6ithZaRf6vd+UJnhs2gUxoSQGJmkQHJBHBJ45xxTtS8T6fo1tbyaqLmGadC62kVs9zMoAG4lIQ5wuQCwyoyOeRWZ4s0O+1i8ia20HRb7y4isF9dXsltdWbN1MTxxMw7HKuh4/GqOveCtRvJtKvbe4fULqzsjZzq+rXWm+fnafM82Dcc5U5Ugg56jHIBuX3jTQdPaFZbySZ57b7XFHaWstw8kOQPMVY1YlRkZIHGeak1LxXpWlafBfXD3U1rcR+ak1lYz3S7MZ3ExI20YOcnFcpHY6rpXiWy0/wAP6fp8U0Ph8Qm3nvpWjhHm4yspjLSY/wBpQW9RU+p+CNWOi6To1heGfT7Wz+yzL/aU9gwfAHnZhUmTAz+7Yqvqe4ANbxPrOq2On2Wr6Feae9hJNbpJHPaPI0yyyou5JFlULw2eVaunrlZfDupXXgHT9Gm+yxXlq1ruKys0ZWGRGJB2g5Kp0x1OM963bz+1P7Qsf7P+x/Y97fbfP3eZt2/L5eOM7sZz2oAP7Vg/t7+yNsn2j7N9q3YGzbu24znOc+1Qaz4j03QRH/aMk3mShmSG2tZbiVlX7zeXErNtGRlsYGRk81m6tYa/D4uj1jQrPTbyM2JtZI7y+ktip8zdkbYZMj8qo+KPCmo6zqVhq9uitdRWrW89mmtXVinzENkTQLubBBGGTBznjFAGve+NNBsZLeOS8eaW6txdW8NpbS3Ek0Wcb0SNWLDkZwOByeKdceL9Ft7OyujcTTR3y74BbWks7svdiiKWVRkZZgACQDg1U0Lw3LpWqWNwkFvaW1vpK2Qtorl5/LYPuwHdQXXH8RwT6VzNzHJ4CXSrm61fw/BP9kmtJI9SvzACDL5geL5SZGGcFMDPHzCgDorr4jaDbSaYI11S8i1SLzbaey0q4njZNpYHKIc8DoMkdSAOadqfjO30rxLaWV35gtrqwa5jjjtJpbl2DqMLEgLnAbJG3I6nGDWZpej6yfCHhK8s7e3k1HTYQ7215K9sr74ipyQkhUjIOMH0z3roY9LvJPFVtrFwII1XTmt5Io5C5EhdW4JUZXg88H2oAfN4q0a30S01ea822N5LHDDL5Tnc8jBFUrjIO445Ax3xWvXNafpWu6L4WtrHTG057xLwvKbguY/JaYs+3AB37G4zxnrxXS0AY+reKtI0S9is9QuJftc0Rlitre2lnlkUEAlUjVmbBIzgcDnpzUtn4j0rUPIFpdeYZ7Y3UY8thmMHaScjggnGDz7Ux9KnbxlFqwaP7Olg9sVyd24yK2cYxjA9a5qz8J69pUlpJYHTZZBbXNrMZppFEQkmMiuoCHeR0Kkp/vUAblx438PWv2X7RqIjF3FHPExhkwUc4RiduFBPHOOSB1Izq6bqVrq+nRX1g7PBKCVLxtGwwcEFWAZSCCCCAQRXKW3g3UYbexR5rUtb2VhbuQzctBNvcj5ehHT364rovD2mzaTo4tLlkaQTTSZjJIw8rOOoHZhQBp1z/i3xM3hq2snRdO3Xdx5AfUr/AOxwodpbmTY/JxgDHJNdBWdrZ1X7Ds0WysLyWQlJFvrl4UVSDz8sb7v93jPrQBctmme1ia6jjjmZQZEikLqp7gMQCR74H0rH8R+Ip9Ba1MekzXcM88UT3AmRI4t8ipg5Jct82QAuOOWFJp+mavouh6JpunT2c62pSK9kuFZS0QU58oLnDZxgHjFVvGmn6/qtpb2mhWemzRrcQ3Ekl5fSQEGORX2hVhfIO3GcjHoaAOnrD8WeJo/C2iPem2e8nwfKtkbaZMDLHPYBQST7epArVsnuns4m1CGGC5K/vI4JjKin0DlVJHvtFcz4x8F3PiNLuew1y9sLqWya0SJBAYWBOTnfE7Lk4yVIJwPQUAdYjbkVumRmsjWtYvLK6tbDSLGG91C6V5EjuLkwRKibdxZwjnPzKAApznt1qR4NYtbfTILC5guhHIq3098MSSRBTll8sKu8nHYL14qn4t0m61S0t/7P0+3u7iKQsry6pPYNECOSskKM5z0K8AjrQBf0HWYte0eK/ijaIsWjkiYgmKRGKuuRwcMCMjrVbxZ4kj8L6DNfm2a8nCt5NqjbWlIUseewCgknsB+FSeGNDXw74et9OVkdkLPI0abFLuxZsL2GScD0rK8YeDbjxHHcTWOt3un3TWMlokcYgMLBuu7fE7Lk4BKkHAHpQB1EUnmwpJjG9Q2PTIrN1+/1XTrP7RpVnp1xHGrPO19fvbCNQM5BWGTPfrik+zaxZafpltYXMF28UiJeT3ww8kQHzFfLVV35xjgCptUsZ9Qls4lZBaJOJblSxDOFGVUccjdtJ6cD3oAk0i6u77R7W61KzWxupow8lssvmCIntuwM/kKo+LPEkfhfQZr82zXk4VvJtUba0pCljz2AUEk9gPwrarlPGHg248Rx3E1jrd7p901jJaJHGIDCwbru3xOy5OASpBwB6UAdRFJ5sKSYxvUNj0yKxvFHiWLw3YxSMsDTTuUj+1XAt4UAUszySkHYgA64POBjmpvs2sWWn6ZbWFzBdvFIiXk98MPJEB8xXy1Vd+cY4Aqr4l0S61C90nVNNitJ77SZnlihvHKRyb0KH5wrFCAcg7W6EY5yADS0a+k1PR7a9l+xkzoHBsbr7TCwPQpJtXcCOc7RVDxd4j/4RjSIrzFj+8uFh36he/ZII8gnc8uxsDjHTkkVN4Z0mXRtIaG58oTzXEtzKkGfLjaRy5VcgEgZxnAz1wM4q1qsmpR2ROjWlpd3OQPLvLloEx3O5Y3P4bfxoAl0+a4uNPgmvI4I55EDOttOZoxn+65VSw99orK8XeI/+EY0iK8xY/vLhYd+oXv2SCPIJ3PLsbA4x05JFWPDOky6H4dttPuJY5ZI9xYxJtRSzFtqDsq5wPYCrGqyalHZE6NaWl3c5A8u8uWgTHc7ljc/ht/GgCXT5ri40+Ca8jgjnkQM6205mjGf7rlVLD32iqHifX4/Degz6gbd7uZVPkWsbANO4BO0E9OAST2AJ7VU03SdZ0Pwvp+n6bLYS3Mc4NwZkdYliZyzrEF5G0HC544GaZ4r8JzeIcz2mt32nXCWktvGkAgMbeYOd3mRORnAGVwcUAb9lcfa7C3uduzzolk25zjIzjNUfEeuR+HtEmvmge6lUEQW0ZAed8EhBngdCSTwACTwKm0Wxm0zQ7OyurqS7mghVHmkCguQP9lVH6CsvxP4Vl8QSR3FrrV/ptxDbyxRrbiBo23jBLCSJ8HjGVwcE+tAGzp13/aGl2t5s8v7RCkuzOdu5QcZ79azfFHiSLw3p8czLC00zmOIXNwIIVwpZmklIOxAqkk4P0NR22na7pHhPTNP027try+tvIjnm1AfK0QIEm3y1X5guQvA7Z70eJ9DuNTn0rUdOjtZr3Sbk3EMN2xSOTcjIQXCsUOGyGCt06c0AaGiX8mqaNb3sv2Imdd4awuzcwsOxWTau4Y74FUvFviL/hGNFW/xZfNOkO6/vPssCbjjc8m1to/A1J4Z0mfSNLkS8EK3Nzcy3U0duSYomkbcVQkAkD1wMnJwM4q5qcmoxWRbRrW1u7nIAju7loEI7ncsbn8Nv5UAO02e4utNgnvI7eOaRAzLazmaPnptcqpYY77RVXxHrkfh7RJr5oHupVBEFtGQHnfBIQZ4HQkk8AAk8Cm+GNJm0Tw/DZXMkckqs8jCFdsaF3LbEH90bsD2FU/E/hWXxBJHcWutX+m3ENvLFGtuIGjbeMEsJInweMZXBwT60AbOnXf9oaXa3mzy/tEKS7M527lBxnv1qHW9Wi0TSZb2WN5mX5YoI/vTOeFRfcn8up4FZ9tp2u6R4T0zT9Nu7a8vrbyI55tQHytECBJt8tV+YLkLwO2e9O8ReGn12W1ng1i+02a0Enlm1WFlJYYyRLG4zjIyMEAn1oAv6JqJ1jQbHUjD5Bu7dJjFu3bNyg4zgZxnrik1vVotE0mW9ljeZl+WKCP70znhUX3J/LqeBVfwppFzoPhXT9Mvr172e1gWN5nC9QOg2qo2joMjOBzk81D4i8NPrstrPBrF9ps1oJPLNqsLKSwxkiWNxnGRkYIBPrQBf0TUTrGg2OpGHyDd26TGLdu2blBxnAzjPXFQ63q0umJaxWVqt3e3svk20UkvlRlgpYl3CsVACnkKT04rO0vSNe0HwLYaZYXtve6naxxRtNfj93tBG4Dy1XouQvGeBnPJq74n02XVNHMFtYwXkwkV0WW/lsthH8SzRKzow/2QOpGaAH+H9abWrOY3FsLS8tJ2trq3WXzFjkXB+V8DcpBBBwDg8gHitWsLwl4fbw/pc0c5j+03dw9zOImZlVmwMBm+Z8AAF25Y5JxnFaGrf2p/Z5/sL7H9s3pj7Zu8vbuG77vOduce+KALtFUtW/tP+zZP7C+yfbcrs+2bvLxuG7O3n7uce+KNV/tT+zH/ALD+yfbsrs+2bvKxuG7O3npnHvigC7RQOnPWigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCtB/x9S/7i/wA2qzVaD/j6l/3F/m1WaAOO8ca/qukXuk2umXlnpqXtwkbXl7aPPGWLqoi4dApIJPLZOMDnkdggYRqJCGfA3FRgE+wycfnXN+MPD+q+IYIbSxvtPhsi6m5gvbFpy4B52kSKBwehBB46c537S3FpZQWyu8iwxrGHkOWbAxkn1oA5/X/FU+meILPRdPg0x727j8yJdT1E2azc42xYikMjDqRgYBHXNWtT8SNpX2a2bSrrUNSmhMzWenMjlEXAZt8rRrgEgDOCew64b4i0bV9ZjltLXUNLj064h8qe2v8AS2ut+c5IIlQdD0ZW6fhWRrvw4stVTS3jXTbifTbX7Gn9taat/G8fHJTchD5X7wYdTweMAF+bxzaFrZNL0zUtWkurEX8SWccYzFuA5aR0UHnoSCe2cVPe+KhDodtq+maRqGsWk8H2jdZGFTGm3OWEsiduwyeKw5PD+tQ+JLW30eey01YdEFs08Wlt9mB8zlY4xINhA5A3NgdQak1j4bW2o2Ol2EctpLYWFr9l+z6pZfbF28fvEBdQkuMjeQ2M9OuQCx4pv7xtD0/X9D1q8tIXmtf9HSKExzpLKgO/fGzg7WI+Vlrr651/C803g2z0K5v42e1a3IuI7cqGWGRWA2FzgkIATnrzjtWreWt9NqFjNaaj9mt4HY3Nv5Cv9pUrgLuPKYPOR16UAUrrxPZadqs1nqbLaqrW8cMhJbzXmLKowBx8ykZ6fSsrVvFF6+k2c9naXttFc3qxG+t1gmSJRcCMB1kdW+ccZVW27s9qseI/Bg8Qaut6b9rcLZSW4iEQb94c+XLnOcpufA77varTeGt3hSx0X7Xzam3YzmP/AFhidXJ2543FfXjPegCXWPEA0y7is7fT73UbqSMysloI/wBzGDjzG3uoxnsMsecKcGubtPHWqQad4aR/DupaxNq1qJGureS2iBfyyxAV5E545yFGDwSeK39U0G9udbTU9J1KOxle3+y3PmW3nb4924FPmUI4JPJDDnlTVRvCV3b6LoVvpmpwx32iqFiubq0Mscg8so26NZEPIOeG4PrQBHqfia/sPF9nZw6bf3i3GmvP/Z9tHEXEgkUZaRmCLgE9XAPbJxW/o+qwa3pMGoWqyJHMD8koAdCCQVbBIyCCOCRxVeLR5f8AhILfV7m6R5o7E2rpHCUV2LKxcZYkD5enPXrT9A0j+w9HjsPP8/ZJI+/ZtzvdmxjJ6bsUASavqn9k2sU/2G9vfMnjh8uyh8x13sF3kZGFXOWPYAmr1UdXtNQvLWKPStS/s2VZ43eXyFl3xqwLx4bpuGRu6jORV6gDD1fxQml6vDpcGl6jqV9NA1xHFZxpgqrBTl3dUU85+YjOOMnik03xbYao9ukEVwjT2b3eJFUbAj7GRsE/MG44yOOtW20jd4oj1jz8bLNrXydnXLht2c+2MYrAh8EXti1q2m61HA8cM9vM72e8tHLKZPk+cBGBOMsHH+zQBYm8f6dCtkwsNSlS7t4LgNFAreWkzbU3YbOd2BgZ6+gJG3o2qx61pMV9DDLAJCytFMF3xsrFWU7SRkEEcEj0NYUHgnyYbSP+0N32a1s7fPk43fZ5fM3fe43dMdvetvRNL/sfTBZ+d52JZZN+3b9+RnxjJ6bsfhQBoVh+LNRudK0pbm21rSdIw+0y6pbtKkhI+VFAljO4npyc9hW5Wbrdrq93aiLRL+xsnbIka8sWuQykdAFljwfrn6UATaRc3V5otnc6hbfZbqaBHmgzny2IyV/A1k+MdX1HR7O0k0xlhWSfZPcPpk98sKbWO4xwsrYyANxOBnmpbLw/daVo2i6ZpOrSQwaaUWYywJI11EqkFD0CZODlRxjAGKu6xb6tc2qx6Jf2ljKW+eS5s2uBtx/CBImDnHJyPagCxp8xuNNt5jcwXRkjVvPt12xyZH3lG5sA9Ryfqay/Fmo3OlaUtzba1pOkYfaZdUt2lSQkfKigSxncT05Oewq/o2lxaLotppsEkksdtEIw8hBZsdzjj8qi1u11e7tRFol/Y2TtkSNeWLXIZSOgCyx4P1z9KAJtIubq80WzudQtvst1NAjzQZz5bEZK/gaoeKtQuNL0kXVvrWlaOFkAafVYDLG+QcIAJY8MTjHJ9MVc0LSY9B0Cy0qCWSaOzhWJZJcbmAHU4AA+gAApus2+r3NqqaHfWVlISfMa8smuVZcdAqyx4PuSfpQA/Rbu7vtCsrrUbYWt3NArzQjPyMRyOefz5qDXzq0dl52j6hp2nrCrSTy39o867QM8BZY9vckkn6VXsvD11pWh6Rpek6q9vHYOnnM8CObiMZzHjgICTwR0AwKTxNomp6y1j/ZupWdrHbS+bJBeWLXMc7D7mQssZ+U8jkjODjgUAXtA1CfVfD1jf3lt9lnuIFkeHn5CR784+vNVPFWoXGl6SLq31rStHCyANPqsBljfIOEAEseGJxjk+mK1rRbhLOJb6WKa5CgSyQxGNGbuQpZio9ix+tU9Zt9XubVU0O+srKQk+Y15ZNcqy46BVljwfck/SgB+i3d3faFZXWo2wtbuaBXmhGfkYjkc8/nzWX4u1jV9Ftbe40y2sntzcQxzy3Ejl13zImFjAAOQx+YuMHHDVLZeHrrStD0jS9J1V7eOwdPOZ4Ec3EYzmPHAQEngjoBgVF4u0HV/EFnFaaZqtlYQLJHLJ9osHuGZkkV1wRMgAyvIwc+ooA6KsjxPfyaXorXaazpeirG433eqxF4QDxj/AFseCSRg7vwrQsku47KNdSnhuLoD95JBCYkY+yFmI/76NQarDqk1qF0S8s7Ofd8z3do1wpX02rJGc++fwoAZ4fvbzUfD9nd6lAtvdTRhpEUEDPqAeQCOcHkZwazPGHiV9Aisbe1aNLzUJWjieSB59gVC7EQxkPKcDhFIJz1wDUtn4dvNL8O2Ol6Tq7W7286yzTtbq/nKXLSRhTwgbJAx90YxU+vaJNqclld6fdx2eoWEjSW8ssHnR/MpVldAykgg9mU5A57EAl8O6idV0G3u2vYL5nBDTQWz26lgSCDE7MyEYwVY5BBzjpUfie/k0vRWu01nS9FWNxvu9ViLwgHjH+tjwSSMHd+FTaFpP9jaaYHn+0TyyvPPME2B5HYsxC5OBk4AycADk9afqsOqTWoXRLyzs593zPd2jXClfTaskZz75/CgBnh+9vNR8P2d3qUC291NGGkRQQM+oB5AI5weRnBqr4g1K/t7rT9O0iS1t7rUJHVbm8iaWOMIu4jYrIWYjoNw6E84wY7Pw7eaX4dsdL0nV2t3t51lmna3V/OUuWkjCnhA2SBj7oxip/E+iya/pH2GNdKdGcM6arp322FgOn7vzE5zg5yfpQA3wprx8Q6IbmTyTPBcS2s5gOY2kjcoxX/ZJGQD0zjtUviO9k07RZLqLV9N0cRsC93qcRkhUdMEeZHgnjnd+FSaDo0Wg6RHYwyNKQzSSSMAN7sSzHA4AyeAOgwKk1SLU5rQLot5aWlxuBMl3aNcJt7jaskZz75/CgCHw7fXmpeH7S71KFIbmVMuIwVVuThgDyAwwwB5GcGoPFOty6Jo0klhClzqMisLSByQrsFLEsRyFUAkn0GByRVe08N32meGbXTNJ1prWeK5Wea5NqjiRTJvkjVDwitkqMZKgjqRUviHwjpviQiW8e8huUgkgimtb+e32q+MgiJ1DDIBwc9KANLSbp7/AEWyu5gqyXFvHKwUcAsoJx7c1V8R3smnaLJdRavpujiNgXu9TiMkKjpgjzI8E8c7vwqbQ9Kj0PQ7PTIZZZktYljEk0jyM2B1yxJ/DJx0p2qRanNaBdFvLS0uNwJku7RrhNvcbVkjOffP4UAQ+Hb681Lw/aXepQpDcyplxGCqtycMAeQGGGAPIzg1B4p1uXRNGkksIUudRkVhaQOSFdgpYliOQqgEk+gwOSKr2nhu+0zwza6ZpOtNazxXKzzXJtUcSKZN8kaoeEVslRjJUEdSKl8Q+EdN8SES3j3kNykEkEU1rfz2+1XxkEROoYZAODnpQBpaTdPf6LZXcwVZLi3jlYKOAWUE49uabqsepyWYXRbqztJ92TLeWzToF7/IsiHPvupuh6VHoeh2emQyyzJaxLGJJpHkZsDrliT+GTjpVTxTo1/rulpZ6df29mDKrTC5tWuI50HWNlWRDtJxn5uQMHgmgBfCmq3WteHoby/SISs8ieZACI5wrlRKgJJCsBuAJPB6nqV8Q6nd2K2NtppgjutQuPs8c9yheKE7GbLKGUt93AXcuSetLLYa3NoCWy6xb2uoh1LXdtYYj2hgSoid2xlflzuOM5qTxDpcus6LLYxDTm80jeup2Ju4WUHODHvTP58UAVvCutzazZ3kd61u95p929ncSWoIikdcHcoJJXIIypJwcjJxmrXiC6lsdFmuYdU0/SfKwzXepRGSGNc87h5kf57h+NR+HNBj8PaWbVJFlkkkMsrpEI1LHAwqDhVAAVV5wAOT1q3qceoy2ZXRrq1tLncMSXVs06AdxsWRDn33UAVPDGoXuqeH4LvU0hWdy43wKyxzKGIWRVYkqGADAEnGep61X8Y6tquieHLrUNHtrOZraGSWRrqV1CBVJBCqp35PGNy+ue1RWPhrUNL8LnTtP1vyL6S5a5lvRaIV3PJvkVYicKpyQBkkZzknkz+LdG1LX9Bn0zTNRtbBbqNop5Liza4JRhj5QJU2n3OfpQBswOZbeN2xllBOPcU+qWkW+oWumpDq93bXdwnHm2ts0CFe3ytI5z77vwFGrW19eabJDpeof2dcsVK3PkLLtAYEja3ByMj2zmgC7RVLVbW+u9MeDS9Q/s66YqVufIWXaAwJG1uDkZHtmjVbW+u9MeDS9Q/s66YqVufIWXaAwJG1uDkZHtmgC7RQOnNFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAVoP+PqX/AHF/m1WarQf8fUv+4v8ANqs0AcP8RdQ1HT30t01S+0jS2uEW5vrGOJjGxdceZ5ithNu7kLjI+Y4rtYv9SmJPNG0fvDj5vfjjn2rE8R+GpvEDW/l65f6dFE6tJDbJCyzAHPO9GIPUZUjr3wMbVtbxWlrFbW67YoUEaLknCgYAyfagDhvF3jS80XxPLpsOtaHpix2KXMMWo27Sy3shZx5cQWZDn5QMBWOWHHarHiH4iR6BFpsNzHptnqN7afamh1fU1soowMZTeUYl8nAG3sckd+nj0mCPX59XV5PtE1ulsykjYFRmYEDGc5c9/Sq2seHl1S8gvbbUb3S76FGiW6s/LLGNiCUKyo6EZAP3cjHBGTkA52Xxnr1/d+HpfDWlaXdafrVs08bXmoSQycIGx8kLhQM9fmz7da0vGHiufwppMN5IuiJuVt66lq/2NS4XOyNjE28nnqFq5qHhxtQtrDOs6hBfWOfL1GJYPObK7W3BojH8w64Qe2KZqfhSPU7y2um1S/t7iK3NrLJCIc3MRILI+6M7ckclNh9xxgAxvFjpqPhfS/EVpcahaTmazaJYL+aJdsk0eVeNHCPwxHzA129Yn/CL2zeGbbQ57u6mgtmiKSsUEmInV0BwoGPlA6Zx3zzV68037ZqFjdfbbyD7G7P5MEu2Ofcu3Ei4+YDqB60AVv7Vn/4TP+yNsf2f+z/tW7B37vM24znGMe1ZHjHx5beFr62sN+lpd3ELzr/auprYw7FIGA5ViWJPAC9jkjvoat4YfUtaj1Sz1zUtJuUtzbsbNbdg6bt3IlifnPpinaj4a+3SWtzFq+oWOoW0Rh+32wh8yRDgsGV42jOSoP3Bg9MZNAGVD42vNWk06Pw1o0d6dQ01dRSW5vRBHGpYDaxCOc88FVYE9cDmnweMrzU7fTV0TSYbi8urZrqeG4vDEkCK2xgHEbFm3ZAG0AgEkitq00RLfU4tRmvLm6u47MWjSzbB5i7t24hFUbifQAe1cxrHhl9Ig05fD9t4gnnt4pYDLptxaIXjZt5SUzkfLu6Mg3DnBHcASTxl4mu28OS6PoWl+RrMRdo73UpEkjYIWKZSFgMYHzfNnpgdatapqevQeObK202yjupZdKeR7eS+MVtG4lTLM2xmPBIBEZJ77QansfB0i+E9CsJtRuLHUNKiUJd2ZR2Rtm1gPORwwIJGSCe/WtmLRo01aDUpbiee6htDa75NoDqWDFiFUDdle2B7UAULbxFf6j4YstU0vRvtVxPOsU1r9qVPJHmbJXDsPmC4Y4wC2O2a6CsMeFoI9Cg0u11DUbSKC6FyJbecJI583zCjEDlCSQRjkcVuUAc9rHiDUrXxDBo2jaRFfXE1q1yJbi88iKMK6rhiEduc8bVPIwcDmodH8Y/2tLbRmx8l5bGW6f8AfbtjxyeWyD5RkZz83H0rabSoG15NWLSfaEtmtguRt2lg2cYznI9axf8AhBbOP7N9k1LUrTyY5onMMkYM0cr72RiUJUZPBTaw9aAKUnj262WD2uhm4S6tbW5kxdhTH577AoBX5iGx3AxnpgA9F4f1V9a0WG9mt1tpWZ0kiSTzFV0co2GwMjKnBwOOwqjD4N0+GK3jSa6It7e2t0y68rBJvQn5epPX29K1NL02HSbEWls0jRiSSTMhBOXcuegHdjQBcrmfGV5rGnQWd1pl/Db232u3hmiNtvkk3zIpw5bCrtJBGwn0YV01YPiXww/iVIY21zUtOhidJPKs1tyHdGDKxMkTnIIHAIHqDQBvVynjrXr/AE3R7mDQJFTUUtnuXmZA4t4l/iIPBLEbVB9zztNa8miyTQ6ck+sak8ljMJWmWRI2uiARtlCKFKnPQAdBVXxH4J8O+K4ZRrej2VzO8RhW6ktY3miX/ZdlJGM5FAG5GS0Sk9SATXN+MrzWNOgs7rTL+G3tvtdvDNEbbfJJvmRThy2FXaSCNhPowroLOzt9PsobSxgjt7aBBHFFEgRUUcAADgD2FY/iXww/iVIY21zUtOhidJPKs1tyHdGDKxMkTnIIHAIHqDQBvVy3jrXb7TdEuoNBdU1MWslz5rIHFvEgJLkHgkn5VB6k55CmtWTRZJodOSfWNSeSxmErTLIkbXRAI2yhFClTnoAOgqv4i8F+HvFUMi65pFldTNC0KXMttG80SnP3GZSVIzke9AGxbuXtYnY5ZkBJ98Vzvja71jTrC3vNK1CG1gW6t45k+zB5JN86KQHLbVG0sCNhPPBWt+xsbbTLCCysII7e2gQJFFEgRUUdgBwPwrJ8TeGG8TQRQNreo6dAjq7R2awYkZWDqxMkTngqOhA9c0AbtYnit5ItH86PVNV03Y4/eaVZLcyPkEAFGik+XPJOBjHJAqeTRZZrSwin1nUnks51madZEje5xn5ZAiKpU55AA6CpNX0251O3SK01m+0llbLSWSwlnGOh82NwB9AD70AM8OXVzfeGdOur6aCe5ltkeWW3YGN2I5IKkj8iR6VmeNrvWNOsLe80rUIbWBbq3jmT7MHkk3zopActtUbSwI2E88Fa29K0y20bSrfT7FWWC3Tam9izHuSSeSScnNZvibww3iaCKBtb1HToEdXaOzWDEjKwdWJkic8FR0IHrmgDdrC8XnWBo8Z0D7d532hfO/s77N5/lYOdn2j93nOOvbOKsyaLLNaWEU+s6k8lnOszTrIkb3OM/LIERVKnPIAHQVY1Sxn1CzMFrqd3pj7gfPtFiL49P3qOuPwzQBFoF1He6DazxXlxehkwZ7qNUlYgkEOqqoDAgggKOlZnji71fTtAkvtIvobVYCpkDW3mO+XUfKxbavU5yrZzxjrWxpOlW2i6XDYWQfyogfmkYszsSSzMT1JJJJ9TVDxP4bbxNYCzfWNQ063P+sSyWD97ggjJkjcjBHbHvmgDbrnPGes3un6PPb6G6LqstvLLFI6b1t0RctKw7gcADuxHbNXZNDmn0y1tLjW9Ukkt50mN0rxxSzbWzsfy0VSp6EBRkUzX/COgeJ4iuu6PY30nlNFHNcWsckkQP9xmU7T3+tAF/TJnuNJtJpm3SSQI7nGMkqCaxfHF3q+naBJfaRfQ2qwFTIGtvMd8uo+Vi21epzlWznjHWtnS9MtNG0u307TYI7e1tkEcccaBQAPYAD3rP8T+G28TWAs31jUNOtz/AKxLJYP3uCCMmSNyMEdse+aANusjxJHIdKaePWr7SVg+dnskgZ5OwTEsbjkkYwAScUsmhzT6Za2lxreqSSW86TG6V44pZtrZ2P5aKpU9CAoyKuX2nxag1t57yBbedZwikbXYA4DZHIBOe3IFAEGgW+oWuh28Ws3sl7e4LSzSIitychTsVVOBgZAGcZxWb44u9X07w3cX+j30Np9nTfJvtvMd+RjaS21e+cq2e2OtdHWL4m8OHxNppsX1e/063cESrZrD+9HHBMkb4xj+HFAGypyoJ9KwfFur3dhpclrorINVuIZGgZ13LAqrlpWHcLxgd2KjvU0vh+a40a3sLnXtWkkhuEnN4kkcM0m192xvLRV2HG0gKMj86drvhTQfEsYGu6PY37qjJHLc2scrxBuu0sDj1/CgC1otxLd6Dp9zcNvlmto5HbAGWKgk4HvWT44u9X07w3cX+j30Np9nTfJvtvMd+RjaS21e+cq2e2Ota+kaTZ6Fo9tpmmQJBa20YjjRECjjvgADJ6njqao+JvDh8TaabF9Xv9Ot3BEq2aw/vRxwTJG+MY/hxQBsqcqCfSsjxV/av9gyf2D9q+1+ZH/x5+R52zcN+zz/AN3u25xu4pJfD81xo1vYXOvatJJDcJObxJI4ZpNr7tjeWirsONpAUZH51f1G0mvrF4LbULnTpGIIuLVY2dcHsJEdeenKmgCn4ZuheaDDJ9svLx1Zkkkvo40mV1YhkdY1VQQQRwMcdT1qn44utWsPCl9faJfQ2b2tvJK7SW3ms2FJAQlgqnPcqwx271p6No9vomnC0tXlly7SSTTvuklkY5Z2PTJJ7AAdAAOKreJfD58S6S+nNqt9p0Eysk32MQkyoRgqTJG+B/u4PvQBqW7l7WJ2OWZASffFZfiPVLixshbaZtbU7sMtsHGVTAy0jD+6o59zgd6afD00nh8aXca9q0jCRXF6rxQz4VgQuY41Xbxg/Lkgnmp9Z8NaJ4ijRdd0iw1HywRGbu2SUx567dwOKAE8MXdxqHhPSry9k824ns4pJZNoXcxUEnA4HPpVHxxdatYeFL6+0S+hs3tbeSV2ktvNZsKSAhLBVOe5Vhjt3rR0HQrDw1odtpOkQJBa2yBVVEVdx7sdoA3E8k45JqDxL4fPiXSX05tVvtOgmVkm+xiEmVCMFSZI3wP93B96ANS3cvaxOxyzICT74rM8Uf2r/wAI/N/YP2j7bvj2/ZfJ83ZvG/Z537vdt3Y3cU0+H5n8OnSrjXtVlYsCL5XihuAAwIUGONVxxj7uSCa0L+1mvLF4Le/uLCRsYuLdY2kT6CRWX81NAFDwvdfa9CRmvb68lSR45m1COKOdHDEMjiJVTKnjKjBGDk5ydis7RNFg0LTvstvLPOzSNNNcXD7pJpGOWdiABknsAAOAAAAKk1bTv7W02Sz+2XdlvKnz7OXy5FwwOA2DjOMH2JoAu0VS1XTf7V0x7P7bd2W8qfPs5fLlXDA8Ng9cYPsTRqum/wBq6Y9n9tu7LeVPn2cvlyrhgeGweuMH2JoAu0UDgUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAFaD/j6l/wBxf5tVmq0H/H1L/uL/ADarNAHCfEu2uG/sq6mF/NpUNyguYtPvJYJkJdSJAIyrSYAYbQcjOQCa7a1eKW0hkt38yFkVo33FtykcHJ5PHc1j+IfDOk67JbS6tNdxeVIoUQahLbpId3CsqMFfJOOQTyQOtbcUSQwpFCixxooVEUYCgdABQB5/4s1rU4fGU+nWWq61ahNOjmtrfS9MS5EszPIMSs0L7FO1Rksg689xY8Q+L9Y0qXTNMSJbfUrixN1cyrpN1qKIw2qUEducjLE/MWwMdDmuxXTrVNUk1FYsXcsKwPJuPKKSQMZx1Y8471V1fw9p2uNE98k6yw5Ec9rdS20qg9VEkTK204GRnBwPSgDlbjV/F2oal4ZfTryy0ePVLZ5JrK+0qSWSJ1jDEN+9Q9TwMKR3z0F/xp4iv9BsYRY6jaR3vkvI0J0a5vml2j7wSGQNGmeCzZAyBn12L3wzp1/p9rZ3JvSlp/qZo9QnjnXjH+uVxIcjrljnvmm3/hbStTktpLyO5L28flK8d7NG0if3JCrgyqccq+4HnPU0Acz4utdO17wZpHiC90uze/8AOsJYZ3hV5IN88RIRyMgc9q76sefSNEsfD8Gm3hEWnQyRCIXN0/DCQGNd7Nn7wUAZ9B04q3eaPY6hqFjfXcHmXGnu0ls+9h5bMu0nAODwcc5oA5/W/Fk3h7X5YJ4muoZfsxjjBC+SjGQSyZxkhQm7B+grO1ebU9S8K6bf3M1lcWUt/DJLb3Fs+91a6XyikiSIF2gqeVbOOe9dVqPhvSNWvRd6jZJPOLWWzDlmBEMmN68Hvgc9amOi6edJt9M+zj7HbeV5UQdht8sgpznPBUfXHNAGXrGparLry6RokllA8dr9ruJLuB5d6FtoRQrrtJwfmOccfKc8crp1z4oi0vwTbaJq2m2dte2mx4rjTmuDuWEtksJUyOBgAKc9Seldzqnh3TNZuYZ9QhkaSFSgMdxJFvQ9UcIwDocfdbK+1RXHhXSLjR7PTDDNDbWIAtvst3LBJCAu0bZEYOODjryOtAGFqqa23xDsYtKuLCK6Ojyebc3MDui4lTJWJXBOfQyDHX5ulb/hfVZ9a8OW17dpGtwxdJRECELI5QlQSSASucEnGatQ6TZwXkN2iO1xDb/Zklkld28vIOCWJ3HIHJyfen6fp9rpdmtrYxeVCrMwXcWwWYseSSepNAEWr/2t9li/sH7F9o8+PzPtu/Z5O4eZjbzu2529s4zV6qOr6LYa7axW2q2/nxRTx3CLvZcSRsGRsqR0IBx09avUAc1rGp663iu30XQn063WWye5e5vIXlMZWRVAEauu4EE/xLjrz0qpoPi2/wBTuLWG5it1L6dPPKY1YZljm8v5ck4U4Jwcn3rpzp9q2qLqJi/0tYTAJNx4QkMRjOOoHOM1lzeCtBmSBHs5AkAkVVS6lQOsjbnRwGHmKSc7WyPagDnX8Za/LHpslnBpuJ7KyuJ1lWQZaeTyyFIPygZByQemOc5HU+GdSudV0CG5v/K+075IpTChRGZJGTcFJJAO3OCTjPU0sfhjSIo4Ujs9qwxQwxjzH+VIW3xjr2bn375q7ZWNvp1qLezj8uIOz7dxPLMWY5PuSaALFcxrkTav4qtNEnuby2smspbljZ3Ulu8jh0UDzIyrAAMTgHByM109Z2saDYa7Eiagk2Y87Jbe5kt5Vz1AkjZWAPcZwe9AFbwjeXN94Zt5b2RppkeSEzOADKEkZA5xxkhQePWofF1rYz6fG19NqYlyY7aDTb+a2knlYcKPKdd3T+I7QMk4AJq7L4c0maHTYmskWLS5Vls0jJRYWUFQQFIB4J4ORTNZ8M6br1xbT6h9sWa1DCGS0v57VlDY3DMTqTnA60AWNDhv7fQbGLWJhPfpAi3Eo6O+PmPGO9Y2uRNq/iq00Se5vLayayluWNndSW7yOHRQPMjKsAAxOAcHIzXR28CWttHBEZGSNQqmWRpGIHqzElj7kk1n6lpGleJLdftJeQRMyrNZ3ckMiHOHUSRMrDkYIz256UAQ+Eby5vvDNvLeyNNMjyQmZwAZQkjIHOOMkKDx61H4strCfT421CfUkIYpbw6dfTW0k0jDhR5TKWPHc7QMk4AyLcvhzSZodNiayRYtLlWWzSMlFhZQVBAUgHgng5FM1rw1puvy20uo/a1ltSxhktL6e1ZNww3MTqTkDvQBNoEOoW/h6xh1mbz79IFE8mQdz455HU+/esnXkfVPFOn6HNPd29jLaT3MjWlzJbvI6NGqr5kZVgBvJwCM8Z4rRudW0PwvaWlrqmsW1gjDyoDqN988uO2+VtznpySTUuraJYa7BGl+sv7s7o5ba5kglTI52yRsrAEdQDg96AKnhG7ubzw5G15K80sU00HnSY3SrHKyKxxxkhRmmeLLawn0+NtQn1JCGKW8OnX01tJNIw4UeUyljx3O0DJOAMi3L4b0ma00+1ayRYNNlSa0jRigidQQp4Iz1PXNM1rw1puvy20uo/a1ltSxhktL6e1ZNww3MTqTkDvQBNoEOoW/h6xh1mbz79IFE8mQdz455HU+/esnXkfVPFOn6HNPd29jLaT3MjWlzJbvI6NGqr5kZVgBvJwCM8Z4rRudW0PwvaWlrqmsW1gjDyoDqN988uO2+VtznpySTUuraJYa7BGl+sv7s7o5ba5kglTI52yRsrAEdQDg96AKnhG7ubzw5G15K80sU00HnSY3SrHKyKxxxkhRml8UW2nz6aj6rcahFHHIPLTT7ya3klc8KoMLKzE5+7nHftkTy+G9JmtNPtWskWDTZUmtI0YoInUEKeCM9T1zUPiHRdG1hrEa1LLDJFMTaNDqEto/mFSCFaN1JO3dx6ZoAm8NwajbeHLKHWZGkvVj/eFmDMOeAWH3iBgE9yM1neIhJqHiDSdEkmureyuo55p3tLh4Hcx7NqeYhDKMsT8pBO3HTIrY0lbNdJtxply11aBP3UzXLXBcevmMzFvqSaZq2i2Wt26Q36S/u33xyQTyQSxt0yskbK65BIOCMgkHg0AUvCNzcT6NLHdTSXDWt3PbJNKQWkSOQqpJ7nAAJ7kZp3ii20+fTUfVbjUIo45B5aafeTW8krnhVBhZWYnP3c479siWXwzo82l2mnSWS/ZLKZJ4I1dl2yIdytkHJOeTnOT1zS634c07xD9mOpC6DWjmSB7W9mtnRipUndE6noSOvegBfDcGo23hyyh1mRpL1Y/3hZgzDngFh94gYBPcjNZ3iISah4g0nRJJrq3srqOead7S4eB3MezanmIQyjLE/KQTtx0yK3bK0jsLOK1gaZo4l2q087zOR7u5LMfck1X1bRbLW7dIb9Jf3b745IJ5IJY26ZWSNldcgkHBGQSDwaAKXhG5uJ9GljuppLhrW7ntkmlILSJHIVUk9zgAE9yM1kfETxVaaNp40ptbtdGvL+CVkup7hImijUclCxwXJIVRzyc9q2bvQtAXTdP0y8hhitoLlJLSIzFMzJl1IOQWbgsc5zyTmtJJLTVdP3Qyx3VpcIQHifcrqeDhh/SgCl4W1CHVPCel3lvdpeLLaxkzpKJA7bQG+YE5Oc596o+I/Mvdb0jRmmube0vPOed7Wd4XfYoKoJEIZck5+Ug/LjpmtpDZ6ZbW1r5kdvENsECPJjdgcKMnJOB9eKrXljpfibTYi7i5g3b4bi0uWjZSMjKSxsGU9RlSO4oAqeEp55NMuYLmeW4+x3s1rHNM255ERsLk9yBxk8nGTzVjxHardaLIrWmpXhVgwg0y+NpM59pBLHx7FgPrTZ/Cui3GjW2lTWINlazx3EUQkYYkR96uWByx3DJJJyc5zmrWqaVb6xaC3u5LuNAwbNpeTWz5/wB+JlbHtnFAFDwZM8/hOzMt495Im+N5JSxdSrkbGLAFmXG0kjJIz3qDxH5l7rekaM01zb2l55zzvazvC77FBVBIhDLknPykH5cdM1tadp1ppOnxWWnQLBbxDCIuT7kknkknkk8knJqvrmnabqGnMdYJigt8y/aFuGt2gwDlhKjKycZBII4JHSgCn4Snnk0y5guZ5bj7HezWsc0zbnkRGwuT3IHGTycZPNWPEcNhLo7tq1zeW9tGwYmzupoJGPQKGiYOSSQAoPJwMGo5PDGh3uh2mmm0STT4JY7mBElYDejB1fcDlju+Ykk7j1zmp9a0Cw8QW8MOprcFYJRNE1vdy27o4BAIeNlboT3oAg8J22oWnhyCLVnmaYO5RbiXzJY4i5MaO+TuYLtBJJJI6nqa/id5Z7/RtKE08FtqFw6XElvK0TlViZgodSGXJA5Ug4Bq3LeaL4Q0iIanqsdjaK2xJ9U1AsWY8482ZiWPXqTU99Yafr+molx+/t3xLFNBMyMvHDpIhDKcH7ykHBoAz/CUky2+o2E089zHp989tBNcSeY7RhVYBnPLEbiuTknHJJyateI4bCXR3bVrm8t7aNgxNndTQSMegUNEwckkgBQeTgYNMfwnosnh9dFkst1gsiy+WZX3M4bfvZ87mYsMkkkk9c07xDpOk6va20WtySRJHcK0DxXslqwl5C7XjZWzyQBmgBnhO21C08OQRas8zTB3KLcS+ZLHEXJjR3ydzBdoJJJJHU9TX8TvLPf6NpQmngttQuHS4kt5WicqsTMFDqQy5IHKkHANaejRWMOlxx6XdPd2yFlWWS8e6YkEggyOzMSDkcnjGKdqelWmsWf2a/jdkDBlaOVopI2HRkdCGU9eVIPJoAzPCUky2+o2E089zHp989tBNcSeY7RhVYBnPLEbiuTknHJJyai8fQ3TeCtTns9TvNPe2tJpc2jKhkxGcAsVLLzzlCrcdauP4U0aTw7/AGG9nu08sGaMyvudg2/cz53MxYZLEkk9Sal1zw9YeI7D7Fqn2o2/IZLe9mt94IwQxidSwwehyKALlizPp1szkszRKSScknAqeqWlaTbaLYi0smumiU5H2q7luGHtvkZmx7ZwKNW0ix1zTZLDVIPPtpCpaPey5KsGHKkHqBQBdoqlqukWOuaY+n6pB59rIVLR72XJVgw5Ug9QKNV0ix1zTH0/VIPPtZCpaPey5KsGHKkHqBQBdooAwMCigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooArQf8AH1L/ALi/zarNVoP+PqX/AHF/m1WaAOB+Jujx3v8AZuoT2FlrEFnOgm028RWDozglk3fKrYQj5hggkZXrXb2M0Fxp9vNaLtgkiV4gF24UgEcduKo6v4Y0LX7i2n1vR7K/mtWDQSXECu0ZzngkZAyBx0NatAHH+LtP1C51JLpRPeaZbW5ae0stZm0+4jbJO9fLKrJkcYkdANuQeTVS41K71HVLS00rX7nSNMfQhfK5jjknyHGGLzB+i/eyDn1B5PT6n4X0DWruO61nQ9N1C4iGI5ru0jldBnOAWBI55qrqPhHTdY8QJqOrWtrfQpaiBLW5tlkVWD7g43ZAI6dPxoA5G88VeJNTt/D1tYwalDPqGlG9lfSktBKXG0YAu2ChPmyQAW5Xkc51jf6/qV9omj6hqEnh28uNOa6ujbLA8skylQ0aFxImBkscA9sHGa6jVNE0rXLVbXWtMs9Rt1bcsV3brKgPqAwIzUV14a0K+0qDTL3RdOuNPt8eTaTWiPFFgYG1CMDA44FAGL4vsrqHSdPm/ta5lW3urVJYZre2kS6JnQbnDREhhnIKFMHmqvjPWdcj8RWOi6JHqaie0luTLpYszMWVlUL/AKUwTaN2TgFuRyOc9dHplhFp8NjFZW6WcAURW6xKI49pBXauMDBAxjpio9V0XS9dtVttb02z1GBW3rFd26yqG9cMCM+9AHI6tc+K/wCxdPv7ya905YbISalBpH2R7iOXgliJ1dDGAGPyNuz03du1tJ47qyguIJDLFLGro5GCwIyDjism98KeFpLeCW/8PaTLHp0WLcyWMb/Z0XnCfL8oGOgq0df0xdFttVNzixuvLEMvlt83mEBOMZGSw6jjvVxpzl8Kv0+YXNKiiq2oaja6XZm6v5fKhDqhbaW5ZgoGACepAqYxcnaKuwLNFFVH1O0j1eLTHmxeSwtOkW08opAJzjHUjjOaai5bICp4ieSPT4DDrkOiMbuEG4mRHEg3jMIDkDL/AHQRyCeOa1qgu7G01CJYr+1huo0kWVUmjDhXU5VgD3BAIPY1PUgcD4w8+48dWNoLHX9Rt/7OkkNvo2qGzKt5ije37+ENwcdT9Kn8VXtzpum2WnaJceIIb1LV5hDZNazyrGoA3TS3ZZSASAcOWJPcAmuzNtAboXJhjNwEMYl2DcFJztz1xkZxVXUdE0rWGgbVtMs75rZ/MgNzbrIYm/vLuB2njqKAOSg1rVddXwxZf2s2kPqemG9lubaKIyTSBU/doJVdQPnLH5ScAYxzUninTtWXVPDEFr4q1m1WS5NvO8K2wMuIZG3sDCVLEqOMbfRQcGujuPDGg3elrpt1omnT2CuZFtZLSNogxJJYIRjOSecdzT5/D2i3OjJpFzpFhNpkYASyktkaFQOgCEbRjtxQBj6o2pS69pnh+31u8sVezluJL+KKAzzsjIu3542jH3yThB2xjmsaw1rXvEF7pFlHqr6clxbXvnTwW8TPL5MyxpIm8Mq5HPQjk8dCOvuvDWhX2lQaZe6Lp1xp9vjybSa0R4osDA2oRgYHHAq4llaxywyJbQrJBGYomEYBjQ4yqnsOBwPQUAFlFPBYwRXdz9qnSNVknKBPNYDlto4GeuBXK+KPEmp6Lr4tLDyp3urPzba3mXgtG5M3TDEmMjHuBx1rsahks7aa4juJreKSaNWVJGQFkDY3AHqAcDPrigDnYddurnwybu3mWW41K6kh075RgKWIRvcKqlz7A10FhZx6fp8FpBuMcCBFLHJOB1J7k1BFo1nb3VrNbxCFLOFobe3jULFEDjJVQODgAew+pq/QBgeMNGg1nRTHNoek6y0ZLLHquBHFwQXUlH+YDtxn+8OtS+Dbi3uvBOjzWc008DWcflyzkF3G0ckgkfkT9T1q1q2gaPr8UcWu6TY6nHE26NLy2SYIfUBgcGr6qEUKgCqowABgAUAc78Qf+Sd67/15Sfyqh4y1nVrK40XTdHjv86gZN8unC288bEDBU+0sI+eScgnAOB3HXXFvBd28lvdwxzwyLteOVQysPQg8EVBqOladrFibLV7C1v7ViCYLqFZYyR0O1gRxQBzFrrOu6ZaaLe+J82sMiy299HKIso3JilYxkqCQuCAxXLjFU9e1zxDBb6HaW6ah9o1Z5pZG09LQTwqBvWJftBEeQDgk7iQpx6jsItE0qHSk0yHTLOPT0xstEt0ES4O4YTGBzz060/UtK0/WbJrPWLC2v7ViC0F1CsqEjkEqwI4oA5LXJdVm+DOpt4ggaDUPsUolRyhYgEhWbyyUDFcEhSQCTitHxSuuNbWj6JdXcUMSM9zHpv2f7XJwAoT7Qpj29c52npg9jtwaPpltpP8AZdtp1pFp+0p9kjgVYtp6jYBjHtiodW8N6HrwiGu6Np+pCHPlC8tUm2Z643A46dqAJNEvodT0GyvbW4luYZ4FdJpkCu4I6sAAAfXAAqa6sLa9ktpLqISPay+dCST8j7SufyYj8anRFjjVI1CIoAVVGAB6AUtAHMa7p2pWOk2Vl4Uee0trfcZYbBoftTIBwIvtCtGfmIzuxx0YdDj6z4nv/wDhH/DaaDLql2dVkaJ7qKO1W7+RGJAEuyEOSpzwRgNgdDXX6t4f0bX44013SLHU0iJMa3lskwQnqQGBxUl1pGm32l/2be6fa3NhtC/ZZoFeLA6DYRjAwO1AHCX8fiq70Hw++o6vrGiXh1RbaZIfsm+WMuwSSTajpuKhcqp2ZJ+XoBvasdSivdF0GDWryA3SytLqnlQGdzGAQoBjMYJySfk6KcY61rp4b0OPRDo0ejaeultnNitqggOTk/u8bevPTrSS+G9Dn0VNIn0XT5NMjxssntUMK45GEI2j8qAOWF94l1XQgNPvLgtZX1xBPLZC3W6u44yVVoxMphznG7IUcHBHSrN9rpufCmkf2VqOuzXl9xCbOG0F3OUB37vOUQrjBJOFHHy9RnevvC3h/U7K3s9S0LTby1tRi3guLOORIRjGFUjC8ccVNf6Do+qadHp+p6VY3llFjy7a4tkkjTAwMKQQMCgDG8HyP4k8IaRqGuqbi9t5HdZJAqsHUvHuIj+Tdtznb8uScdq2lXTfDui4Lw2GnWceS8sm1IlHcsx4HuTU1np9lp6yLp9pBarK5kkEEQQO56scDk8dai1jSrbW9HutMvhutrqMxSjapyp6jDAj9KAJLiztdQ+zSTxrN5EonhbPCtggMMdeCaxtRJ8MDSW08rBpEc5guocZCrJ92TJ5GHwOuMOfQY6BEWONUQYVQAB6AUy6tbe+tZLa9giuIJV2yRSoHVx6EHgigDh9e8Ra3DpOlPYreO2t3zLGbJLcTQQ7GZAnnkR7mCg5fP3mwOgCR3viyWHQNPvrq40m5vLq5hnlmhtpLh4VRjG52bolk6HjK5H3ccV2t7p1lqVg9jqNnb3dpIAHt54leNgOgKkYNQ2Og6RpcEEOmaVZWcVuzPDHb26RrEzfeKgAYJzzjrQBi6zZ+JINEsbbTtWubq4idmu57dLaO8njAOPLWRDDuyUByFGMkEHg1NVlk1r4XS3lhrWoRmK0leSSa2tmknKKwaOZGiaPGQQdigHHBxXSatoGj6/FHFruk2OpxxNujS8tkmCH1AYHBq0LK1WxFkttCLQR+UIBGPL2Yxt29MY4xQBzeuahdwWfh+ws70aWNTmWB7xI0LRARFgqBgUDMVCjKkdeM4o1Y6np0Wi6PFrl4ZNQu3il1SWKAzqBG8gVQIhHk7QBlDwD35rob3TbHUdPex1Cyt7uzcBXt54leNgOgKkYPSqi+GdBTRW0dNE05dLY5NiLSMQE5zny8bevPSgDI06/vLrw/wCIrS+me7OmyTWqXkiqrXCiINlggC7gWKnAA46CqcV5ep4V8H6dY3kmn/2lHFDJeRIjPGFty4Ch1ZdxK45UjGe+K6+20+ystPSws7SC3s0TYlvFEqxqv90KBgD2qO60jTb7S/7NvdPtbmw2hfss0CvFgdBsIxgYHagDiTreuyXdrpEOqOrJrb6e+oPbxM9xELcyE4ACBw3GQoGV+6RkHr7bRy2mW9rrV2+rS284mS5mjWNiytuQkRgLkcDgAHHTtViDSdOtbe1t7XT7WGGzObaOOFVWA4I+QAYXgkcepq3QBTih0/QtNkKmKzs4i80ju+1E3MXdiSeBkk0+fUbK1slvLm8t4bVtu2eSVVQ7iAuGJxzkY9c0mpWEWq6Xc2FznybmJonwqnhhg8MCPzBpH0uxl02OwuLSGe0iCBYZkDqNuNvB9MDH0oAlu7y1sLZri+uYbaBSA0s0gRRk4GSeOSQKi1VmXR7to75NPYQuVvJFVlgOPvkNwQOvPHFS3dna39s1vfW0NzAxBaKaMOpwcjIPHBANOnghubeS3uYkmhkUo8cihlZTwQQeCPagCPTizaZbF7tb1jEpNygAWY4++AOAD1445rA+Ium2+oeA9XN15xEFlO6ok7orHy2GHVSA4/2WBHtXSQwx28KQwRrFFGoVERQFUDoAB0FU9W0HSNegSHXdKstSijbeiXlukyq2MZAYHBoAn0//AJBlr/1xT/0EVgfEXTbfUPAerm684iCyndUSd0Vj5bDDqpAcf7LAj2rb0zSNN0Sz+yaNp9rp9tuLeTaQLEmT1O1QBmmatoOka9AkOu6VZalFG29EvLdJlVsYyAwODQBPp/8AyDLX/rin/oIrA+Ium2+oeA9XN15xEFlO6ok7orHy2GHVSA4/2WBHtW3pmkaboln9k0bT7XT7bcW8m0gWJMnqdqgDNM1bQdI16BIdd0qy1KKNt6JeW6TKrYxkBgcGgCfT/wDkGWv/AFxT/wBBFZnjDT4NQ8KagtyZtsVtLIFjneMMQjcMFI3L/stkH0q/pmkaboln9k0bT7XT7bcW8m0gWJMnqdqgDNJqui6Xrtqttrem2eowK29Yru3WVQ3rhgRn3oAi8Of8itpX/XlD/wCgCq3jDT4NQ8KagtyZtsVtLIFjneMMQjcMFI3L/stkH0q9pWi6XoVq1tomm2enQM29orS3WJS3rhQBn3o1XRdL121W21vTbPUYFbesV3brKob1wwIz70AReHP+RW0r/ryh/wDQBVbxhp8GoeFNQW5M22K2lkCxzvGGIRuGCkbl/wBlsg+lXtK0XS9CtWttE02z06Bm3tFaW6xKW9cKAM+9Gq6Lpeu2q22t6bZ6jArb1iu7dZVDeuGBGfegCLw5/wAitpX/AF5Q/wDoAqt4w0+DUPCmoLcmbbFbSyBY53jDEI3DBSNy/wCy2QfSr2laLpehWrW2iabZ6dAzb2itLdYlLeuFAGfejVdF0vXbVbbW9Ns9RgVt6xXdusqhvXDAjPvQBF4c/wCRW0r/AK8of/QBUfifT4NR8O3kdyZtscLyARTvFuIU8NsI3L6qcg9xVnStF0vQrVrbRNNs9OgZt7RWlusSlvXCgDPvRqmjaZrloLXWtOtNRtwwcQ3cCyoGHQ4YEZoAq+E/+RM0b/rxh/8AQBS+J9Pg1Hw7eR3Jm2xwvIBFO8W4hTw2wjcvqpyD3FT6ToWk6DbvBoel2WmwyPveOzt0hVmxjJCgAnAHNO1TRtM1y0FrrWnWmo24YOIbuBZUDDocMCM0AVfCf/ImaN/14w/+gCl8T6fBqPh28juTNtjheQCKd4txCnhthG5fVTkHuKn0nQtJ0G3eDQ9LstNhkfe8dnbpCrNjGSFABOAOadqmjaZrloLXWtOtNRtwwcQ3cCyoGHQ4YEZoAq+E/wDkTNG/68Yf/QBWjeXltp9nLd39xFa20Kl5ZpnCIijuWPAH1qtpOhaToNu8Gh6XZabDI+947O3SFWbGMkKACcAc1ZvLO21CzltL+3iuraZSksMyB0dT2Kngj60ALNd29tZvd3E8UVtGnmPNI4VFXGdxY8AY70kl7aw2LXstzClosfmmdpAIwmM7t3TGOc0s1pb3Nm9pcQRS20ieW8MiBkZcY2lTwRjtSSWVrNYtZS20L2jR+UYGjBjKYxt29MY4xQBJHIk0SSwuskbqGV1OQwPQg9xTqbHGkMSRQoscaKFVFGAoHQAdhTqAP//Z)

summary(iris)

![A screenshot of a computer

Description automatically generated with low confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM5OQAAkpIAAgAAAAM5OQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDowMDowOAAyMDIyOjAxOjA0IDIwOjAwOjA4AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MDA6MDguOTkxPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAOYCQQMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APoq3dY9PieRgqrECzMcADHWpkdZEV42DKwyrKcgj1qG3Yrp8TKpciIEKuMnjpzxWDo3h+8tdUkv90ekwSNuOmWDb43OWy0m4bQx3bj5aoc9XcVtCEZRk5Stb8f1/TvYR0tZ9n4g0bUb2az0/V7G6urfPnQQXKO8eDg7lByMHjmr7/6tsLuOPu+vtXJeHbbVrfUjbQ2F/puipbsi2uoSW8gjfI2+S0Ts+PvZ8w/3duORV0acJwm5OzW2qX/Bf9a9xt3Onjv7SZYWhuoJFuFLQlZARIo5JX1H0rN0nUPDllbQadpOpWPlhzHFCl2rkuQZNoyxJO0lsenPSsDw/putRNoVtd6Q9rDpVtNbyzyTxnzGKqFZFVj8hweTg+qiq2n+Eb61hsG/s6OOaKOxSRlKZHltIZBkHnBYH3zxmuz6ph4uSlU9NV3a/JJ/MnmfY7GHX9HuZkit9WsZZJJPLREuUYs+3ftAB5O35senPSi28QaNeapLptpq1jPfw58y1iuUaVMHBygORjI7VyGl+E72zXTnOnRxTQrYLKylMgRtI0gyDzgsD754zTrex8TTeLrDUNTtr6SK0uZVaMNaC2RHVlV4sHzSAMbt5zzwp6BywmHvLlqLRdWt/wBe3QXM+x1sfiDRprz7JDq1jJc+UZvJW5Qv5Y4L7c52jB56VZN7arbxXDXMIhmKiOQyDa5bhcHoc5GPXNZHhLRF0rw5aW91ZQw3MbSuwCqSGd2JOR3IIyaytCsXk8QzaYSr6boNwXt8Nn55FyqH08tWYY9GT0rB0KLlPklpH8Vtp6u33+RV2dCNVefXG0+ytvNS3AN3cNJtWIkZVV4JZ+hI4ABznoDFpviG11bWr2z06azuoLRF3z295HKRISwaNkU5UjaOT1z7VV0uVNK8RajYXrGN9QuftNo78LMCihkU9Ny7D8vXGD64uQWVwni68vWjxbyWcMSPuHLK8hIx16MPzpShTimrfZTT77X/AFXlbuGpNBrukXV+tjbapZTXbR+atvHcI0hTON20HOM8Zqvp/iK01TXrvT9Ons7qO0jBllt7yORo5NzAxtGp3KRt6n3HaoPCWiDSfDtpBc2UMF1E8rttVSQzuxJyO5BGTVmOznXxdcXpj/0d7KOJX3Dlg7kjHXoRSlGhGU4x1ts7+e/zX9MNdCWDX9HutVk0y21axm1CLPmWkdyjSpjrlAcjGfSm2GrSXGoXGn31qbS7hHmKA+9JoycB0bAz6EEAg+owTh6Hb6ra66sVnp2o6bpIMjTQX0tvLFuYlt0JR2kBLEnDkKB0A6VbtZI9Z8aDULFi9pYWsls06j5JZHdSVVv4tuzkjgE46g4udCnFyS1Vr3vez+WmvbW3cV2dHRRRXnlhRRRQAUUUUAFFFFABRRRQAyGGK3iEVvGkUa9ERQoH4Cn0UUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVH5EP2n7R5SeeE2ebtG7bnO3PXGecVJRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBGbeFrlbhoozOilFlKjcqkgkA9cHA49hUlFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBFaf8ecP/XNf5VLUVp/x5w/9c1/lUtAATgZNYWk+JpNZuU+y6FqS2EoJj1J3txC4HQhRKZBn3QH1ArcOdp24zjjNcZo/hnUoPEkd++laRoUQaR7r+yL2RxfswIzLF5UaZyd2872GMA8k0Abll4r0fUdWbTrO5kecFgrG2lWKUr94RylQkhHcKxxg56GotN8aaDq99Da6feSSvPvEUn2WVYpGQkMgkKhC42nKZ3DB44rnvDPgW60HWrX7Rapd21i0ht72TXrx2XcCARaOpiU4YqcN6kYzioPBularqul+H5LoWkOmabPNdRSRSs0075kQKyFAEA3k5DMTgcCgDrYPFOlz67/AGOGu4rw79gnsJ4o5dn3tkjoEfGc/Kx45qnpGo60PGOo6RrFzYXMMVrFcwPa2jwMod5F2tulcNgIORt78ViWfhLxFH4ttNXvpYbp7W5kLSyavcMs0ThlytuU8qFlG3AXO7nLDqeoh0mePxnd6uzx/Z5rGG2VQTvDI8jEkYxjDjv60AazKHUqwDKRggjrWV4XfS5fDtvLoFhHp9i5cx28cKxBfmIPyrwMkE1Z0/8AtTzr3+1fsfl+efsf2bdu8nAx5m7+POenGMVheErLxLotrb6VqNhpX2GEyf6XBqMjysCzMP3RgUDrz8/HvT5nblvoBo2/izRrrWv7LguZHuCzorfZpRC7r95FmK+WzDByoYkYPHBqCx8c+H9SvILaxvJZjcO0Ucq2k3kmQZzGZdmwONp+Qtu9q5/RPAd1o/iC3eW2S9s7a6luIbuXX7wNEX3kYsyGhyN5XO4Z5OAeK07bwrfQ+GtD05pbfzdPv1uZWDNtKh3bC8dcMOuKQGhH4z0OXVBp8dzMZ3laGNvsc3lyuoJZUk2bHI2tnaTgjB5qLQfHGl+ItQns7G21aOWCVoma60m4hTKgE/OyBV69GIb26Vx2jXkh8RaH4cs9Q0XUYtIv5nc6deGecIElG6dAAISC4U8tuY/w4xXZaVp2r6V4g1ALb2Uul31010bg3brPGxRRt8ryypGV67x16UAUvDnj/T9Vit4L2UrezXEtvmG1mMAdZHURmXBRXwv3S2eenIrrq5KHwrfR+GdM05pbfzrTU1vHYM20oJmkwOOuD+feutoAKKKKACsGw8TyanqHlWOg6lLY+a8X9pB7cQZUlWO0y+bgMCPuZz7c1vVxlp4c1U+KotQOlaPoyrO0t1d6ZeymW/GCAssXlIpzkHLM5XHHXNAG3F4r0efW/wCyormRrku0Yb7NJ5LOoyyCbb5ZcYOVDbhg8cGo7Xxlod5qKWVtdyPK8z24f7LKIvNQkNGZCuwP8p+UnJHIBFc3pPgK50nxHFI9st9ZRXst3Fcy6/eKYi7M3FptaEkbyM7hnrgGoPDel6vrFvFC62cOkWuuXN206zMZ5GS4kIj8vZtA3YJbeTgY296AOvPirS115NHka7iu5HMcZlsZ0hlYKWKpMyCNjgHgMeh9Kq2mo6zD44fStRuLG4s5bR7qDyLR4pI8SBdrMZWD8HqAv0rBuPCPiSfxZb6tNLBdGz1E3MLSavcqkkJDJs+zBDFGyq/DDcWK8kbiR1T6VO3jKLVg0f2dLB7Yrk7txkVs4xjGB60AaxOATjPsKxk8U6a+kxXwc7pIo5Ra7l84LIwRcrn+8cZzjg1cs/7U/tC+/tD7H9j3r9i8jd5m3b83mZ4zuzjHauKg8AapDrtte/arMxrqDGZcvk2St5sUY45cSAHnjDNjmgDpbTxB9u8YT6VBlIbe2LyJPZ3EMjPvxuR3UI6Y7qTz7VW1PxnZ2+pW1hYO0s7X0drKzW0vlcn5lWXARnH90MSMHI4rTOmzHxYuqbk8gWJt9uTu3Fw2cYxjA9a5yHw14gikt7ANp39m2urfb1uGlkaeZGkaQoU2hUILYzuYMB0XPABp6P450vW9YudNtLbV0nt5fKZrjSbiKPO0N99k2rwf4ipPYEEE09H8f6fczTWupy7LlNSmsgYLWV4oyshWNZJACkbMNpwzLncMDkVdsdO1jTPFWoS29tYz6ZqVwtxLO926TQkRKm0RCIqwygOS69TxxzSfwnfN4XudNEtv50urm+VtzbRH9qE2DxndtGOmM9+9AHX0UUUAFFFFABXL2/jmCbUPJfR9ThszetYLqL+SYWmDFcYWUyAFgQCUA9cV1FcpoHga00+9nv8AUg9zdtfz3UKm8mkgi3yMyssLHy1cA/eC5yTzyaANNvFejrrg0k3MhujIIiwtpTCJCMiMzBfLD4/gLbuRxzVSx8c6Vf8AiK40aG11dbm3kWNnk0i5WLJBP3ymFHHVsA9iRzWGngS6tvFMlwbVNQsJdQ+3h5tevIPJYsG/49VVoXKsMgkrnjI4yd5NP1ew8YXd9Y29lcWOoiH7Q8128UsBRSvyoI2D5GDyy0AWbnxTpdnrUWl3TXcVxNIIo5GsJxAzkZC+fs8vJ9N3XjrVNtR1q18e2um3VzYTabe2880SR2jxzRGMxgBpDKyvneeiL2rE1nwl4i1DxKb8Sw3EdveR3VoZdWuIkCIR+5NsqGL+8fNO5s44Hbp7vSbi48XaZqqtGIbS2uIpFJO4tIYyMcYx8hz07UAbFUtN1WDVftf2dZF+yXL2r7wBllxkjBPHNEH9qf2xd/afsf8AZuxPsvl7vO3c79+flx0xj3zWFpNl4l0jWL+NLDSp9NvNQkuftB1GRJkR8ceV5BUkY/v8+ooA0bjxZo1rrK6XLcyfaTIsTMltK0UcjDKo8oUojHIwrMCcjjkVBJ458PxahJZm8leWG4+zTmO0mdLeTIAWR1QrHncMFiAe2a5+78B3X/CU3N2tsmo2N5fJesJtfvLUQsCvH2dA0UuCm4Z254B6ZrUufCt9N4b13T1ltxLqOoNdRMWbaql0bDcdcKemaANC78Y6JY6obC5uZlmWRIWdbSZolkcgLGZQpQOdw+UtnBBxiq9r460q88SXGiRWuri6t3VGd9IuRFls/wAezAHyn5mwp7E1yGrXclrrdx4asdR0W8e61qG8NvFeF79MyxyMrQAfKqgFvMLfdAG3nNdkdO1ey8Y3Goafb2VzZ38cKXDT3bxSQeXuGUURsHyG7svSgCla+P8AT49U1Oy1aUxvaX5tVNvazSLEuE2mZ1DLHkvwXKg9uhrrq5O78LXs/h/xHYpLbiXVbtp4CWbaqkIMNxwflPTNdWowoHtQAtFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/8AXNf5VX1rUDpOhX2orD55tYHmEW7bv2qTjODjOOtWLT/jzh/65r/KoNXsP7V0W80/zPK+1QPF5m3dt3AjOOM9aAMXTPGP9p6lplpHp7J9stWluGaUH7NIM/uiMfMcq4zkY2+9SaJrF5f+IdYjvIb2zS2jhMdndRwfKDv/AHivFI+4Njo2CMdOasWvhfT9P1MXunRJbSSXD3NztBPnyNGELHJ44A6elWYdJ8rW7/UPOz9shii8vZ9zZv5znnO/9KAMfSfHlpq0mmtHpOqW1pqZKW15cxRpG8gVm2bd+/OFbDbdpxwxyK6mubtPCP2XSfDll9t3f2HKsm/ysediN0xjPy/fz36Vr6fa31tNetf6j9sSacyW6eQsf2ePAxHkfewQTuPPNAF2iiigAqlBqXn6xd6f9ivI/syI/wBpkixDLuzwjZ+YjHI7ZFXazxp93JqN+15qBm0+5iWOKzEQQwHBDnzAdx3ZH0xxQBlaR4mudW8X3llHBEulR2oktrjJ3zsJGR29NmRgeuCehFdLXL6P4C03QfEKalp1zqAjjtBax20+o3M6KASekkjDGOAuMDqK29Ptb62mvWv9R+2JNOZLdPIWP7PHgYjyPvYIJ3HnmgDDtddv28cy6SNS0nUrdFdp4LOFkn0/gFPObzXB3ZwBtQnqAQDUNj4n1SaTTtTuPsX9japcm3ghSN1nh+9sdnLEPu2fdCrt3Dk45v8A9galdeJrfU9W1O1lgsWkNnBa2TQsN42kSSNI+8Y7AKM4J6CoLLwlcWt5aRSamkmkWEzXFpZrbbZFc7sB5NxDKu87QEU9Mk45AK9h4m1WeXTtSuBZf2PqtybaCFI3WeHO7Y7OWKvu2/dCrt3Dk456+uZsvCVxa3lpHJqaSaRYTNcWlmtttkVzuwHk3EMq7ztART0yTjnpqACob24+yWFxc7d/kxNJtzjOBnGamqG9t/tdhcW27Z50TR7sZxkYzigDl9H8cvqv9go2lNBPqSv9rjM4b7Eyg/KSB8+SrAdMgE1c0vWL298Z6hZ3NvfWMNvao0dvcxwFJMyOPOR45GbB242sFxgHHJp9l4Q0/TrqG6skSK586Oa6lVTm5ZITECefl4I6en41fTS9niObVfOz5tqlv5W3ptZm3Zz/ALXTHagDGsvHtrfTWxj0jVY7K4uTaLfzRRpEJgzLtwX3kErwwUryOeuOprm4vCPl6DYab9tz9jvxe+Z5X38SmTbjPHXGc/hWvZ2t9DqF9Nd6j9pt53U21v5Cp9mULgruHL5POT06UAXaKKKACqSalv1yTTPsV4vlwLP9rMX7hssRsD55cYyRjoRV2qSWt8Nckum1HdYNAsaWPkKNkgYkyeZ1ORgbenFAGNcalrun+LbC0uZ9Ou7LUJZES2gtXjnt0VS3mNIZGVwCFU/IvLjnsemrm9L0LW7HxJeahcavp91b3cpZkOmutwsY+5GJfOKhVz/c5yT1JNa9na30OoX013qP2m3ndTbW/kKn2ZQuCu4cvk85PTpQBzkPifVXlttVb7D/AGHdXxsVg8txcIfMMay+Zu2kFh9zYCA2dxxgonijVGkj1X/Qf7DfUDp/kGNxcA+b5Ql8zdtI3j7mwcHO7tVqHwlcRX0MX9pp/YtvdG8isRa4k80sXAMu7BjDEkKEB4HzEDBF8I3C3yQjUoxoiXhvlsRa/vfO3+Zjzd2PL3ndt2Zz/FjigCqnijVGkj1X/Qf7DfUDp/kGNxcA+b5Ql8zdtI3j7mwcHO7tXY1zC+Ebhb5IRqUY0RLw3y2Itf3vnb/Mx5u7Hl7zu27M5/ixxXT0AFI7bUZuuBmlpHXcjL0yMUAcdpXj9tUtNHcaU0U+oXBinhM4P2VeMPkL82d8eBxw3tWjBq95P47OnywXtnbR2juiTRwNFdEOo8xXWRnGM42sq5zntUen+CdP05LaW3CC+RLZLi7CHNwsA+UEZwOp/PvWq+l7/EcOq+djyrV7fytvXcytuzn/AGemO9AGKPH1o07bdJ1Q2kV8bCe+MUawxS+Z5Y6uGZSxHzIrAZ5wQQOqrmm8IbvD8+mfbsedqRv/ADfJ6f6QJtmN3ttzn3x2rYgtb6PWLu5n1HzrKVEEFn5Cr5DDO5t45bdkcHpigC7RRRQAVSfUtmuR6Z9ivG8yBp/tYi/cLhgNhfPDnOQMdAau1Se1vjrkd0uo7bBYGjex8hTvkLAiTzOowMjb05oAzLPWNVfxrNpOoW1nDbCzNxCYJXkdv3m0FiQoGR/CAcf3jXQVy/8AYHiL/hMv7a/tvS/I8r7P9m/sqTd5O/djf9oxv7btuP8AZrbgtb6PWLu5n1HzrKVEEFn5Cr5DDO5t45bdkcHpigDnJfE+qCWfVYvsP9iW9/8AYHgaJ/PYiQRtKJN20AMfubDkDO7nAW68T6okl3qkH2L+xrG9FnNC8b+fJ8yo0ok3bVCs33ChyF+8M8WJPCVw99JFHqUceizXYvZbIWv70y7g5Al3YEZYBiuwnOfmwcAuPCVxLeTRRamkWj3V0Ly4s/s2ZGkBDELLuwqFlBIKE8nDDPABXuvE+qJJd6pB9i/saxvRZzQvG/nyfMqNKJN21QrN9wochfvDPHX1zFx4SuJbyaKLU0i0e6uheXFn9mzI0gIYhZd2FQsoJBQnk4YZ46egAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAitP+POH/rmv8qkcMY2EZCvg7SwyAfcZGfzqO0/484f+ua/yqR1LRsquUJBAZcZX3GeKAOb8K3urS6lr9rrV9HeyWd1GkZhtxCigwIxCrljjJJ+ZmPPXGAIvDviu/125vIXsdMtZoIy62Z1Njdxkk7BPCYQYsgdQW9tw5qbRvCE2j6pd3x8TaxeteNvuIrlLUK7BAgb93ApBAUdCBxyDU+neF/sespqd/rOoatcxRNDAbxYFEKsQWA8qJM52r97d04xzQBS8Ha74k1z7TJrWl6Va20NzPAJLS/kkfdHIVA2NEoI4Pzbhn+6M4HSXl0ljYXF3KCY4ImlYDrhRk/yrM03w6dK1W4ubXVb77JcSPKdOZYfIR3OWYHy/MyTk4LkcnjpjXkjSWNo5FDo4KspGQQeooA5HT/EGupcaLc6yLA2WuMEht7eF1ltGaNpFDSF2EvCkEhU59av6d4r/tC10Sb7H5f9qyyx483PlbA5z05zs9utU4fB11pmp6bNp+pPe2Fg5EOn6ht22qEbcwuihsqpIAk35HAK9as6b4KtdNvrSddS1GdLGWSS0t5ZE8qESAhlAVAWHzHBYsw9cEggHSVSgur6TWLu2n07ybKJEMF556t57HO5dg5XbgcnrmjT9N/s+a9k+23l19rnM+25l3rDkAbIxj5U4zj1Jog03yNYu9Q+23kn2lET7NJLmGLbnlFx8pOeT3wKAOd0y71SHxtcQa5eavDFPLL9ggkjtDZzoOQEZFMoYLzh2GecZA46452naQDjgkZrHTw6reIF1a+1K+vmhLG1tpvLENqWGCUCIpJxkZcsQCcYzVuw0z7BJeuL68uPtc5mxcS7xBkAbIxj5VGM455JoAyfDt5qzeINcstZvorv7IYDGYLfyUTchJAXcx7d2P4dKy9O1nVnj0jXZtReW01a68htOMEYjgRt+xkYLv3DaN25mBycAcVq6V4Sn0vXrjVG8TavePclfPhuEtRHJtBC52QKwwD2I981La+ErW11SO5F7eyW1vK01tYO6eRbyNnc64UOfvNgMzAZ4A4wAY2m6zq0i6Prs2ovLaavd/ZzpxgQRwI2/YyMF37htXduZgcnAHFdvWDa+ErW11SO5F7eyW1vK01tYO6eRbyNnc64UOfvNgMzAZ4A4xvUAFB6cdaKDyPSgDm/D95qzeJ9ZsNXvobsW0du8XkW3kom8PkAFmbsOrHnpjpUWieLLzWNeurB7LT7QQCQi3m1Bxe4Viqu9uYRtRiMhg7AggjOal03wjPp3iGbVj4n1i6e42ieCdLQRyhQQoOyBWAG49GB9SamtPCxi1iHUdQ1rUtUe13/AGWK7EAWAsMEgxxIzccfMW/PmgCl4W13xPq+pahFrGk6TbWtpdvbtJa6hLI6kKpA2tCob733sr/u+vUu4jjZ26KCTWTa+H/sWu3GoWmqXsUNzIZZtPCwmB5CoUvkx+YDwOA4HHStgjIweRQBxVj4n12SHStavBp/9j6tOkUVpHC4uLdZP9W7S7yr9sqEXG7qdvOnaeLPtVvZy/Ytn2rU5dPx5uduwyDf05z5fT368VSfwXc2N3YyaNqLTWNnc+dHpF8F8iIHPMboocEbiQHMi9gF4K2rfwRaW+pxXQ1PUnit71723szIghikffv4VAzAlycOzYOMYoA6WqSXV8dcktW07bYLAsiX3nqd8hYgx+X1GBg7unNFnpv2PUL66+23k/2x1fyZ5d0cG1duI1x8oPUj1oTTdmuSan9tvG8yBYPshl/cLhid4THDnOCc9AKAMGZtVtPG1nBaa3dahHcO73mnyww+VaQbTtcMiBwdwCjczbvm44yOrrA03wvLpmtXN/F4g1SWO6naeWzlW2MbMRjG4QiTAAAA38AAdK0rPTfseoX119tvJ/tjq/kzy7o4Nq7cRrj5QepHrQBxMHibUX+IgsJdRvYozfPAsT2sf9nyxBCdqT7N5nyMFN/BDfLgVaj1vVXji8QjUZPscmqGwOl+RGYxH55hDhgvmeZkbs7iuONvetaLwZaw6l541C+ayW6N4mmsY/IScndvB2eZ94ltpfbk9KlHhG1GrC6+23v2Vbg3S6bvT7OJyc+Z93fnJJ2l9ueduaAMSPW9VeOLxCNRk+xyaobA6X5EZjEfnmEOGC+Z5mRuzuK442967msEeEbUasLr7be/ZVuDdLpu9Ps4nJz5n3d+cknaX25525reoAKKKKAOZ0m71geO9S07VNQhurdLGGeGOC2EKx7pJR3ZmJwqgktjjIC80mn+Kru+8Wz6RJZ6faJG0gSO41BlvZUXjzVtzFgxk9GDkY98gPt/CE9v4nfWz4n1iWWRVjeB0tPKaNWZlj4gDYBY8ht3qalHhXzNbg1DUNa1G/S1mae2tJxAIoHIK5BSJXOAzAbnPXnPFAFHQte8Uaj4n1SxvtI0iKysblYWmh1GVpFUxK4IUwgOTuHdcZxzjJ62sZfDph8RS6raarfWq3DK9zZRrCYZ2VdoZi0ZcHAA+VwPlHvnZoA4lPFWtGzh8QMtiNEmvFtls/Jf7QEaXyhL5u/b1w2zZ0ON2a1R4rzbzy/Y/wDVauNMx5vXLqu/p/tZx7dao33gqeKRH0XUG+yx3Yuxo94FNoz7t5IZV8xDu+YZZkB/gPGLbeCrWTUXuW1HUBC96t+LNZEEKzggluE3MDjkMxHcAHBAB0lUnur4a5Harp26waBpHvvPUbJAwAj8vqcjJ3dOKINN8jWLvUPtt5J9pRE+zSS5hi255RcfKTnk98Ch9N365Hqf228Xy4Gg+yCX9w2WB3lMcuMYBz0JoAyLO71ePx/Np9/fQz2jWBuIoobbywn73aMksxZscE5AP90V0lc3/wAIjP8A8JR/bf8Awk+sebt8v7PstPK8rdu8v/UbsZ77t3vWvBpvkaxd6h9tvJPtKIn2aSXMMW3PKLj5Sc8nvgUAcZL4pvJ/FVzJNcataaRYaitiz2dvbm33YX/XtKDKQzOFzEMKOpHJFi61nVil/r0GovHaafqH2T+zfIjMcsYdUdmbbv35LEYYDgZU81sT+D7SfVZLr7bex20063Nxp6OnkTzLja7ZUuPuqcKwU45BycuuPCVrcao1y17epayTrczaejoIJplxh2+Xf1VTtDBSRyDzkAxbrWdWKX+vQai8dpp+ofZP7N8iMxyxh1R2Ztu/fksRhgOBlTzXcVg3HhK1uNUa5a9vUtZJ1uZtPR0EE0y4w7fLv6qp2hgpI5B5zvUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/wAecP8A1zX+VUfEt1cWPhXVLqyl8q4htJHik2htjBSQcHg8+tXrT/jzh/65r/KkvLSG/sprS7TzIJ0MciZI3KRgjI5oA4rw/wCJNW1LXbK2ubg7LJZLPUV+zhBPdKu4sMjptCsNpx+8x24i8N+PdT1rWLd3s5Tpt35pCro93F9kVQSrNcv+6l3bcYUDBYYLYzXdPaQyTQSumXt8+Ucn5cjB+vHrWbZ+FdL0/VGvrIXkDszMYEv5xbgt1Ig3+UMkk8L1OetAHNWmoarrGr+FdVvnsvsV9NLNbQwwuskKmByA7liHJHUhUweMHrWno0V3F8QNX/tNrKedrKBkntreSFvK8yXajBpXBIwfmAXOenSr9l4O0PT9QivbW0kE8Du8Be5lkWDcMMsasxCKc/dUBehxwK00sbZNSlv1jxcyxLE77jyikkDHTqx/OgDj7PxjezePbfS1vLW/0+6eeNWh0m5hERQZGLlnMUxGCpCAEH6EUzS/FHiSe10fVNQ/stbHUL37GbWCGQyjLOqyeYXwPujKbD3+at2DwVodvfJdwQ3SSRTedEBfz7IW5zsTftRTk5VQFPcHAq5H4f0yKxtLNLbFvZTCeBPMb5HBJBznJ5Y8HigDSqlB/an9sXf2n7H/AGbsT7L5e7zt3O/fn5cdMY981dqlBo9jbaxd6rBBtvbxEjnl3sd6pnaME4GMnoKAOZsLe50jx27ayLhxqU8wsLhNZuJYsYLeW9q2I4yFBwVDdD0PXs6y4PDmm2+tvq4SeW9YMFe4u5ZliDdRGjsVjzgZ2AZqfT9HsdKmvZbCDynvpzc3B3s2+QgAtyTjgDgYFAHn2g3983jiG4u21JLW6u7lLfUGv3ktNRUZ2RJb7isJGD821c+VwW3mr2mT3Yt9D8QG9vnvNUvTBdWz3LNDsbzMIsROxCm0cqAx2nJOTXTWfhLRrDUzf2tvKsu9pEja6leGJ2zuaOFmMcZOTyqg8n1NSW/hfSLXWDqcNqwuNzMoM8jRRs33mSItsRjk5ZVBOTk8mgDltLnuxDoXiBr2+e71S+MF1bPcs0OxvM+VYidiFNo5UBjtOScmu/rJt/C+kWusHU4bVhcbmZQZ5GijZvvMkRbYjHJyyqCcnJ5Na1ABVXU5nt9Ju5oW2yRwO6HGcEKSKtUyaFLi3khmXdHIpRxnGQRg0AefeGvE2uX99oun3t6ZJrNvI1aX7MEF1I8TSRMvGACoDnb0LAeoqTSPHmp6t4mijgspn06W9mtDEujXYMIQsvnNdEeSQSn3QON33iRz2/8AZ9tstU8r5bMgwDcfkIUr688EjmqEfhbS4NYOpW4vIJjIZWjh1CeOBnPVjAriMk9SSvJ5PNAHLvqWr6zfeHtTmex/su41ci3gSJ1miVY5lDM5YhyducBVxnq2Odi1ivE+JUx1B7KfdpzG2kgt5IpIo/NHyOTKyvyc5CqatxeDNCh1RNQSzc3EdwbmLfcyskEhDBmjjLFY872ztAznnNav2G3OpC/8v/SREYRJuP3Cc4x06igDjpvGV7B48s9Mhu7W9sbq8a1ZItJuV8giNm5u9xhdgUwUABGfao4/FXiM2q6tN/ZaacurGwa2WCRppU+0eSHEm8BCODt2tnHUZwN5/BGhPem68i6WT7QLlVS/uFSOXOS6IH2oTk52gbskHIJzc/4R3S/7P+w/Zf8ARvtP2vZ5jf63zPM3Zzn7/OOnbGOKANOqSf2p/bkm/wCx/wBleQvl43ef5245z/DsxjHfOau1STR7FNck1hYMX8sC2zzb25jDFguM46k84zQBzV/EbH4g6fNG2rWUdxOUkmnvnltLomJsRJD5jCNsqDuKIPlwCScHsqyP+EW0o68usSx3M94jF4vtF7NLFCxGC0cTuUQ4yMqoOCR3NWrPR7HT9Qvr60g8u41B1kuX3sfMZV2g4JwOBjjFAHF20921vY+JDe3xvbjVjaS2v2lzAYTO0WzySdgKgA7gA+VOTgkUR3F41vF4lN5fC9fWTZNa/aX8jyftJh2eSTsyF+bftD5744rqk8LaQmtjVVtn+1Bi6qZ5DEjkYMixbvLDkE5cLuOTzyaP+EX0j+2xqv2Z/tIcyBTPJ5IkIwZBDu8sPj+Pbu96AOVjuLxreLxKby+F6+smya1+0v5Hk/aTDs8knZkL82/aHz3xxXoNZH/CL6R/bY1X7M/2kOZApnk8kSEYMgh3eWHx/Ht3e9a9ABTZCViYjqASKdSEBlIPQjBoA818P+LNev8A+yLG6vC11DLFNqE32YKs8M/+pUfLtHVs7cHMfbPNyPx3qdz4se2s7KWWxi1D7C8CaPduxAO1pvtQ/cqAedhB4H3snFdpHpVnFY2tnHDiC02eQm4/Js+7znJx71SfwtpbaydUQXkFyziR1ttQnhikYfxPEjhHOAASynOBnpQBzGp6nqmsrb3gezXSk1yG2SDyX8/MdwELmTdtOWU/LsGAc7j0rVliu0+J1k981lPE9lc/ZDHbyRzQKGi3KzeaVfJI52KRj61ffwdocmpG/e0kab7QtyFNzKY0lBz5ix7tise5ABOTnOTWnJY20uoQ3zx5uYI3jjfcflVipYY6c7V/KgDj9Y8Y3un+MrWxtLy1urSS9itZrdNJuSYi45zdhzCrgkHYVzg47g0y68UeJI4dV1JP7Lj07S9SNqYTDI81zGGRSd29VjYbj2cH/ZrduvBWh3l9NdTQ3QkmkErLHfzxxiQEESLGrhVfgfOAG688mrj+HtMksLuye2zb3kxnnTzG+dyQSc5yOVHSgDSqk/8Aan9uR7Psf9leQ3mZ3ef524Yx/DsxnPfOKu1SfR7F9cj1hoM38UDWyTb24jLBiuM46gc4zQBwdt460/V/ibp6W3iayW1zc2aabHex7pHXaN8iZzuLAhQewJ78ek1Xlsbee9t7uWPdPbBxE+4jbuADcdDnA61FBo9jbaxd6rBBtvbxEjnl3sd6pnaME4GMnoKAOa19Gs/GWm3Uf9rWaSXEaS3rX7tZSBsqIPs/mEB2OPmMagZzvzwU1i3udO8aRavqQuJNKkkggieDWbiLyJGO0brUYidSxGWJJ5+6QK3ZvDOmXOtJqlylzPcRsHjSW9meFGAwGWEv5YYeoXNOufDmm3msxapdpPNcQkNGkl3K0KMOjCEt5YYZ+9tz70AcneT3b2+p+Iftt9HeWGqC1gtkuWEJiEiJsMWdjFgxO4gsNwwRgV6BWTP4X0i41hdTmtWa4DiQqJ5BEzj7rtEG2M4wMMVLDAweBWtQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/HnD/1zX+VZ3iuSWHwfq8lvLJDKlnKUkjYqyHYcEEdCPWtG0/484f8Armv8qdNDFcQvDcRpLFIpV0dQysD1BB6igDhNBm1tvEGnx6o+oRx2Cy2I89iFvyE3ef1w+RsAJH3t9Q+ENe8VazqlrqFza6j/AGbctMLkT/YltbcLkL5XluZywKgESZ6nhcAV2Fjreg6xqEttpup6bfXliSJIre4jkktz905AJK9x29KWPw1oUWtNrEWi6emqOSWvltUE5yMHMmN3TjrQByGheItSufHVlFHd6vdaPqUNxLDJqEVmsThCpUw+UBKByR+9HIx9abpOp+IP7O0HWr7XpbkX2ofZJLJbaFITGzuoJIUvvGByGCnH3a6c6H4W03VLcro2mW97eXTTRSR2KB3nCsxfcF4bbu+YnPJ55rUXTrJIIYFs7dYoH8yKMRLtjbJO5Rjg5J5HrQBZooooAKy7R5D4k1BG1qG5jWKLbpqoge04OWYg7iH7ZHbitSoY7K1ivJbuK2hS5nVVlmWMB5Av3QzdSBk4z0oA4y00e28OfEZJ5rTR7mfW5p3huo7ER30Hy72Dy7mMiY+XOFx8o5zx2dve2t28yWtzDO1vIYpljkDGN8Z2tjoeRwfWse1fwlp/iu4t7JtFtfEF4u+eKIxJdzjrlgPnYd+a2LeytbR5ntbaGBriQyzNHGFMj4xubHU8Dk+lAHlegRC18Y2uuz6fZtaX17eJa6lapnULhsMfKueBlBsfABb7seQuOdDwprS6l8Smu7uHVob2+01swXWm3UKW6LICkYLxhRgZy3QsSMngV2ttpfh+18Q3FzZ2Omw6zNHvuJYoY1uHQnGWIG4gkdT6VLFqOjXGvS2kF5Yy6tbxYlhSVDcRxkg/MoO4LnB546UAcxcadZ6Z8TdOvDpOn6e988qR3djjz71/L3MJxtXCjBIOXycZ29+3rC06Dwnb+KL1dJi0aLXmXfeC2WJboqSDmTb8+CcHJ9q3aACqmrO0ei3rxsUdbeQqynBB2nkGrdI6LJGySKHRgQysMgj0IoA838NS66LzQLTUbjU/I05/s5ubmQ41LzIWdXZs/PtUAEkfez6VJoGveLNY8SJdLZ6l/Z41Ce1uIn+xC0iiRmUMuH+0eZlVJzwcn5QMGuwttX8P3uqHSrPUNNuL6x5NnFPG0tvgbfuA5XAOOg64p0nhrQpdaXWJdF099UQgrfNaoZxgYGJMbunHWgDj7bxHqUvj7Tls7vV59Hv7q4t913FaLasURifJ2AT5DIRl+CM8ng0yPVfEI01dcm12VkTWzZixS2hWJ4TdeVhyVLlgDwVZegyDyT1Nzonhey1FLm40bTUvNQulxN9iQvNMAWUlgudwwxDHp61qf2bY/Z/I+xW/k+b53l+Uu3zN27fjGN27nPXPNAFmiiigArLjeT/hK5kOtQvGLRSNKCJ5kZ3H98Wzuwfu4IxxWpUIsrVb5r1baEXbxiJpxGPMZAchS3XGTnFAHGatp1hp3xH0fUX0nT7GS7umiTULMgXV5IYXykw2qfLAXP3n5VeFAzXZw3trcXE8FvcwyzWzBZ40kDNESMgMByCRzzWHZf8ACGL4xuhpv9gjxKVP2kQeT9sI4J34+fH3c59q3IbK1t7iee3toYprlg08iRhWlIGAWI5JA45oA86tbe2EWm64YoR4km1xrWW4ziaRPOYPCW6lFjGQh4G0HtmtHUNItNE+IdrrV3aaPeSaterBA8lkBe2z+SRmOYk7lwhyoVcBmOe1blvceEZfGU4tZdFfxKkWyby2iN4qDHytj59v3eDx0p8SeFYvGMvkro6eJZIcybBELxouOT/GV4HtwKAMtPC3h6/8cHULbQtNiuNNk82W9jtEWWW5ZeAZAMnarZOepZfSuvrOh1LRYdZk0m3vLCPU3BuJLNJUEzA4zIUB3HtzitGgApspxC5HB2mnUEZGDyKAPLvDtzr8kGh297cambe1lguDfTSHF8JxxGWzl9mXBB/2OtXbXXvFepeLrhrGz1JrO01Q2csI+xLaLCpAZ2Jf7R5mDuGAF6DaRzXWw6t4dfUxoFvf6W19agEack0ZlhCgEHygcrgEHpxxUlz4a0K91eLVbzRdPuNRhx5d5Lao0yY6YcjIx25oA5C78RainjixOm3mrz6ZcambGbzorMWSsEbcicC4LBl6nK5zzim3mp+IEstb1ka9KkWl6q0MFlHbQhJIw6ArIzKWP3jgqUI75rp9S0PwtBcvf6no2mG4vZoopLh7FHeaTcvl7m2knDBcE9MDpitRtOsngmgazt2infzJYzEu2Rsg7mGOTkDk+lAFmiiigArLkeT/AISuFBrUKRm0YnSiieZIdw/fBs7sD7uAMc1qVCbK1a+W9a2hN2kZiWcxjzFQnJUN1xkZxQBxvifTrS08ZaRq8ukafb77yGM6rbkfbpJGyoiI2DMZ4yd7HA+5j5h2Ud7ay3ktpFcwvcwKrSwrIC8Yb7pZeoBwcZ61hyP4KtPGamZtBg8TTAKpYwreyAjAA/jOQPyFbkdlaxXkt3FbQpczqqyzLGA8gX7oZupAycZ6UAcvP4W8Pap43W6j0LTRdWEi3NzfLaIJnnI+RfMA3cD5jz3TsTVTxBo9tpfjS18TXlppF8tzcW9oi3FgDdwOTtDQzFjwM5KbRwCd1dfFJYRahNbQNbJeSAXEsSFRIw+6HYDk9AMn0x2rOlTwtH4wieZdHXxJJD+6ZxELx4wD0/jK4z04oA4HWbfzPHt5rb2Nhc2FlqdrBLfMP+JjaSAKNkJx/qSXjyNwPzS/K24GvWawrmDwm3jC2e7i0Y+JPL3W7SrF9s2AEZTPz4xu6cda3aACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yqWorT/jzh/65r/KnTzxWtvJPcypDDEpd5JGCqijkkk8AUAcPb6za6n8SVFtqenay1vbXMa/2afm04ZTKzkM+WYrgcpjaflPJFjwJp0snhrS9duNT1S9vprAeYlxeu8UhOCP3ZO0EYwGABOeSTzXVJqNlJLbxJeW7SXMZlgQSqTKgxllGfmHI5HqKs0AeXeH76zv9d8Mz/2rc3mryTTNqdu908yW03kvlChJWEgkgIAuRk4OMj0nUPtH9mXX2H/j58l/Jz/f2nb+uKsUUAeX+G10Q6l4dPhkQf26rf8AE+Me37Vt8pt/2vHzbvM243856Vb8OeJPtsnhnTxqklxfJdXSX8QlZ2QqsmEl9G+6Qrc8ZA4rub3SLHUbm1uLu3V7i0ffBMCVeM98MMHB6EdCOCDVygClp+sWOqzXsVhP5r2M5trgbGXZIACV5AzwRyMiqVjNYt4x1aKDVLye9SGAz2MjMYbdSG2sgIwC3OcE9B0raooA8u8I397ZatZ2K60s2ozX9yNT0XykBhQtIwuDx5oPCAMzFGDAADIx6Da63aaiuoLpbG7n0+VoJogpQiUKDsywA7jnpz1qna+L9Ku9Yj0tF1KK6lLrGLnSrqBHKjLYkeMIeB2PNblAHm/hGTUh8Q7iXVvD+oWWoXumh7u4nktmUESNtA8uZjsA+VRjPGSBkmm6VcW0kXh7R4pIm8QWOoyTXsCjMsAPmeZI46qr7hhjgNuXGa7O08VaPe6w2mW1zI1wCwUtbyLFKV+8I5SoSQr3CsSMHPQ0tv4o0i61g6ZDcsbjcyqTBIsUjL95UlK7HYYOVViRg5HBoA4zSbi2kj8O6PFJE3iCx1F5r2BRmWBT5nmSOOqq+4YY4DblxmvSaybfxRpF1rB0yG5Y3G5lUmCRYpGX7ypKV2OwwcqrEjByODWtQAUUUjuscbPIwRFBLMxwAPUmgDiZ9Ytr74l6fbRanp+rNbPKotLHHn6cfLwzzkM2QfugER4LD7xxiTwPpb3Vjba3eatqtzdia5QpLeuYSnmuApizsO3s2N3AG4gYrqIdW064jtHg1C1lS+XdaMkykXAxnKYPzDHPGeKt0AeVWd/Z3uvaJJPq13Lrx1lxf2Bu3lS2wk4VWh5SEYA2kBS+M5bJz6nJu8pvLxvwdufWnUUAeT6HHpDS6G2ni3/4TVbxP7XK7ftoXnzvPx83l4xt3fL/AKvb/DWhpniYSXenaU2qyS6kviC4jubcSs8kcWZyiygfcUgLtDYBwMZxXd6jo9hq32c6hbLK9tKJoJMlXhcfxKwwVOODg8gkHgkVdoApWesWOoahfWNpP5lxp7rHcpsYeWzLuAyRg8HPGapRTWJ8c3MK6peNfiwRn08s3kJHvOJAMY3k5BOc4A4raooA4bVNatLv4jaRYJqWnanJb3TY0605ubFvKcNNKQzfIM4wVjwXHLHAPWWesWOoahfWNpP5lxp7rHcpsYeWzLuAyRg8HPGaP7YsP7cGjfaVOoGA3PkAEkR7tu49hye/X8Ku0AcNqmtWl38RtIsE1LTtTkt7psadac3Ni3lOGmlIZvkGcYKx4LjljgHNjuLfyYNDeaE+JF183Zt8ZmEf2gsZtvUIYTjf0wdue1d9/bFh/bg0b7Sp1AwG58gAkiPdt3HsOT36/hVX/hKNI/tsaV9pf7SXMYYwSeSZAMmMTbfLL4/g3bvagDi47i38mDQ3mhPiRdfN2bfGZhH9oLGbb1CGE439MHbntXpdZH/CUaR/bY0r7S/2kuYwxgk8kyAZMYm2+WXx/Bu3e1a9ABRRQTgZPAoA4fWdYtLr4gaRYJqenalJbXYP9mWvN3aP5TAzSEM3yAN0Kp94fMeFMvhPTZNRmuNVvNV1SSa21W8SKL7a4hEYldRGY87WUdRuBI7EDiunj1jTZobaaLUbR4rt/Lt3WdSszc/Khz8x4PA9DVygDyy6v7W81RPt2p3J1xNfijk04XbssMAn/dkwA7EUqFIkIBYnG45xXqdFFAHk1uumN5GwW/8Awnw1QGfO37aI/P8Amz/H5HldP4NuK1G8SeXdXWltqkn9ojxJGothKxkjt2kTG4DlYyMgZwpzgda7nU9JsdYtlg1K3WZEcSRnJVo3HRkYYKsPUEGrgGBigClBrFjc6xd6VBPuvbNEkni2MNivnackYOcHoapSzWI8c20LapeLfmwdk08M3kPHvGZCMY3g4AOc4J4raooA4rVNQg0rx1Euk679o1G/nhS70EGKQ+XjaZsBfMj2qAdxbZxjGSK6iDWLG51i70qCfde2aJJPFsYbFfO05Iwc4PQ1Xn8Sabb6yullrma7YqGW2s5pli3dPMdEKx56/ORxzWrQB57aa54Q0/4tS21hqmiW001iY5YobiFGkuTNypAOTIfQ81Xvri2SHVdFuJIv+EhutaW4tbcjM0iiSMpKq9SioMFhwNpBPFdnL4q0eHW10qS5kFyziPcLeQwrIRkRmYL5YcjnYW3cjjkUs/ijSLfWF0ya5ZbguIywgkMSufuo0oXYrnIwpYMcjA5FAHF31xbJDqui3EkX/CQ3WtLcWtuRmaRRJGUlVepRUGCw4G0gnivSqyZ/FGkW+sLpk1yy3BcRlhBIYlc/dRpQuxXORhSwY5GByK1qACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f8Armv8qzvFUEl14Q1aCGJppJbOVFjRdxclSMAd60bT/jzh/wCua/yqWgDh9F8MX2j69ZzXPlTQwNJBYiBGH2e12Eqj54DbmI44wqDtXPeHoJI/iDa6qfD8emR3H2mC9is/D1xA6yNgqJp/u3AO1j5gUID/ABfMM+sEhVJPQDJrC0jxpomuXUUGnzXW+dS8DXFhPbpOB18t5EVX45+UnjnpQBzfhbTp9N8TRGfTr5NHmEraNFIrONPycurrtzFvHKbj8q5T5fu12un6l/aE17H9ivLX7JOYN1zFsWbAB3xnPzJzjPqDTItf0ebUbnT4dWsZL20XfcWyXKGSFfV1zlRyOtUtG8ceFvEN49pofiHTb+5RmBgguUZzt6kLnLL/ALQyPegDdorNtfEmh32rS6XZazp9xqMOfNs4bpHmjwcHcgORgkdRVLSdc1O58TX2j6tptpaNb28dxFLbXrTiRHd1G4NEm0/JnA3detAG/WLYw2K+MdWlg0u8gvXhgE99IrCG4UBtqoScErznAHUda15ZUgheWQ4SNSzEAnAHPQVXbVLNbC3vWm/0e4MYifafmMhATjGeSw+negCnpaS3mpXep3cUkRDtbW0cilSsSnBbB/vsM57qEq1p+pf2hNex/Yry1+yTmDdcxbFmwAd8Zz8yc4z6g1S0vxNaazr19Y6ZPZXcFlGm+4tr6OVllLMGjaNSShG0cnrnHY1He+MNKttZg0yC9s7m6Nx5N1El0m+0Hlu+51GSPud8dc0Acra6Zf3PibTNLsrm7k0vR797kebpMtr5S7JBtM8nyz8vhfLA4GWJ6mxpkF2bfQ/D5sr5LzS70z3Vy9syw7F8zDrKRscvuHCksNxyBg10ejeOPC3iG8e00PxDpt/cozAwQXKM529SFzll/wBoZHvTNE8Z6Tq/2e3lvbK11K4Mnl6e12hmZVdl3BeGIOwnp6+lAGBpcF2YdC8PtZXyXel3xnurl7Zlh2L5nzLKRscvuHCksNxyBg139FFABVTVkaTRb1I1Lu1vIFVRkk7TwBVuigDz3QPCV9pN9o0kyRGztZQthDFEwa0ieF2kDjoP3mAMcABR1rJtbe4/4WZaav8A2DFp7JfTRXZtNAnSYo6MqNJdj5Z1ZgrHauFyMtxk+sUUAee6Rp09l4yiuG028Xw/NPIdPtjEx+x3B+9Kybcxo/zbc8LlicbwB2tnqX2zUL61+xXkH2N1Tzp4tsc+5d2Y2z8wHQn1q7RQAUUUUAFYkcVkPG91NFpd2uomwRW1BlYW8ke84iDZxuByTxnB605fFWmPq39nQi/mm8wxGWHTbiSAMOCDMsZjGDwctweDVmLxBo0+pLp0Or2Ml64YrbJcoZGCkhiFznggg+hBoA4zQ9M8VWXj60uNW0rTiJre5a7v7e/lk3FmjxwYFAICqqpu+6Cc5HPa2mpG8vr+1Wyu4DZuqCW4i2Rz5XdmNv4gOhPY0HXNJGsjSDqdmNTKeYLL7QnnFeu7Zndj3xUc3iPQ7bWY9IuNZ0+LU5ceXZPdIsz56YQncc/SgDjtD0zxVZePrS41bStOImt7lru/t7+WTcWaPHBgUAgKqqm77oJzkcujt7xbeLw0bO+N6msm9a6+zP5Hk/aTNv8AOI2ZK/Ls3F89sc11Fp4ls9Q8Tz6Rp89ld/ZYS9y8F7G8kEm7HlvEDuXjnJ47VbbXNJTWV0h9Us11N03rZG4QTMv94Jndjg847UAcZHb3i28Xho2d8b1NZN6119mfyPJ+0mbf5xGzJX5dm4vntjmvQazU8SaHJrbaMms6e2qL96xF0hnHGeY87unPTpWlQAU2UZhcDk7TTqKAPNPD/hHUdPt9HmnjQWUDW0ttaLEwlt5Xx9oZx0AyuR6bnz1qlqMEz/EaDVk0COzltNUAuZbbw/O1zLCVKCQ3i/LIrZXKKrFR1I2nHrFFAHnkemy2njb7bHpl9/wj018f9FEbMEvMY+1eVt3LGTkZ6bv3mOd1dtBqXn6xd6f9ivI/syI/2mSLEMu7PCNn5iMcjtkVdooAKKKKACsWWGxPjm2mbS7xr8WDqmoBW8hI94zGTnG8nBAxnAPNbVFAHmcum6hZ+J9QEJ1tdVuNXW5s5IBKLJrdvLD+YV/dHCq4xJ8/A2/w138GpefrF3p/2K8j+zIj/aZIsQy7s8I2fmIxyO2RV2igDzfX9NvrvWZ9C0i5uzbXWoQ3s0Z0mVFiYSJI7C8b90U+X7gBfJwCB0sXkF2lvqfh77FfSXl/qguoLlLZjCIjIj7zLjYpUKRtJDHaMA5FegUUAef3kF2lvqfh77FfSXl/qguoLlLZjCIjIj7zLjYpUKRtJDHaMA5FegUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/9c1/lUtRWn/HnD/1zX+VRapqEWk6Td6hcJI8VrC0zrGAWYKMkAEjnigCxIC0TAdSCBXHeC/BtxpelaTNrl/fXF7ZW2yG1maHyrJmGGCeWg3ccZdnOOh5Odax8XafqF7plrbR3JfUbU3SFkAESj+F+chuGGMH7ppNG8Q/2vrWqQxnba2ax7Y5rO4t51Y7txYSqoZTgbSuRwaAOV8J+F9W0vWtPg1ca9MmmyTtDOHsBZEvuy3yhbg5Dchgfm65wDXR6BHqGl61qdjPpN01vdXst3HqCyQ+ThgCFI8zzN2QR9zHvUumeOfD+sXVtBpt7JP8Aa8+RMLSZYZGAJKCUoE3jBymdwweOK6CgDzu2sPFc/jTTtS1a01CSKzuplaINZLaokisqvDg+cQBgt5hzzwp6DqINOuk8fXuotFi0l06CBJNw5dZJCRjOejDnHetyigCjY3F7dvfR6jp32OOOcxwN56yfaI8D95gfdySRtPPFcDoHhPxBa63p1xf2oWFpvLu/9IVgkVsCtswHfdyxA5GeelemVSg1mwuNYu9Lhn3XlkiSTx7GGxXztOSMHOD0NAFSCwuU8aX1+0eLaWxghSTcOXV5CRjrwGH51zGmaPrMc3h+yuNEKLpF/LLPqDzRbZgySjzIwGLHcXG7cFOT0bkjY07xbcXl5ZyTaYkWk6lI0Vhdrdb5HIBIMke0BAwVipDN2yFziumJwpIBPHQd6AOb0CPUNL1rU7GfSbpre6vZbuPUFkh8nDAEKR5nmbsgj7mPesqx8LXln4U0y0h0+OG6j1oXtwsZQHb57MXJBwTtI9+1b+h+IJ9W1LUrS60uXTnsTF8s8qO7B1J5CEqOnZm/DpVOy8W3F1eWksmmJHpF/M1vaXi3O6RnG7BePaAqtsO0h2PTIGeADp6K5my8W3F1eWkkmmJHpF/M1vaXi3O6RnG7BePaAqtsO0h2PTIGeOmoAKKKKACisjT/ABPpuqalJZWH2yV4ywM32CdYCVOCFnKCNueOGPQ+lNTxbo0msHTI7mVrgMyBhaymJnUZaNZduxnABygYtweODQBs0Vzug+ONL8RahPZ2Ntq0csErRM11pNxCmVAJ+dkCr16MQ3t0qzH4s0eXVzpyTzed5hhEptZRA0g6xicr5ZfORtDZyCMZFAGzRWRZ+J9M1DVpNOszeSyxsyNKthP9n3L94CfZ5ZIPGA3UEdaQ+KtLXXk0eRruK7kcxxmWxnSGVgpYqkzII2OAeAx6H0oA5+Cw1OHxQH0XRtY0hJLwy3ss19DLY3CZO4rF5rsjN1BRIyScsexyfD1nf6lHBZ2mkNBbw+ILi+m1MvEI2CTyfKFDeYXPC8qF25+Y9K9OqK3toLWMx2sMcKFmcrGgUFmOScDuSSSaAPO7Twtq1r4qZL7+3rqzOrNqMUto9gLUFmJXfvAuMgHaQCeOhxwNzQU1TQdTvdPm0C6uYbu/luRqtvNB5bLI24GRWkWQMowvCtwowew62igDINjcHxql/wCX/ow09oTJuH3zIDjHXoK41PC2rQeLJlvP7eubGXVhqMclk9gLZTkFfMLgXGVxghScjGDzgd4msWL65Jo6z5v4oFuXh2NxGWKhs4x1B4zmsa28U3N543u9Ct4dK2WZHnb9TIu9pQNvW3ERyuWC5Ljv9KAKNhb6zbeLUXStM1LTdMe4lkvVu5bWS1m3ZJki2u0yuW2nBCpjdlQa7SuYXxdcNfJMNNjOiPeGxW+F1+987f5efK248veNu7fnP8OOa6egAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yqrrtjLqnh6/sbdkWW5t3iQuSFBZSBnHarVp/wAecP8A1zX+VSOWEbGMBnwdoY4BPucHH5UAc7p/hGDSdYW9spZGElzJcTrNKW2Fk27Yxj5VyS2PVmPer0GlzReItTv2aMxXdvDFGATuBTfnPHT5h+tU/DWs6pqN7rNvrcFnBLYXKRqlo7yKoaFHILsAXOWPO1eMcdy7RPFLa9byXVnoepLZ7GeC5ke323ODjCASllJx0dVx3weKAKNl4VvrbQ/Clm8tuZNFmSS4IZsOBE6fJxzy4644zXQaf/annXv9q/Y/L88/Y/s27d5OBjzN38ec9OMYrG8K+LbzxI8/n+GdR0yOKaaIzzz27xlo3K7fkkLbuP7u3g/MeCeiuJ47W1luJ22xRIXdvQAZJoAkorltO8WX1xdaa+paPHZWGrnFhMt2ZJc7C6iWMoojJVSflZ+eDWhZeJ7K/g0uWGKdV1SSSOEMq5UoGJ3c8fcPTPagDZqjCNTbV7wXf2P+zDGgtfL3edu5378/LjpjHvmr1UYdTEur3lgbO8iFrGjm5kixDLuzwjZ+YjHIxxkUAc7pnhnVbeXS9Ou/sI0jRZTLazRyO00+FZUV0KgJtDdQzbtoOFziuisP7V8y9/tMWZTzz9jFuXB8rAx5mf4s56cYxXO6Z4m1W4l0vUbv7CdI1mUxWsMcbrNBlWZGdyxD7gvQKu3cBlsZrsKAOT0Sy8UQeK9SvtU03SIrPUPL3G31OWWSLYhUYU26hs/7wx70yx8MapDJp2mXH2L+xtLuTcQTJI7Tzfe2IyFQE27/ALwZt20cDPE1rrt+3jmXSRqWk6lbortPBZwsk+n8Ap5zea4O7OANqE9QCAahsfE+qTSadqdx9i/sbVLk28EKRus8P3tjs5Yh92z7oVdu4cnHIAWHhnVYJdO024Nl/Y+lXJuYJkkdp5sbtiMhUKm3d94M27aOBnjr65Cw8TarPLp2pXAsv7H1W5NtBCkbrPDndsdnLFX3bfuhV27hycc9fQAUUUHgetAHIaPoOs23icXrWtjpFkPMM0FhqM00d0WOdxgaNI4m3EsWXLEkgk5zWdpPgK50nxHFI9st9ZRXst3Fcy6/eKYi7M3FptaEkbyM7hnrgGuptPElpe6dZ3cMU+bu4NusJUeYkgLBwwzgbdrZ5PTjPFVYPGVpcavHaJY3otZrh7WHUmWMW8kyZ3Rj59+cqwyUCkrwemQA0rTtX0rxBqAW3spdLvrpro3Bu3WeNiijb5XllSMr13jr0rLj8K6v5cOjS/Yho8Go/b1vEuH+0PiYzCMxbNo+Y4L+YcgZxzxqaN4vTXLqJbPRtVW0kaWMX0sKLCrxsylT8+/nbw23acjnPFSaV4n/ALY1S4trLSL82lvNJA+oM0Ah8xDhl2+Z5o545QevTBoAzLLQdbTxhHqAtrLSbNXkacWOpzSreg5xutmiWNHJIYyAs3y4yQaz7jwj4kn8WW+rTSwXRs9RNzC0mr3KpJCQybPswQxRsqvww3FivJG4kb9pq95c+OJrCaC9sreGzLpFPHAY7g+YB5qOkjOPTayr1zUlv4nN9rElnp2jajd20Uxgl1FPJWCN1+8PnkEjYPBKoRnjnBoA3aK52PxnayX4j/s++Wwa5NomqMIvs7zbtmwDf5n3wV3FAue/SorV9Rs/iE1jNrF1e2dxYvcrb3EcIWBhIqgIUjVsYP8AEWoA6eiudj8Z2sl+I/7PvlsGuTaJqjCL7O827ZsA3+Z98FdxQLnv0p2m+Lo9Wv1hs9H1Rrc3E1s960SCGOSMsCD8+7B28MFK8gEg8UAaaf2p/bkm/wCx/wBleQvl43ef5245z/DsxjHfOaydU0zWNW8Saczw6fbaZp9yLpbkTPJcykIV2BNgWMHcctvbIGMc5Gsmpb9ck0z7FeL5cCz/AGsxfuGyxGwPnlxjJGOhFYKa7qZ8eSaZc3lrZWYkC28M+lT7rseWGPl3JkERYHd8oUnCnjuACFPC+qLJHpP+g/2GmoHUPPMjm4J83zRF5e3aBvP3954GNveuxrjk8Uao0keq/wCg/wBhvqB0/wAgxuLgHzfKEvmbtpG8fc2Dg53dq7GgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yqRwxjYRkK+DtLDIB9xkZ/Oo7T/jzh/65r/Kqmv302l+HNRvrRY2ntraSWMSAlSyqSM45xmgDG0Hw94h0zWtQvb/AFzTbqPUHEs0cGlSQsriNUXaxuHAGFBIIOfUUuj+FL208VS69qd7p0tzJCYWOnac1oZwSMGYmV/MKhcL0xlvWquieMrzVtYsLQx2gVInj1PYSTDdKCfLXngAKTyM4ZDVbQvilp2ueIYbCF9NMN0ZRb+RqazXS+WCSZoAv7oEKcHc3YHBOKAN7RtE1HRtSuhHqFpJpM88twtsbNhOjyNuOZfN2kbi3HljgjnjJ2biCO6tZbedd0UqFHX1BGCK46DxDqmra34euPsi2el300r27x3hdp4/Jcr5se0BSeGABccckGr+j3Woy+ONVi1SL7OyWkJijg1Bp4SheQB9jRJskOOcFhjHPFAFGLw5ren6josdxPFrOk6ZJi3RE8i4g+QoryMzFZtqsc48s98MeKsaT4OvdOu9NM+sxzWelzTPbW6WewlZAw+dy53MNx5AUYz8vQhsHjgt49Xw3OukM8hkCiz1bz7mLau4edB5a+WCP9puceuaj03xtqV6um3lzoMVrpmoXRtFma+3zCTcwVhGEwUO3qXDc/doA6XT7W+tpr1r/UftiTTmS3TyFj+zx4GI8j72CCdx55ogtL5NYu7i41DzrKZEWCz8hV8gjO47+rbsjg9MVdqjDdX8mr3ltLp4hs4o0NveGZW89jncNg5Xbx165oAxtO8JXFneWcc2ppLpOmyNLYWi2uyRCQQBJJuIcKGYKAq9slsZra0+1vraa9a/1H7Yk05kt08hY/s8eBiPI+9ggnceeayPDl5q0niHXLHWL6K7+ymAxmG38lE3oSQBlm7d2P4dK6SgDn/7A1K68TW+p6tqdrLBYtIbOC1smhYbxtIkkaR94x2AUZwT0FQWXhK4tby0ik1NJNIsJmuLSzW22yK53YDybiGVd52gIp6ZJxzBBf3cPxB+wprGoXFu6StNa39mkMSYAKi3kESGUjPOGkAHUg4zV07WdWePSNdm1F5bTVrryG04wRiOBG37GRgu/cNo3bmYHJwBxQBpWXhK4tby0jk1NJNIsJmuLSzW22yK53YDybiGVd52gIp6ZJxz01cRpus6tIuj67NqLy2mr3f2c6cYEEcCNv2MjBd+4bV3bmYHJwBxXb0AFFFB6cdaAMWz8OrZ+JLnUhc74ZSzxWvl4EUjhRI+7PO7aOMDGW654wtL+HFro3if+0rC30Aw/aZLjfNoqteqzklgtyJBjljjKEgcZPWtmx8TG9s7Miz8u9nuntZbYy/6loyfMOccgBcjgZyvTNV9LutSl8eajDqkItxHZxtAkGoNPE6GRwHMbRJsk45wWGMDPHIBqaBpH9h6PHYef5+ySR9+zbne7NjGT03YrGi8JX0vjKDXtTvtNd7YOsT2emNb3MkZyFjlmMrb0Gc7dqgsAeMYqbw/4k1fXpIbj+wY7bTJHmja4a+DSqyOyg+WEwUbaMHduBPK4GagXxhey3kMsGkRPpM+of2el19sIl3hyjMYvLxt3KQMOSeOB2AN06XnxGuq+d920Nt5W31cNuzn2xjFZdhoGr6Rqk39mavaDSJ7l7l7O4sGklQudzqkqyqACxJG5GIyeSMYbaXWov8AEGa31CEQRLYs1uIL9pY5F8wDc8RiXY/PUM3HFUY/HGoyKt42hRR6WNSOnyTvffvd3neUHSMRkMucZ3MpHOAcAkAnj8GXIkjspdShfQob37bFZ/ZCJxJ5nmhTN5m0oHOceWDgAZ9dptI3eKI9Y8/Gyza18nZ1y4bdnPtjGKzLS61F/iDNb6hCIIlsWa3EF+0sci+YBueIxLsfnqGbjipNP17VdX1SX+zdKtDpENy9u95PfMkzMhKuUiETAgMCBl1JweBxkAqR+DLkSR2UupQvoUN79tis/shE4k8zzQpm8zaUDnOPLBwAM+uzoOj/ANiafJa+f5++5muN2zbjzJGfGMnpuxnvisO58c/YvHlr4duU0hvtcxijWDVg94n7suGe3MY2qdp5DnqPXjr6AKSWt8Nckum1HdYNAsaWPkKNkgYkyeZ1ORgbenFZ99oepanr9pcXeqQrpdnOLiKzgtCsrSBSBvlLkFRknCop6c4yDoJdXx1yS1bTttgsCyJfeep3yFiDH5fUYGDu6c1zrXWqW3j0rql7q1tps0wjsVjjtGs5z5WdjHaZ1bcHOSVU4AB5wQCwvhG4W+SEalGNES8N8tiLX9752/zMebux5e87tuzOf4scV09cNHreqvHF4hGoyfY5NUNgdL8iMxiPzzCHDBfM8zI3Z3Fccbe9dzQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBFaf8ecP/AFzX+VR6jYxappdzY3DOsVzE0TlCAwDDBxnvUlp/x5w/9c1/lVHxLdXFj4V1S6spfKuIbSR4pNobYwUkHB4PPrQBKujWSXkVzDCsMkcjSN5aqvmsy7Sz8cnAHPsKoaZ4YOk3X+iazqP9nAts0txA0CBs5AYxebjJJA38dOnFYPh/xJq2pa7ZW1zcHZZLJZ6iv2cIJ7pV3FhkdNoVhtOP3mO3Efhjx1qmva3a5s5Tp16ZcKuj3cX2QKDtZrl/3UobGMKBgsMFsZoA3NO8F22nXllMupajPHpzObK2lkTyoFZSuwBUBYAHgsWYeuMg68emQx61PqatJ588CQMpI2hUZiCOM5+c9/SuT0fxhfXfjiLSnu7XULG5jneKa30m5tlTyyuAs7u0c/BIJTHIz7UzS/FHiSe10fVNQ/stbHUL37GbWCGQyjLOqyeYXwPujKbD3+agDTs/AtvY3ttPBrGpCOzuGntbc+R5cO/dvUHytzBtxyWZm9COc3YfCtlDpOnaestwYtOuRdRMWXczBmbDcdMsemK26KACqMOmeTq95fi+vH+1Ron2d5cww7c/Mi4+UnPPXOBV6qMI1U6veC5NoNNMafZTFu84Nzv35+XHTGPfNAGVpXhKfS9euNUbxNq949yV8+G4S1Ecm0ELnZArDAPYj3zWtp+m/wBnzXsn228uvtc5n23Mu9YcgDZGMfKnGcepNYnhlbu38UeIbO71O81BYTbFHumXI3RknCqFVf8AgKj8+a6cjKkAkZHUdqAMWPw1nXo9Uv8AVr/UGgZ3tbefylitiwwSojjUsdpI+ctgE/WmWvhK1tdUjuRe3sltbytNbWDunkW8jZ3OuFDn7zYDMwGeAOMVfDK3dv4o8Q2d3qd5qCwm2KPdMuRujJOFUKq/8BUfnzXOx6jf2PibTTKdaOq3GqNa3yTmUWTQMHKmMN+6OFVSDFl+u/8AioA6y18JWtrqkdyL29ktreVprawd08i3kbO51woc/ebAZmAzwBxjerzWPUb+x8TaaZTrR1W41RrW+ScyiyaBg5Uxhv3RwqqQYsv13/xV6VQAUUUUAZltoFraa/datE8vnXK4MRYeWhwoZlGM5YImSSfujpzmddNhTWpdTDSefJbrblcjbtVmYHpnOWPerlFAFLSNKg0XTUsbVpHiR3cGQgtlmLHoB3Y1xR8N6g/iy3hsrXWrfS7fU/t5N1c2ws1PLN5SxsZmLM2dsnyjJIAIAr0KigCodNhOtDVNz+eLc2+3I27SwbOMZzketZ3/AAidj/Y/9m+bceT9u+3bty7vM87zsdMbd3HTOO/etyigCodNhOtDVNz+eLc2+3I27SwbOMZzketZlv4W+w6xLeabrWpWdtNObibTo/Ja3dz94/PGzruPJCuozzxk1vUUAct/wgdut8J4dY1OGOO+N/Dbp5GyGVid5BMRZgwZgQ7NgN8uMAjqaKKAKSabs1yTU/tt43mQLB9kMv7hcMTvCY4c5wTnoBVK58Nrfa9BqN9ql/cQ2sgmt9PYxrbxSAYD/KgdiMnAZmAJzjIGNqigDBHhG1GrC6+23v2Vbg3S6bvT7OJyc+Z93fnJJ2l9uedua3qKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIrT/jzh/65r/KkvLSG/sprS7TzIJ0MciZI3KRgjI5pbT/jzh/65r/KpaAIXtIZJoJXTL2+fKOT8uRg/Xj1rNs/Cul6fqbX1kLyF2ZmMCX84t8t94iDf5QySTwvU561zkGnWWi/ExXi0jT9Klvba5MT6aRuvcFGZ7gBVwwPT74yx+YE4N3wY2t32hadruq65LeC4st8lkLWJI9xwVZSq7g2Mg8kEngL0oAt2/hDw7peo2csInhuElZrRH1KchDglkjQyYCY5Majb8o4+UY0Y/D+mRWNpZpbYt7KYTwJ5jfI4JIOc5PLHg8Vxmm3l3qGr+EdSv8AWGuJNSaa5WwZIlFuPJfiPaocgZwdxY5xyOld7qE01vpl1Nax+ZPHC7xpj7zBSQPzoAsUV59o7SWzeFNSs9Vvr641o/6cJruSSOVTCzsyxMxWLa4UfIFxnBq3o3iW9uoPCyXN6jXGoy3PnptQNKiLJg4A4AIXkY7etAHbVRh0awt9XvNUhgKXl7Gkc8okb51TIUYzgYyemKsW97a3bzJa3MM7W8himWOQMY3xna2Oh5HB9ao2rSP4j1GN9aiuIxFFt01FQPaZByxYHcd/bOMY4oAqab4L0jSdWfU7NtT+1SHMjTavdzLJgYG5HlKtgHjIOO1aNho1hpkl7JYwGJ7+c3FyRIx3yEAFuTxwB0wKwfC1hBpvi/xNb23mlAbU7pp3mdiYzyXclj+Jrpre9tbt5ktbmGdreQxTLHIGMb4ztbHQ8jg+tAGNpvgvSNJ1Z9Ts21P7VIcyNNq93MsmBgbkeUq2AeMg47Vag8N6bb6y2qBbma7YsVa5vJpli3dfLR3Kx56fIBxxXnnh238rxrZ61LYWP2XUb67jtNTgGL6dvm/d3RwPkGx8AFvux5C45vaVb20cXh7WIo4l8QX2oyQ3s6nEs4HmeZG56sqbRhTkLtXGKAO1g8N6bb6y2qBbma7YsVa5vJpli3dfLR3Kx56fIBxxWrXm2k29tHH4d1iKOJfEF9qLw3s6nEs6jzPMjc9WVNowpyF2rjFek0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBFaf8ecP/XNf5VLUVp/x5w/9c1/lWX4xUP4I1pWGQ1jMCP+AGgCxp/h7RdJuri50rR7Cxnujm4ltrVI2mOSfmKgFuSTz61dt7eC0t47e0hjghjXakcShVUegA4ArgtC0fULDxJpbarDsjsFlsdOYTeYZbcR7t57hj8q4OT+7z3rH8PeJbef4g2slvfi3sL37TDNDP4hmupBNwVjkgf5LaThyERs4BGOOAD0m10DR7G7kurLSbG3uJZTNJNFbIju5BBckDJbBIz15NaFee+FtSnHiaKz1DVLybS3EraHNcMQb0Z+YO+cyFR9zcMsvzfMRurtdP1ix1Wa9isJ/NexnNtcDYy7JAASvIGeCORkUAUT4Q0ePWRq2nWq6ZqBk3zXFiqxNcgnJWUAYkB/2gSOoIPNW7XQNHsbuS6stJsbe4llM0k0VsiO7kEFyQMlsEjPXk1oUUAQ29la2jzPa20MDXEhlmaOMKZHxjc2Op4HJ9KRbG0S6muktYVuLhQk0wjAeRR0DHqQMnGfWp6xbGaxbxjq0UGqXk96kMBnsZGYw26kNtZARgFuc4J6DpQBm6Dp3w8OvSnwxZ+GTq1mW83+z4rfz4Dna27YNy85BzXTW9la2jzPa20MDXEhlmaOMKZHxjc2Op4HJ9K47SfEGgeK/GkL2OsaaX0kzxW1lFcobiVvuyOyA7lQYIAxz9444rqtP1ix1Wa9isJ/NexnNtcDYy7JAASvIGeCORkUAZVjL4LTxfdJpj6CviNwRdLbmEXjYwTvx857Zz7VZtP+EZ/4Sq8+w/2T/wAJB5Y+1+T5X2vZxjfj58dOvHSsKx1CCy8ePpmh67/aq3U00l/p4MUn9mtjdv3IoZMtxtkLE54xg1l6VcW0kXh7R4pIm8QWOoyTXsCjMsAPmeZI46qr7hhjgNuXGaAOxtP+EZ/4Sq8+w/2T/wAJB5Y+1+T5X2vZxjfj58dOvHStmvNtJuLaSPw7o8UkTeILHUXmvYFGZYFPmeZI46qr7hhjgNuXGa9JoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yqWiigAooooAKKKKACiiigAooooAqXmoxWNxZwyq5a8m8mMqBgNtZueemFNRahrNvp2pabZTpK0moytFEUAIUqhc7snpgds0UV0QhFtX7P8AURoUUUVzjCs/RNZt9e037bZpKkfmyRYlAByjlD0J4yDRRWqinTb81+oupoUUUVkMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP/Z)

#data partition

set.seed(419)

ind <- sample(2, nrow(iris), replace = TRUE, prob = c(0.8,0.2))

train <- iris[ind==1,]

test <- iris[ind==2,]

dim(train)

dim(test)

![Background pattern

Description automatically generated with low confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM1NAAAkpIAAgAAAAM1NAAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDowMjowNQAyMDIyOjAxOjA0IDIwOjAyOjA1AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MDI6MDUuNTM3PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAEABuwMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APo6SaOHb5sipvYIu5gNzHoB70+qOsRNcaVNbrp0Gpecuw21ywWJwf75Ib5fXCsfY1V8PaNd6Rbul3qMlyGOVtxkxQck4QuWkPBA5cjgbVUcVsoR9nzOWvbv/Xn94uprSyxwQvLM6xxopZ3c4CgdST2FYtr4u0m6kvZUv7L+zrSGOU6gLpDCwcsPvfdGCvXPepPFNjc6hoEkNlH50iyxSmHIHnKkisUyeOQCOePWq+hQXz+INU1K80xtOju4oBGkkkbSMVDA79hIB5A4JGMc9htTp0vYynN69rpdV08036WE272Lml67BfaFHqly9rbQSMQrrdpLGw3lVIkX5Tu4498VYs9Y03UWxp+o2l0fKWbEE6v8jZ2vwfunBwehwa599DvZPBi6dJah5v7QErRMykGP7V5hPXH3ecfh1pmj+G7m0vps2y2sU1tdIzxlfvyXBcHAPUqc5raVHDtTkpWd3ZeX5iuzSTxVZx6bcavqTQ6do8fEN5dThfO5I3BccKeNvOW9Bxmzp/ibQtW0977TNYsbq1j2+ZLFcKyxk9A3PynnocGs7R2F94Rk0IkQ6ja2f2SeCThkOwoHx3RsZDDgj6Gqd1ZajrPw8n0afQ7i3nSCGDyrqSBlnCldxG2RhtwD97B9qboUHJxfu+8luvh72e/e6dvkF2dHb65pN5BczWmp2c8VmxW5kiuEZYCOocg/KR3zUdt4k0O902fULPWdPuLK3z51zFdI0cWBk7mBwOCOtGqQXFvo942g20AvjFiIFAAxAwB2BwOgJA6dBWF4QsdXtNc1K61aHUmW9iiKz6g1p5ilNylGFuQvfIwDx1OeKyjRoypSqXta1ldXe19Lfj+A7u9ja0nXrfUtFbU5ZLWG1811SaO8SWJ0DlVfep2/Nwcds4p8euWmow3Y8P3dhqd1ana8Md2uEf8AuuV3bTweo7VhXugXtz4E1XS2tFkmuruZ1hZlIdGuC3OTjlexrQmgXSvE76rP5VppcOmCFpWZURCJMhcfTpxjtVypUG5OL1u7K/RWt5u97fIV2aWk6nHq2nrcxxSwNuKSQTAB4XU4ZGwSMg+hIPUEirtYXhWGQ29/qEkUsC6leNcxwzIUdE2qq5U8qSF3YPIzzg1u1yV4xhUcY7f1p8ilsFFFFYjCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAZO5it5HXGVUkZ9hXN6Hq2vSeE4NX1KKDVZbuOOaK2022FuYlYZO5pZyGxnkjBwOFJ4rorkFrSYKCSUYADvxXKeGdQvpfAVna6Rpsh1GztooJYNWiuLBNwUBsO0JLYweVUj3FAGtpWqXviLwbaanYi30+8vbdZUEyNcxxMecEAxlx+K1J4avrzUNGEuptA91HPNDI9vEY0by5GTIUsxGducbjWZ4WTVPDHgyG18SWluo06FI1bS5Jr1pQBgnyxCrZ9lDVd8Hln0AytDPCJru5lRLiB4X2tM7KSjgMuQQcEA0Aal9cy2lo0tvZTX0gIAggZAzZPq7KvHXr+dZmleIJ9U8J2+sRaVNJNMD/odvKjMCHKnDOUU9M9vxrS1B76OydtKt7e5uhjZFcztCjeuXVHI/wC+TXN+GLPxTonhX7Bc6bo73VvnyBHqkuyXc5Y7mNvlMZ4wGz7UAa2h6zPrnheHVIbOOK4mRytu852hgxXBcL0yOu38DTNA1m+1K4v7TVtPgs7uxkVH+y3RuIm3KGGHKIcgHkFRjI65qh4T0/xDpPhZtN1Ww0oywI/keRfySJMWZmw5aBdg5xkBvpT/AAfoF3on2xp7XT9LtpynkaVpkjPb22M7mUlE5YnJARRx3JJoA6aiiigCtqN3/Z+l3V5s8z7PC8uzON21ScZ7dKy/CevXHiPSP7QlXSfJc4ifS9SN6jeoLeWgBB4wM1tTGRYXMCK8oU7Fdiqk9gSAcD3wfpWH4e0vU4NT1PVdZSztri/MY+y2UrSxoEBG4yMiFmOeTtGAqjnGaAN+iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCvfXi2Fq1w8M8yJ98W8RkcD1CL8zfRQT7UWOoWmp2i3OnXMVzAxKiSJgwyDgj2IIwR1B4ovoLi5tWitLtrN24M6RqzqP9kMCufcgj2NV9N0Ow0p5JbWEtczACa6mYyTS4JIDO2WIGTgZwM4AA4rZKn7PX4v63/4H3C1uTalqEOl6fJd3O8omAFQZZ2JAVQO5JIA+tYlhr+oXOpar5ml3w+ywQNHpzeQJQzb84bfsOQB/Hjj1yK1dc0r+2dKe1E3kSB0lil27gjowZSVyMjIGRkZHcVBpGkXllqN5f6lqCXlxdxxIwit/JRNm77o3McHd3JPXnoBtTdGNGTlZy87918u99b9hO9ylp3iE23g+PVdTN3cs05jZTBGsoJmKBNqMV+UkDIJzjNS6T4utNWklT7He2ZigaZvtUar9xyjqMMclWHJ+6cjaW5p//CN/8U+mmfavu3YufM8vrifzduM/hnPv7UWPhpbS8aaS485GgmhaPy8ZEkpk657Zx+tbSeEkpvq27enTTYXvFWLWdSt/DM/iKe3mvxLD58GnWvlJ5UWCQSzkZbGCxz/ur62tP8Tef4cfWNV0y70mCOETEXDRSF1K5yvlOxPpyAT6UaVYXaaLLoWpwnyYYfs8V3G67ZoiCo46q4GM8Yz0J6CFfDVzeeFbnQdfvba7tZYBbxtbWZhZEAwN26Rwx4B6Ae1Evq7bUrfEtVe/L5W0276/MNRR4xtYrLUJ9S0++06SwiWeS3uRGXeNshWUo7LgkEckYxzgc1JP4ivIPDt3qjeHNSV7cFhaPNbb5FAzuDLKVC/jnjgHjNLRPCV1oNteDTv+Ees7iZVEctjoX2ccE/6wCb94OegK4yasaJ4VGmadqVtczWx/tEnzI7C1+zQJldpKRl3wxzknPJqp/U4tuLT1X82q0v6dd236bs94saVqV54i0LzjY32hSTRq0bytBI3IB3LtZwR2+YA+wqXw/qU9/ZzR3/lfbrKdra5MKlUZhghlBJIBUqcEnGcZPWo9NttW0bRmiu5YNVNvGqW0VnbfZ3KgYAYvKwJ98qPapPD+mz2FnNJf+V9uvZ2ubkQsWRWOAFUkAkBQoyQM4zgdKwqez5Z8trX0t/wdbW79dhq5q0UUVxFBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVyStpMVJBCMQR24rlfC+nXcXgSyutL1KcX15bQzzT6lPPfDJUFtqvKNmcnGCAD2PSusnQy28iLjLKQM+4rmtE0fXh4Sh0bUp49IltYo4YrvSblbh5FUYJImg2rnHTDdetAEvhlpfEfw80x9YubiWa8tEaeeGVreRmI5IaLaVP+7ip/B4ZNAMTTTzCG7uYke4neZ9qzOqgu5LNgADJJNR6NoF54V8Omx0q/uNYaFFS1h1SWKFUA4274Yc49yrGrXhqxvNP0YRamsCXUk800iW8pkRfMkZ8Biqk43YztFAGjcqz2sqpLJCxQgSxKGdOOoBBBI9wfoa5Twvc32r2er2p17UZI0dVt7u6tIre+hyuSWiaJQoz93fECRk4IwT1lxE89tJFFPJbu6lVmiClkPqNwIyPcEe1Ytn4VjtrbURPqmoXl5qMYinv5mjWYIAQoUIiouNxxhepJOaAGeE4tQ8u7ubzW7zVbSWQCza7igVgi8F8wxoCGPIyOgB710NMhhjt7eOGFQkcahEUDAAAwBT6AK2o/av7Luv7P8A+PvyX8jp9/advXjrjrxWF4Mu7uW2ubfVrzV5dRhKefb6tHarJDkcFTbqEZWwSDluhBwQRXRzI0kLokrRMykCRACyH1GQRke4IrM0XQI9HkubiS+u9Svbor515eFPMZVyFXEaqigZPAUdSTkmgDWooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP/Z)

### **scatter plot & correlations**

#scatter plot & correlations

install.packages('psych')

library(psych)

pairs.panels(train[,-5], gap=0, bg=c("red","yellow", "blue")[train$Species], pch=21)

![Chart, scatter chart

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM1NQAAkpIAAgAAAAM1NQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDowNjozNwAyMDIyOjAxOjA0IDIwOjA2OjM3AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MDY6MzcuNTQ1PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAaQB6QMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsTxS0kOlrP8A2/LodvE+ZpreCOWaTIwsaCRXGSxHARmY4A5NbdZWueG9N8RfZTqa3W6zkMsD217NbNG5UqSGidT90kfQn1pMaMi91DXbbwHpxu5vsmr3ctray3AjQtCZZVQvt5QOFbOOVDeo66PhO8u7vSJo9RuDdz2l5Pam5KKpmEchVWIUBd2MZwAMg4A6VLL4a0240t9PuRdXFs8SRET300jAIxZWDs5YOGOd4O7heflGLel6XaaNp0djp0RigjJIDOzsSxLMzMxLMxJJJJJJJJNV1f8AXb/g/f5E9F/X9f8AA8y3RRRSGc141/tuDSXvtBvrmF7WNn8i3hhYSvxgytLk+UuDuEY3kH5TkAE8QX95dx6HaaPqT2A1acg3sEaOyxiF5fkEisuSVA5U8Z6HBGjrHhvTNdkhk1GKYvErIGgupYCyNjcjeWy70OBlWypx0puo+GdL1W0NteRTGPzVmTyrqWJoWVdgMbIwMY28YQgHLZ+8cro0PqHhXUbjVvCem317tNxPbq0rIuFZsYJA7AnkfWtaobO0t7Cygs7KFYLe3jWOKJBhUUDAA+gqaqe4lsFcL4v8fW+jeLNI0OHVLCzle5ha9FzMiuYnYqqIrHkkgksOgA7sK7qq93Y21+IRdx+YIJlnj+Yja68g8fy6UuqfmgezXkct411PVre7FvpGpHTfs+mXWpM4iR/OaIoFjbeDhDvO7bhumGHfrLSY3NnDOVKGWNX2ntkZxWVqnhLRtajiTVLea4ETyMpN1KCRIcvGxDAtGeMxnKYAGMAAbQGBgcChbW/rr/wPu8we+n9bf8H7wooooAKKKKACiiigAooooAKKKKACiiigAooooAyvFGpT6P4T1TUbQKbi2tZJIt4yoYKcEjuM9ao+GrnUoptY03Ub6TVpdPmQRXMsccbyK8SvtbYqpkMTyAOCucnk711awXtnNa3cSTW86NHLG4yrqRggj0INZ2meGdL0i1FvYxTqnnGZzJdyytKxTZ+8Z2JkG3AAYkDC4HyjC7j7GL4GvtYdpLXxVLqqaq8CTtbXwtPKUZIYwm3GSoYgfvDu4HHWuwrL0fw5pmg7/wCzY5l3KFHn3Us+xB0RPMZtiD+6uB7VqVRIVXv/ALZ9hl/s0wi6IxG04JRT/eIHLY67cjOMZXORYoPI5qZJtWQ0ctpmp61f/Ca01O1/0zXLjSEmjICJ5k7RAg4Pyj5jnHSpvB13dS2dza6pcarJf28gMyaqtqJUDKCuPsw2bTgkcluue1aC+HdLXSYdLFu32CG1NmluZnKeUQBgjPzEBRhjlhzgjJzJpWjWeiwPFYidvMbc8lzcyXEjntmSRmYgdgTx2q205NrqD6WL9FFFSBieKWkh0tZ/7fl0O3ifM01vBHLNJkYWNBIrjJYjgIzMcAcms+9m8U/8K7t2ghmbXnWETfZxCJVBdfMYCT93v2ZOD8u72rW1zw3pviL7KdTW63Wchlge2vZrZo3KlSQ0Tqfukj6E+tJL4Z02fTfsNx9smh2IgMl/OzrsYsrCQvuDgn74O7gc8DC6MfUb4XvGu9EUTz301zBI8U/9oCATo4P3X8gCPgEfd4xjnOa2Kq6dpttpVktrZK4jUkkyStK7k9WZ3JZj7kk1aqmSgooopDCiiigAooooAKKKKACiiuJufDmh+IPinq/9vaNp+p+Roun+V9ttUm8vdPe527gcZwM49BQB21Fc3/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TQB0lFc3/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TQB0lFc3/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TQB0lFc3/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TQB0lFc3/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TQB0lFc3/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TQBZu9QuovH2laakuLS40y9nlj2j5njltVQ5xkYEr8A4O7noMbded+AfAPg+8+G3hq6vPCehz3E2k2skssumws8jGFSWYlckknJJroP+FceCP8AoTfD/wD4K4P/AImgDpKxPBWoXWr+AfD+pahL513eaZbTzybQu93iVmOAABkk8AYqt/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TQB0lYlpqF1L4+1XTXlzaW+mWU8Ue0fK8kt0rnOMnIiTgnA28dTmt/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJWJ411C60jwD4g1LT5fJu7PTLmeCTaG2OkTMpwQQcEDgjFVv+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/iaAOkorm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/iaALOg6hdXuteJoLmXfFY6mkFuu0DYhs7aQjgc/PI5ycnnHQCtuub/AOFceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaAOkorzvxp4B8H2ug20lr4T0OF21bTYy0emwqSr30CsuQvQqxBHcEjvXQf8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE1z9n4B8Ht8SdZtW8J6GbePSbCRIjpsOxWaa8DMBtwCQignvtHoKAPRKxPFuoXWmaLbz2MvlSvqenwM20NlJbyGNxyO6Owz1GcjBqt/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAFnQdQur3WvE0FzLvisdTSC3XaBsQ2dtIRwOfnkc5OTzjoBW3XN/8ACuPBH/Qm+H//AAVwf/E0f8K48Ef9Cb4f/wDBXB/8TQBZ17ULqy1rwzBbS7Ir7U3guF2g70FncyAcjj540ORg8Y6E1t1zf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lYnhLULrU9FuJ76XzZU1PUIFbaFwkV5NGg4HZEUZ6nGTk1W/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JoA6SsS71C6i8faVpqS4tLjTL2eWPaPmeOW1VDnGRgSvwDg7uegxW/4Vx4I/wChN8P/APgrg/8AiaP+FceCP+hN8P8A/grg/wDiaAOkorm/hx/ySzwp/wBgWz/9EJXSHODjrSbsrgFFebW2q+MLjTJXvH1Wy1XS7KAfY105Giv7tgQweQRspQsF5idQisSxXB2+kLnaN3BxzVNWDqLRRRSAKKKKACiiigArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oAq+PBqIXTpYrbVrrSI5HbUYdFmMd0w2/IQVZZCoOSVjO4/LwRkVj23jDSPCuha1fR63d39pbXEMUOnar5sNzZyyYAWSS5xII2LBg0g+UbsEgADrtc0nUr64tLvRNZbTbu1LDbLEZ7edWxkSRBlyRgEMGUjnnBIOJdeAZtVjv7rWdX36zdfZ/JvLO28mO1MDl4ikbO5PzsS25juyRwKSGzI/4W/ALDUPJtNO1TULN7XbBo2rLdRTJPKIhiXYuHDE5VlH8PODkb8HizVfM1PT73Qok1uyhiuI7WC/DwzxSEqH850TaFZX3ZXIC8BsgHI8Z6D4mvPCM8N5q5v7qa+sRCumad5S2yrcoWkCs0jFgMkkttAUfKOSbOpfD261yx1F9c1e2utTvfsy+aunAWyxwSeYsRgaRi6sxYsC/OeMYFPp8/wDIP6/4cwb/AOI8mvadeWdnPYRXNlfaYxudE1f7ZDJHNdKpXzAiEHCsGUjkMOua7Dxnd3FrP4bFrPLCJtahilEblfMQo+VOOo4HB9KyJvhzqF/qF3far4gimnuvsOUg0/yoohbTmVVRfMJAYHByzEEk5xhRueIvD2p65a2fk6naW11Y6it7byPYtIm1QwVHTzVLHDcsGH0FPSy9U/lp/kxd/T9H+onjPxlaeD7Kze5a1E99cC3t/tl2ttAG2li0kpB2KFU84JJwACTXPWvxWGoQ20OlafZalqMuqf2a6WWpiW2VjC0qyLOE+ZMKM/KCvzcEgA7N94Y1zVYbSe/1yxXVdOuhc2N1aaa8cafKUdJI2nYurKxBwynpg5FSHwvqd7c6Vd61riXdzp+oG9xDZCGLBheIRou4so+fdlmc5z0BACW+v9bf8EHt9/36/wDAM9PH96zNpjaJD/wkA1P+zls1vibct5InMhm8vcEEZ/5553YGOc1k3fjnxLe67pdjaaTb2Dw6+2m30Ut8SJsWvnZVhCTsOcg8E7VBA3ELa8SeHG0fUJdftp71rubV1vYJrXTGvFtP9GEDLLCjCSVGVT9zBBZT0BNVfDvhTWdWhuNXub97a+/4SE6pazXmnNGJEFusBBty6vGpG/aGbcAFJzzlxs3r5ff7t/1/QJaJ263/AF/4Anh/xlrenadPc6jp32zSv+EgnsWvZb9jOu+7aNCkRQgxqWVfvggA4XAGfTq5I+Bc+F5NH/tH7+r/ANp+d5HT/S/tHl43f8Bzn3x2rraS+FX3/wCAv1uN/E2vP83+hzfw4/5JZ4U/7Atn/wCiErpK5v4cf8ks8Kf9gWz/APRCV0lAgooooAKKKKACiiigAooooAKKKKAOb8ef8i7a/wDYa0r/ANOFvXSVzfjz/kXbX/sNaV/6cLeukoAKKKKACiiigAooooAKKKKACiiigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiiigAooooAKKKKACiiigAooooA8/8Ahx4K8K/8ID4U1P8A4RrR/wC0P7Ms7j7X9gi83zfKRvM37c7t3Oc5zzXfk4Un2rgPhxaeKv8AhAfCkn9s6P8A2f8A2ZZt5H9kS+b5XlJ8vmfacbtvG7ZjPO3tXoFJ6oDiNI8WXt/4Ts7nxZ4fkntNSs0lefTbZruB1kQHy3gG6UHkggK6YwS/O0dsuNowMDHAxiloqm7gFFFFIAooooAKKKKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAK/i/wAX3/h3VtM0/S9Jt9QlvoLictcXrW6xrE0S44ifJJmHp0rG/wCFg+J/+hY0n/weS/8AyLR8Qf8AkevDv/YN1D/0bZ1zutao2k6aZoLV726dhFbWkbhWnkPRQT0AGWJ7KrN2r1sLhaVSlzzPz3Pc9zDB5h9WwzVrLdd/M63SPibBcQyw61Yra6sdQawtNNsZzdSXji3jnyhKJgBZAGZgqLwWYA5rRi1rxleSTPa+ELOzt1cLENV1kRzSDaCWKQRTIBkkD5yflzgZrz/4Z65o3gp/Elrrt1qF7qs2pI098mkzztOv2WFgC0MbBVVmk2x5+UH3ye6/4Wj4Y/v6t/4Ir7/4zXn1KUlNpJ7n2GFx1KeHpzqVI3cU3rbddnqhx8Xa/ZWE8uq+AtYMtv5hk/sy5tbqN1UnDR7pUkfcoBC+WGycYzVn/hYPhiL/AJCWp/2Pn7n9tW8uneb67PtCpvxxnbnGRnGRnyrw1az6h4T0i8u9a8QSXFxZQyyv/b14NzMgJOBLgcntSeI7Sez0lJLXU9Uld7y1hMV/ql3dW8qvcRoySwvLtkRlYhlPUEjiur+z6vJzXX9fI8NcXYB1/YOMk72vZW3t/Ne3yPeqK8Gs9I8R6PrKX/hnWdL0BGffc2GnaXItndfcHzQPcMiHEYG6MI2C3zc10/w88feLNc8aSaF4ts7G2eOzuJz9kspY0YxyQqjRytIyyIyzEkYVlIwQO/PUw1Wkuaa0PWwed5fjans8PUvLtZr80v69UepUUUVznsBRRRQBzfw4/wCSWeFP+wLZ/wDohK6Sub+HH/JLPCn/AGBbP/0QldJQAUUUUAFFeTwax46+I2ta1L4O1+28NaLpF29jBI9gly9/Kn3y2/7qZxgjnmul+Gvi/UPFGk39r4htorbXNFvHsb9Ic+W7ryJEz/Cw/ke1C1X4/Lv+QPR2+XzOzoqC+vrbTdPuL6/mWC2to2lmlboiqMkn8BXlHh/4ral4u+M2n6ZpltcWXhiawnlge5twjagVPEy7huCZ4XGM859ALV2/r+tAeiuz16iuB+IHi3W7PXtH8I+C0t/7c1gPI11cjdHZQJ96Qr3PXA6ZHeqekT/EPwr4407S/Et8fFuiaorr/aVvpogewlUZHmCPKhD0ye/cYwSPvf1/X/Dg9D0qiiigDm/Hn/Iu2v8A2GtK/wDThb10lc348/5F21/7DWlf+nC3rpKACiiigAoryeDWPHXxG1rWpfB2v23hrRdIu3sYJHsEuXv5U++W3/dTOMEc810vw18X6h4o0m/tfENtFba5ot49jfpDny3deRImf4WH8j2oWq/H5d/yB6O3y+Z2dFcx8RvF/wDwgvgLUdfSBbia3VVhibO1pHYKucdsnJ9hXAa7qvxM+HugQeL/ABD4jsNaslli/tHSE09IRAjsAfKlB3MQSB83Hfmhav8AD7wd0ezUV598QfF2s2uq+HPDPg57eDVvETyFLy6TeltDGoZm29GbB4B4496z9M13xf4P+JOkeF/GOs2/iOy12KU2l+lktrLDLGNxVkQ7SuO/XJ9qFdu39aCbsr/P5HqNFFFAwrm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigAormviD4uXwP4IvtcFv9qmhCx28H/PWV2CoPpk5PsDXBaxqPxQ8B6HF4v1/W7HW7GNkfU9FisFh+yxsQD5UoO5yuf4vrzSv939f15BqexUVHb3Ed1axXEDbopkDo3qCMg1554w8SeJdS+Itp4F8F31tpNwbA6hfanPbidoY9+xVjjb5WOeufXtim7p2tqCs1foej0V5v4P8SeJdO+I154F8Z31vq862K6hZapBbiBpY921lkjBwDnpjsPeqqv8AEzxpqmqXek6sPBml2Vy1vY293pIllvgv/LR/MwVUnoVHTtxknb+vL8wXnp/V/wAj1KiuO+GPjC88Z+E5LrVreGDUbK7lsbtYCfLaSM4LLnnByOK7GgSdwooooGef/Djxr4V/4QHwppn/AAkuj/2h/Zlnb/ZPt8Xm+b5SL5ezdndu4xjOeK9Arm/hx/ySzwp/2BbP/wBEJXSHgUAFFcQvjXX28NN4lOgaYuirA12XOrv9oEAySfL+z7d+0fc39eN3eu2Vgyhh0IyKA2FooooAKKKKACiiigArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA574g/8AI9eHf+wbqH/o2zritMS38ReIP+EiSVLizs1ktNNKhGRiSBNOrYyCWXyxzjCMRkPW/wDGWaUeJPD1jaSPFealp+oWdvIjFWjZntS0gPqiK8mMjOzAOSKbZ2kGn2NvZ2ieXb28SxRJknaqjAGTyeB3r3sB71JLon/X9eh+T8WP2OOlNfFJJL0tq/nt6cyMzQ/+Qx4j/wCwkn/pJb1s1jaH/wAhjxH/ANhJP/SS3rZr0Ibff+Z8fif4i/wx/wDSUY3g3/kRdB/7Btv/AOilo8Vf8geD/sJWH/pXFR4N/wCRF0H/ALBtv/6KWjxV/wAgeD/sJWH/AKVxVH/Ln5fodP8AzMf+3/8A242ay28N/wDCS+PtMhg1C40zULTTL26sL+3PzW06y2qhip4dSrMrI3DKzDjgjUqrZa9YeHfiNpt3qhuBC+lXsQ+z2ktw24zWp+7ErEDAPOMfmKxxqbw8kvL80ehwxKMc2pSk7L3v/SZHceE/Fk+qXVxoPiS2j03xPp6B7q0RiYriMnC3Nux5eJj/AMCRvlbnBPU15h4l8X+HtUutO1bSb7WrTV9Kdmt2GjX6xXEbFfNt5R5DDZIEUbtpZGVWGSuD2/hfxRpni/Q01TR5HMZYxTQTLsmtpV+9FIn8Lqeo+hGQQT844yW6P2qnWpVHaEk/R3NiiiipNTm/hx/ySzwp/wBgWz/9EJXSVzfw4/5JZ4U/7Atn/wCiErpKAKup3v8AZul3V79muLv7PE0v2e1j3yy4GdqL3Y9AK4/RPif/AG3rVtp3/CD+M9P+0MV+1X+k+VBHwTl33nA4ruqKOuodDzD4AoY/h3dpIMSrrF2JQeobfzn3pPhkpPxS+JciA+SdSgUHGBuEbbvxpZ/A3jTwvr+r3fw11TR0sNanN1cWWsRyEW07fekiMfXPXDccCt/wX4KufBPhO+gtr1NR12/llvLm9ulKpPdOOCQvIQHAwPc96UXpftG3z0/y/IJau3eV/wA/8/zOtmhiuYXhuI0likBV0dQysPQg9a8x1YBf2nvDqqAANAnAA7fOa9A0H+2v7Dt/+En+wf2pg+f/AGdv8jOTjbv+bpjr3zXPX/hC/uvjJpXiyOa2FhZ6ZLaSRszeaXZiQQNuMc+v4U7Wmvn+TDeD+X5o4HxbY63qn7TlrYaRqJ0v7R4e2veqgaWGESsX8rPAckBcnOAxPUCr1zDr3wr8feHI4/E+reINB1+7+wT22sT+fNBKR8rpJgYHtjGAeuQR1vjrwLea/qmmeIfDOpJpXiPSdwt55Y98U0bD5opB12n1HTJ454zNM8D+LNd8Y6d4h+JOpaXJ/Y5Z7DTdHSQQLKRjzXaT5iQOg9QOnIJB2suz19L3/rs9fMJu9/Naetrf15HpFFFFAHN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb10lABQelFFAHmHwBQx/Du7SQYlXWLsSg9Q2/nPvSfDJSfil8S5EB8k6lAoOMDcI23fjSz+BvGnhfX9Xu/hrqmjpYa1Obq4stYjkItp2+9JEY+ueuG44Fb/AIL8FXPgnwnfQW16mo67fyy3lze3SlUnunHBIXkIDgYHue9KL0v2jb56f5fkEtXbvK/5/wCf5lT4yarZaZ8NL2LUNLXVhqEkdlDZvIUWSR2+XLD7uMbs+oHI615v4w8D+NvD3gOwv/FniVPFui6K0U99oTw+QHjXj/Xj55dpOfn6gZ9q9Q13wfqPjn4b/wBjeMLi0tNZYiUXWlBzFbzIxMbpv+bpjIOOpwRwa5nUfBXxO8XaSfDvi/xDoMOiSFVurnTLeT7XdIGB2kNhEJxyV/Ijgium7b3Xppt+N/PsO6aV9tfXX/gf8Eq/EW8/4TbxB4L0TwqotNXuof7WtNYdyradBgEkKD85YfKVJxwM+oqf2drfgv4y+HtR8famvixdTDafp2o+SLVtPmIOR5KnZ8wON3Xr6YPYeMPh7eXl3omteCL+HSdb0KE29sbhC8E8BXHlSAc49DzjnjOCKen+B/Fuv+L9K1/4kappTLortLY6bo0UghMpGPMd5PmJGOB69xyDUbKWnd/d/wANp676Eu/LZ9vx/wCH+VvM9KooopDCubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKAPMPj4hbwLppIzEut2Zlz0C7iOfbJFbXxiKD4OeJvMxj7CwGRnnIx+uK2vGPhWy8a+Er7QNSZkhu0AEifejcEMrD6EA+/SvP7v4ffELxTYWvhvxt4h0h/DcDobiWwikF5qCIQQsm75VzgEle/rUOPNFw7v80l+FvmVflkp9v0d/xud/4JSSPwDoCTAiRdNtwwbqD5a15z4xtdR8X/ABtttM8H3K6Dq2hWIlu9d2+Y3lyE7YBCSFkGSG+bgc9O/pOqx+IYrvSo/DS6StgkoXUFvRJvEIxxDs43Yz97jpXL+KvA/iBfGi+MPh/qVlZ6tJbC1vbTUkZra7QHKlinzKw6ZHbHTnOkpc1Tn6Xf5EQi4w5fJfmc34OtdR8IfHC50/xpcLrur67ZF7HXgPKJijwWgMI+VPu7vl9vXj0bxhomt6/o4s/D3iWXw7MWPmXEVqszOpUjaNxG3kg5BB461zvhjwPr7+Nh4x8f6nZXeqw2ptbOz02JktrVGOWIL/MzHOOfU9eMZsHgfx34M1DUYfhxqmhvouoXL3Qs9ajl3WTv94RGPqueQD049yU9YqL7frp+H9ajW7kv60/zJvgtcrp+naz4OmsILW+8O3nlXM1u7Ml4ZMsJiWJbc2OQSccYwOB6bXJeAPA58G2N9Jfag+qaxqtwbrUb512CWQ9AqjhVA6D6+wHW03d2vvZffbUmPW3d/mFFFFIo8/8AhxoOo/8ACA+FLv8A4SzWPJ/syzl+xeVZ+Vt8pD5efI37ccZ3bsfxZ5r0DpXn/wAOPFunf8ID4U0/7NrHnf2ZZwb/AOxLzyt3lIufN8rZtz/Hu245zjmvQKAPMrqXwVcLJq9r4JTeY/t82sQabZeZaRszFLslzls7WkGFdsD5lBIB9MU5UEHIx19a5z/hAPD/APaTX3kXokcBWiGp3IgZASRGYfM8vZkn5Nu3k8c10lPpYHvcKKKKQBRRRQAUUUUAFc3Y/wDJU9d/7Aum/wDo++rpK8y8U393L8SdW8MaHcyWms67oVlFBdLDIy2cKzXnnXBZCNpVXATkZkeMdMkAGPruq3uu/Eu1vnSS30yG31PT7OCQITI0FxbpNPlSSAz5QK3QQhuN+Beqz4v0+10jxN4S03T4vJtLPR72CCPcW2Ij2aqMkknAA5JzVavosv8A4HzPxvi//kaP0RjaH/yGPEf/AGEk/wDSS3rZrG0P/kMeI/8AsJJ/6SW9bNdkNvv/ADPm8T/EX+GP/pKMbwb/AMiLoP8A2Dbf/wBFLR4q/wCQPB/2ErD/ANK4qPBv/Ii6D/2Dbf8A9FLR4q/5A8H/AGErD/0riqP+XPy/Q6f+Zj/2/wD+3GzWNdf8j1pf/YNvP/RtrWzWNdf8j1pf/YNvP/RtrVz2+a/M5sN8b9Jf+ks2aoeEtN1Tw3o7+M/DFn/aCz3l7DrekwxKJruKO+udk8LYBadA7DYxw6YUYZVq/UngPx7oOi+F30+/bURcQ6lqG/ydJupk5vJmGHSMqeCOh46da87Mk3GNj7PgupCnXqubSVlv6noujazp3iHRrbVtFu47yxuk3wzRnhh078ggggg4IIIIBFXq8b1zx/pvhbWG8SeGJNYudOkOdX0SXSryOMqWLNdW7SRhIpQWZnBKpIMkkP8AMfW9P1C11WwjvLCXzYZMgEqVZSCQyspAKsrAqVIBUgggEEV4bi1uj9Rp1adRXhJP0dzE+HH/ACSzwp/2BbP/ANEJXSVzfw4/5JZ4U/7Atn/6ISukpGgUUUUAFFFFABRRRQAUUUUAFFFFAHN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb10lABRRRQAUUUUAFFFFABRRRQAUUUUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHN/Dj/klnhT/sC2f/AKISukrz/wCHHhLTv+EB8Kah9p1jzv7Ms59n9t3nlbvKRseV5uzbn+DbtxxjHFegUAFFZkniXQoZrGKbWtPjk1EA2SNdIDcg4wYxn585HTPWtOgAooooAKKKKACiiigArhNZ1yfwx8Rb68fRNQ1K3vtKs4keyeD5GiluiwYSSoekq4xnvXd15z42tvEeveKL3SPCsWnx3FvpUMv2u9umj8tpnnVCqCJw20xEnJGcgVrRVNy/eOyPPzCeMhQvgoqU7rfa3V7ow9c8Uf8ACSeOtG/4k+oab9n02+/4/TAfM3S2v3fKkfpt5zjqMZ5xbrNuvh58RZ9Vmv4pPD8Uv2a4gtP9Plb7N5iw4P8Ax7fPteFmweu/HQczXngj4mTrcC0n8P2pklZoj9ukfylMGwLzbc4k/e5PX7vSvXo4rD0Y8kW7H55mWRZxmVdYirCKk1rZqyt830/G/kUtD/5DHiP/ALCSf+klvWzVODwD4+ttSubmGPw+qXV6LqaL+0pjuUW6xeXn7Nx8yK+4emPeiz8EfEyBbcXc/h+6McqtKft0ieaog2FeLbjMn73I6fd6VrHHUFpc4a3C2aVHzKC+GPVbpWtv5enmUvBv/Ii6D/2Dbf8A9FLR4q/5A8H/AGErD/0rirnPEw8X/DHRtHsbxNLume3t4Le3s7x2dltyPPkJeBVAdWjTG7K5BUHkjobPwb478ReHtOukuPD95aXENhdRTfbZo/NMcgmMu37KCPMAQbT93H1FQsdQcOS+tjqlwpm0cQsS6fuuV1qtdU3bppfX/hr7dY11/wAj1pf/AGDbz/0ba1dXwR8TA0pafw+waVGQfbpBsUTs7L/x7c7oysWe2zd1JqGX4efEWTUbW98zw+Jrfzk3fb5fmikuIpNn/HtgYji8vPU7t3Uc3LHUGt/6uc1HhXNITbcFs1uusXr6X07+VjSrG8K/8gef/sJX/wD6Vy1dk8EfExoZFjn8Po7RXKo/26Q7GdwYWx9m58tcrj+LOTUMPw8+ItpZzQWMnh+DzPtjq32+Vtss8xkR+bbny9zDHRs5OMUPHUOa9/60CPCuaKk4ciu2uq6c353VvxsQeMv+RF17/sG3H/opqdef8JcNcm1/R9T0Sw1eZY1uXg0yZEv1jzsjmVp3XHOPMC+Yq8KwHBl1T4efEXVLfU7WSTw+tpfW08CQ/b5T5XmRoqnd9mBbaVkbHGfMx/CKu/8ACGfEX7Z5mPD/AJP2nzPJ/tGX/VeTt8rd9lz/AKz95u6/w9Kxq18JWlef6no4LK+IMvo8uFSTd29YvorLW+u+2nmdx8OP+SWeFP8AsC2f/ohK6SvO/AN54xX4beGls9C0OW3Gk2oikl1qZHZfJXBZRasFJHUAnHqetdB9u8b/APQveH//AAfT/wDyHXiH6edJRXN/bvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHQB0lFc39u8b/9C94f/wDB9P8A/IdH27xv/wBC94f/APB9P/8AIdAHSUVzf27xv/0L3h//AMH0/wD8h0fbvG//AEL3h/8A8H0//wAh0AdJRXN/bvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHQB0lFc39u8b/9C94f/wDB9P8A/IdH27xv/wBC94f/APB9P/8AIdAB48/5F21/7DWlf+nC3rpK878aXnjFtBthdaFocaf2tppDR61M5LfboNowbUcFsAnPAJODjB6D7d43/wChe8P/APg+n/8AkOgDpKK5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDoA6Siub+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ6AOkorm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOgDpKK5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDoA6Siub+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ6AOkrm7H/kqeu/8AYF03/wBH31H27xv/ANC94f8A/B9P/wDIdc/Z3njH/hZOssuhaGbg6TYB4zrUwRV8682kN9lySSWyMDGByckAA9Eorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AOkorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AOkorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AOkorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AOkorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AOkorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AMP4ca9qP/CA+FLT/hE9Y8n+zLOL7b5tn5W3ykHmY8/ftxzjbux/DnivQCMgiub+HH/JLPCn/YFs/wD0QldJSeqA4WLwFc6X4e1fTbfUWvrS5sIrKKNrVftIhjVlKb/MRC5ViqthApwW3ck9yowgHIwO9ec3PwvuTr1lIutape6bHeG5k+165erPANjjZGVk2sMsoBwjKAcs+6vRwMDFVe6uwe4UUUUgCiiigChrGtWOhWa3OpPKqPIsUaQwSTSSOeirHGrMx4J4B4BPQVX0rxPpus3b2tp9thnVPM8q90+4tGZc4JUTIu4AkZxnGRnqKl1zRI9btoEN3c2U9tMJ7e6tSnmQuAVyA6spyrMpBUjDH61maVob2/iX7Zca5da5PbQPbs95LAr2m8xvtEcMKA7wqklzkbVwMMaI76/1p/mD8jpa5ux/5Knrv/YF03/0ffVrarLqsNqraHZ2d5cbwGjvLtrdAuDkhljkJOccYHU88YPN+HJdVm+JOvtrlnZ2dx/ZOnBY7O7a4Qr517glmjjIOc8YPQc84AB2VFFFAEdzcwWdrLdXk0cFvChklllcKkagZLMTwAAMkmue8ReONM0XwHc+KbCSLV7OPasLWc6skztKIlG8ZAG9gGIyQAeCRirPjLwzF4w8JXuhzXD2oudjJMihtjo6yISO43IMjIJGQCOo4zRYvCHwn0VvC3inXYLufWpXnuVntD5LK6rF86DeIoiqAEyNgkSHOAQsSbT8u5004U5Rvq5X+G263bv/AMDzLOhy+HvjZ4XF34h0IxTabePAY1u3BjfYjHZNHsYoyuhIIA3L0O1Wr0K2toLO1itbOGOC3hQRxRRIFSNQMBVA4AAGABUWn6bY6RYR2OlWdvY2kWfLt7aJY40ySThVAAyST9TVmnFWWu5nVmpSfJpG7sr3tf8ArfqFFFFUZBRRRQAUUUUAc38OP+SWeFP+wLZ/+iEq9rfiCLRZLWBLK71G9vGZbezs1TzHCjLNl2VFUDqWYdQBkkCqPw4/5JZ4U/7Atn/6ISqXj1tBDacPEV1faQNz/ZtctpzbrZSYHyvLnC7x0Dgo23B5wCmM2tC8R2+uSXdt9lurC/sXVbqyu1USRbhlTlGZGDDkFWI6jqCBr147rusazqPhnXbbStebX9Dgls3bWVt1kPlNJ/pMRNv5azKqKC3l7SFdlJyM1javaaRB4T1mTTdd0m+0l7nTRcWvhjTHtraN/tSZdGSWRTKUwCEIbAQkdMtav7v0/r+ri/r+vM97rO1zW7bQNPS8vEleNriG3AiAJ3SyLGp5I4ywz7eteWXd3oOn2viSbwtaWN14RkhsYpIracwWBuWlKyMXjBAjEZiMu0EEDDdWrn4Gs4dQ1q20m40aazabRJQ2hWJtbN3+2lWZF3urkYCl1OMjB5U04q8kvNBsrnuWp67baVqelWV0ku7VJ2t4ZFA2K4jZ8MScjIRsYB5qpb+LrC58a3PhhIrgXdvD5rTMqiJiAhKA5yWAlQkYxhhzWf47lt7vwjPqVjcRzSaHdx3rNE4bY0DhpUJHQ7N6kdRmuTuLltI8G6b4/aMmT+0ptRn+QlmtrgNGi+vC+R/3yOKm9tX/AFe1v1+4dui/q17/AKL5noGi+JIdfkmNhZXRt4bme1a6fyxGXiYIcfPuIJ3YIH8JzjjLdY8W6ZoOom01IzRhdPn1F5gm5EihKB84+bP7wYAB6GvM9a0rVtF03RbHTPPOsJ4V1FibcYladmgaQpt/jLM2Mc5xWRr9j4J1Oa+h8EW9hdQt4Qv3kiso1aLzFaBkJAGPOBAJz84wmf4ae2/Z/hzf5DilJ+tvxa/RntVpr9rea9PpMSTCeC0hvGZlGwpIXCgHOc/Ic8enNaleS6X4e8KeJPFt1t0/TdR0qLw3Z/ZYkjSS3XMlwCyKPlDDBGRyMt0ya7X4czzXXwz8OzXMryyvp0JaR2yzHYOST1NU1v5f5v8AyITvb5fkn+ovjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lSMKKKKACiiigAooooAKKKKACiiigArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigAooooAKKKKACiiigAooooAKKKKAOb+HH/JLPCn/AGBbP/0QldJXN/Dj/klnhT/sC2f/AKISukoAKKKKACiiigAooooAyfEnhjR/F2kHTPEFlHeW29ZFVx9x16MPf9CCQcgkVkeDvh9pvg+8v7u3g097m5YCOe302K2kSIKo2ExgA5K7jtCqSc7RXW0ULTYHqFc3Y/8AJU9d/wCwLpv/AKPvq1tVv7nTrVZbPSbzVXZwphs3hV1GCdx82RFxxjg55HHXHN+HL+51H4k6/LeaTeaU66TpyiG8eFnYedencPKkdcc45OeDx0yAdTqGpWOkWEl9qt5b2NpFjzLi5lWONMkAZZiAMkgfU1FPrelWujDV7rU7OHTGRJBeyXCrCVfG1t5O3B3DBzzketcf8Y9M0bUvBMJ1/W/7FS2vUmtrj7O1xul2umzyl+eT5Hc4UgjG48KRXF6zZ+BP+FW+GvC58apAxmOoWd+bVpELu8qyNNGMeTHulmUB2QqUILHy3rOUmm/TudlHDwqRi3J6ys7RvZaO++r308tzC+MnxMvR4vhk8E+JJLiysdNS4V9JvkaFLgyS583a2JOEj+Rgwxnj5jnH8ZfEPw5418SWeq6z4YvkslgPmvb6qqvc2SPu2yRGEgNiRvlSRTliPM4VhwvhrxTP4Z1K01q2tdH1WWONpNt3YtcLZu8scnmAK+VdcMQ3BAVh1PHp9h8WfB0nhfUtauvCmgP43tLzfCYtHZBK5ZWFyzlT5ZUs5IaQFjETuXcMcqlz3bfyavt6/ee5UpfVVCMKbbSspRkotuV29I3bSV46t+dr2PpKivM/h7488a+NfCo1SPw3o5UTPCJ5tRltVuMYO+NFhmG0Z258w/MjdOg3bnx6+kX1rZ+IfDWrWck+8edarHexnYPmdUhdp2jyVG8xLgum4KWxXY5xUeZuyPmpQlCThLdHX0Vyeg/FHwZ4n1tNI0LXoLu+khEyRBHUOCgfAZlClgpyUB3DDZA2tjrKtprcgKrahqVjpFhJfareW9jaRY8y4uZVjjTJAGWYgDJIH1NWa5D4l+AIviN4Wj0mS/fT5ILpLqGdYhIoYKykMmRkFXboRzg9sGqahKaU3ZX1e9l3t1E9tDq7a5gvLWK6s5o57eZBJFLE4ZJFIyGUjggg5BFeUfFjQPidqvjDRp/AOoy2+nRxqGEV4sKQz+ZkyTIceam3Z8uJPuONvzfN3vgjwrD4J8Gaf4ft7mS6WzVt08ihS7u7O5AHQbmOBk4GBk9TvVpTqKjU5opS33V122/HyYNXRzfw4/5JZ4U/7Atn/wCiErpK5v4cf8ks8Kf9gWz/APRCV0lYDCs7XNEttf09LO8eVI1uIbgGIgHdFIsijkHjKjPt6Vo188eFPCnh258GaLPcaBpcssmnwO8j2cbM7GNSSSRySe9dOHw7rysnax4ecZxTymnGc4uXM7aH0PRXzr4j0fw/pkdraaX4W0O41bUZTDZwzWsSoCFLNI/GdiKMnbkngdSDWh8OvhZoX9ua3ZTG4S+hsrS4j1WxkNpcQTym8R3iMeBGpGB5YymFXIbFXWwkqSve9jnyziClmFRU1BxcrtXe6W79Onm9tnb3qiuS8HeIb6S/vvC3iq5t5fEOlbW82KNohqFqwGy6VCABkko4QsqupGQCorra4z6QKKKKACiiigDm/Hn/ACLtr/2GtK/9OFvXSVzfjz/kXbX/ALDWlf8Apwt66SgAooooAKKbLLHBC8szrHHGpZ3c4Cgckk9hXH6R8W/Amva8NG0rxHaz37NsSPa6LI3ojsoVj6bSc9qN3YHors7KiiigAorJ0jxRo2v6hqVlo98l1caVMILxUVsROc/LuIweh6E4xisrxR8T/Bvgy9Sz8Sa7DaXTjd5CxvK6g9CyorFQffFHbzA6uiqek6vp+vaVBqWjXkN7ZXC7op4W3K3Y/iDkEdQRg1cptNaMNwrm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76kB0lFFFABRRWN4n8X6B4N05b7xNqcOnwM21C+WZz6Kqgs34A0m0twNmisTwv4x8P+M9Pe98MapDqEMbbZNgKtGe25GAZc9sjmtunsJNPYKK4vUvi/4C0jXzouo+JbWK+V/LdQrskbdMNIFKKR3yRjvXWy31pBp7X011DHZpH5rXDyARhMZ3FumMc56UdLlWadieiuM0T4ueBPEWtDSdH8R2896zbUiaOSMSH0VnUBj7AnNdnR0uLrYKKKKAOb+HH/JLPCn/AGBbP/0QldJXN/Dj/klnhT/sC2f/AKISukoAKKKKACiiigAooooAq6lqlho9i97q99bWFqhAae6mWJFJOBlmIAyeKraR4l0LX2lXQda07UzCAZRZXaTbM9M7ScZwevpUfiLRp9Ygs3sbuO0vLG6W6t5JoDNHuCshDoGUsNrt0YEHB7VR0/SNaXxTb6jr19b3zRWk0MLWFj9mijDvGWEgeaRmY7Bt2gAYfPUULV6/1oD8jpa5i3Mq/EzxAbdEeUaHpxRHcqrN519gEgHAz3wfoa2dVv7nTrVZbPSbzVXZwphs3hV1GCdx82RFxxjg55HHXHlHi/x/rPhnWdd1m18PzWFwbLS7Zv7VMciW6GW/bzn8iVhtJAjGXU7nHsGUmkm2aUoSqVIwirttLt+Jc+Md5J/wiVlH4r0WLyZdQVbaXTdVPmwzeVI2757faQUEinIb73TOCOB8K2XhPx7e2ukDw5rEb6bauojsdTikOoQLOxl88yrGE/eTN/qiCfNbGAq4fY+L/E3x1sH8LvLosU6wrqZjh82KKRUKo0Ew3SEjMyuDjhoQMc7k474l+BE8A32j297HYZj0vz5JBbbY7ucz3DPEjHG4oska5xnAjJUcLXFO7fPuvRd/8/Kx9PhnCMFhmlGpdvScrJOKd9JWd43TtJS6Pazz/wCw4vGfi6403wQk9hp12Bb2qXt9EFClgY8uyqwXbMg8seZIcPy+K+gk/Z58FxxW6CTU/l4um89B9uTPCSAJhQFyo8oRnB5JODXnn7N/iLTY9b1TwlNa6a0Ws25v1kO0SMeFa0Yf8tFCFmA4wBIcENx77/wjv2TnRNRu9OxyIN/nQHH3V8uTOxB02xGPjjIwuNIQVr2vfyOHE4qXtPZqo4OO3vNrW/VarRvSz3d92bNecahqX/CT+KtOAS50mM3l5pNjqllcxvcF495mSSGWFo1jZrMkMGZ/kj4UM4GFr/j/AMTXF1qmg297pVndgyw7Rm3ntY4yQbiR2kYRrKVURgqvF1CRIcE14/p/xCv/AIa608+lWunNqNzAscv2+2LMkLDzFIIZXAb5SBnaQQSD8prG0swrQwtGN03aV1o7aNa2S1trsTTyu2BqYydRLlasu/mn+muzvax2vxP+Cr+DVj8VfDIXlnFYxzS3kcN/sktI1jyXickORgS7gXYkuAoxnEXhf9oPxFqUMPhe7shJrGogWlprXmp+5uJV2RPJEIgpUTHPA4TAIdlJf2Dwt8VPDniXQbLUWuW0/wC026yObuGWKBJOjxLcSIscjK24fKcnaxAwDjwv4neNtG0LxNqOleDvDXg2ytoYUS31eKyU3AkZA3nQSRYKMhbCkA4aMnPYe9DF069F0ppSlG9nzJNWWqe/Nayst0k0t9PIjhqsvfinbv0+/ZC+H/i/4w+FepatoXjSxvNbuVkhIhvtVDPasygnEm2TcGV4zjdhcHjJNehf8NCRReBDr1z4bdbqSWJLe0jvQyMsj3CAtIUBUg2k3ARv+WfPzNt8b+GvwuvfiJ4Z1NdOXT4zFc2sn264iZVXEcweFWCnJPmIzgEY2x8HIx0Op+ML74P6avw51Dw1oWoW6fv7mW8t2aK/Z2MiyAHaHCgJHkg4aIjPAA760KGJrQ9jD3+b3or3VJeV0oxu2lu7Wb2Yo0JRV5ySXe6f4K7/AAPorwR4qh8beDNP8QW9tJareK26CRgxR0dkcAjqNynBwMjBwOg3q8p+F3i/TvH+iRW1tr11p15bw/6RoVqkMUcEIcooiYQq3l7QuCjkoHUFs4J8ms/jr4nsvGCxQ6GGkjuvLXSpr2+luCSxUwEPMVMv8OTH97nb2rzY4TEVasoQha3RtK3Xrvp9/wAy5Rowjdzu/JO3zva33M+i/hx/ySzwp/2BbP8A9EJXSVzfw4/5JZ4U/wCwLZ/+iErpK5DEK8P8G/8AIi6D/wBg23/9FLXuFfOVncSzeAfDGh2NxcW17qen24E9upzDAiRmZ9+CEO07VPXe6Y9R6mXS5ZSfkfC8ZU3VpUIL+Z/JW1fyWpreG531uSfxDNHsiuMw6epDcWyscSYZQVaQ/MccFVi7rmtDSvEGp6F461f+ytLtL/ztNsvM+03zW+zEt1jG2KTdnJ9MY754uwwxW0EcFvGkUUahEjRQqooGAAB0AHasm1/5HrVP+wbZ/wDo26r1KlJTgoT6nweDzCphsRUxOH0cVpfWyul+X46mj4h8UeLL97DULDQNPtb/AEycTI1vrJZriL/lrbNvtQNkigDqAHWN/wCAVam+LetxeG5NdTwzpc1klobwFNZlDPGE38BrUckdjim1wfignw/p+u6cqOdP1jT725gdnd/KuvKZ5I+hCq67pAMj5ll9QByVMDRgrn0GD4ozLETVO6vddN11+5a/f5H0nRRRXhH6sFFFFAHN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvXSUAFFFc14u8Gf8Ja1qf8AhJPEGifZt3GjX32fzd2Pv/Kc4xx6ZNAHM/Hu6mj+GRsIJGj/ALVv7axdkOCEd8sM+4XH40vxg8L6WnwUv4bS0it/7Et1n09oxta2aMggoeo4BHvmsj4h+ALvRvhPejTtV13xJc2N9BqijVrz7RJiJhuVTtGBt3HFN+JPxM8OeJvhZLpnhfUYdU1bxDGlraafbOHnDORkOgyUwM/exzUO/JJR3vp9yt+N7fMpW54uW1v11/Cx6h4a1B9W8K6VqMv+su7OGZvqyAn+dYHxE8S3el2Frofh75/EWuubaxUf8sBj95cN/sovP1x71r6dNpvhbRdE0bUNRtbabyIrS2SedUad1ULhASCx6cD1rhNT8KfEyD4nap4n0Cfwrcxzwra2S6q9yXtYByVURgAFm5Jyeg6dK1qcsptdLv8A4b+uhnTuoJ9bIz/ghpNv4V174gaZBJJLBp99CnmSHLvtjbLH3Jyfxrnfhf490PS9D1DXLjRdW8Q+IdbuprrUBpFibp7aEuwRJDkBFwpO3OcEHGMVp/CWLxhN8S/G0Wqf2H9me+C6x9n87f5hjbb5GeNueu7n0qx8Hdf8P/DzQdU8H+Kr6z0PVtMv5Xm+2SCEXSNjZKjNjflQAAMnAHrUrVpv+Vfpf9PkPRJpfzP9bf13Ox+EsHhL/hHb7UPAV5PLpuo3r3D2suALOUgbo1QKCg6cHPGCDg13leVfBlRqOteNfE2nQyQ6LrGqB7DchQTBAQ8oU9mY9fY+leq0309F+WwLd+r/ADCubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqQzpKKKKACvLLaGLXv2nNQe/Tzk8P6NELNH5WOSVstIB64JGa09Q+E/9oalc3n/AAn3ji1+0StL5FtrOyKPcc7UXZwozgD0rDvL60+H/wAe2v8AX5/s2leINIjt49Sunwi3EJxtdzwCVGcnHJpRfvRb8/yYS+GSXl+aJ7+3g8P/ALTGjTadEIB4h0qeO9WPhZXjO5XYd2wAM9f6+ozxGa3kiEjxF0KiSMjcmRjIzkZFeUWWp2fj39oOy1Hw9Mt9pXhrTZUmvoTuhaeU4CKw4b5ecgkcH0r0pdas7xdQi0a6tNRvrEFZbWK5XckmDhHxkoSRjkfhRp7NJ+f3XYfbbXl99kebeJp/A/we+Gk3hq6Sa6F/BMUinh82S8djgtJIFCDll5bHA4ziuZ8V6bf6N+yroNjqUwuII5rX+0HtZRIq2xlLY3KcMBlBkZGRxxzXdaP8ZfB+reE57vxLeWmiXcIkiv8AR76YGaJlJDJsIDSZHovfGM5Fcp4KvLzwl+z1qerXXhqTU9NmvJ7qHSJ2CbbGRhzghvlA3NjHI575o738n5aPRfjv2QdUl5rz1Wr/AA+9o3fi8fCsPwMuJbZrBLWGFH0Z7ZlAWUEeWYSv/svbPbNegeF9Ql1bwjpGo3OPOu7KGaTHTcyAn9TXg/iix+FsHhGW2+F9lp994k8Sqtpaw2tw08sIkOXJVmPkgKWB4X06A49+0PTRo/h/T9MVtws7aOAN67FC5/Sr/mv3X63/AE1/yJ/lt2f6W/UvUUUVJRzfw4/5JZ4U/wCwLZ/+iErpK5v4cf8AJLPCn/YFs/8A0QldJQAUUUUAFFFFABRRRQBg+LPD/wDwkVlZWzw2t1bw3iTXFneDMVzGAylW4PI3BxwRuRenUUvD/gq28Na6kukW8NraJZmKaVWzPqEpZT5k/wAo3Mu1sMSxPmt93HPV0ULTb+ugPUK5ux/5Knrv/YF03/0ffVrarf3OnWqy2ek3mquzhTDZvCrqME7j5siLjjHBzyOOuOb8OX9zqPxJ1+W80m80p10nTlEN48LOw869O4eVI645xyc8HjpkATwf8LfD/gjWbnUtHa8eWWIwQpcShktYSwYxphQSPlTlyzfIOeWz2dFcH8YPH958OvBkOqaZbW091c3qWiG6J8uPKO5YgEFuIyMZHLA9sGqVJzmqdNat2XTV/gXUqzqPnqNt93rt/wAA67VdKg1e1WKZpIZYnEtvcwkCW2kAIDoSCM4JBBBVlLKwZWYHJ/4SDWNJ+TxFoVxNEn3tR0dPtMTDoCYAfPVif4ESUKGGZCAxDPhx4rm8b/D3S/EF1bx2890siyJExKbkkaMsueQCUyBzjOMnGTW+Kl0bL4eXU26BY/tdkkwuZvKheJruFZEkbBxGyFlbII2lsgjiorXpKV1qr/gQtT5w+Ivibxv/AG5qfiHSvFt9ceH5tYeztbrStXKwYG4pEI0dSpCKMttAbG4MwYM3d/C7wxe+OPhPfX8HiC8tvEUF5dJaXkNy6OjPGj+XcMVO8NJsdmG5iojG75Nq+aeN9V0mLUrv7NYeFZ1nuBBFHZ3ElwlnBEttNthdHjVUkkaXJWNWyZgGOTj3jwb8K4U8B3T276r4YvdYQ3Vva2urXoGmM8CKodfMTzHVl3tuUcnZyFBOscR9cy2m69Fe/qmlGyUVbllq5OWqbduWVm+xcJzozfs5tfNnkfxT03U/BEmlXelrdeG7N3f7HZyzR/b0kVSJJVuYizeVtlC7XmLZcgLtAwz4TSeNfHurXEMOpaxcBFhgutYm1fL6fbSMxmWNZA5LSCIBWQAq8aEkDOYvFHgW/wDhP4Tt4PE2maXrceoXxkgYy3Rt7BkjwcOrRMHmDjIyARbAkPgbPoHwpomleCPhtPq/hfwlLY3lxpwv5dK8ySS4eUQ7hbl3BfIOVAxwSSFyTnepg8NQy2OE5VKN372jcrNO7bSn/wCBLXXdNkyq1KlTnm235lVvDeu6b4mtbXRYr+LT7SW0j06aPUMWdrYRrGssEsJkzJIwWcK5jc/vI/nXblPRK8y+C3xJ1n4jadqs2t6fbQiyljWK6s0dYZdwJZMMW+ZcAnDdJF4HU+m1ySwssLUnTm3e93re22i3VvJaC5uZXPn7T/g74p8HfHC01DwSGt/DhmRmne8UiO1ODNbuh+Zs7SF+VusZLbgWX6BoryT4sfCfxB488YaNqui67FYQWUaxkSvIHtHEm4zwhcguQR3T/VJ8393tlV+t1I+3ko2Vr27Xte2rb2v6dETblWh2/wAOP+SWeFP+wLZ/+iErpK5v4cf8ks8Kf9gWz/8ARCV0lcRRHc3MFnay3V5NHBbwoZJZZXCpGoGSzE8AADJJr58+Hemt/wAI3p2r6hbot7Np8FvCTgtFbIgCqGHZjmQ9/nCnOwV6jrU114v8ZDwxZPcQ6Jpm2XXZvs42XTkI8ViGY8qyNvlAUgoVQkbyK4Xwb/yIug/9g23/APRS16mWpObufB8a1JQwtNR6t/dbb+v8zZrGtf8AketU/wCwbZ/+jbqtmsa1/wCR61T/ALBtn/6Nuq9qW6/roz8zo/w6n+H/ANuibNc/48tIL34f65FdJvRbKWUDJGGRS6nj0ZQfwroKxvGX/Ii69/2Dbj/0U1FTWD9B4NuOJptb8y/M9Q8J+IJ9Xtbix1n7HB4g0txDqlpaSl0jYjcki552SJh1z0yVJ3K2OgrkvF2j3Vtqtn4x0IZ1HSoXiu7ZLUSvqNkWV5IFx83mDZuiwcb8qRhyRv6NrOneIdGttW0W7jvLG6TfDNGeGHTvyCCCCDgggggEV8if0OXqKKKAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoAKKKKACsyz8M6Dp2pyajp+iada30ufMuoLSNJXz1y4GTn61p0UAU73SNN1G4tZ9Q0+1u5rN/MtpJ4VdoH/vISMqeByPSrlFFAFW10uwsbm5uLGxtrae8cPcywwqjTsOjOQMsfc1X1Xw5omutE2t6Np+otD/qzeWqSlPpuBxWlRQA2ONIYlihRY40AVUUYCgdABTqKKACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKrahptjq9k9nqtlb31s/3oLmJZEb6qwINWaKAKunaZYaPZraaTY21jbKSVgtoVjQfRVAFNs9I03T7q6ubDT7W1nvH33MsEKo07erkDLHk8n1q5RQBk3fhXw9qGprqN/oOmXN8hBW6ms43lXHTDkZ4+tapAK4IBGMYpaKPIOtzL07wxoOj3kt3pGiadYXM2fMmtbSOJ35zyygE81qUUUAFFFFAHN/Dj/klnhT/sC2f/AKISukrm/hx/ySzwp/2BbP8A9EJXSUAFFFFABRRRQAUUUUAVdS1Sw0exe91e+trC1QgNPdTLEiknAyzEAZPFVtI8S6Fr7SroOtadqZhAMosrtJtmemdpOM4PX0qPxFo0+sQWb2N3HaXljdLdW8k0Bmj3BWQh0DKWG126MCDg9qo6fpGtL4pt9R16+t75orSaGFrCx+zRRh3jLCQPNIzMdg27QAMPnqKFq9f60B+R0tc3Y/8AJU9d/wCwLpv/AKPvq1tVv7nTrVZbPSbzVXZwphs3hV1GCdx82RFxxjg55HHXHN+HL+51H4k6/LeaTeaU66TpyiG8eFnYedencPKkdcc45OeDx0yAdlWXr2gw69a26SXNxZz2s3n211bFPMhfYyEgOrIco7rhlIw2RggEalFTOEZxcJq6ejT6hsea/C+PX9PeLTdRbU5ohbSz6p/aFkIVtr95VdlgcRoJUZ5LkkqZFGxMMoI3dR48tbi88Hzx2lvJPIlxbTHylLSRqlxG7Soo+86KpdVw25lA2vnacbwR431DxHrAtrs2Eoks2uZ7e0Rll0eUMgFrcku2ZDvccrGcwSfL1C93XHhoU54bkhJuLurtWe7W1ltstNktypXUrnI/Dy2uIdP1We5S7ZbrUPNiur6AwXF2oghTfJEVTYQyMgARMrGrYOd7J4/+JeifDm3sn1uK8uJL53EMFnGrOQgG5iWZVAG5R1z8wwDg46+sHxV4I8O+Nra3g8T6al6ts5eFvMeN0JGCA6ENg8ZGcHAJHAx24KlRoKnSqXcIpLSydkrdrfhbyJk27tFHQviNo/iK6sv7MhvH0/UXeOw1N41WG6kRWZkVd3mqQI5eXRR+7OCcru6ysLTvBfh/SdSS903TxbNFnyII5XFvbkjBaKDd5cbEFgWRQTvfJ+Zs7tZ0va2ftLbu1u3S/n3G7dAooorUQUUUUAeGXOmWGq+H/hjBqllb3sS+FpHEdxEsihtliM4YHnBPPvXP61pGiXGpHw/4Y8PaMdTKhrq7fT4mj06NujsNvzSEfcj79ThRzcmTWNd8P/D+yiWfQIF8MvELssjzzxgWW9ogrERgjbtdiWGWyikKTu6baaVoUiaVYJ5Mtz5t2VJZ3lIZfMdnbJZsyJyxzyOw49vBw5qNmvmfl3EuIdDMnKMm3ZWir2Wm77+nW2umjpWfgXwxZ2Nvbf2Fp0/kxLH5s9nE0kmBjcx28scZJ9an8G/8iLoP/YNt/wD0UtXbXV7G9+xfZp9/262N1b/Iw3xDZluRx/rE4ODz7GsXw5q9jpngXQ/t0/lbNES6b5GOIooo97cDtvXjqc8Zr0FyRkrdv8j5KTxNelJVLylzLe7/AJr/AJfgdNWNa/8AI9ap/wBg2z/9G3VXbrV7Gy+2/aZ9n2G2F1cfIx2RHfhuBz/q34GTx7ist7yDT/FmuXl2/l29vpNrLK+Cdqq90ScDk8DtVSauv66Mwo058lRWeqVv/Ao/5r7zoKxvGX/Ii69/2Dbj/wBFNV261exsvtv2mfZ9hthdXHyMdkR34bgc/wCrfgZPHuKy/F95A/hPxHZq+biHSZZXTB4V0kCnPTko35fSibXKwwtOar0207XX5r/Nfejc+1+J/wDoddW/8BbH/wCR65qe08SeFrq91jw74j1Z472ZrrVbO3tbRpLhtmPMhQxCNZCQC+Fy45yWAB3bjV7G1uHgnn2Sx+RuXYxx50hjj6Du4I9upwKH1exj8/fPj7Pcx2svyN8ssmzYvTnPmpyOBu56HHPLC4drZHr0s8ziMk/aSfl3vb/NW9UdR8J/Etx4n0PVbqbWn1qCHURFa3bxxoxjNtBJtIjRBkNI/UAjoeld3XznaXi+FvEXiHVNDj1nT9Rk1WCF5rCK2ms7kOlqVjmgllQli7yfOhRh5zHeeQOy8PfGXWZrO9HifwLfxXOnhI520q5guA8nlh3xGzqw4ZCqqZCd2M5HPhVKNRTaUevY/VsHmeFlhacp1VdxV7yV9lvtrqr+p23jz/kXbX/sNaV/6cLeukrxnU/jHpHitrDRINE1vTrqTXNMQf2nFDB8y3kEhAUy72O3BIVTgMpOAc17NWDTW56sKkJq8Hf0CiiikWFFFFABRRRQAUUUUAFFFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRRRQAUUUUAFFFFABRRRQAUUUUAc38OP+SWeFP8AsC2f/ohK6Sub+HH/ACSzwp/2BbP/ANEJXSUAFFFFABRRRQAUUUUAYXivQT4gsbO3aG2u4IbtJriyvD+5uowCCr/K2cFg4BBBZFBx1FSz8LXGneMbO9tLlTo9rZXEMVtKzNJA8jwnahP/ACzxEcKT8ucD5cKvUUULTb+tLBuFcTc6Daa38U9X+2zahF5Oi6ft+xalcWmcz3ud3kuu7pxnOOcdTXbVzdj/AMlT13/sC6b/AOj76gA/4QPSP+fzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/wAfrpKKAOb/AOED0j/n88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8AH66SigDm/wDhA9I/5/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/AB+ukooA5v8A4QPSP+fzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/wAfqbxV438O+Cba3n8T6klkty5SFfLeR3IGSQiAtgcZOMDIBPIztW1zBeWsV1ZzRz28yCSKWJwySKRkMpHBBByCKpxkkpNaMDn/APhA9I/5/PEH/hR6h/8AH6P+ED0j/n88Qf8AhR6h/wDH61pdb0qDWYdIn1Ozj1O4QyQ2T3CiaRefmVCdxHytyB/CfSuU+JvxS0v4b6SkkqR6hqczosOmpcqkhU7syMMFgg2MNwU/NgcZJBCMpyUY7sDV/wCED0j/AJ/PEH/hR6h/8fr5w+KXxCt7Hxfbw/D7xJrE+m2UQe5K6zqEiXMwkYMjO0vMe1Fw0ZGd7EMeMb3w4+PPiq/8YLbeJfs97Z6tOLe1i2CD7NO77Ywm1SxiLMFJfcQBnJKlXr6vZeDvgj8Q7CW/0GfWrsr9vVDcDydLhaTCLCGUmeRPLkwzlP4TwTlfUw9D2VfklDnlZtJfC9Hdt3Xw6vS+qt5lum+Tnk+Vfj5aefd2R6h4J+HXh7Vvh74Vv78apLc/2NblX/tq8URh4oyyoolARSVX5VAHyjjgVtn4UeE2nSdoNUMqKyLIdcvdyqSCQD53AJVcj2HpV74cf8ks8Kf9gWz/APRCV0leWpSSsmc0qFKcuaUU36HExfCHwdB5Pk2eox/Z4jDDs1q9Hlpx8i/vuF+VeBx8o9K8h8QfDrWIfjdp2jaX4e1OTwjtitQgvLtrZrN1Xz98vm/IRtbCblB8qP5GyN30pRWtOu6bd1e6a1vpfqtd10F9Xo78q+5HEy/CHwdP53nWeoyfaIhDNv1q9PmJz8jfvuV+ZuDx8x9a52DQfhLq3jC98LxXt1c6x5bQXNs2sX5EqoCWi3mTY5Xc+UBJHz5Aw2OW8efHfxBP4gvvCfgLRbiO/gvntVvUT7TO/lbvM2W4Rh1Q8kt8gJwCfl5z4Narpd58aIJPEGjX8XiW4e7BmNwFiW6CuZXa3KKyMyiXcN7KHY4RRtCehDA1lSlVqX+G6SavbSzavdRae/fTuR7Gheygvu/rse3S/CHwdP53nWeoyfaIhDNv1q9PmJz8jfvuV+ZuDx8x9aJfhD4On87zrPUZPtEQhm361enzE5+Rv33K/M3B4+Y+tLqXxh8BaRq1/pl/4jgjvNO4uIlikfadyqVUqpDsCwyq5Iw2QNrY6jR9Y0/xBo9tqujXUd3ZXSb4po+jDoQQeQQQQQcEEEEAivMvU5ebWxf1eh/IvuRy0nwh8HTSNJLZ6i7ts3M2tXpJ2NuTnzv4WJI9CcivMvhvd+AviR4m1LSYvDer2QCf2hDNJ4gu5PtCxuih5F8wbJBmIjBfGPvfKM9tovxptNZ+Llx4JTRp4lS4ntYr4zAl5YQxfdHj5V/dyYIYk4XIGTt7+x0XStLuru60zTLOzuL5/Mupbe3WN7hsk7nIALHLMcnPU+tdMlKjFxrRfNJJxd9k9b263Xp3JWHovaK+5HLt8IfBzeZus9RPmSrM+davfmddu1z++5YbFweo2j0FSR/CjwnE8jxQaojStvkZdcvQXbAXJ/fcnCgZ9APSuyork55dyvq1C1uRfcjzDxZ8NPDWl6RDdWEWpQzy6zpod/7ZvCWLXlvGWOZfvbcAN1GAQQQCOr/4QPSP+fzxB/4Ueof/AB+jx5/yLtr/ANhrSv8A04W9dIehqZSb1ZpCnCCtBW9Dm/8AhA9I/wCfzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/x+vNdLukvvh8lxp83ja58VSxP9mljk1NoGuN5CEs5+zbM4zn5MA5rpta+LlnoeoX1pO2jsdICLqC3OrpbXEj7A7i3gKky4B4yyZb5QeDR/X9f12NGv6/r+tzpP+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfrF0HxT4gvL/xZN9it9QtrS6iTTo47zZ8rQxuNxaNQqYfezEsRkgBsDONf/EeTXtOvLOznsIrmyvtMY3Oiav8AbIZI5rpVK+YEQg4Vgykchh1zTSbaXe34i6XOz/4QPSP+fzxB/wCFHqH/AMfo/wCED0j/AJ/PEH/hR6h/8fpnjO7uLWfw2LWeWETa1DFKI3K+YhR8qcdRwOD6VJ4z8ZWng+ys3uWtRPfXAt7f7ZdrbQBtpYtJKQdihVPOCScAAk1N9L+dvy/zDrbyv+f+Qn/CB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wo9Q/+P1z9r8VhqENtDpWn2WpajLqn9mullqYltlYwtKsizhPmTCjPygr83BIAN1PH96zNpjaJD/wkA1P+zls1vibct5InMhm8vcEEZ/5553YGOc0/6/L/ADQf1+f+TNP/AIQPSP8An88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8frlrvxz4lvdd0uxtNJt7B4dfbTb6KW+JE2LXzsqwhJ2HOQeCdqggbiFTw/4y1vTtOnudR077ZpX/AAkE9i17LfsZ133bRoUiKEGNSyr98EAHC4Ay0r28/wDgf5g9P69f8jqv+ED0j/n88Qf+FHqH/wAfrn7PwVpbfEnWbc3WubI9JsHBGv3wclprwHL+duI+UYBOByQBuOfRK5ux/wCSp67/ANgXTf8A0ffUgD/hA9I/5/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/AB+ukooA5v8A4QPSP+fzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/wAfrpKKAOb/AOED0j/n88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8AH66SigDm/wDhA9I/5/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/AB+ukooA5v8A4QPSP+fzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/wAfrpKKAOb/AOED0j/n88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8AH66SigDz/wCHGg6j/wAID4Uu/wDhLNY8n+zLOX7F5Vn5W3ykPl58jftxxndux/Fnmu/IypHtXOfDj/klnhT/ALAtn/6ISukpNXVgOM0Dwbq/h3w5p1po+ui0uILWOOe2niN3ZtIFAd1UlJFJxwFdV6kpkk12YzjnrRRVN3DrcKKKKQBRRRQAUUUUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQAUUUUAFUdbvp9L0DUL+zspL+4tbWSaK0izvuGVSwjXAJyxGBgHr0NfP/AMVf2gNRin1jwz4Zsm01oLt7KTVGuP3pCErIEUDEZLKQr7icc4ViCvB6d8QPiZ4EuLDWb691O4jvWuYI7XWrl7hJPKfZIrRNJuRkfbz8p4PJG4H0Vl9W0eeSi5/Cm9ZaXtHztr00TZHOuh0yeONP+NFnJp3jTTLga5p0NzdaM2gkx/bdsRd7Xa4lwzeUCGwc7cDB4k8w1Hxff3uuR6ql5NpcllZpa2MmlvL/AKGkcPlxxRlpCyqcfMd+f3jthicHr/ie+l6rNpPjHQrzTtPu9ehnk1G006+8xLTdHGNspBU+c6yy7wFUHkbWIZ3S2+FvjjQ9M0/xRojQutxp6X1vqtteGJomkj+SBE4kaVyVRQoKs0oXHJx6KxeFhQk46cyajG/Nytp8/X3U3y2unLS99NdI4ebtKbsu76+i3f5HG6LpeNHvNWtdagsZrC7tvs8asySys29i0Tgkho/LVj7NwQdob1zTvgxqfxF8H2vjCDxTb6nqt+i5XUbVwuY8Q7Wk5JZUjwWKPuZc5Od5f4L8P2um+EdX0XWxZ+M9OnvrOCCS01Fhp1ncZCridf3qyOJ41JiiZcbVZ8bwnufw/utHm8Iw2ugWkFhDps0thNZQS+YLeaJysilurZYbwzAMwcMQC1cGJzijWqujQmnKD2WqUdPdd1dpO94vSz1WppFqkrwWvd7/AC6L137MpeAvh/a+FvDejRavBY6hrunRSL/af2cGSPzHkcokjDftHmso6ZGTgZIrpL7RdK1S6tLrU9Ms7y4sX8y1luLdZHt2yDuQkEqcqpyMdB6VeorzZNybbM223dnN/Dj/AJJZ4U/7Atn/AOiErpK5v4cf8ks8Kf8AYFs//RCVxGv/ABY8QaV8dbHwXbaFFLp08kEZZkkM86SLlp4yOAiZbPyt/qX+Yfw6UqM6rah0Te6Wi33/AC3JbSO4+IHh298WeAdV0PS777DdXkQVJiWCnDBijFedrgFG68MeG6Hwbwn408TfBbxfa+AfEy6a+lSX0bNO8kirFFOEBeKR9qiJWLM3yY3CQZBOR7z8QPEV74T8A6rrml2P266s4gyQkMVGWCl2C87UBLt04U8r1HgXxG8aap4//Z90rV9YsEtJx4kEKvbBljuUWCU70DEkDJKH5jyjc/wj0MHGpUp+zcVKEpJeak00mre87dvhb3JlZO50nhv4wW2pfHPVYrXwxp9xZHzoH1bSLCS6vTFGQqyvJErGSNmRAAFAG9PmO35vItS8Xf8ACK/HDU/Evh0RSyw6reSR/wBpWzRMDJ5iurxbgwwXYDJB4BKqcqNf4H+N77QPHukWGo69NYeHm+0xTRXt4FtY12SOMB22ofMC/MMEkkZ+Y5o6idH1n4+X9zq1zp+uabc6lct9pu9VktbWSPbIY1+0AFlCYRRtBUlAFJUgntVJ4KpUdSC5Y01KS97WN4tvVXTflyrs+8X5krdynpvhDxP8TtW1LVtLTTbm6uZp9Qe0t9QhSVi02GCxmUugBkyC+0bR94kqG90+C3jfStHtdP8AhlfLcx67ZNdI77A0DSiSSV4Q4OSyAsCSNhMbbWYFS3l/wt0U+FfilpHiDWLqz0/wyt3fx2epz3ayQ3BVJYgonAC5JJILrGHCMV5wp+kdK8EeD08SnxlpGm2j6jfIZVvoZC6OJAMyIuSgLDq6gFtzcncc8lfMMPiqShGXPFL3bW0kklyttydo2tbR37FKDizZi0XSoNZm1eDTLOPU7hBHNepbqJpF4+VnA3EfKvBP8I9KvUUV5BoFFFFAHN+PP+Rdtf8AsNaV/wCnC3rpDyK5vx5/yLtr/wBhrSv/AE4W9ZUnxRg+1XUVr4Z1y6S2uprUzRG0CO0UjRsV3zq2NyHGQKqMJT0irmFbEUcPHnrTUV3bS/M6Pwvof/CN+GbPSPtH2n7KhXzdmzdliemTjr61lzeFdWtdY1K58Oa/HpttqsizXUUtj9oeOUKEZ4WLhUJVV4dXGRnHUHP/AOFn/wDUoeIP++7L/wCSa6Xw1r8HifQYtUtbe4tUklliMNyFEiNFK0TA7GZfvIehPFVKnOGsk0RQxmGxLcaNSMrdmn+RzusfD2bVDrkY1WAWmrXFvdmC4sRMBND5Y+f5wJI2EQymB1OGHSoJvhzqF/qF3far4gimnuvsOUg0/wAqKIW05lVUXzCQGBwcsxBJOcYUd9RWa0tbodW6sc74i8PanrlrZ+TqdpbXVjqK3tvI9i0ibVDBUdPNUscNywYfQVWvvDGuarDaT3+uWK6rp10LmxurTTXjjT5SjpJG07F1ZWIOGU9MHIrq6KFpp/XT/IN/6/rucwfC+p3tzpV3rWuJd3On6gb3ENkIYsGF4hGi7iyj592WZznPQEAYfiTw42j6hLr9tPetdzaut7BNa6Y14tp/owgZZYUYSSoyqfuYILKegJrabx1Fc6zf6d4f0TVNeOmuIby4sDbrDFMckw75pUDOowWC527gDg8VLB4501NVttL16G48PajeZNpbaoY1+0jcq4jkjd42bc4Hlh9/fbggk9P62/yQ/wCvz/zOW8O+FNZ1aG41e5v3tr7/AISE6pazXmnNGJEFusBBty6vGpG/aGbcAFJzznoD4Fz4Xk0f+0fv6v8A2n53kdP9L+0eXjd/wHOffHautop3ta3S34W/yQtXv/W/+bCubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqQHSUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB5/8OPBXhX/hAfCmp/8ACNaP/aH9mWdx9r+wReb5vlI3mb9ud27nOc55r0CvP/hxr2o/8ID4UtP+ET1jyf7Ms4vtvm2flbfKQeZjz9+3HONu7H8OeK9APAOKTdlcAorza2+IOrXmmS3SyabaXOmWUE2oaZc27rcTXEgP7hA0imElhtXcrliykAjG70hTlQSMZHT0qmrBs7C0UUUgCiiigAooooAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SuH+LemeLtW8D/Z/AVzLDqH2qNplguBBLLCAcqkhI2ncUY/MuVVhk52nuKKunP2c1NJOzvrqvmuqE9Uc58P7PxBp/gHSrXxhcfaNYjiIuHMgdgNxKKzD7zKm1WbnJBOW+8bfivV7jQvDVzqFpHG0kbRoXlBMcCvIqNM4BGUjVjI3K/Kh+ZfvC1Y63pWqXV3a6ZqdneXFi/l3UVvcLI9u2SNrgElTlWGDjofSud+Jeo2tv4YTTpZj9p1G7toobYKWFwPtMSskmM7YW3LHI5BAEuMOWVGxxFRqE5rTRvT+rFJa2PFtY1Syt/EFv4mkWS81LU764hbXLDW10qDVYI4JAIlzcKYkjlSKPdyGEKtucyBWfqfhjS/EuoaDcS6PqPiO7vBcWF7qtnPHDDeXe0TtJar5kSbAUugG2KrMS58xvv1mXxR4Q1q9vLAW8c1ikttcxRQj7DZJItq7i1HmrjDyQEAwDmV97SlNxi8JeHX8X2WpaDpllZSXUlhIBFezNHaIfJggS5VFR1WdPLzlUBfzn+ZQqqflMJWxTiuWTblZ83M7tNv4dlF2d7r3XsklZHvUcsrSwcscoJxi7dPm7dbaaety3pfgjU7mfSXutG8NXGs3Oo3ulve3zSXVvL9nS62xfZSipDGDbqqtGdyqo+UhmWqV/4QtbrVEs9WU6NotnaXOn2useJ3juRHKIoIvs8bpcbNyETSJ821XaZVjBiYj1Twx4Vl03xVqh0fStF0S/mtobS6n0mNZY9PjUvIdrtEga4lEifuyhVFjjkcsDHG/pOn6fa6VYR2dhF5UMeSAWLMxJJZmYklmZiWLEksSSSSSa9Cjl05UXKUnCbv1vyp7K12nyrRdNdlsePOq5Su9Tz7TPh4njHw8dU8eGQ6jrOlRQS2lsklrHaKUdgrQu7h5UeZyGcHayoVVSCT03hXwrLoFxc3V5dWs9xNbwWiJY2ZtYIoITIY1WMu5BzK+TuxjaAowSekor06WDw9Hl9nBLlvbyvv+SMnJvcKKKK6yTm/hx/ySzwp/wBgWz/9EJWDr8Gu2fjB9SluLm2skvLZ4NQfUVhsbW0HliaGaEyANI5E4VvLfmWL512/I/wbqMD+BfBWiQ+I7PTb640K1kFqDG13KogUholckAfI+SUfIBxgjNV9c+H+qXd/dJZLY3trNJHLFc6leSvcQxqE32eWRy0MpRwxL8LcSDYwXD8OM9q4r2cW2mtpcvX8V3XU6acaKV6kvkl+be1+jVzT8YX+s+IfB+pWXgVL5LuaHEGpxhIo+CCyxs7KxLoCqyICuXUhxglfFrO38UJrGl6L8Qhca4wkmsD4bvLiFry5t5BFcmdZzIN0YaAkEucPCIt2GPl9Xqk+v6N4X13Q9M0DTnt01uygk0621ExxRmRrQm0hUwhGilDjeW8sbp5QVYDc+brHgrX7Tw6/iXUPClnoUWmXqah9n0vVgl5Y2Uahbi3jMcarsZfPl2pKnzSk/eyG46mNxVWjyUIXa3+F8srfA9U2tbuztpo7l+0jB+4reerfrfZPzSRz8eieHpdb07S/C2lx2OvNrF2hnt9YS1mgiVblhCfLeSVGRQsbMYijFDh2Dq7QeGNKXT/HmnXa6n4fstYXV76O4fzri+mg2rcrI0yPcKxTIBD7AQuHdxg7/TvDnw28Q3F9ZWni230SXwrZ3tzqNvYXAku7yR5vO2x3DOTGSv2hiWBf5kGCc7qxPGt5P8NfE2k6foP2NrKznn1W0tHsyggM3noU3LIAyAzTYUIm0CMZbBzwPDYiC9rPSM3aUbt3i+Zvrs7r3On8zO/BU62YVlh4rnfno9P72/33XkW7j4U67qUyafI81pdxajd30mtNO8tkfN88o1va/aMxzKZ0YEqu1kYh3436Hw307xJb688F5Bd2t3Yapd/25KL8yafMJQ86JbwtIxUkz28m7y0OA4LZLK3W/DbX4ta8MxxRwvbrbqDbxOQSLcsyxjI6hTHJGCTuYRByBuxVzUf+JX8QdIvl4i1iGTTJwvLPLGr3EBOeiqi3YJHJMqZBABX1cPgMPFRqU7rW+769P8Pltsefi6VTDVpUKm8dDpKKKK9Q5AooooA5vx5/yLtr/wBhrSv/AE4W9efaV/zFP+w1qX/pbNXoPjz/AJF21/7DWlf+nC3rx4a9dSa1qOh+HI4Z9RXWtQku5plLQ2MRvZjl8EFnYfdQEE/eJAHPo5fJRqu/b9UfHcYUZ1sBBR6TTb6JcstX/XktTrq6j4Xf8iIn/YS1H/0unrze7ufEmkWr3kqWmtRR4MlrZWr2823PzMm6Rw7AZ+T5d3Zs8H0H4RXkGofDW1vLR/Mt7i9v5YnwRuVr2Yg4PI4PeujMpXjFHi8F0XCtVmmnGyV13v52a+a16HbUUUV4x+lhXLarqGo6z4oXw5pMUkenwoJNZ1OOfy2iDKSltEVywlb5WY/KUjYEEM6ML3ivxJ/wjWlRzQafcanqF3MLWwsLcYa5nZWYKWPCKFVmZ24VVY88A+Y+GNU8VaPY3ttp934fRhqd4LmdtHl8y7nW4eN53K3IG5ym7AACghRhVArWnSnVfLBXZw43H4bAU1VxMuWLdtm9d+ifY9ltraCztYrWzhjgt4UEcUUSBUjUDAVQOAABgAVV1nRtO8Q6Nc6TrVpHeWN0myaGQcMOvUcgggEEYIIBBBFee/8ACU+N/wDoI+H/APwTz/8AyVXX+BtbvvEHhOK/1X7P9r+03UEhto2jjbyriSIEKzMRkIDjJ5NVVw9WkrzVjHA5vgswk44afM1vo1+aQzw3q+qDVb3w/wCJINl7afvLO93qV1K13YWUAAYkX5VlUKFDMpGFdQOkrE8V6RfarpUcmhz29vrNhMLvT5rpGeJZQrIVdQQSrxvJGTyVDlh8yirujarBrmjW2pWqSRpcJuMUwAkhbo0bgE7XRgVZc8MpHasD1C9XN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAYnjHxVZeCvCV9r+pKzw2iAiNPvSOSFVR9SQPbrXn938QfiF4VsLXxH418PaQnhud0FxHp8spu9PRyAGk3fK2MgEL39KufHzc3gXTYxny5Nbs1kA7ruPX8cVtfGIIfg54m8zGPsLEZOOcjH64qHLli59n+ST/G/yK5eaSh3/V2/Cx2cciSxrJGwZHAZWB4IPQ15/wCLfHXiAeNovBvgDS7O91gW4u7u71F2W2tIicDcF+ZifbpkcHnHTeCXkk8A6A8xJkbTbcsW6k+WtcH4jh1zwL8XbnxlYaBfeINH1exjtbyLTUElxbSIRtZY+rAge3U5IwM6TSjU5Xtd/rb8SINyhzdbL9L/AIHQeE/GOuSeKJvCfjrTrSy1pLb7Xb3GnyM1teRZ2sU3fMpUnBU896x5PHfjXxZrmqW3wz0rSP7P0mdrabUdaeQJczL95Ilj549Tx9K5u81/V9c+PXhTUbjRbrRrf+zL02lte4Fyw8tiXkRSdgJwApJPynPUVm/Bqw8ea/8ADGAeHdftfDFnDcTfv2sVu5r2UuSzMHwEQZC9zlSfSkrvXsv1a/T7xuy081+V/wCvI9Y+HfjaTxpo10dR086Zq+mXTWeo2ZfcI5V7qe6nqPxGTjJ66uE+GPjDV/ECaxoviuGCPXtAuvs13JbA+VOpGUkX0yAePx4zgd3VPv6CXVBRRRUjOb+HH/JLPCn/AGBbP/0QldJXn/w40HUf+EB8KXf/AAlmseT/AGZZy/YvKs/K2+Uh8vPkb9uOM7t2P4s816BQAUUUUAFFFFABRRRQAUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSVznjW01W80m2XSUu5okug17bWN19nuJ4djgLHJvTaRIYmPzplUYZOdrdHRUVIe0g4NtXVtNH8n0Y1ozyf4c+Fr3wzLp2p67ZXujQ6RoL2l9JqmqLPEznyGLxATSLHGogfP+rGCmAQDt6q1SK40u78R+JrF5TqkaQW2m3MIL21tMERbVkbCh5HIMmcDcwRmZYlarV7/AMT/AMZW+nj5tP0Xbd3fdZLph+4iPUHYuZmU4ZWNq4NW9I/4nXk63c/NE25tPi/hjiOQsvu7oc5OCqtswDvLY0aMcPTVKF+u+u7u/wAzaEVK9Seyt8+y+dt+nrZNnh/wxY6Po0tmbCxjFzvE1vbwqIVRmYiFVwBsUOR90BiWYgM7ZzrXTNM8KO+ieCNOgi1K8AmlaQvIltHyommJbcVyGCRgguwYDaBI6XbnWX1q6l0rwxdxs8LmK/1GIrIliQcNGvVWuPRDkJ95x9xJNLStG07Q7VrfSrSO2SRzLKVGXmkIAMkjn5nc4GXYlj1JNbqEdHbYJYiq1KPM7S3XTTbTbTp2DStKg0i1aKFpJpZXMtxczEGW5kIALuQAM4AAAAVVCqoVVUC9RRVGAUUUUAFFFFAHlvgbwRLeeDfDd2mppHp13aaXqV1bG2LTNPBBb7Nku8BU/wBHiypRifnww3Db3Xiu31O68NXMOiNILotGSsUnlySRCRTLGj5G12jDqrZXDMDuXG4U/hx/ySzwp/2BbP8A9EJXSVhGhTgpKCtzO7t3atf1HdnkNj4L1Z/GWn62+halDqNtcxCx1LUNRS4NjYhh58EuZnZ3cG52nEmBPGN6bcR+tXNtBeWstreQxz28yGOWKVAySKRgqwPBBBwQakoqcPh1h4cqk5f4m29kuvp992Ddzn/B9zPHo0ejapNJJqukottctO5aS4VcrHcknqJVTfnLYYuhYsjYta/4W0bxRBDDrtil2sLFoyWZGQkYOGUg4PGRnBwPQUms6VPcXVtqulNGmq2KSRwiYnypo3KGSF8AlQxjQhwCysqnDLuR7OjarBrmjW2pWqSRpcJuMUwAkhbo0bgE7XRgVZc8MpHauiUVJWaLp1alGanTk011TsyhrUMWkQWerWkaQxaSpSWNFAUWjACQAdggVJMAZPlbR941B8Q/3fw+1e+X/W6ZD/acIP3WltWFxGG9VLxKCBgkE4IPI6SuB8Xf8SrwJqvheX5I9ShGk6NI33f9IC28cbt6o8mTwWMS7hvZXxPwvyZtd1qdvtR/Fb/g7v0b6I76iiirOUKKKKAOS+J327/hCD/ZH2f+0P7T037L9q3eV5v26DZv287d2M45xnFedeFdMi0nTr60ikluGj1W/SS5uGDTXDLdSp5kjYG5yFGW74r07x5/yLtr/wBhrSv/AE4W9efaV/zFP+w1qX/pbNXpZb/Gfp/kfE8at/2dD/Gv/SZF6ofh9pF9oFgfE+jT3EthealqH9t6WqNMZNt1MiXMC5yJFCorKud6LwpdVDTV1Hwu/wCRET/sJaj/AOl09dWZ/BE8Pgj/AHit/hX5nV21zBeWsV1ZzRz28yCSKWJwySKRkMpHBBByCKLm5gs7WW6vJo4LeFDJLLK4VI1AyWYngAAZJNc03g+fTNZv9U8H6lHpU2puJL20ubY3FnLJzmcRK8bJK3yhmD7WA+ZS2GBbeFtVvNfi1LxZrkepRWqAWunWdq1rarIG3edIhlkMrgqmzcdqFdwG75h4Z+pB4dsLvU9fuvFes20lrMyPZaXbGaT91Zbg3mPEwGyWVlDMCMqqxKcMrZ4PSv8AmKf9hrUv/S2avZa8a0r/AJin/Ya1L/0tmr0st/jP0/VHxPGv/Iuh/jX/AKTIvVh+F7jXk0idbDxRqNhbjUr7ZbwwWrIn+ly5wXhZuTk8k9fTitysbwr/AMgef/sJX/8A6Vy17NSnCpJKavv+h+b4PGYjB0p1MPJxbcVddveNX7X4n/6HXVv/AAFsf/kep/h5Pf6OsOpXdzFNpuvaleW9432ZInW/S5ljjuHZNqASxxJEwCjMoiwC0rmmVteB9Kg1z4Vz6bdNJGlxf6kolhIEkLfbpysiEg7XRgGVscMoPavKx9GnTjFwVj7zhLMsXjK9SOIqOSSVr+p3tc3Y/wDJU9d/7Aum/wDo++qTwnrL31rcaVqd3HPrmjOLXUQCodzjMc5ReFEqbZABkLuKZyjYjsf+Sp67/wBgXTf/AEffV5J+hHSUUUUAc18QfCI8ceCL7QxcfZZpgslvP/zylRgyH6ZGD7E1wOsad8UPHmhxeENf0Sx0SxkZE1PWor9ZvtUakE+VEPmQtj+L6cV7HRStr5dg1MTUbrVdHm0ex0HQP7RsnkEFzN9sSH7FEMAPtYZk4zwOeK5rxdZeN9J8a2/iXwdG2u2T2ptbvQZr/wAhN27KyxlvkDdiTzgd88egUU9b36grJWPO/CHhfxDqPjq68ceOYILG9a1+x6fpUMwmFnDnLFnAwzk9xxgn6DI0vRfHfwwuNQ0vwl4ftfE/h+6uXubJDqC2stiXOSjb+GQHpjnqe+K9boo9PT9fz1D1/rp+RxHw28H6n4dh1bVvE08E2va9dfarwWwPlQgDCRrnqFBPPv3xk9vRRTEgooopDPP/AIceNfCv/CA+FNM/4SXR/wC0P7Ms7f7J9vi83zfKRfL2bs7t3GMZzxXoHSub+HH/ACSzwp/2BbP/ANEJXSUAcZH8SrSRXmTQtY+yRwC7ku9kHlpaknbcH97koQrHaAXwpyg4z2YIYAjkHpWWPDelrop0lIJFsC5fyFnkC8tuKcN9zPGz7uPlxjitTpR0B76f1/X9eZRRRQAUUUUAFFFFABXN2P8AyVPXf+wLpv8A6Pvq6SuH1PxJpPhXx9ruo69eLaW39k6ZGp2M7OxnvsKqKCzHAJwAcAE9ATRsNJydludxXnPxC+Ltv4C8QW+myaRJfL9mW8u5VnEZihLso8tdp3v+7c7SUH3fm5O3xUfEf4o+M7eWxtby6MN3GL+UaNGBcW0SsoCRbEEm3fLGDy74Xltu8tztz4D8S3VgNeXSr7U21CGR4J7K1e6lkkBY75WVCVkO9GJ3fe3AkMrqvLOu2vc/rX+vQ93DZXGNRvFSSS3V7PWN09dt1b+azSPWPFvxMbwl451S1uNEk1Tw/qlxHqs80FysZmt/Iit+FYfOm62mO3IEg2fNsY7u11/xFbWWpWtl8QfE8eifawGTS9HkmAVc7Q894qh1TcNwYCADDqxkVSa+VTp+ra1KzWOh3Gu3t/amVpLeJ57jP8U7gKTuJkXJyee5q54jt/EjS2f/AAlUGti/uLKNXOq3cnmFGmMakh3LKu5ZsAr3ztIPMRrSScrb9f6f3G9TLaUqkaCnZxTbjrfXVW93XSzk7vTaySS+37a2gs7WK1s4Y4LeFBHFFEgVI1AwFUDgAAYAFSV872mp/E/4g+AreXT7u4uJ9O1Se2uxp12lnPMDFDJE7ODEpC+ZKpA25ymVYgsPetEi1GDQNPi1yeO51OO1jW8miGEkmCgOy8DgtkjgfQV1Qmp7I8TEYZ0NJSV7tNa3VtNdOvT9C9RRRVnKFFFFABRRRQBzfw4/5JZ4U/7Atn/6ISukrm/hx/ySzwp/2BbP/wBEJXSUAFFFFABWJqHh3N/Jqvh+W30vWJcCa5a28yO7UAKFnRWQybQBtbcGUjAO0urY/wAUtR8UaZ4PWfwXDM92bpFuJLa2FxNFDhsskZDbjvCKflbCsxwMbh8sJZ674w8XS2kw1PUta1S7nhvLeZRbPOI977HZggG3yUPllgF8sAKNoAxqVeR2s2ejhMA8TBz54xS7v01a3truk9nofUXiH4jXPg3SjeeK/C99GiuIzLpt1b3EUjNyFi3yRyucZJHlDG1jyo3HhbH4kWvxU+ImjaVJYXFjoqzNcacxAF2L6GORg8qklFjUByFG470jJ4LKPJ/BnhJdf+KGm+H9cn1G0uFu7mzmKBGkgEEMwWNZWRw20RKmMsMDA6DFfxR4N1Pwd4pvrJtF1NLea+mg+23YItr+AlpYlZ1HlsSEjfaF4ZOgK8Yzqya5raL9L/d6no4fAUI1FRc/3kkrO+nvctrWu5PV+60rrz0PsKwv5Wnaw1JUjv413fICEuEBA8yPOeMkBlJJQkAkgqzeZaF+0NoF/fSJrdjcaTaSxmaxuFD3TTICOJEjQmNsMpwN6/eG7gbvK/DL/E7xHo9jp2jrrVzp1g07WogxbJBtdogIrphHuCq7pt8w4GMKAvyxeKPAGpeCdYsLjxWIbu81KK4Zn0u/KPKytEWkklmt3JJL9NpJySW4wylWmldLRdX/AF+JrSy3DSk4VJJzla0Yu73V9Nr2+y2mmn2sfWVtcwXlrFdWc0c9vMgkilicMkikZDKRwQQcgipK8X8Vyan4k8I+F7P4UXVzDaW9mGl0i11JbW9ji8uMQMxMisUVdwPzkNvRhvGGGh8JtX+JF54gvrPx3FePawW372a7skgEdyHACxMiqJUI8wlhvHyJhhu+bpVROVkvn0PFlg5wpe0lJJ/yt2luls9736X0TZ2njz/kXbX/ALDWlf8Apwt68+0r/mKf9hrUv/S2aszS9D+IumXFzN42vLiayfVNMVjNeCZLi4/tO2IkgQE+VHgSfLiPh0G35fl09K/5in/Ya1L/ANLZq9XK3zVW7W0f5o+B47pqlgYRUlL346rbWMn5bbPzL1dR8Lv+RET/ALCWo/8ApdPXL11Hwu/5ERP+wlqP/pdPXXmfwRPnuCP94rf4V+Z19cNJ8UYPtV1Fa+Gdcuktrqa1M0RtAjtFI0bFd86tjchxkCu5rxrSv+Yp/wBhrUv/AEtmrz8JQjXqOMux9hxDmlbK8LGtRSbcktb9m+jXY6v/AIWf/wBSh4g/77sv/kmuM8OXX27T7u78mSDz9U1CTypdu+PdeTHa20kZGcHBI9Ca1qxvCv8AyB5/+wlf/wDpXLXsUcLChUvFvVf5H5xmefYnNcJyV4xSjJPRPtLu2bNY3hX/AJA8/wD2Er//ANK5a2axvCv/ACB5/wDsJX//AKVy11P416P9DwI/7vL1j+UjZrqPhd/yIif9hLUf/S6euXrL8Ja/4qstEmt9KvdHitE1K/8ALS502WWQZu5icss6g8k/wjj161w46lOqoxgrs+p4Vx+GwFSrVxMuWLSWzeur6J9j0fxJol1/atl4k8PQW51iy/czhowXvbItmS2DFlAbIDoWOA64JCu5qj4Y1nTvEPjrU9W0W7jvLG60LTXhmjPDDz74d+QQQQQcEEEEAisH/hKfG/8A0EfD/wD4J5//AJKqf4Zx2s3iTUNbgsbeyudf8P6Rqt8lspWN7iX7VvYKScZwPqeTkkk+LVoVKNudWufpuBzTB5hzfVZ83La+jW97bpdj0miiisT0gooooAKKKKACiiigAooooAKKKKAPP/hxd+Kv+EB8KR/2No/9n/2ZZr5/9ry+b5XlJ83l/ZsbtvO3fjPG7vXoFc38OP8AklnhT/sC2f8A6ISukoAKKKKACiiigAooooAwvFN7q+nQWN3o9tNdRxXJa9ihQOxh8mTB2/ebEnlkhMuQOAehz/DFxrbX9p9uvL+9gu9P+1XP26yFuLSUldsceI0ODmTKsWZdi5Iz82h4r1a80mxs/sEtpbPd3aWzXl6heG2DAkMyhlJyQEA3D5nXnsaFprV4/juw0fVtOtY75bC6la5RCwdA8ADROeVVtx3IeQyLyQFZnHf+u1xvp/XU6yvKvHWhQ+JfHGqabc6LrGoqNM02eOfSZraOS1dZb5Qf38iqdyu64wwwT0O016Pqui6Vr1qtrrmmWepW6OJFivLdZkVgCAwDAjOCRn3Nc34c0XStB+JOv2uh6ZZ6bbvpOnSNFZ26wozGa9BYhQBnAAz7CpaTVmOE5QkpwdmtU10POfEfgjVx4NXQvBPgHULFVkinuZrqexEupyKzn9/Ilz0UuZBlXG7AVYwoNdn4EufEfhfwPpujal4Q1+8ubWNg0i3FiVQFywjUm6yUQEIvA4UcL0HotFSoRUuZG08TVqU1Sk9E77K93u77u/mzzbw3oml+EdVvdS8N/CnWLC7vuJpI7ixPG7dtQG7IjXP8KADhePlGNPV5YvEHk/298K9Q1PyN3lfbU0yby92M7d1ycZwM49BXbUVZznJafq1zpFhHY6V8ONYsbSLPl29s2mxxpkknCrcgDJJP1NWf+Eo1f/oRPEH/AH/0/wD+SqX4gWfiDUPAOq2vg+4+z6xJEBbuJAjEbgXVWP3WZNyq3GCQcr94ZXwk0zxdpPgf7P49uZZtQ+1SNCs9wJ5YoSBhXkBO47g7D5mwrKMjG0a+zXsvacy3tbr6+nzFfWxU8VfF+08E21vP4n8L67ZLcuUhXfZSO5AySES5LYHGTjAyATyM7Vt4x1C8tYrqz8Fa5PbzIJIpYrrTmSRSMhlIusEEHIIrx7x/4z8I/EHxrd+HfEmk6taxeHvt5g1LT7qPznMEbPOhidSgVvIbByTlU+6GbHTeD/inHr3wl8UDw/pL6Bc+FtIb7Inni6REWB/JIZ1BJBiOQynoOTkgdVXBzhQVTld9G72taXw21vrqSpJux6B/wlGr/wDQieIP+/8Ap/8A8lVk+JPigvhHRzqniLwnrtlaB1jDtLYszseiqq3JZjwTgA8AnoCa8C8BfHvxB4OhvrbW4bnxLHO8bw/a9TbdATlWw7I7EH5eMgDaSBljXu32LQ/jr8LNOudTgvLGC4k89BFKBJbzRs8TbWIKsP8AWKCy8q2cKcY0xGX1MHVSxKfJe112vra9uz3tsCmpLQ0NH+IE/iDR7bVdG8Ha5d2V0m+KaOewww6EEG6yCCCCDgggggEVd/4SjV/+hE8Qf9/9P/8Akqr3hfw3p/hHwzZ6Fo6yC0s0IQyvudyzFmZj6lmYnAA54AGBXEfEn402nw58TWOkz6NPfia3W6uZkmCeVEXZRsUg72+RzglB93nk446dGVap7Oim97d7LX8im7K7LPgHxHqkHw28NRReC9cuUj0m1VZoprEJIBCoDLuuQ2D1GQD6gV0H/CUav/0IniD/AL/6f/8AJVHw4/5JZ4U/7Atn/wCiErpKwGc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVdJXmWtfGm00b4uW/gl9GnlV7iC1lvhMAUlmClNsePmX95HklgRlsA4G7WlRqVW1TV7Jt+i3Ym0tzqf8AhKNX/wChE8Qf9/8AT/8A5KriNM8G2GlfESfxla+AfFH9oSySzLE11pvlxyygiRxi43knc/DMVG84Awu00DQPidB8db7UtW1GV/C7STkBrxWgkgK/uY44eqOp8vLbVzsf5m3fPyvxB+K3iPxd4kuPAHw/0+8s76PUZLc3kN+sM1wIFcyKM48sbkJDCTJVcEfMVrohgpVZqMJJqyk30inbfTpfW1/K4Ko4p20vp6nV6zqvhjwHqc/jjWPh7rGnXUshU3JuLN8yycExwi6I8xhuJZF3EGQk4LGt+38XweNvDEU6eAtU1nR79A6rK2nSRyANnDI1z1DLyCMqy4IBFeUeHfEo+JC2Hwo+JNhfjUrW5mRNWgvkaZbiDzOHG0qcRB0LEybjz1O5ev8Ah98RdE0nxtH8LNF0W7hsrCW5tLe/muQ7zTxb3lZ0wAoZllIIJ/h+VQcLcsDKEGlF8y957W5NLSvvq322sDqOTXM/L/gHB+Dr+TT/ANoy8isNNvi9s9xi0t5rRZZY9hC2Z/0gR7YQVAVXbAt1+Rdp2e26rfNr1qtrrnwx1TUrdHEixXg02ZFYAgMA1yRnBIz7modM+EnhrSfiNP4ztfth1CaSWZYHmBhillBEkijG7J3PwWKjecAYXHcVxTjRjb2V9tb9+ttXpfb8jWpWqVWnPokl00W2xyN/q13qcCw3/wAPNdmVG3oTPp4aNwCA6MLrKsMnDAgjsaz/AO2PF2nfNpnhXxBfxDgWmpXGnjA6ALMlxuGM8lxIWwOQSWPfUVk4p6lQrTiuXddnqv8Ageqszzjxd4k1m48M2QvPBOs2kn9qaY75ubJ0Di9gOwEXGTkjaCVAyQTtGSOFfQfidF4juprLw3eR6VPczXHkG4sS+6TUGmY5809YGKYzjceP71eu+PP+Rdtf+w1pX/pwt66StqdSVJ3izzsZg6GNh7OvG6vf+vvPn7w7o3xXtr22bxJ4fu7u3WyZJkhnsAWuPOJVx+9X5RHhe3I6d67b4dXPizwx4EstL8Q+DdYutTjluJbma2uLAxu0s8kuRm4X+/6DmvS6KqpWnUSUnexjhMswuDqTqUIKLlvb57ff+XY5v/hKNX/6ETxB/wB/9P8A/kqvNn0jxtFbXQsvCOpRyz6vNd7jc2JHkSXjTMv+vPzGJiv1PB717bRSpVp0m3ErHZfQzCnGnXV0mn81f/M8In0r4ltbTLB4avllaC9WJjcWGFkaQG1J/fdETIb37N1rFPhf4t2thqcGk6DcQNNd3U9oWuLEiNZZ4pEDZkPIH2jPXl164G36RorV4us+p59Ph7Lqe1NPW+tn/X+Wh86Xmh/GJ7bUVs9EuI5ZJ52smaawxFGZITEG/eHkIs4PXl15PUQnwv8AFu1sNTg0nQbiBpru6ntC1xYkRrLPFIgbMh5A+0Z68uvXA2/SNfKen/FPxv8AC74h6xY+MpJ/EEpPlz2suoYiEpxIksR2MEQoxwiheHGQCoA68MsVi3JUpXkraa3d3bT9b2K/sPLaaS9krXvsvx7/APBfc3b/AEv4t2gvLuXSpLWyikv5vMmudPVYoDF/o+5jJgeWwLMSenUt0rJ+HXibWPEt5d2egadd3yx6rcXzW4e1if7FKHKgCSRSxEzqSRnGQN3IB5rw18Ztds7rV4vFRvPFGnaxby2t3Y3N+0Sb26tGQreWNpkXagUfMP7ox2n7PuoaDB4k1EaF4d1f+1ZLMxW0lzfrcQhBIvmKzpDGIxny23EOSFIX5sK/XWoYnC051arbtazXw3926d7PrbRPXy1IXD2X117KFNfgu+vyvu9kbWpWnxDhvLry/D97bxXYlg09XmsmZJnjhERIEpJCstw7fewpyQQp29D4Gvtb0DVV0278HaxLd2XhnSLOaOGeyODE10u/JuACrHOOc/KcgcZ3PHnii1+F/h1fEd7Yf2zq93OtmJciHJYFygYhjHEBGcKA3IGclmeo/h14qh8beIL3xBb20lqt5odhugkYMUdLq/RwCOo3KcHAyMHA6DyajxFWmq9Re7dpeu7X5HpYTLcFlydPCre133tt+ur1fkb/APwlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lYEXj3wfNeJaQ+K9EkuXcRrCmowl2cnAULuyTnjFcvWx3EX/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUgdSxUMCy9RnkUAc5/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlVvXN3bWUIlvLiK3jLqgeVwoLMQqjJ7kkADuTRLeWsFzBbz3MMc9yWEETyANKQMkKDycDk47UAYP8AwlGr/wDQieIP+/8Ap/8A8lUf8JRq/wD0IniD/v8A6f8A/JVba6lYvqcmmpe27X0cYle1EqmVUJwGKZyBnvjFMh1fTbm8Npb6hay3IZ1MMc6s4KYDjaDnK7lz6bhnrQBj/wDCUav/ANCJ4g/7/wCn/wDyVR/wlGr/APQieIP+/wDp/wD8lVvPeWsd4lpJcwrcvG0qwmQB2RSAzBepALAE9sj1oS9tZbprWO5he4SNZWiWQF1RiQrEdcHBwe+DQBg/8JRq/wD0IniD/v8A6f8A/JVH/CUav/0IniD/AL/6f/8AJVdJRQB5/wDDjQdR/wCEB8KXf/CWax5P9mWcv2LyrPytvlIfLz5G/bjjO7dj+LPNegVzfw4/5JZ4U/7Atn/6ISukoA5Ky8MeJt1x/aPjrVv9e3kG3gsRmLqu4Na8MOhwSDjPGdo60cDrn3ooo6B1uFFFFABRRRQAUUUUAFc3Y/8AJU9d/wCwLpv/AKPvq1tV0XStetVtdc0yz1K3RxIsV5brMisAQGAYEZwSM+5rm/Dmi6VoPxJ1+10PTLPTbd9J06RorO3WFGYzXoLEKAM4AGfYUAdlRRRQAUUUUAcPrHxm8A6DrFxpep6+qXdtIY5UitZ5grjqu5EKkjoQDwQQcEEV2ltcwXlrFdWc0c9vMgkilicMkikZDKRwQQcgivGPiP8As+6drUes674YlvV1y5lN1HZvcoLeSRmzKASm4FgXIy4AZhyq9OY+HXxrh+Hvh6fwt43tNZur3Tb6S1gWAQyiCJAF8reZATtdZMdQBtAOAAPT+pwr0lLC3lLS8ba6papK+l9LvvHTUjms/ePafGGiwQeGvE2r6DpkcfiK40m4jjvbK3AvJG8o7FDqN5OVTAz1VcdBXyH8N/8AR/GltqtpfW9rd6cwuLa0iMvm6g6K7fZo2RCoaXaIiGIz5oADk7T698dfiHqlzovh+48I6hqul6deNJLFPGWtX1BNqYkjwRIETcQRJsDeYjKJFG5fN/BS6S3jQaj8T9b8QWGooLO+tdVjuIplVjGJo3mMgkLZXyNoCnHIYDBxvheehg6k2vdmn0100e6297Vp6ethqDqTUYq7OlsfHFpcfDbVdeb4XeEZZrO/gtkvotGAtEWRXLb15yVKIv3xzPHwOA/S+G/jv4ibxN4a0S48JWWk6XcQwo0QjkjJgwQbqHOFS3VRvxtYBY2+fHK9/wDD/wCJdx8SNHX+xEs7e9traA6k9wkmIZXUk+XEOHQlGAJlDDGSOBuu+MdW0LwDo0WveL59Q1pluUitEkRHbzeWXZGoSJWUK7eYQGxkbuQtc0qlOU3ShhvebdleV1dJJJXu7PVaa3tsbqjGK5qk/krN/wCS++67HQf29Pe/8gHTJr1G+7dzOILY9/vHLspHIdEZTkYPUj5ymfxT8ePiVtt4joD6IvMkrzA6YRN1AHS556Epu8nqu2tPQfHnin4lfH62n8I6jqNpotu0cz2d1MscaWkexZw8SsyuzM7hThmy6HKhcr9J1PJPAv39ZtJrdct+6aV213urNNA60ZK1OKS+9v5v80kc38OP+SWeFP8AsC2f/ohK6Sub+HH/ACSzwp/2BbP/ANEJXSVwGRS1jWNP8P6Pc6rrN1HaWVqm+WaToo6AADkkkgADJJIABJrJ0C98I+NWt/Fehx2Go3EG63i1A2wFxBjOY8sodOHJwcZD56Nk4Px1iSb4K68sk6QACBgz7uSLiMhRtBOWICjtkjJAyR4XpGr3/hz9me5utE1x9PnufE2yVbd5EnI+zr+5DheGOxZMhgCny7skofQo4P21BVE7NzUettU9XZP/AD8iHKzsaHgjUruT9ru833cjNNqupW8p84lpIkSbZGw7ovlx4B4GxcdBjlNV8caz4Q+O2v6/p9ysl3Fqt7bsLsSMkkQd0WNyGXcqhU2rnAKJ/dp/hXR7vw7qWmfEPxbJqFzoNzNKftVjfutxdXEiSK0aMHSQSK+/ezFVYRyYZtyh+68DXngB/itDqXgtfEGoa1K011Fb6tIpjlZ42aaKKTdu89VaQBpi0bFGBfLLKPWT5JSqTpucVBR0Ttdct02rW00bequrq5Hkn1LF38fdCtvCdv4j0fSNHTx5fMLa+ZrNwFRSQXMu1S6kRJhPMyu5eW2HPrfw6nt/Evhuw8Z3vh6z0zXdUtttzPHbhZJkDbVbeRvKOsaOoJPyleTgGvOvCE3w3uP2grqXT4Nct/Eby3DCC6KG1iuyhNwq7CW3jMwO4mPO7aSPLNe615GK9jGMYwptN63d+q2SvZxvs931NI36sK8k+E/wn8QeA/GGs6rrWuxX8F7G0YETyF7tzJuE8wbADgA93/1r/N/e9borlhWnCEoR2lvoujv8vkO13cKKKKyGc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFFFFABRRRQAUUUUAZPiTxRo3hHRzqniK+SytA6xh2VmZ2PRVVQWY8E4APAJ6AmvFviX8YPh3f6Sl7oOmaJ4m1vzFtw+raRIy28Q3MSTIi5GeAoYcyZ5wQej/aK1bw1a+AY9N8QrePf3byS6SLQDKTxoQHYsQuz94FYckiT5RkZX5j0HSb6e3vNYsrhbOPS41viouxDOyhwPNjZiMEOYxw24s67QxyB6+Cw+GlT9tiG9HtZ2fbVdL6S6pNct3slGc5csP+GMiKGAxrJP5awKDGWUjdIcgceh755wD7jP2l8GbS1Hwz0zU4tFg0u71CNpLjy7dIjN+9kKv8qr8h3FkXGFVwAT1Pnnw/8Ajt4Y8PeD9M0/xBNrF3qkkrnUbyWAOULMCJHcyMzoqnYpG5ysPKj5QeP+F3xt1LRPGF3P491bVb3Tr6H98GImSCYyAiQJn5EC+blYx/dAU4GOrE4bGYyMqk6Li426Sv2aSSt0u79nruP2sYR9nB6dfN/5dkP8O6drHxq+Ok2pa7ZJa22nTRz3lpdRPKtrFE6gWZVhgM5DbgdoJ81tvG0/QmkW0Fn8SdXtbOGOC3h0LTI4ookCpGomvQFUDgAAYAFdTXN2P/JU9d/7Aum/+j76vIxOI9vJNKySSS9Pz1u9dehMVY6Q9DXkvhzT/FHiL4PwaFBp2ixaff20lt9tnv5XkSNnYF/IEABYAkgeYBkDmvWqqaXpdno2mQ6fpsPk2sAIjj3FtoznqST1Nclu5abWqPNrzXfGN5rGt23hu31eYaJKlpax232AwXDrEjk3JncS/MWx+724XkEno3Tbm70i48dahc63eWUsup28QT7JHdNDJJBBgRxxpl5PmEa/eXhSQ2DnuNU8E6DrOoS3t/aSNLOipcLFdSxR3Sr0WaNGCygZIw4bjjpxRe+CdA1Ce9lubOQtfiLzxHdSxqWj2+W4VWAV12Lh1AYYHNNX6/1tf77fIWi0W39f15nmepa3rdx/aOj602qNHb3WjXUA1dLRbhPMvArA/ZfkKnYMZwwOfau++IERg07TNbTh9G1OC5Zs4xEzeVL/AOQ5GP4VPB8PfDMEk0i2Esk1w0LTzTXk0skzQyeZGXdnLMVboSTwAvQAVr3Gj2d3pl7p90ss9rfCQTpJO7ZDjDAEnKj0CkAdsU76ab3v+Vvy1Dq/u/zPOILhLDWrXx5MSsOoardWkz8DFqU8uIn23W0Z/wC2hqjH4g1XwV4asLmAJ5l7o2o65dW8oDK1y8kUil2+9hfNIOCOB7CvS7rwnol74VXw3c2CvpCRJCttvYAImNo3A7uMDnOanu9A0u/u4rm8so55IraW0UPkp5Mm3ehT7pB2L1B6e5pLTT5L0t/nqO+t3/Tv/loeR/EDSNVtbi9W/wDElzqBfwjqLiV4IEkUh4C6gJGF8tuB0LDLfN0xt2ularN48vYbPxJe2bQeHbNnukgt2mmbfPt3boygUc5CqCeORznrLP4d+GLJ5HjsJZWksn09mub2ec/ZnxmIeY5wnyjAHA5xjJzoab4Z0rSJWlsoZfNa2S0aSa5lmZokLFVLOxJwXbnrzjoBQ/hsvP8A9u/zQX7/ANfD/k/wIvBmrXGveCNG1W+CC5vLKKaXYMLuKgnA7DPatuqumabaaNpVtpumxeTaWsaxQx7i21QMAZJJP4mrVVJpybRK0Rzfw4/5JZ4U/wCwLZ/+iErpK5v4cf8AJLPCn/YFs/8A0QldJUjCiiigAooooAKKKKAMLxTe6vp0Fjd6PbTXUcVyWvYoUDsYfJkwdv3mxJ5ZITLkDgHoc/wxca21/afbry/vYLvT/tVz9ushbi0lJXbHHiNDg5kyrFmXYuSM/NreJvEC+GNFbU5dOvL+GN1WRbTy90ak43t5joAoOMnPAOTwCRHpeoz6pqayXvhTUNMkiiYR3d41o+AxXKKYpnYZwD0AO0ZPAojv/XYH0Nuubsf+Sp67/wBgXTf/AEffVraroula9ara65plnqVujiRYry3WZFYAgMAwIzgkZ9zXN+HNF0rQfiTr9roemWem276Tp0jRWdusKMxmvQWIUAZwAM+woA7KuH+LfgnU/H3gf+x9Gv4rScXUczpOzLFcqoI8tyoJxkhx8rfMi8DqO4oq6dSVKaqR3Tuuu3qJq6sc58P/AA7e+E/AOlaHql99uurOIq8wLFRliwRS3O1AQi9OFHC9B0dFZniLX7HwvoFzq+qvstrfaGIIGWZgiLliFGWZRliFGckgAkTOd25SGUbjx54ctL2a1uL90eJzEH+zSmOaUHBhik27ZZcgr5SFn3Kw25UgeCeP9O8Cy+Nm1LxBBDptxqJuGniktbue0ikjaMFT9nZBJcks/mNHIY0ZWRldz5p6vw7r9te+OItYg8OeK3td95daRpTyWkaRTb/LvZ3VplYP5szoI3LbdzleGCxp4n8E+HvHXh/VvFGl69dW2labbXt1Z79vlw3MmJpZCnlGZU3DcVbL/MdiooTdwUMV7aTpqolq1LkaclHW26avdK91Za2u0r9EKLknNr3Vu/66vp+iu1i/ELxZ4W8XeHfDWm6la2vh/T5dNW6tL77DPcC2k2wE28Jh2KUCuyNzw0WCikITY1DU/hZqHg+w1OPS/sOtvZQ6fY/2lbXUlnZXE0IMayvMnkOsayK+5g37tFKghUFc14A+G0viXyNJ+IE2tafZLdXFvoxtrmB1+0hpDdRnIkYZ+zlhwEyjnOWG7ffwDpi61DCU1bxN4dubSWKxsBcxxS3SRLZJ9qDqYFaEeXFGFZiWMaSrvV9yvFYmOEpOvCsqii5KXK04JXsuR6ataT5mldK3UbqOf7uK5Y6er/xd9dVvboek+EpPh54K0e7/AOEYtZ9OWSZBNbyWd2byVirbAsUimZ1wshG0FRslI+65GT8bvEGnz/CBNRg0e316znvI03XKyotmQWBkfYUkjYMpiI3IQzlW7ocSPwl4u1jS7XVdMu31DX7y1tbnTPErSpHZwIYQWWSDCljmW7CE27kLOuWB3be/+H+k6ppZ1H7XbX1jYTFJI7bUZ4pZmuWaR7if90zIiyF4zsUqoZXIRc5ZYLG4v61F4mlot2m7Nqz30fK1ono7p6KyZhKMeXRmR8FfDWgWvgux8S6b4aTRdS1S3xPmWaUlQ5wyGVmZUkwsgAPIK5LYBr0qiivRqTc5uTIWhzfw4/5JZ4U/7Atn/wCiEpbz4geFrDxhB4XvNZgi1ifaEtirEBmGVVnA2KzcYViCdy4HzLlPhx/ySzwp/wBgWz/9EJXMeM/Afg2w8XR/EPWv7Re+hmhaOxtX3C9uUwsIVMbi+VTADKvyAtxvJcHRXM6zaVntbfpe/TuUoym1GCuzpPiP4Un8bfD3VPD9pcx2090sbRSSA7dySLIAccgEpjIyRnODjB810j4X2/hXwNonhfxvLZX1pqfiGW6vgrMI4VSwmZdszbXXBt0YuNhwWXlc7u6k8cT6ho13fWttcaTBaTRWs6XMSveefKIjHCke7y1ZvtEWHdyqscMuASPHtcTxrdfGTR9dij1LUtPs9Witktb2W0M1u3kJNNDsDCIO0UfmKynb8yfMJAQuUMdB0nTVSKjbn1aWi6p7218o+exu8PGDvUeu1lq/8vxb8j0m/wBQ+E95og8CyrDd2NiqPDZ2VtcSkkYOYZIlLSSfOxYoxcgyFuA9eX+CfGnhXSfjrLDp/g+2s7ONp7G2mghu5ryERIV80wncdziMhsRK48xizH5y0j+DoLnxZ/b8NtrgudS1q+LohsnjmJa4Y28aS5Hmpt+Yyfu/3MpR2JiLXNL0aezuNNvJtY1yzSHVbtze3l9D5bP/AKQrRRhi0ST4Lh2kiEbuj7JQHVn8uXEFOFSVCi1PmVld8tptu7tFyuvdt3e9tLG0cLCs0qd1Ls9b/PTX5JeZv+LNU8G+H9dTxZ4Msbe38TXc0oN9qFtNDZF/s0rMjtKEiWRnTy22vHIsjNvJxKjdF4I+J8/izVdPW2v9J1GC8lmhktbKF0uLVIxJi6kDSMVjdo1wjIpX7RGC7EfPS8H+E9bTxFo90b7Ub3SLXULrVY7q4NqLa4iuEuNhQIizCU/aVLB1VARJjgID2+mf8SjxxqOlD5LTUoRqdonYShtl0FA4VQWt5CCAWeeRstk7bovGV2p1Z8tnay1TSv1avrpt28zlklBuNtTpKKKK9IzCiiigDm/Hn/Iu2v8A2GtK/wDThb10lc348/5F21/7DWlf+nC3rpKACiiigAooooAK85+KnxAi0Hw7rGl6at22oNp9wGv4S0dvp8nlbkEk4+5KwYGNB8zMYwdodWrU17xlb+feWljrdnpcFjFLLe30qiaUrGG81baLPzugRy0hV0Vk2bJGEix+Sa/caTr+nJaeHdD1u00fU0TVNXs7u5s1iubYRoWufNaYyC4GbaQ7pFBxucEud/DjMUsPDmTW/V206287bdO7R0U6E6krWt1v0t39DiNN8N2vh3T5IPFU2nav4akuIJX1LSxc3MNoWcxTGOeIqsUgDRMUdWVwkfVlVT6z8PtM+FvirxjqyeFbS0msYLSFfsdwkp+2ddzmObO6FP3QCjA8wFnUlYHHB+FfD2uaxqLWGu6fr+s+GtdNxrNvp6XFpHJeIPIWKaeQTIxO2RCyZX51Rhu+bb7D8L/g/pfw6VNQE9xdazNYpb3Mjyhooz8rSLEAqnaXUctk4UdMnOmXY2rioVZYqblLTlcbcru/eXTVON5WW9vk60opKnSVo+e77N7/ACXRN76t+XfFHSfDfw88YeHtK0L4e2mowSkXSm5lupXvpDIFNuh34YgIvysJF/fD5BuO/wBbh+CPw7g+z7PDUTfZ5jMnmXEz7idvD7nO9flHyNleW4+Zs4Hwn0D4naV4w1mfx9qMtxp0kbBRLeLMk0/mZEkKDPlJt3/LiP76Db8vy+t17eJrzhy04yu0tWpSd769e17Oy7nHFLcK878daTBN4oS8W41C1uJLOOJ3stRntt6q8hUMI3UHBdsZ/vGvRK8y+KGrXFlq1tZaTClxq93a5tIpQ4jAV8PI7KDtVQ4JyQW+6OSKywai6vvq6PnuJJ144D/Z5OMrrVO2nXXou/kY/wDZX/UX8Qf+D+9/+O1BPBPp13pdxa6xrm/+1rCMiXWruVGV7uJGVkeQqwKsQQQetUbLwRpSp52uRJruoOoE15qKCUscs2ERsrGuWOFUAYx1xmqV74ePh680+70B51sRqliZdGTDpI/26J1MG91WFixIxkIcjhcbq9atSiqUn7NbPt/kfn+XY+tPHUofWpv3o781nqrr4m9el1r1sfQ9FZHhnxNp3ivRl1HS2kADtDPbzpsmtZl4eGVDyjqeCPoRkEE69fOn7IFYniTxXY+GvsUM8Vxe6hqM3kWOnWaq89y3VioYgBVX5mdiFUdTyATV/E9rp+qw6JZr9u126hae3sEJHyBgpklcAiKME/ebk4IQO2FJpHhi10/VZtbvG+3a7dQrBcX7gj5AxYRxISRFGCfurycAuXbLEAzV8M65r3lXHi/Wri08uZ3XTNAu3t4NnzBA84CzyMAwJIaNCQvycZaSfwBYtGPsOs+JLG4R0eO4j126mKlWDfcmd42BxghkYEE8V1NFAHE6h4g8Q+CZpLjxJB/bfhuOEM+qWFuFubLDgM1xFv8A3i7CHMkKjGx/3YGMdlbXMF5axXVnNHPbzIJIpYnDJIpGQykcEEHIIqSuWudKn8N6/Lr2kteTabcIRqOkQkuisW3faoI8E78l98aY8zcWAaRQsgB1NFR21zBeWsV1ZzRz28yCSKWJwySKRkMpHBBByCKkoA5v4cf8ks8Kf9gWz/8ARCV0lc38OP8AklnhT/sC2f8A6ISukoAKKKKACiiigAooooAKKKKACubsf+Sp67/2BdN/9H31a2q6LpWvWq2uuaZZ6lbo4kWK8t1mRWAIDAMCM4JGfc1zfhzRdK0H4k6/a6Hplnptu+k6dI0VnbrCjMZr0FiFAGcADPsKAOyqhq+tWOhWa3OpSuiO4jjSKF5pJWIJ2pGgLucBmIUHAVieASL9ZevaDDr1rbpJc3FnPazefbXVsU8yF9jISA6shyjuuGUjDZGCARFTn5H7O3NbS+1+l/IatfUreH/Geh+Jyo0e5ncvCLiIXFnNb+dEcfPH5qL5ijcuSuQNy5xuGeW8Zwp4v0XUp7q5jj0HTbiJbeGYNs1C7gusSxyIoZnQtGIEXaSXaRvLkxCaSTwdH4ct9N0TStY1S7v7u2OlWU08kayabY4Q3EiGFEIISONVkYPiUwDgO2en8S6fYf8ACKx6THbeWjSQQ2FvalYvLlR1aEoMEBYygcjawCxsSrAFTj+9lQaqpc2uzduttd9rX89i4xc5qMTwqW2trrzzayW2k3dw0sCaTC97F/Y8Pyg5iTA8u4MSFY3t0eR7lMFmAB2/hdb22g21/feJnmFrqEb2LaILGa5nlxtLvLbIrMqhXUfOvSYdA67/AFO38DWK6BcWV7PJcX948M93qixpHNNcQ7DFLgLtGwxoVUgr8uCGy2ed1Dwm8l61n4T1K8OvwyO2oa7M8X7kSpENjp5JjdykNuwiRIztiUtJH5gMnkUMBiaEYuPK5JdW9HfRXSu0lf3n7ze9z2Fms6OEngaVuST1dtX6dtl089Gx+l+FdAudb+y+FJLoWUEYurnURqtxdKTcbm2W7NIyxyurFnlXEixzDaczb067UfCmjanZ2ltLavbx2SeXbGxnktGhjwB5atCysE+VfkztO1ePlGF8MeGdO8JaBb6RpKyeTAiqZZn3yzFVCBnbudqqo7BVVQAqgDXr3PZU+Vx5VZ9LHiXZHbW0FnaxWtnDHBbwoI4ookCpGoGAqgcAADAAqSiitBBRRRQB5t4R8TW6eCPB2iWupJZzvpFlHPcm0klWF3gj2ReZt8qOVtwKiRs5MY2P5grS1S48GWFxdadrbXF7eOgS5u3t553RjtkSPz41IhkLBHSJCh3tGY1BZM5/gPwVY3ngvwvqT3d4kUunadeXFijJ5M9xFBD5crEqZAV8qLhXVT5YyDlt2/q3gOy1XUrm7/tLULRLqWO5nt7cxeW9xGEEU+XjZgy+VEQoYITGNysCwbhqRxTUrKLd9Lt25fPTffy8zdVmo8idl1t19e5ymt+KPB2j+CbnT9NhuWW6uIUll1G2vQLeWSWNBNczyAOjxjZIu+RH2pFtZQY2rgpNGurbRda1vT7XS9YZ9ViNlrFre3Qvr5UhgaS3tHAnlYMsc0ZYT/L+9ztVCB7FbfDy0hvUnuNY1S8VrmO8uYZjAEu7iMqY5X2RKwK+XCAEKqfKXIOX3bWvaDDr1rbpJc3FnPazefbXVsU8yF9jISA6shyjuuGUjDZGCARxSwVevC9dRulZRTajfRq7spWvdWWlulyOZJ6HF+BfA3hnUvBlnqEd7c6mt80t2lzb6veFImklZyIyZAyuu4xtJhJG+fcBvdaxfiL8Kb+7ls5vCEbzW6KUksZLpiUc8tMDK+CXwN/Qs3zHcWY12Hwz0qDwr4dm8HxtIX0S6lVDKRulgmkeaGQcDIKuULYA8yKUDO3NdlXoSwdCUOXlt59fvOzAZhWwGIWIpWuu+2v9dDj/AAJpd54SsofDGp3SXTCA3VtKibVA3fvYh3IRnU7mwW83AA2mrnjD/QP7K8QL8v8AZV6n2kj5c2s37mXe/wDDGm9J2z8v+jrnGAy6msWEt7BBJaMi3lnOtxbs5IUsAVZT1wGRnTODt37gCQKwfGt/Fqfwa8SXkCuiy6HeExyAB428lwyMB0ZSCpHYgjtW8EoLkXTYjFVJYmTxMt5P3vXv8/zuddRRRWhxBRRRQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lABRRRQAVw+teJLHUhCbq8v7fQ5txgOmJcNdantxmSP7ODKlspK/vFx5jMnIjK+fqf8jn/wBi3/6df/ub/wBHf9cv9dj+K/susPaam17eaXaRrLa29/p6tNd3iyqC8cEIjcspMaSCQAtiBiBsJc41pVFB+ys5dL7fOxrTp87u9Et3/XXyPD9fstP1vxNevol9C2jSoskd3fWs1naWkToTDE7SRgIm0KiEAqQUA6hR0fhrwfb+NntdT0+W4sJrRA1noEl9eWtrdwB8m5jl8lCgZ/s8oEEe1fLj3AGQbOu8P/BK3bTZ7PxFqOoPod1NHcL4f3QxBSsYjXz5YFXzGwkTbUKqrr1l++e08LeBbTwu1q0epahqJsrP7DZ/bTF/o0HybkXy403Z8qPJfcfkGCMtnyI5dUlW56trO+zlomt1trf7lqnc9bMM3q42nTpS+GCSWi1t1f8AlsHg3wbB4atBNcASajIJASJ5JIrWN5C4t4A5wkaDYnyKgYRISowAOnoor2qdOFKChBWSPFbuFFFFWIK8/wDGWm2Y8XpqYt0+2vYpbmc8t5Ykdgo9BliTjrxnoMegVxPjP/kMxf8AXuP/AEJq78vSddHyfF0pRyuVnu0c9VHVf+YX/wBhrTf/AEthq9VHVf8AmF/9hrTf/S2GvcxH8Gfo/wAj8syn/kY0P8cf/Skd54g8C2mqan/bei3Unh/xEiOi6rZRRl5QyBQk6MCsyDah2tyNg2stE+k+NrqMQv4s0u0RnQvLY6GyzBQwLBDLcSICQCMsjYznFdTRXyh+/nhMHhW20vxj4mjg1LXGmjureCS7Os3KzXAWzgYGRkcbzukc88DdgADAGj/ZX/UX8Qf+D+9/+O1au/8Ake/Fv/YSh/8ASG1qSvo8NRpSoxbivuPxjPMyx1LMq0KdaSSeiUml+ZX0eOfT/HfhkQ6rrEiXF7LFNFc6tczxyL9juHwUkkZT8yKenUV6/XieqahdaV4g8NXlhaw3dxFqT7IZpzCjZs7gHLhGI4JP3T0xx1rp/wDhYPif/oWNJ/8AB5L/APItefisNOVV+zjp5H12QZ1Qp4GKxtb3238TbdrnotFedf8ACwfE/wD0LGk/+DyX/wCRaTSvi1Je2JkuPCGq+dHPNBIbK4tpYS0crRkq0kkbEZXui/j1PG8NWW8WfR086y2om41o6d3b8zUsLSD4f6zb6bp1nInh3WLp2RlcCLSrlsYjALfLFK2dqqMLKdvPmqE7KvN9Z8bad4h0a50nWvAuuXljdJsmhkayww69Rc5BBAIIwQQCCCKl8AfEW61vX5/Cuv6XeWmrW9vJeQzzNCwubQSiOOR/LYhZTu+ZVG3KkjAIURKlUiryi18jqo4/CV58lGrGT7KSb/Bm/wDDj/klnhT/ALAtn/6ISukrm/hx/wAks8Kf9gWz/wDRCV0lZnYFFFFABRRRQAUUUUAYXinX5vDsFjdiDzLRrkpeSeWzCGLyZGDlhwg3qgLt8oDHOOoz/DHiPUdSv7SK9udNvor/AE/+0EOnxlPsikrsRyZH37tzbXAQHym49NXxHrVxo8Fkmn2cV5eX10trBHPcGCPcVZyWcKxA2o3RTk4HeqWn6tqT+Kbew8Q6da2V1JaTTWxsdTluI3RXjD71aKMA5dNpw38XI5yR1f8AXa/+T+XqEun9df6R0tc3Y/8AJU9d/wCwLpv/AKPvq1tV0m21m1W3vJLyNFcODZ3s1q+cEcvEysRz0Jx0OOBXN+HNJttG+JOv29nJeSI2k6c5N5ezXT5869HDyszAcdAcdTjk0AdlRWB4x8Y6b4I0RNS1ZLiZZZlghgtkDSSuQWwNxCjCqzZYgYX1IB5i6+OPhK1h0qVhfvHqEXnSMsKgWSCRomMuWHR45Qdm/wD1ZIyCpaXOMd2b08NXqpOnBu91om9UrtfJavyOP+HvxfXXPijqv/Ca/wBnaLItn9ntI7m48k2RSRS8J8w8yuZVDkbMm1XK8fL7BpUMt3eS6zexvFJKphtoZFIMMAckNg8q0nyswwCAI1IymT8W+Kdc1PXtW1TXNQffc6xAs0jxLtQhY9u1FCMQiqUXLYbjlicmvdficnxQm8QWFtBHJfafOkcsen6ZaMbSSbe4a2upPvPEVZFZnMUbqSdi7Wxzwqcy5t0v6/A9XEYP2MlTVoykne7sklra7evMrO/W6S0evqdzr93qF1LYeFbeO5mhcx3F9dLIlrbkHadrBf37q2QY0IAKOrvG20HS0bSoND0a2021aSRLdNplmIMkzdWkcgDc7sSzNjlmJ71wfxUvvFvh3SdGt/h/aXFvZLvjmbTNPW4eEKqiKNYtjhYyN+SE4KIMjOG7zRJdRn0DT5dcgjttTktY2vIYjlI5ioLqvJ4DZA5P1NdCldtHkSpONONS61vpfVW7rp5dy9RRRVGQUUUUAFFFFAHN/Dj/AJJZ4U/7Atn/AOiErpK5v4cf8ks8Kf8AYFs//RCV0lABRRRQBka5pU95JZ6hpjRx6npzs8HmEqk6spV4JGALBG+U8Zw6RuVfZtNnStVg1e1aWFJIZYnMVxbTACW2kABKOASM4IIIJVlKspZWUm9XmsnjbQtf+I76Jod5qGl69C0lomoC2R7a8aHczW8iE7nVWWQ5whG2QJIvmfOm0ty4U5zu4Juyu7dF3fkeg6hqVjpFhJfareW9jaRY8y4uZVjjTJAGWYgDJIH1NeXfFzxDFo3hlhoc0V3H4pUNONjSwNABGjzeYvRHRooCAyk+cjIVYHdoeOfCPi7xzpNnpN5DotqLW9SddRivpTuwrRs5tjD3R3Ij87hto3kAk+P+DPHV58MvHtzp17NdapYQ3VzplxFDZom5IprmRHiLFQD5juSGkb5ZGHJVcY1ZW308+zPRwND2nvQ95reG3NG8dE97tu1kr9UfRXgTX7zxR4H03WdSsxZ3N1GxaNQQrgOVEig87HADryeGHLdT0FeMeLPFfiBPBOla18Npr2HQbjzpJvL09ZprAx5DQkMHCxArJ0QhSgCuFKKeXbxp8Y7iCacQ6okTyqzSWejJMsTEMQkBETebCRu/efvPuR/ON3zr2yWjTb9C/wCzZVF7SM4xi21rJJrVaNPVNX/BvVan0fRVHRJdRn0DT5dcgjttTktY2vIYjlI5ioLqvJ4DZA5P1NXq6DyDm/Hn/Iu2v/Ya0r/04W9dJXg+l658RdTuLmHxtZ3ENkmqaYzCazEKW9x/adsBHA4A82PBk+bMnCId3zfNtfHnx74i8GwaLb+F7k2st+J2aZIY5H3IYlRf3gKhSZueM8LggZzHOuXmZ1fVp+29jFpvyd1tfp+PmTaR8WdWvPjZJ4OvtPs7e1e5uLaKI71uYxGjuszEnDI6x7gAi8Sqdxx83W67dweIbW+05n2aCm621O7AJNySdjWkIHLMSdjsuSCfLTMhYxfMFuvjbxb4suNa09dSvdRhmt7ye4+xIxjeIFgR5cezdtt0CryGPy4LHFezfCrwz4y1bwxBL411S80+C3ldba1W1FvdSAj95K8hAdTIXlBcos38SyjexfGlUc07f0j0cfgqeGlHmsrJJpPXmWj0bbV97tJLtpZ9fqF7qPiK/k02306YGPCSQyyr5FozAHN2Y5P3pKEkW6FgVKmQoJUZN7StDezum1DVL6TU9TdDH9okjVEgQkM0cKL9xCwB5LOdqB3fYuL2n6fa6VYR2dhF5UMeSAWLMxJJZmYklmZiWLEksSSSSSas1uo2PJqVHPTZLZdEFFFFUZBRRRQAUUUUAFcT4z/5DMX/AF7j/wBCau2rifGf/IZi/wCvcf8AoTV35f8Ax/kfJcX/APIrfqjnqo6r/wAwv/sNab/6Ww1erM165gs7WxuryaOC3h1bTpJZZXCpGovISWYngAAZJNe5iP4M/R/kfluU/wDIxof44/8ApSPaqK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qvlD9/OIu/8Ake/Fv/YSh/8ASG1qSqUOpWOr+LPFN9pV5b31pLqUfl3FtKskb4srYHDKSDggj6irtfUYX+BH0PwnP/8AkaV/Uxtc/wCQx4c/7CT/APpJcVs1ja5/yGPDn/YSf/0kuK2a2jvL1/RHm1vgp+n/ALdIKxvCv/IHn/7CV/8A+lctbNY3hX/kDz/9hK//APSuWh/GvR/oEf8Ad5esfykbNZbaRfar4+0yTQ57e31mw0y9u9PmukZ4llEtqhV1BBKvG8kZPJUOWHzKK1Kn8Lf8lTsP+wLff+j7SubHf7vL5fmj2+Fv+RxR/wC3v/SZHWfDj/klnhT/ALAtn/6ISukrm/hx/wAks8Kf9gWz/wDRCV0lfNH7aFFFFABRRRQAUUUUAVtR02x1exey1ayt761kxvguYlkRsHIyrAg8gGqukeGtC0BpW0HRdO0wzACU2VokO/HTO0DOMnr61p0UAFeY+NPG6eA/GWrah9ha/mudP0u1gh83ylLGTUHJZ8EqNsbdFPOBwCSPTq5vxJ8P/Dni2aWTX7S4uPPhjgmjjv54Y5kjdnQOkbqrbWdiCQSCaTu1oXTcIzTmrq+q2uu1+h87aB8J9a8VeBz4nu9VsIkkmZ2t7h5ZP7SnWR4WeYhCfM3FymFkZjIR8pbnlfE3gvVfA/iG10nUraxE95bpcyRQXDbdrmY+W+FwSpjIyAQQAMkMQPo6fwBoVr478OaXbnVYrO30q+kgjTWrwGEo9pGoRvNygCOy7VIGD06Vp6v8IPBniDyf7estQ1PyN3lfbdZvZvL3Yzt3SnGcDOPQVzSw6lG3+Z7VLOJ0qqna6vdq0V0SsnZ9Eru2vZXd/mYfDbWv+FWt4skGmy6dtFoiS3UjzRyeebYuqmMqAXIOAw4Ud+Ku+Dvg7rnjfSTd6TFocMenzizm+0zOrSuqwyFvlhPBVscnPzN+PvOg+AtEvZfE2iXMmsPpdjepYW9l/bt6IktzY2zGLaJsFcyPwc8HHQAVuaf8MfDWkWEdjpQ1ixtIs+Xb22vX0caZJJwqzADJJP1NUsPG9/8APf7zKWbVXTcUtejtHSO9vh721v0tsQ/C3wfqPgjwe2l6tdQzSPdPMkNszNDaqQo8tCwHBKlz8q/NI3B+8ezrz/wV4TstX8A+H9S1DUPEE13eaZbTzyf8JFfrvd4lZjgTADJJ4AxR4t8J2WmaLbz2OoeIIpX1PT4Gb/hIr9spLeQxuOZu6Owz1GcjBrdJRVkeVUqSqzdSW7d3039ND0Ciub/4QPSP+fzxB/4Ueof/AB+sO78J2UXj7StNTUPEAtLjTL2eWP8A4SK/+Z45bVUOfOyMCV+AcHdz0GGQegUVzf8Awgekf8/niD/wo9Q/+P1h+EvCdlqei3E99qHiCWVNT1CBW/4SK/XCRXk0aDibsiKM9TjJyaAPQKK8/wDGvhOy0jwD4g1LT9Q8QQ3dnplzPBJ/wkV+2x0iZlODMQcEDgjFbn/CB6R/z+eIP/Cj1D/4/QAfDj/klnhT/sC2f/ohK6SuWtvh1oNnaxWtnLrkFvCgjiii8Q36pGoGAqgTYAAGABUv/CB6R/z+eIP/AAo9Q/8Aj9AHSUVzf/CB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wAKPUP/AI/QBQ+KXg/UfG/g9dL0m6hhkS6SZ4blmWG6UBh5blQeAWDj5W+aNeB94fKWo6DFperT6dMFma0vJoFTcTDJOjOsibTwsakSbXAJbYmUTedn15/wgekf8/niD/wo9Q/+P1kXfwX8C6hdXV1f6ZeXVxeosd1LNq947zqpUqrky5YAohAPTavoKwq0faap2f8Aw/metl+ZPB6SjzR3tpveL3cX0ja3/Bv578FvAWrPrWmeNF1CFNP8uaJgGf7ROEDQfZ3XGPKRlGw7jkQx/IucJF4l/Z81vVPFer6nY3mlCO4vJr2CR5JYZpGlcsY3KoSgUSNhgW3bF+Ubjt9Ztvh1oNnaxWtnLrkFvCgjiii8Q36pGoGAqgTYAAGABUv/AAgekf8AP54g/wDCj1D/AOP0/Yw5eV/qZPMa6rOtFpO1tovRNNdLdFra7PlLT/Alzf8Aj+Lw1ZQafcXRubqzaW7dlVpo97yZOxiVUwyKrHlgVJCZKj3jwD8LPE/hnxBqF5qfilljmi8rzrMiSa+O/Ilm86NgrD5jgbzmVvm4+bp4vhR4Tg1mbV4INUj1O4QRzXqa5eiaRePlZxNuI+VeCf4R6Ve/4QPSP+fzxB/4Ueof/H6mOHind/r/AJm9bNq9SPJCyjZJq0Xdq2vwrey0/O7vzfjn4k6x8P5tPtb7SLHVpb5ZXjnhu3tVIj2bsoUk2n94oHzNnBPHSuX+CXh+fSfEEusXutKV1ezzBFKksc2psxEnnybwFeRVBJKNMB5zHfggv32q/Cjwnr1qtrrkGqalbo4kWK81y9mRWAIDANMRnBIz7mp7v4b+HtQtXtr99aureTG+KbxBfujYORkGbB5ANV7OXNe+2xjHFUvZOnyWcviatrqmtGtLPs1fbREHxWsZ9U+Hs1hZ3slhcXWoafDFdxZ327NewKJFwQcqTkYI6dRXyD4g0CXSNVu7O8s7aOVb97Hy4JGVCysFyTtUlN0RI45D54Ir7Hl+HHh6azgtJP7X+zW4jEUI129CJ5ZDRkKJsZUqpB6ggegrlvC3ww8Lazaanqup2+oXGoXd7qNhc3LavdiSe3ju5YVidhLl1EcSLg5yFGc0TpudnezX9eQYXFww3PHl5oy72W3XaXRvS9u97Hinw78B6x451jxBHo1/BobafaQwzrG77bwOHIt32gfumC4YkNjYvyN2+ivhb4P1HwR4PbS9WuoZpHunmSG2ZmhtVIUeWhYDglS5+Vfmkbg/eK6V8KPCeg2rWuhwapptu7mRorPXL2FGYgAsQswGcADPsKo+EvCdlqei3E99qHiCWVNT1CBW/wCEiv1wkV5NGg4m7IijPU4ycmnTpRgl3JxmPq4qUr6Rbvay87apLv8APsegUVzf/CB6R/z+eIP/AAo9Q/8Aj9YfhLwnZanotxPfah4gllTU9QgVv+Eiv1wkV5NGg4m7IijPU4ycmtTzz0Ciub/4QPSP+fzxB/4Ueof/AB+sPwl4TstT0W4nvtQ8QSypqeoQK3/CRX64SK8mjQcTdkRRnqcZOTQB6BRXN/8ACB6R/wA/niD/AMKPUP8A4/WH4S8J2Wp6LcT32oeIJZU1PUIFb/hIr9cJFeTRoOJuyIoz1OMnJoA9Aorm/wDhA9I/5/PEH/hR6h/8frD8JeE7LU9FuJ77UPEEsqanqECt/wAJFfrhIryaNBxN2RFGepxk5NAHoFcF49vILLU4Jbp9iMkUQOCcs8pRRx6swH41s/8ACB6R/wA/niD/AMKPUP8A4/XM+FvAGh+J/APh3UvED6vf3d1ptpczSTa5endIUWTdjzcD5/mGAMHpiujD1vYz57Hj5xlzzLC/V1K2qf3GM+r2Mfn758fZ7mO1l+Rvllk2bF6c581ORwN3PQ4y/Ed5Bc6a0UL7ntdWsIphgjaxuIHx7/K6nj1r0FvhD4ObzN1nqJ8yVZnzrV78zrt2uf33LDYuD1G0egob4Q+Dm8zdZ6ifMlWZ861e/M67drn99yw2Lg9RtHoK9CWZJprlPkKXBc6c4z9qrpp/db/g/h5nMQXkFzNcxQvue1lEUwwRtYor49/ldTx61NXSx/CjwnE8jxQaojStvkZdcvQXbAXJ/fcnCgZ9APSn/wDCrvDH9zVv/B7ff/HqtZnHrE5pcEV7+7VX3P5nm+lXkFtr2txTPte61ZYoRgncwsYXx7fKjHn0rUTV7GTyNk+ftFzJaxfI3zSx7969OMeU/J4O3jqM9b/wqHwd53nfY9R83zfO3/21e7t+zZvz533tny56446UL8IfBy+Xts9RHlytMmNavfldt25x++4Y72yep3H1NQsyS+ydNTgudSz9qr2S+5W/y/E8+1K8gvdS8Oy2r70XVp4icEYZLe5Rhz6MpH4VqJq9jJ5GyfP2i5ktYvkb5pY9+9enGPKfk8Hbx1GetX4Q+Dl8vbZ6iPLlaZMa1e/K7btzj99wx3tk9TuPqaF+EPg5fL22eojy5WmTGtXvyu27c4/fcMd7ZPU7j6mhZil9n+tAnwXOSS9qtFZffJ/qvxOSTV7GTyNk+ftFzJaxfI3zSx7969OMeU/J4O3jqM5fhe8gS1azZ8XE17qUqJg8ql44Y56cF1/P616Cvwh8HL5e2z1EeXK0yY1q9+V23bnH77hjvbJ6ncfU0R/CHwdDIskVnqKOu/ay61egje25+fO/iYAn1IyaP7RV78v9aB/qXNQcFVVm7/dzW/NX+ZyVrq9je/Yvs0+/7dbG6t/kYb4hsy3I4/1icHB59jV3wVeQah8RdJvLR/Mt7jQbyWJ8EblaWzIODyOD3roIvhD4Og8nybPUY/s8Rhh2a1ejy04+Rf33C/KvA4+UelS2nwp8Kae8L2EOqWrQRGCJodcvUMcZ25RcTcL8i8Dj5R6Csq+OVWm4W3/4B35XwtLL8bDE+0vy309VJfqvxLvw4/5JZ4U/7Atn/wCiErpKrabp9rpGlWmm6fF5NpZwpBBHuLbERQqjJJJwAOSc1ZrzD7gKKKKACiiigAooooAKKKKACiiuW+IOt3ejeGZBpyXqz3W6IXVpZy3BtV2EmQrGrEHjAJGNxBPANTKXKrjirux1NFcZeTX2s/C7Tm0y78i6vIrRfMvLmWyeTLJvXzAPMR3GVBAz82RmtfwlJnRDbPDLDNZzyQTJJfS3mHBycTS4dxzwSBjpjitGrSa7f1+qIUrxT7m5RRXC+GhfWfiuWXVpBd/2lNdC1urbWri4iCrISENuwEUW1QF3KScgjjJqepXQ7qiuFxfWvxAm1K+kF3YyXqWlubXWrj/RiYVAR7QDymO7LFmOQGBxwK7qhaq4dbBRXIeOX1K4vNG0rTY3kW9llMirqMlgH2JuCmeIF1HVsKCTtwfl3EQ3El7qvwusl0u9aK5uPIi82+1BoZJMSKHTz413bmAKhwMnIOMmlcOp2tFYfhKTOiG2eGWGaznkgmSS+lvMODk4mlw7jngkDHTHFbToJI2RtwDAg7WKn8COR9RTfkCHUVyHgrTEj1HV9RtrvVHsmnNnbQXupT3SgQsVeQea7EFpNw/3UX1OanhoX1n4rll1aQXf9pTXQtbq21q4uIgqyEhDbsBFFtUBdyknII4yaAeh3VFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFMmErQSC3dY5SpCO6blVscEgEZHtkfWuf8CvdP4clW/vZ7+aLUb2I3FwQXcJdSKM4AA4AGAAABgACgOlzo6KpayITol59rv5NOg8lvNu45BG0K45YMQQuB37VkeDrSe3t72UNqC6dcTB7GHUp5Zp0TaAWYykuoYgkIxyB12klVAOkoqpqgiOk3Qub1rCIxMHukkEZhGOWDHhSPXtWH4OW4s7jWNLu5ZnNrdK0Uct5Jd+VE8alV86X53JIZiG+7u2jIAJOoHT0VT1e/OlaPd3y2s941vE0i29tGXklIHCqoBJJ+lcz8N9YutX0vVG1G4u7i5i1GQM1zaTW4UEKQiLIqkKuSAOoGM8mhatryuD0SZ2VFZfiY3I8K6n9hu4LO5NrIIrm4kMaRMVIDFh0APOazfBiy2cF7pd5BNDd2sitL5mqz6irB1GCJZgGHTlQAB260AzpqKwvGt/daZ4L1K6sC4nSLCshAZMsFLAngEAk5PAxzVPwUs9o2qabei4juLaZGaKXVJNQRA6AjZNKqyc4JKtnB6cGjqB1NFZPicWS+Gr6fVHu0tbWJriQ2d1LbyEIC2A8bK3bpnmovCGlXGj+GLW3vrm6uLpwZpjdXT3DIzncYw7kkqudoyeg9SaED6G3RRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFNdEljaORVdGBVlYZBB6ginUUAUZ9E0q6t5be50yzmhmhWCSOS3VleJSSqEEYKgk4HQZNT2Vla6dZxWen20NpbQrtjggjCIg9Ao4AqeigArNXw5oiXN7cJo+nrPqClLyUWqBrlT1EhxlwfQ5rSooAojQ9JGsf2uNLsxqWzy/tot087ZjG3fjdj2zV6iigCpqWlafrNk1nrFha39qxDNBdQrKhI6HawI4pk+iaVdW8tvc6ZZzQzQrBJHJbqyvEpJVCCMFQScDoMmr1FAEFlZWunWcVnp9tDaW0K7Y4IIwiIPQKOAKnoooAr/ANnWX2UW32O38hZBKIvKXaHD7w2MYzv+bPrz1qG10TSrHUrnULLTLO3vbv8A4+LmG3RJJv8AfYDLfjV6igAooooAKKKKACiiigAooooAKKKKACiiigAqOC3gtYyltDHCjO0hWNQoLMSzNx3JJJPckmpKKAIL2xtNSspbPUbWG7tZhtkgnjDo49Cp4NVtJ0DR9Aiki0LSbHTI5W3SJZ2yQhz6kKBk1oUUANlijnheKZFkjkUq6OMhgeCCO4qtpmk6dotmLPRtPtdPtgxYQWsKxICep2qAM1booAKjit4YPM8iKOLzHMj7FA3serHHU8dakooAbLFHPC8UyLJHIpV0cZDA8EEdxVbTNJ07RbMWejafa6fbBiwgtYViQE9TtUAZq3RQA10SWNo5FV0YFWVhkEHqCKraZpOnaLZiz0bT7XT7YMWEFrCsSAnqdqgDNW6KAI7i3hu7d4LqGOeGQbXjkUMrD0IPBqSiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA/9k=)

Figure Scatter plot PCA

#Principal Component Analysis

pc <- prcomp(train[,-5], center = TRUE, scale. = TRUE)

pc

attributes(pc)

![A screenshot of a computer

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM1MQAAkpIAAgAAAAM1MQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDowODoyMAAyMDIyOjAxOjA0IDIwOjA4OjIwAAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MDg6MjAuNTA3PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAO8CQQMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APoXU9VtNHtPtF88gQsFVIoXmkkb+6qICzHgnABOAT2rJuvHvhvTtLj1DV9ROlW8kvkx/wBp28tm7tkDhJVViORkgYAyScA1L4ttEvNKjjk0a/1YLMriPTrtbaeIjOHWQyx49OHBwT15FYs2l+IL/wADXUN5FdTXC3sdzaWt1JCbkQxyI4iZ0IjL/KwBLHqu5icmgDbutZ8L3mk22vXOr6a+m2s3mQ3/ANtQQLJyn3w20n5iME9T61cj1/R5dOhv4tVsXs58+VcrcoY5MAk7Wzg4CsePQ+lZOtX3iC88NxT6TpOoWN004Wa33WjXccXOWj3SNBu6feYjGeM4Fc3pXhXVZLfTrTV9MmuEtvED6hJLfNbMZI2R2VysZ27ldlBAUYYZXIG6m5NqzA7mDxFol1o8mr2usWE2mxAmS9jukaFMdcuDtGO/NUrLxhpN3baleyX1lDpljKiC/a6TyZFaNHD7/ugfPjqaxNQ0LVk1DVL6Gwa6i/ti2vo7VJIw11GkKKdu5goYMMjcRyvXoaT7J4kt7DXbzTtLeyub/UI51ihkgecQ+XGrsm8+V5vynhiVyDywxlAdVb+INGu9Nj1C01axnspXKR3MVyjRu3PyhgcE8Hj2NJB4h0W50Z9XttXsJtMjBL3sdyjQqB1JcHaMd+a4XT/C+rz2K22q6bc3AbX4dSeTUGtWZ49oJ3CIhN6kDIVcZxgt1rqvE+mzyWNrNpdiLlra/jvJrSLYjXO3OcFiF3Zww3EcqORQBb0PxDba/JfGwaGa2tpVjiuYZhIk6tGr7gRxj5scE9K0Ly8ttPs5bu/uIrW2hUvLNM4REUdyx4A+tYfhazvYL3W7y/04af8Ab7xZ4ovMR2K+Si5bbkBsqcjJ56Ejky+LLO8urGymsbVr1rO9iuXtEZFadVzwpchcgkMMkDK9RQA7S/FOn6nFqV1Hc2w0+xdQL1bhWikQxLJv3dAPm65I4zmrlnrukaja29zp+qWV1BdOY4JYLhHWZhnKqQcMRg8D0NcTqPhrW9V0nWZYrKTTJ7jVrfUIoIpYGkkSNI8jLBoxJlTw2V3Ac4+arGn+HL2bw7qcrw6ymqyXqX8J1h7Pe80apt2/ZTsCkJtOcHk5oA6/Udb0vSbae41PUbOzitwvmvc3CRrHuOF3FiAMngZ61WsPENtN4Vt9d1WW00+2khE0kjXkckManofOB2kdORxzT9DtLiKwluL6Lyr29kaeePcGKE8KmRwdqhVyOOKxVstf0z4bWVnpkDLqcMUaSJEYmlRc/OY958suBnG47c9c9CAaF5458LWOhLrVz4h00aa7mNLpbpHSRx1VSpO5uDwMng1OPFnh5tDfWI9d0x9NRtjXovI/JDZxtMmdoOSBjPeuQ0/w7rknhPxRYXltem51GX7VBNfPbeZKSiDY3kkIHBTBwAvI5PJruNLvbnULAyXelXelyAlfIu3hZzx1zE7rj8c+1AEGna9BceFYNc1KS1sLd4BPI5vEkhjX180fKVxzuHFS22v6PeabHqFnqtjPZSv5cdzFco0btnG0MDgnIxiucbQ9Th8B6HALMz3elzQXE1isiAzbDkoGJC7u4yQMqMkdao3fhzUddkub280cwQ32q2U7addtC7JHDgM77WZCTgHAZjgL34AB1kHinw/daTNqttrumzadAcTXkd5G0MZ9GcHA6jqe9WtN1XT9ZslvNHv7a/tWJCz2syyoSOCAykjiuV1jRbltY1i7k0a91C3nazkt1sLiKKUSRbj5i75EHynbwxwRxhhkVt+Ff7Z/sc/8JB5xm81vK+0iLz/L/h83yf3e/r9zjGO+aANiSRIo2kkYIiAszE4AA6msK28TmTR31a60y8hspGAtFjieeeZD0do0U+Wp6gk8Agts5A0Nd099V8Pahp8cnlvdW0kKv/dLKQD+tZFp4gNz4Vb7Dpl5eahboLe502MxxzwPjB3CV0GOMg5wwwVyDQBtaRqcOtaLZ6nbJIkN3CsyLKAGAYZAOCRn8TVyuZ8DnUbTwZZ2Wq6PdabcWFskLLcywsJSq8lTHI4xx/Fg+1anh3VZtb8O2epXNp9ikuY95g80SbOeMMAAwI5yPWgDSoqtqM9zbabcTWFp9tuo42aK280R+awHC7jwuemTUdxdX0ehvdQad51+sHmLY+eq7pNufL8w8Dnjd0oAu0VDFNKbBJp4RDMYg7wlwdjYyV3dDg8Zqn4d1WbW/DtnqVzafYpLmPeYPNEmznjDAAMCOcj1oAu3N1b2cPm3c8cEe4LvlcKuScAZPckgfU1DpuradrFu0+kaha38KOY2ktZllVWHVSVJGR6VgfEhBJ4LkQwrOGu7UGJsYk/0iP5TnjB6VQPh/WfEDazeFZfDrX/2eOGGaVzIoi3Zdja3CYLbsALJ0UZ9KAO3lljgheWZ1jjjUs7scBQOSSaxtO8Rf294bbVdBs3nPmOkcF03kM+xyp5wcZwSM47Z29ubg8A6/Dp1xbHxNby+fJEzC4gvrmNlQklGWa9fhiRnaVzjByDitTwvHf8Ahfw5fS+L72yRRezzK8MBhUK8pI4Mj5LE5AHPIXk9QDf0rVINX0yO9tw8aNkNHKNrxMpIZGHYggg/SprS8tr+1S5sbiK5gk+5LC4dW5xwRwaxvCVrPBpF1c3EDwtqF5NeLbyrtaNXb5VYHocAEjsSau+Hkkj0G2WbR4tFcA5sIXRlh+Y9CgC89ePWgDSooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAMzxJqM+keGNR1C0EbT2ts8sYlUlSwGRkAgkfiKzNT1rW/DXhObUL+1i1y6ijklZrGMWcUaqhYbxJK7AcYyu48/dq54yhluPBOsQ28Uk0r2cgSOJCzMdp4AHJPsKzdam1DxR4JubXwzZIzXkMlrJ/a4uLAxAoRuCNCWbk+gB9aANu+bUrrR0l0a5tbO5dVk3Xds1wgGMkbVkjOffP4Uug30up+HdPvrkIJrm2jlcRghQzKCcAknH4mqMepXekeGUk8R2PlTIBF5WkrPqGRjAOEhD/X5cD1qx4Vikg8IaTFPG8UiWcSvHIpVlO0ZBB5B9qAJNf1WfRtJmvLbTZtQaNGYpHIiBQFJ3MWI+Xj+EMeehqzp13/aGl2t5s8v7RCkuzOdu5QcZ79apeJodVutBubXRLazuJ7mN4W+13TQKispG7KxuSRnpgfWqenw+J7XwYLUW2k2+r20KQ2+bqWe3faANzny0YZweAD25oA19Tk1GKzLaNa2t3c7hiO6uWgQjud6xuc+22sjTtZ1/UfD8l5Fo2ni988xwxf2m5glQHHmCXydwHXH7vnA7HNaerW17eaO9taSJFNNtSSTcV2oSN5UgH5tuce+Kq+ILXVv+EdNp4WW1juMpGBPO0KrFnDBXVHKtt4B2nHXtQBQXxdef8I3eX50OSa7sZZYLiC3uUaJGjBJYSPtLJ0GQu7P8PFW9T8Sf2f4J/wCEg8iEf6PHN5dxceVGu/b96Tadqjdy208DpVSex14eCZNNsNG0e2upUkgMA1OXyURgRv8AM+z7mbJyQVGTn5qtaMniCx8KRW9zp+m/2jaxJFDFHqEjQyhVAy0hhBXODwEb60AQ/wDCS38fhD+2v7Ltr9mRpVGlais8BjCkh/NdY8rxztVj6A1Zu/EDw+HbG/t7MTXWoCJLa2aXYpkkXIDPg4Uc5baTgcAniskaH4gtfCuqW9tb6XLqGrTTSSwG7eG3thIu0hHETM5yMklV3Ek8VPHpOr3PgVNL1bSdNlu4I444ootVmRG2BcSCZYQ8bAjI2qSCBzQA6PxfMLC5S501E1i2vEsms47nfGZZAChEpUHYQwJJTIwflJ4OhoOtzao97a6jaR2eo2EgjuIYp/Oj+ZQysrlVJBB7qDkHisLT/Bcll4Y1SGaytLu/1KZZ5LdtQmVVZVVV/wBK2mUuAoPmkbt3PFaPg/w0+gRX1xdLGl5qEqySpHO8+wKgRQZpAHlOBy7AE56YAoA09b1b+yLON4oPtFzcTLb20JfYJJG6Atg4A5JOCQAeD0qPQ9Xn1L7Vb6jZrZX9lII54Y5vNj5UMrI+1SykHuqnIPFJ4h0ufU7S3eyaIXllcpdQCYkIzLn5WIyQCCRnBxnODjFZ9vpviC207WdRgGlp4g1DDQxO8j2sRRAqKzhVdxwSSFXr04oA1db1U6TYpLFb/aZ5pkggi37A8jnC7mwdq9ycHgcAniqOna7qWoWuo24021i1rT3CSWjXrGBiwDKRMI920g9485BGO9W9dsJdT8OzWrWdveTuq/upLp7ZN4IORKis6EHkMoyCB061h6N4VudI0PVmawsL2/1RlaazubuSSFlCBAjzvGzy/KDlmQk5xgCgC/Ya3rOpaLcy2uk2Q1O1uWtngk1BhbsVIyyzCIkjn/nmOQQcYp2k6vrmp6HdXTaTYRXkcrR28a6i7wTheN3m+SGUZ3D7h6ehBqnpPh/V7DwxeWKPaWUt1NmG1tJWMGnwnapSJioPChmHyqAx4AFbeoWZGgyWVhp9neL5QiSzvJDHC69NrEI/GP8AZNAFDTtb1bU9Fu5YNLtE1O1uGt2t3vm+zuykZKzCIkjn/nnnIII4pml6zr+o6XfTPo2npdwTmG3SPU2eCfGAx8wwhlAO4fcPKnFQaNoWsaX4ZvrWF7OzubiRja2ttIzW+noQFCRsVBIGCw+VRk4AArS1Sy1G28LvZeFfs8d2kSxW5uZCiqOATuCsc4zg7Tz1BoAzrfxfONLv31HTEi1CxvEsmt7e582KSWTZs2ylFOP3i5JUEc8HjN7QtcudRur3T9VsorHUrEoZYYLgzxsjjKOrlUJBwRgqCCD2wTTtdIvT4OudNvND01JWzstk1OWRJiTne85hVw5bJ3BSc85zR4Q8MzaJJfXt8saXd8Yw0cd1LdbEQEKGnlAeVuSdzAcYAGBQBra1qq6Pp32gxGeWSRIYYQ23zJHYKoz2GTyecDJwag0PWLq/mu7PVrGOx1CzK+bFDcefGysCVZHKqSDgg5UEEHqMEv8AEOlSatpqR2zolzbzx3MBkztLxsGAbHY4xntnODWdY6br0SavqsyaZDrd7EsdvAskktvEIw2wNJtVmyWJJCrjOBnGSAb941ylnK1hDFNchSYo5pTEjN6FgrED3Cn6Viabrms6jpuoBdIs49Usbj7OYDqDG3kOFbKzCLd0bnMeQQR71p3KXsmhOjWtneXjwbXt5ZGSCRiMMpbaxC9f4Tx2rA0PQNa0vQNTgi/s/TprqTNnY2cjtbaem0LhGKL6F8BFGTjHViAWtOvtU13R7/8AtLQ9M823nKW0Qv2nt7h0wdxcwgrhxjOw4K5Gak0rxJLLY6pLr9pDp0mlylLgwXJuISNivlXKITwwBBUEHjmtGWzNroTWem2kFx5cHlRW9zIUjkGMbXYKxAPc7T9K5bT/AAPeS6TPa3l0ugxNdx3NtY6I6SQWgQcKvnRbSCw3kCNQGwRzkkA2NH1/UNd8MPqNjpUcN4JpYks7y6MYykhT5nVG2nAzgKcHj3qrbeK9Qi0m+u9Z0q1geC6W0tlsr83CXUjEJgM0ce3DnaeD0PpRoXhzWdC8M6jZrrD319cXE8sE1z5YEW9yQf3ca887jwfm4HFX9V8PLdeG4dNsXWJ7R4ZbZpMkb4nDru7kEryfcmgCGy1zVrmO/s5dJtYtas1RhbC+LW8ivnawm8sMB8rZzHkFTgHgmfw9rd1qrX9tqVjFZ3unziGZLe4M8RyocFXKoTwwyCoIP4E5n9l+Jjb6vqka6Zb67ewxwW8K3DvDAiFsEymMFmO9j/q8A4GDgk6nhm0vbHSzb6jp9nYurkgWt8915uRy7u8UZLk5zkHPXNAFnWtVTRtMa7eMzOXSKKJSAZJHYKi5PTJI57Cq2iaxd31zd2Or2MVjqFoEaSOC4M8TI+drK5VCfukEFRgjuMEyeIdJfWdJ8iGRY54poriBnBK+ZG4dQcdiVwfrWfYabriPqur3Uemw6xdwLDbwRyvLBEIw2zdIVRmyzknCjA4GcZIBuX1zLaWjS29lNfSAgCCBkDNk+rsq8dev51Q0PWZ9c8Lw6pDZxxXEyOVt3nO0MGK4LhemR12/gasSvq0eio0NvZXOpiNd8TzvDCz8bsPsdgOuPlNYvhPT/EOk+Fm03VbDSjLAj+R5F/JIkxZmbDloF2DnGQG+lAFvSPENxMuqLr9pbadLphHnvBdmeHaU35DlEOQOoKjHHXNV9P8AGS3fhW91u4024tRbXEkK2zMDI+H2pnoFLZHB6Z5PFZmn+BrqXS72zuZIfDtrPNDJBp+hOskNuYyWJHmwhDvbBZfLA4HUkmr+jeFr3TND1mz1K9bXjfzzSJFfGONGVuzGOJcE9/lOOwoAdH4turWHVYtd0tLfUNNtBeG3srk3KTRHdgqxRDnKkEFeOvNR6Z41ebS9TvdVtLVI7CJJvM0u9+2xSqy7gquUQ7+ny4xhlOeeM7T/AALfx6drErSRWGpX9qtrFtvp77y0Usw33EoEj7ixHQbRwKbbfD+W40HW9OnstL0O21O3SJdN01mmtY3XJ80gpGMt8oKhRkLyTngA1tL8Zi60PU9Wvl0w29hkMmlal9tcMBkxuAihJOQNoLcnrVvwt4hm8Qw3Msg0kLDJ5eNO1T7YUbGSkmI1COOMqC319ca58G3/AIgstZGux6fYzahYx2KRWjtcR7UZmDuWVN3LY244AIyc1q6DpOpR61davrMFjaTy20VqkFjM0qFELHczMicndgLt+UDqc0AdFRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBzHjnxFP4cstOkg1DTdMW7vRby3upoWhgUo7ZIEkfdQOWHWqth4u1KTw7YyvZ295qV/dyW1ntL2sFyq7mE3IdkQopYff7YyDmui1LSLfVJ7CW5aQGxuPtEYUjDNsZMNkHIw59O1Zn/CGWiactnaX17apBcfaLFomjLWBxjbFuQjZgt8rhgAxAwAAADI1jxrrlvok8umaTpp1Gxv4bK+guL5/LjaRo8GNliy4IkHJC464OMHdvtX1TTPC8mo6jbaPaXcRzIk+qtHaou7GTO0II4/2OvHvTD4RtH0K60+a7u5ZryVZ5r9zH57TLtKycJsBGxcDZt+Xp1ovPCzX+kW1pea5qUt1a3AuYdRK24mRxnHyiLyjwSOUPr1waAMCfx9ql58PZPEPh6w0q5lhuWglDai0kHyybN0ciR/vAcjGQnX2wemkuPEJ0CSRtM01dTyR9nXU5PK2+vneRuzjt5f41Wg8HWsWjalpk1/e3MGoyGVzMY90chwWZSEHJYbsHIB6ADitTTrCeysTb3ep3epuST590sSvg9sRIi4/DNAHP6dr0lh4D0GW3imvr6/jihto7y7LNJIy7v3k2zOAAxLBM8dKbP42u7SFoJ9FWTVYr+GymtLa8DIDKu5XWR1XIx1yqng9eM6knha0bw5Z6RFcXMIsAhtbqMr50TIMK4ypUnGeCpByeKjh8IWiJG1zeXl3dLex3st3MUEk0iDau4KgUKBxhVX88kgEuga1e6jdahZatYwWV9YugkS2ujcRsrruUh2RD6gjb271Z8Q6odF8O32oqgdreFnRT0LdgfbOKktdKgtNWv9QjaQy33l+YrEbRsXaMcen1qTUbCHVNNuLG6BMNxG0b4ODgjHHvQBgXd5deEdGs3ZLrXb6/vIoZC9wE3SPxlQ3yoox90YGPU9b2ga1e6jdahZatYwWV9YugkS2ujcRsrruUh2RD6gjb270yHRry9srSDxBOksun3STw3Fsdpn2D5WdSPlJycgE9MgjOBoWulQWmrX+oRtIZb7y/MViNo2LtGOPT60AM1vULjStKkvbWxa+8khpYUfa/l/xMowdzAcheM+tR6Bra+IdPOo2sWLCZs2cxY5uI8f6zaQNoJzjrkYPGcVY1TTItXsjaXMkqwMwMqRsB5qjqjHGdp7gYyOM4zUOj6Hb6GLmOxklFtPMZktm2+XATywjAAIBOTgk8k4xQBlePNXTQ9Hsb64vhYW0epW4nnaXy1EZf5gx9D6VdUXPiPSZTKlzpUcjB7OaG4Kz4HKuygYHPOxiwIxuA5UXNV0m31iG3iui4WC4juFCEcshyAcg8etUYdGvNE0q4tfDtxv8yTNvFfPmKyU9QgVdzKOSELf7IZRjABL4X1SbV9Ainu8G5jkkt52VcBnjcozAdgSucds1a1TVbfR7QXF3HdyIWC4tLOa5fP+5ErNj3xik0bS49F0iCxhcyeWCXkYAGR2JZnOO5Yk/jS6po2ma5aC11rTrTUbcMHEN3AsqBh0OGBGaAGaTrdrrUcj2cV9GIyA32zT57Un6CVFLfhmjX9UGieHr/UynmfZIHlCf3iBwKNJ8P6NoEciaFpFjpiSkGRbO2SEOR0JCgZqzf2UGpafcWV2u+C4jaORc4ypGDQBio8vhvQTNc3VxqmqXjqAJJDiadhgKidI046KMAAscnJL/Bl5qF94aSXWbhLm8W4niklSMIrbJnUYA6DAHv60kPh/+09IGm+M7LTNajt3HkSTwCQTADh3jdcI/JBwSD14ztFjw54X0nwpp8llodnDawyTPM4iiRNzMSedoA4GFHoAB2oAs61e3mnaTLd6fYf2hLDhjbrLsZ0z8204OWAyQpxk8ZGc1X8P68niOze/s4WXT2bFtO5IacD7zbCAVAOQPXBPAxm3qmnJqunvZzTTRRSkCTyWCl1zyhOOARwcYOCcEVX0jQbXQ5Lv+zmkjtrmTzRaDb5ULH7xQAZG48kZIzyAMnIBJrOpjStPMqR+fcyMIraAHBmlP3V9h3J7AE9qx/Dgvte8G+Xrd/Kb37RPG91ZkwEGOZlUrt7DaODkEcNnJztaroul67arba3ptnqMCtvWK7t1lUN64YEZ96zNM8MW3hPQZ7LwdYWNvJLM0uJFESbnbJJ8tedoOAOOFAyOtAE3hnU7nUNEkN3iW8tJ5bWVgAoleNiu7A4G4AHHbNXtJub280q3n1Sw/s67kXMtr5yy+Uc9N68H8Ki0bSF0jR1slmaWRi8k0+NpkkclnfHbLEnHapdJ0/8AsrSrex+13V75K7ftF5L5ksnPVmwMmgC5RRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUVU1PVtO0WzN5rN/a6fbBgpnupliQE9BuYgZqa0u7e/s4rqxuIrm2mUPFNC4dJFPQhhwR7igCWiiigAooooAKKKjmuYLby/tE0cXmOI03sF3seijPUn0oAkooooAKKKKACiiigAooooA5rx9qd1pHhRrmxuri0kNzBEZraATSqjyqrbEKvubBOBtPPasC313Xkt47Nb++EOpajHaWOqavYJBcBNjNITFsjGcoVTdGOTkhh17u/0611O3WC+i82NZUlC7iuHRgyng9iAabqmlWOtae9jqlutxbuQSjZGCDkMCOVYEAhgQQQCDQBmvouoQ6LcQSeJ9VnkLeYLp47VZVUDmMbIQu0+u3cM8MOKXwTPNdeBdFnuZpJ5pLKJnklcszkqMkk8k+9KvhLTV0qXTvtGrtBM4d2fWrtpMjsJDLvA/wBkEA+lT6D4d0/w1Y/Y9J+1Lb8BY7i9muAgAwAvmu20ewwKANSiiigAooooAKKKKACiiigDnPHup3WkeEJ7uxuZrWUTQJ51vCJZEVpUViqFW3NgnA2nnsa56313XYbf7Ol9fPb6hfw2djqesWC286bkYyExbI+m3CbkGWb+Ide71DTrXVLX7NfRebF5iSbdxX5kYMpyCOhANJqWmWesafJZalbpcW8o+ZG9RyCCOQQeQRyDyKAM5dIa10W8g1rxDqV7A43vczyR20kKDkgSW6R7Rx169ear+Dra5t7W9Yy3radNPv09L+eSaZYtoyWaQl8FskBiSAe3QT/8IfpLaLdaVM2o3FpdkGUXOq3Uz8EEbXeQsvIH3SKu6To9totu8NnLeyK77yby+mumBxjhpXYgcdAcUAX6KKKACiiigAooooAKwPHOo3Wk+CdSvrC4ktriJFKTRRCR0y4BKqVYE4JwMH6Vv1W1DT7XVbGSzv4vNt5Mb03Fc4II5BB6gUAcFH4h1vT7G8kW/vrmyuLi1tbHUNdsFtZI5ZX2PmMRxEouVxuQZY4yR07DT9Iu7O1uIr/XNS1cTLgG4EMTpwc7Ghjjxn1PI7EVfvrG11OxmstQt47m2mXZJFIuVYe4qhp3hqw0u1uLe1m1Jo7hdjfaNVuZ2UYx8jSSMUPPVSDQBj+Cy0Gp6tZudSthGYnj0/VLxrqaFSCN/ml5MqxU4UO2NvOCSB11Zuj+H9O0Lzjp8cxknIMs9zcyXEsmBgAySMzEDsM4GTitKgAooooAKKKKACiiigDG8X39zpfgzV76xlMVzb2ckkUgUNtYKSDggg/iK4yHxNrlhpl7dwX2pX1m0UEUN7r2mi18m5kkCcII4WaNQwYnbyeA3XHol/Y22p6fPY30fm21xGY5U3FdykYIyOR+FFzYWt7p8ljeW8dxaSxmKSGVQyuhGCpB6jFAGDdXD+CtFvtX17xHeanCiLhb5baJEcnACtHGmASQMsSB1yOTWd8ONfh1htci/wCEitdbuIr0OWtrpZUjVokOECk4jDbwPoe+a6PR/DtjoTSGwkvyHULsutSuLlVA6BVldgv/AAECrltY21nNcy28ex7qXzZjuJ3PtC556cKBx6UAWKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDD8WWWo6hpMdvpE0azNMpeF72S089BncgmiBdD3yoz8uOhNcrd67PpHhUW+g2msQ3basun3AnvlvJ4WYAkxSXErIc/KF3tgFuVz8tdzqmjaZrloLXWtOtNRtwwcQ3cCyoGHQ4YEZpE0PSY9GOkR6XZpphQobJbdBCVPVdmNuPbFAHGf2n4qh0/SbXUZ7rS5rvWDaLcXiWr3EluYnYFhEWiD7hgFeOASOSDKuu3g0G/s5tV1Oe6h1U2FleWMNt9puyFDbQHQQAj51JIVfkPQ1r3vgPQ57SwsbPTdPstOtrs3MtlFZIIbjMboVZBgc7+SQemK1JfD2iz6Kujz6RYSaWoAWxe2QwAA5GI8beDz0oAx/A+qahqvhe5fV2ne5t7u4tyblYhLhHIG/yf3e7HB28UeCby2sPhho11fXEVtbx2MZeaZwiIMdSTwK0po9F8K2M11BpgtopCglGm6c8rvgbVykKFiAoAzjgCn6eui654YtxZWtvPo91Apige22xtGeQPLYDA9iBigCn4qupoF0Q2s7xibVYEcxuRvQ7sg46g+lR+OtZvtD8OLPpccjzzXUNsGiEZdBI4UsvmMqbucDccZIznpWxqOkabrFj9i1fT7W/tMg+RdQLLHkdDtYEcVDbaBoel6RPp9lpFhaadIGM1rBaokTgj5soBg5HXigDjhqPi+30aCC7ku7CebWoba3udTitZZ5Ld1y29bdvLyDuAIwcAEjrl0+r6zpt1e6G+t3E7nULS2j1O4hgEsKTIWPCxrGTlcLlDywyDXSeHdL8MHRLa58NaVp0Gn3DLdw/ZrJYVZsfLJt2jDY7kZpNTsrTXbTVbDTk0w3RdIbz7fpxuYnIVWCum5N/ysMfNgZ9sUAcfrFxrVx4X8SRW/iy/Mmk38cMd3apbrI67YiyORHjILMTtCnjHTitnxVp9/a6Polqusz3d0dag23t7DEzLkt/DEsanA6cfXNXdJ0XTvCujtZarJay/wBqXKwtHDZ+VbszIESJIQWCJtQDBJ75PNbFl4f0bTbOO007SLG0topfOjhgtkREk/vhQMBvfrQBmeGp7+LWNZ0nUNSn1MWLwtFc3McSyESJkqfLRFOCOPlzzXR1GltBFPLPHDGks2PMkVAGfAwMnvgVJQBznjT57HTrefBsbnUYYbwMcK0TE/K3qrNtUjoQcHrVXw9JpugXHiKGGS10/Q9PnQr+8EcFqTErSKOiooJBwMAFjXSaj9i/s24/tb7P9h8tvtH2nb5WzHO7dxjHXPFUtNs/DuoeGUtNIt9LutCmQokNqkb2roTyAq/IRnNADvEOlDxD4au9NSWFVu4toeWLzoyOD8yZG5T3GRkd65bTtP0+58F6zpQsbOyGlzTRyDRQ9nbzyCMNu2I3Q7sMjFhkEHNdZrTaLBoc48RGwj0rYEmF+UEG3oA2/wCXHTg1nPZ+C7/wfGXttBufDdupljzHC9nGq5yw/gAHPPbmgDPNjc6h8LtHitLc3gW2tZJrMOEN1EqqXiyxC/MOMMQp6EgE1k6CmlLpviW11jRLe18PQ3cSwaRIkcqpIUUtEI1zHuLkfIhYbj6k46LTrDwLJ4TuTpNp4ebw9MS9ybaOA2jlerPt+Q4wMk9MVKIPBt94MAEWhXHhmJC4G2F7JFU5z/cABzz2oAyofDF7aeCbyysrZIBPd/aY9KgcJHFBvUtbKRhV3KDkD5dzkZxzWf4f0kalH4s0Kw06PQdMlijijsSsbrazPGfMBSNjGMjYxRGxznILGuiso/BP/CG3B01dA/4Rpgxn8gQ/YyB94tj5O3OasaavhS68JvFpA0abw9sdXS1ETWm3neCF+THXP60Acraakvhvw/qOk6XpVrb3NvfLaTXHh7SZDEpdAxmMEQdgyqcbct823JweNb4YXNrL4OMNkt4I7e8uYwby3lic/vnIP7xQWOCMn1yDyCK3fDzaE2iQ/wDCKNpx0sFhD/ZpTyBzzt2fL1znHerWntYva7tLa3a3Luc2xUoW3Hf93jO7OffNADr24ltLKSeCzmvZEGVt4CgeT2BdlX8yK5bxBqd5f+GkN7pN9o8MmoW8FzHeSQlmgaRQxzDI4CnO05IOCeMc12FQ3f2b7FN9u8r7N5bed52NmzHO7PGMdc0Acv4fTTfD+s+IbSwFrp+i2SwyGNGEcFrIVYyADhUGNjEDAy2e9dHewW+qaPLE1va6hb3ERxDPhoZwRwG4YFT64P0NUdEtvDN54bFv4ch0mfRJQ6CKwWNrZ8k7xhPlPOcj1zmrt9Z6bJo8trqVvatpoi2yw3CKYRGB0ZT8u0Ad+OKAPPIFs9N8E+LNNhhh0uWO7WGSzsGDWttJKke1EIA+Q7gXyqH5mO0cE3fCWiRpBreiapp1tpFxG8M8lpoU8kFoFK/KyFNjZYq28EDPAII5PU6JH4YuPDRi8OJpMuhsHUpYCI2xBJ3jCfL65/HNRW+heEZ/Cot7XS9Ek0CUfaRHHbwm1cdfMwBsPTO6gDK8MR6Uvwc0tNbhgfTF0+Pzopow0bKAMKV784G3HPTFWPDnhmGz0XVIG0i0t7DUnMkOiOiiCFCgXYygFRuIJYKCMk9eSUs7X4eReFLu40+Dwwnh+Y/6VLAluLSQg4+cj5Dg4607ST8Pm8NaimhHw0dEGW1BbP7P9mHy8mXb8vQfxdhQBypY6H4N8V2emWkGlXEN3CJ7PT5tltaLIIw3lSAAr8pLM2xCCSdvQl12snhnw14k0vTrDSbSWEW0kl3o9v8AYUZJX2tvwzEOqgnfk8EHArtNKu/CNn4VkuNDuNEg0CPf5klm8S2qc/Nkr8g68/Wm6XdeDtN8KyXWiz6HaaBlvMmtHhS1yThslfk68GgDlre6fwdbatpWnaPYxz74D9r8P6PJtUShvnkhj8x2ZApOcnduX7ua1/hhcWsnhaeCyF75dvqFyu69tponbMzHJ8xQWPPPocg4PFX9C1XwVZaDczeGb/QbfSbRt1w+nzQpBCT3Yodqk+9amj3uk6hp/wBp8P3NldWckjN5tjIjxs5OWOV4JznPvQBfrA8bzzW/hC7eB2jG6JZpFYqUhMiiRsg8YQtz2rfpsmzym83b5e07t3THfPtQBymh2mm6B4s1Sx0aG2sNKhsYZ5YIAI4YZCz5baPlUlACemcAn1revG0nU9Blkvfsl9pU0PmSGQLLDLHjOTnIZcc1U8Ox+F5tCaLwkmkSaU7MrJpgiMDMfvAhPlJ9auXMWladockV4lna6VBCVkSUKkEcQHIIPyhQPwoAwfDng/R7bSbqW10uPSBqjLM8GnA2ZRF/1anyipBx97nkkg8cVH4QttOk+FttBqtvby6eIpfOiuEDxlBIxIZTwRx3rXe88M+JvDs8r3Ok6vowB85y8c9v8vJ3HleOvPSqvhzTvBUul3L+EbPQXsbj93cNpkUJilwPuuYxg4B6H1oAq+H/AAjpttoGpHTdMtdGbWozuitbZYhEhUqgKLgbgDk+5PtVHwxpmj6ZZa54d1LStA8izjje9ksNPWC3uEZSR5sRLAOAvILNkEHjOK7AXOnX+ktOJrW50+SNt0m9XiZMEHJ6Edc9qyNEufBUvh66h8OTaC+jQBjcx2Dwm3jyMtvCfKMjk5oAxY9F0jw34D13VLXTo9DXULZpZE06BIGhTaRGMDADAHJPqTzgDHO6fHqHhPw14phGmaZpWrx6THcrHoJMdoy7WXzR8oKybg2SV6KuC2Ca9P03VdJ1+wabSL+y1O0JMbPazJNGTjlSVJHQ9Kg0bT/D2j2VzH4etNMsbVJG+0LYxRxoHUYbeEAG4ADOeaAOf8FWMWia5eaXHYaKhltYrz7Xpdr5LOrMwCzEsxkbgkSEjdz8o79tWD4Vm8IyW1yPBMmivB5u+4GkNEV3kdX8vjcQOp54reoAwfG089t4Nv5bZ2iIVQ8iMVKRlgHYEdMLuOe1UNFs9N0Lxjf2WiQ21lpq6fFcXENvhIo5C74faOAWUZJ77QTXWPt2N5mNuPm3dMVj+HU8MSaTKnhNdJfT2kYSrpgiMRf+IME4z655oAs3N1pGoeHpLq5ntbrSJoDI8pdXhkiIyTnoVI/A1xUthL4c8EeKNX8PWCaPb3Fr5ljp9uohEIVDmUqowjtnJwOAq55yB3J0jTTo/wDZTafanTfK8n7GYV8ny8Y27MbdvtjFUNIsvC2h6TPeaDbaPp2nODJNPZRxRQsFyCzMuAcc8npQByWlzf8ACFrqsNloumXM5s4ruOXRNOcSSb2KqJgpd5SOW8wcsNx2g9Z/h9Lp97B4msbhby7ja98y6fVNPmhE2+GPfkTIByQ3ydhjjBFdP4YHhf8As6abwZ/ZH2OSUtK+k+V5bSYGSxj4LYx15p+nar4c1eC/bSb7S76Lcftxtpo5FztwfM2k87Rj5uwoAxvDXhHQltL6/wBO0mDSYtWRUVdNQ2bCBSdh3RFSGOS2QQcMB2rM05ptO+EutnSy8UkFxf8AlsjHcgE75IPXIGTnrXV2d94a8V6PPb6fdaVrWmgeTNFBJHcQgYzsYDK9McGqfhW18EJJdS+CINAV1xFcvpCQgjuFcx/yNAGKNGt7PWr3S/BYt9O+26M8sv2ZtiiYsFimIX+Jhv8An6nb3wKZ4SgFj48mtdO0EaBbtpokvbMPES83mYSUiJmXLDf8xO9sfMBgV1ekaf4eg065GhWmmR2VxI5uPsUUYjlf7r79owTwQc+mDVbwrP4Q+zz2vgmXRPJifdPDpDQ7UY8ZZY+ATjv6UAb9FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBy3xAj06bw/FHq+sabpUBuFO/VoxJaTEA/u5UZ0DAjJALDkA9sVydxqX2b4eb/DGnaTpenjUxFdXGlXRtbSaDHzTrPHHmNScBnUHbg/Nxur0jVNZ0zQ7QXWtajaadblggmu51iQsegyxAzUthqFnqllHeaZdwXlrKMxz28okR+3DAkGgDy6PV2Tw5pT3nie1GmPrbRvdabrj3axW/kOxjkumCscEEktyowcggEXH1y3tvA96811c3Gjyap5Gm30+szWqGLAIeS9DFxHvDgPklvlHOa7rWLKxnksLvUbn7OthdLNExkVFaQq0YUk+u/AAwc4rToA4v4cam994XvYLm8S4uLS7mjKi+a7McZO6Mea4DuCpBVmGSCDyKm8KarZaH8JtK1LVJvItLewjaWTYzbRwOigk9ewrotUvptPsWuLbTbrUnUgeRatErkeuZHRcD65puiatDruh2eqW0csUV5CsqRzAB1BGcHBIz9CaAMDx1ftptjpmr2gLSxXPlQkIW+aaNo04weN7J/Ws/w1DJ4ms9XbW57o3Nu0dhPNazyWjvJACWYNEykAs5OAcV3M1zBbeX9omji8xxGm9gu9j0UZ6k+lSUAcDLqU0fwv8Pz3+oTwWtwLdNRvzcsjxwkfMxlzuXJwC+QRknI61gX+madqvg/xabK91C5tLe+ilhnXUJ1LoIYcsZAwMqhckMxYH72Twa9dooA8+1ZNIv8Aw3okPhnXJbuzbW4FF7BqTXrqcnIEsjOfbGeM8Yra8LRNp/iDXtKjubue0tXgeEXd3Jcum+PLDfIzMRkZwTxXR3FzBaQNPdTRwRLjdJIwVRk45J96ralqsGlfZPtCyN9ruUtU2AHDNnBOSOOKALtVtQe+jsnbSre3uboY2RXM7Qo3rl1RyP8Avk1ZooA4/X5dTbRtPuvENpZ2cNtqcM12ltctcxrCp4dmaNCAG2seMALnNM0rXtJsY/E/iX7VGPD/AJqTi7hQvHJtiUSSKVB3jIAyuclTXVahqFrpdk93fS+VCmATtLEknAVVGSzE4AABJJwKj0rWLLWrQ3GnyO6q5R0lieKSNh/C8bgMh5BwwBwQe9AFTxD4j03w94ebWNSljS2XZ5bSMEDOxAQbm4XJI5OAOprjdSewf4b6jfafrVncNf6itxNqdhKs1vYSl0xJwcMsW1Sd2A2CW2gnHoOo6jbaTp019fM6W8C7nKRtI2PZVBYn2AJqiPEtidGbUxBqn2dX2FDpN0Js/wDXHy/MI99uKAOH0+dbzwnq1/cavo90bXVI7z+2XlENhqDJsKgsNwQDAjJBfDLn5jkVTnubi98LeJdWkuLa0tNQv7Vre+smMttaOoQNdByAJkVwCWKqrbcHABNeh2fivSL3SrvUUnmgtrNylw13ay2zRsADgpIqtnkducjFPt/Edlc6RNqUcOpCCE4ZJNLuUmP+7E0Ykbr2U0Ac14O1aOPQtd1C81jTZ1W5aR9fQqtnc/IoDgbtoCYCEBzyv3sk4yLW7TUtB1S9hlt9Qt11u2nvdSskP2a8jXy97xrz8qbQGwz/AHGyx5A7y38TaVdaHcavFPILS13+f5lvIkkRX7waJlDgj0K56UkXiWxm0iXUkg1QQRNtZH0m6WYnjpEY/MYc9QpFAHHy6hcalc63feDLaTVtO1CW3hluNLlhBYhWE0kbu6I527E3BuD6lcVr/DJz/wAIi0A0q40uKC9uY4oZjEfl85+B5bsMD7vOOQcZGCdSz8XaPfafe3sUt1FDYMEuBdWM9u6MQCBskRWJIYYABzkYq3pGuWOuQyvp7TAwvsliubaS3kjOMjdHIqsMg5BI57UAWb17uOykbTYIbi6A/dxzzGJGPu4ViP8Avk1y3iB9ZuPDSS67YWdqkGoW8txHZ3b3Sm3WRSzMWijIx1IwRgZz2rsKgvb2206zku72URQRjLMefYAAckk8ADkk4FAHKaPrelDUPEviO0u4ZNCEcTveW6l45ZI0bzHVlzvwuxSVzyuOoxWl4nNrqPg5rsX1rbWy+VeJPeP5cBCsrqJCfuqcAE9s9D0rR0jW7DXLeSbTpJD5T+XLHPA8EsTdcPHIFdTggjIGQQRwasXt7badZyXd7KIoIxlmPPsAAOSSeAByScCgDzvSb3StQ/4SHXfFMmhLoly9ttkaZZbJp0Ujek0iqJDnYN4UcrtHK5p3h6/0fXfgvaxWmuaZixtYHuXe6QxQshD7JiD8qnbg57E12ll4l03UNLub+0a5eO1JE8Js5luIyBnaYCnmZIwQNuSCCM5FSaPr2n67bzTadJLiCTy5o7i3kgkibAOGjkVWXgg8jkHNAHHeGNbaW+8SeKZnsn05oIRnTZzPbyyxh92yUqvmnBRSwUDI2/w11NsiaLod1f6pdW1pcSg3F5dXBAjjbHG45X5FGFHI4HXvVzSdZ0/XNPF9pVytzal3QSqCFJVirYz1GQeeh7VXt/EulXmhPrFlcPdWKMyeZbwSSsxVthCoqlm+YYG0HPbNAHJ6B4m0zT9H8Sa9qN3Z3trFcpLLqtkAttdsI0UeWCSBtICn5255Ldl0PDuraTFo+teJINU0/UXuJfPuxptyk0cLrGqrEGU8tgLycEk9AMCtm28VaXeaVcahbG8kjtX2Twiwn+0RtxwYNnm5wQfu9DnpzTbLxdpF/YX95E93FFpwzdC6sJ7d4/l3fckRWPy88A0AQTXVp4U8L3es+IHjVzi5vJDjmQ4CqCcDC/KoJ9ASepqHwVPp+oRalq1hqmn6hPf3Ikuv7OuUmigYIqiPcvUhQMk4JznAGBWja+JdNutKn1LN3a2tucSPfWM9qeg6LKis3UAYByeOtTaRrlhrkEkmnyS5ifZLFPbyQSxnGQGjkVXXI5GQMjkUAW7trhLOVrGKKa5CkxRzSmNGbsCwVio9wp+lcp4h/t++8G366tptlblZImaKwu5LvzYBIplBDQofuBhgA5rsKiurqCxtJbq8mSGCFS8kjnCqB1JNAHKaPq+mX3ifV9c0i7gudISwiE15anzInkQyE4ZchiqEZxkjIHtW1c+JNIi8Jt4imuFOki3F15zIRlMZBwcH04NS6Rr2n65HI2nyTboSBJDcW0lvKmRkExyKrAHsSMHtVm+1Cz0y0a61K6htLdCA0s8gRQScDk8cnigDmPC2qaTewax4ih1vSpnudj3RtbuOWGzVEwqu6nBIGSSceg4ANZehaloV/F4gvPEd9omqWDSQNcauoRNPmIGFQB2ZQyYGfnflhyOFHa2es2WoaKuq2Ukk9m6F1ZIXLMBnOExuJ4PGM1WsfFOk6hY3l3FPLDHY/wDHyt3bS20kIxuy0ciqwBHIOOe1AHN+AtV0LWvhqbKDV7KWOKCZLv7Pcoxt0Zn5bBO3jkZq14S12J7TVFTX49W0fT1Qwa1N5QjPykujPGFjcJgZZQMA4PIJrZ0/xVpOp2t5PbyXES2SeZcJdWU1vIi4JDeXIisVIBwQMHBA6VJpviLT9VsZryD7XBbwDc8l9ZTWgAxncPORcjHccUAcVper6jdWfiG78P8AkeIr+aSBP7S0fy44JARtPliSTbujXkgyNkkcj7ou+Ao4V0HxBYTaVd6NZx3swY3csJIDIN5LJI43DkljwSc5PNdVpGvWWuJI+nrebI8fPcWM1urg9ChkRQ491yKLPxDpN/p93f2d9FLaWckkU8wJCo0f3xk9ceo4oAw/A+pi6e8sbDWT4g0qzSJbbVMREMSDui3xKqPtwvKjjdg5NdVcNOttI1pHHLOFJjSWQorN2BYAkD3wfpWdo3iTTdeaZdPa5WSEKXiurOa2kAbo2yVVYqcHBAxweeK1aAOQ1/8A4SG/8F6pHqumWVu+1CIrC8kuzLGGBkUhoYzkqCMAHOaNI1XTNQ8Xajq+i3UFxpkWnRx3F1bfPG0is5C7l4LKpOQORkCuqubmGztZbm7lSGCJS8kjthVUdSTVLSNf0/XBKNPkl3wkeZFcW8kEig9CUkVW2nBw2MHBwaAK02reG9Z8IJquoz2Mug3UKTedfqEhZDgqWEgAHOOo61zXgfxb4bh+HlxONX0+aDTfPmukgnSQwx+a5Usqk4BA49a7y4uIbS1luLmRYoYkLyOxwFUDJJrK0/xbo+pW91NFcTW6WaCScX1rLaMiEEh9sqqdvB+bGODzxQBzem6jpusaH4l1+zurTWJ7y1AmsdLu1lMSLG22IshP7w5bJ9wBnaCavw+v92qXT3Gvaf4hih06NRqtmqxpaohP7iUKSA/O7JIOAflXHPa6Rr+n64JRp8ku+EjzIri3kgkUHoSkiq204OGxg4ODUmn61p2qC8NhdpMtlO1vcMuQqSKAWXJ4OM9RxQBwun6xbanceK7uCW18S401Va70bKwyKPMxbDDP+8AOSQ7H5h8q8A1fCd3ptx/aC+JNb0XxJpaabFHNqWyNLe3jVj/o865Kbud2SRn+6uOe607xVpeqw3M1ibx4LdPMadtPnSOReeY3ZAso442Fs8Y6il0zxRpWrJdG2mmha0UPPHe2strJGpBIYpKqtt4PzYxweeDQBznw31rQtR8O3tlpmq6fOYru7d4rW4RjFE077WwDwpGMHpVjwNqUMt1c6XpGt/8ACQaPZwReRfjynEbcgw+ZEqo+FCngbhn5icitrTfFekaqLg2880X2aPzZPtlrLa4j5/eDzVXcnB+YZHvUmkeI9M1ySaPT5ZTLBgvFPbSQPtPRwsiqWQ4OGAKnBweKANSiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5bxrZ6neTaB/YpSO4i1MOZpbZp44V8mQFnVWU45x94ckfSsbxN4Y1Kz8HtFbzpfy3OpC81b/iXtNHMh++BbI4Z04X93uZiAc7uh7HWtesNAt4ZtSacCeUQxJb2stw7uQTgJGrMeAT07U218R6Td6PLqq3qQWcBYTyXatb+QV6iRZApQj0YCgDzuXwnZX/w2nSfT4tUS21FLmG2Ph2a0FtGJIzKkFtKGfBUMcLnduIA7Vua0ukjwBFb6F4XhOlSXIRrS48PzNHbjcSZTZBFkk+bHAA5O7OATW9qHjjwtpek2+qX3iDTYrG6YJb3H2lWSY5x8pBO7BPJHTqcAVZ/4SfQP7D/tn+3NN/svdt+3fa4/IznbjzM7c5469aAOf+G9vPY+GL3Tri2e3aC7mMaLp8lpF5bnenlRuThcH7oY7TwcHirXhy4n8PfC7TZrvTr6aa0sk32dvAWnJ4G0IcHPtWtNq0l7oa6h4UOnauH5jZr4pC69yJESTPT0/EU7w5q7a94a0/VXtxbNeQLKYRJvCEjpuwM/XA+lAGV41laPT9IvBa3c0dvqcE0qW1rJPIiDOTsjDMcZ7A1R8XXNz4l8EO/h+K7VRdRfaIrzTLhGkhDAyDyH8t5Fx1UH5hkDOcV1017Bb3VvbSvtluSwiXaTuKjceeg4HeqepeItJ0hbk6lqFtZi2RHke6lEKLvJCAu2FySpGM0Aeead4eFx4et7OFJpbJ9fgma1tdEutJitU2/MEikO4ITySDtyxHrVrUdATSpNWsrHQ2j8O/b7OW4sbGyJjmh2HzQkSD5xuCblUHIB4PSu4sNchl8Lwa1qrW2nQvbieZmu0kihBGT+9Hykf7Q4rn9T8a+FbzSL9tb1mGx0uO4jihvbfVGhNzlEkBjkiZW/i6KTkAk8ZoA5h/Duj674T8VW9h4cjMEF9HLZ2c9iA0QEMJOyIjMZK5wmA3OMA8VvahpOkan4b0i08OaLPZaaNYheW2h06awKgE7mKFUYL0y2MGtGz1jw9omhWUvhqe21DT7zUBA93Hf+eN7Z3SPMSxdhjncc+/Fb+l6zpmuWhutF1G01G3DFDNaTrKgYdRlSRmgDF8LaNDoXiDXrTTdOTTtMLwSW8MEAih3GP5ygAA6gZx3rp6KKAMHxZbzva6fdwRSzpYX0VzNDChd3jGQcKOWIzuwMk7eBnFZ9hqMlnD4i8Tf2XqktrMySW9mloy3M4jjCkrC21gSeAGwflFdDquqQ6RY/aJ0llLOscUMKgvK7HCouSBknuSAOpIHNR6NrMesQzH7NcWVxbyeVcWt0FEkLYBAJVmU5BBBViOevWgBNaWyu/DtyNVguntJIsyxW6SmbHXCiL95uH+zzWFol5qdr4Xv5YLbUJoxcFNKXUEka4MbbVUyh/wB5tDljl/m2jJrotX1JNH0m4v5YJbhYFz5UO3e5zgAbiBkk9yB71UPiEW2hSanq+m3umbGCC2uDFJK7EgKFETupLEgAZ+uKAMnxXoU48GW9pp5uJTbXkFzcGEBppVWUPKwBzljy2BznpziodBnez0TWJ1m1+LSfMH2B7m2uLi9jG0ByqSo8zDfnAdT3424ra/4SNodHa+1LRtRsJDKsMVnMYXmmdiAoXy5GXknHLDHJOBzT7HxHaXem3d3dRT6a1iSLuC8Ch4CFDclWZSNpBBViDnrQBh6BEs3hLWRrVrfy2E00redNayx3l7EVGZHiQBw5OQAqqcAYVeBT/D97fWeg6rPbWuqXFnFL/wASuLUVlNzIu0DDCT97t35wX+bGewFakHiywuPCCeI1iuUtZE3JFJGElJ3bAu0nhi3GCRjPOKl0zxFFfW17Je2V1pMlif8ASYb4x5jG3cG3Ru6EbTnhjjvigDM8RaVNb/D+5soYZL6aTabl4lJlJZwZZUA53j5mUDkEKADgCovAMNzBHqQeXUby0eZXt7/VrZ4Luf5QGDqyocLgAHYoI7HGTpWni7T7zwuuuxx3S2zyGKOJ4sSu/mGMKFz1ZuBnHXnHNWtF1xNYW4R7K60+7tnCT2l2E8yPIypyjMjAjkFWI6jqCAAXL1LuSykXTZ4be6I/dyTwmVFPugZSf++hXN6xp+vPoMbanc2upT2t/BdFNPsng3RI6ll2NLIWbgkYPOAAM11dVNU1KDSdPe7ug7KpVFSNctI7EKqqPUkgenPOKAOd03UHN3r/AIlj07UzZtDEsFs1m0dxcGIOWKwuFcEltoDAZ28cYJueJYrjUvD1nd2ttOTDc2149sU/elFcMy7f7wHO31GBzV7RdcTWFuEeyutPu7Zwk9pdhPMjyMqcozIwI5BViOo6ggWNU1KDSdPe7ug7KpVFSNctI7EKqqPUkgenPOKAOe0y7M95r3iDyNStLGaGKKHdYSLO/lht0iwFDJnLAAFMnbnBGM41laa/qWiarFpUElxHdXse661oSafcXsOwCQMBESnI2AiJAVzgZ+Y9NF4utf7Jv7y+srzT5dPIFzZ3Kp5qk/cwUZkbdkYIYjsSCCAtv4stjp+oXWqWN7pLacAbiC7VHcAjKkeU7q2egAJOeMUAczpem+K5vBF1p6aVp1lLJqc++3a/ljWS3MrFlD+Rlc9AQpypzwTxb8OXmr+HfA+p3OqaCUlt7y4e3stPMtw0gaVsYXylbbk8EKcqM47VvR+JCmk3Goaro+oaWkTKqR3PkvJOWIChBFI/JJAw2Dk0208TteWt7s0TUk1GyK+bpchgE5DfdYN5vlEHnnf2I6jFAFDQryOHQdU1a1g1C81GV/MuBPps9q0soQBVjjlQNsAwARnvkk5rU/sy3tvDFza6oJLpJona9MSuzzFh8+0Jl/YBeQMAdKgsPE1zf2V/KvhvVoriykEZtJGtvMlYgH5GExjOARnLiktPFgm0rVb680XUtOGlg+bFc+SzSYTedhjkZTxxyw5oA5qG21C+8O3wsINXfTLTUba4sY9SEn2maKNkeVQJv3pGQ23zPmPbjbXQ+HpH1PxHqmtRW93b2U8MFvCLu2e3eQoXLN5bgOB84HzAZwccYNW4/EEi6DearqWi6hpqWiNIYLhoGkkVV3ZXy5XX25I5/OrWkajcanatLd6Re6UwbCxXjwszjGdw8qRxjtyQeOlAFq7W4ezlWxlihuSpEUk0RkRW7EqGUsPYMPrXMazpXiK68K3cOoXlnqNyssM0UdhZNbb1jkV2Qh5nyWCkDkCusqtqOoW+ladNe3jFYYV3MVUsT2AAHJJOAB70Ac9pd619r+peIILHUEsksI4USezeCWd0Z3bbFIFfjcAMgAknGetbA1uFfD8WrXNpqEEckayG3NnJJcR7v4TFGGbIzyADimaNry6tLPbz6feaZe24VpLS8Ee8I2drAxu6EHB6McYIOKvX17b6bYT3t7KIre3jMkjn+FQMk0Acp4D1SNfBCwzWuq2stkkjTJPpdxE4y7EbFeMeYcdlDfSsy1j1C68OeKDBZ3+rJcQqsNxqtmbe5uztIdTEVj4UY24RATnqcsey0nV5tShlmutHvtKiQBka+aEeYvXcAkjFfowU+1V9L8U22t6Dc6rpNpeXUcMskSQhFSScocfIGYDDdQWIGDk4oA5zwbZmKDWIriTWdT0mS2jX7ZrFpLFeSYVleLaUR2ULggqgyXbljk1VOnahqngvxJp2gx6sNOeFF04aoJPtDNjMiqLn59vAA8zjJOPlxXU23i61ey1CbUbK80ubTgpuLW6VGkUMPkI8pnVt3QYYnPHFEHi61+wahPqdle6VLp8Pn3FrdqhkEZBwwMbsjA7SOG6jBxQBzVtba3eW+rR+EzqItLiOFQuvzXMDCUsfO8ppUaRBswBhdgJyvQ07SbHXLbwZ4otLjw7ZRMZZRaWUM7zJKpjUbRvjjyuBwe/tXVaL4h/taW6hudMvtKuLVUd4b3yiSjA7XDRO64+VhjORjkdMppPimw1vR7zU7FZzbWkksZLx7TJsGSygnlSOQTjI5oA534eWs9pd3qRXGs6hYeRCqX2u2skN1vUEGL50QsgGDnbjLNyxJx29ws7W0i2kkcU5UiN5Yy6q3YlQQSPbI+tZ+haxPrVp9om0a+0tCFaMXjwEyKRnI8qR8fjg1qUAcprGleI7zwnqFtqF7Y6jcNseGOxsmtdwVgxQ75nB3AY6gc807TLxtS8S3uuW9jqEVnDYLbhbi0eCSeQOzkLHIAxwCADjBLcE10OoX9vpenz3t65SCBC7kKWOPYDkn2qjo+vrqtxPaz6feabeQKrtbXgTcUbO1wY2ZSCQR1yMcgUAVdTvLjWvh7c3dnpE5nu7EumnX8WyXLL9x0zw3tnrxmuK0rRtQn0HWbTTZda1S2NvbGK51y2eC7keNsm3/eLHuTaBg7QNztlmJOPULm4W0tJriQEpCjOwXqQBnismw8SNdaRJqN7oeq6dCoVkWWKOeSVW6FUt3kPfuAaAMK4bV9fv9T1HwzbTWjNYR2cT6nFJZ738ws5AaMuNqnAbYRluM4NUNJ0TxA3hnxhpLaTZ6W1wGjsRb3byqzG3RBgvEmV4HzdzuBHGT22ka3b6zoaapbxTRQtv+SZQHG1ipyASOqnvVXSPENxq+mSXyeH9Tto/KEsCzvbbrkEZGzbMwHb75XrQBzvhy4nsJ7m7s4PEElhb6fm7tr+Gcu9yuMLAknsGBEQ8s5XFSaZcPq+j65qkdhdXOtXNnsa0vtOntYgoVtkC+cibxljuPck/dGANrTfE1zqE99byeGtWs57OJZPLna2Pmls4RWSZl3cdGK9Qe9NsvFrTyX6X/h/WNNNjEssnmxR3BcNnAVbeSUs3GduM4IPegDitJ0TULrRdasNMm1m/gn01Ykm1y2e3nilU8W6F1TdGQTzggHqzZ463Sbl9a8XjUrezvrW1tLFrVzeWr25klZ1baquAzBQv3gNp3cE842ND1u31/TPt1rFPDH5skRS4UK4KOUORk45B9/XFR6F4isfESXkmm+aY7S5Nu0jptEhAB3L6qQwwe/0waANWiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5vxfot/rUmirptxPaG31ATS3Vv5W+FPKkG4CRWU8sBjaev41meIfBtynhqCHRLq+mu4dRTULiUPCbi6cfeI8xfKD9CAVVBtA+XqOtvdSs9NETahcR2ySuI0klO1Cx4C7jwCScAE8ngVapuLSu0BwCeH9QfwPfpHa6w9/NqEd88OqSWfnTMkkbEL5DCJdwTAyRzycZzWzrV94gvPDcU+k6TqFjdNOFmt91o13HFzlo90jQbun3mIxnjOBW7qGoQ6ZZtc3K3DxqQCtvbSTucnHCRqzH8BWLfeOtGstFi1Tbf3FvLP5AFvp8zuj7whDptyhBPRsE9ACcCtaeHq1bckW7u23XsJtLcreBdN1PTNG1Cz1W3ulle8mnSe5aAtOsh3ZPk/KGGcH5VGQcZHJm0SDVvD/w3sYItL+2apZ2iJ9h+0JHvcYBXzOVH1qxqXjHTdL0BdXuLfVGt2fYEXTJxIDnHzIUBUe7YB7ZyKnfxRpUOlxahdyz2lvLMIEN3aSwMXJwBsdQ3J6HGDVfVq9k+R6u23XsHMih4003U9U0e1/siANeLcKGUyhdkcitHI2T12q5bHfbiovBeh3+j2WoQX8PlhJBbWZ8wOXto12xEnseTwea1B4msJdEk1O3W9eFHMZQadcGVXBxgwhPMH/fPTms6fxRNZeF9E1S6ktGN9PBHPJGkgjIkByUVsNknAAIzzjGaccLWk7cvW3z7BzIqNo2qW/gXw9ALFrm50uS3muLFHj3S7ByqszBMg4YZYDK9RVeXQtVv9B8U7tLFlPqV0lzb2/mxszhUi4Yg7QxKEHnGe5HNdNbeJdLu7WOeKeRVkuRahJreSKRZT0VkZQynHPzAcEHoRUGs+L9L0OwuLu4W8uEt5vIlW0s5JmV8A4O1cAYYckgds54qY4etKfIoO/awXRQ1qzuvFWmaX9q0Ga3WHVYZp7S/aByI0JO87JHUjOOM59q0NL0+6tvFWu3csWy3uzbmFtwO8rHtbgHI5wOasDxBp/8AY7anK1xb2ytt/wBKtJYZCc4AEbqHJJIAAHJ6ZqJfFekNpTagJpxEkvkNG1pMJxJ2TySvmbjkEDbkjnpzSVCs9ove2z37eoXRsUVnprVm2iyaqRcRWsSM7faLaSBwFzn5JFVh0445qnHrkmnaSuo+KXt7BLiVFhhRWYxb8BUdhncxPcAAZxzjJFQqPpre1ut+1guh3ifT7m8tbK4sYvPn0+8S7WAOFMoXIZQTxnDHGSBnGSBzWfaf21aWmu69HobvqF2Ve10mS6jR2EaBVV3BaNWJyeCwAxzWpF4n0mXSbjUvtLw29s2yYXEEkMkbcYUxuocE5GBjJyMZyKRdWm1bS5Z/D8ciTxOAE1OxnthJjkqA6qwyON4DAHscYo9hVXxRaW2q29QuixqiJcaFOl5pP9ppJFiTTwI387PVP3hVD+JArjG8Kajc+DJ7WPTvsMK6nFe2ejidVMUCMhMG5GKLu2sQqnYNwGcZrttI1KPV9LhvYlMfmAh42IJjcEhlOO4II/CrlZyi4ScZboZ57Y+GLu3sXvNM0M6TDBqcV7aaH5kK7VRNkgARjGjPlmADbc4JIJbFqTw7r2ty3OorJBoj3N7FObK/t/te5Ik2oJBFMqg7/m+V2HC5zyK7iipA4WDQPEKfC2bSL9bW7vZHcSW8MfkiWBpSXjBaRhuZCwB3DG4dMZqppXg7VjotzY6Zv0HTmvI7iGx1hRfSEKPnWRo58lWYKQDKxwMHj5a9FooA4PT/AA34hj8H+Rqb2txf22rNfwxQReSJFE5faSZHGWBJHIxkA9Ca3PD9vfT6tqWtajYS6a14sUMVpNKjyKke75n8tmQElzwGPAGTngdBRQBBe28t3ZSQQXk1lI4wtxAELx+4Dqy/mDXP6l4d1H+w0Qarea1dW17DeRfbRBGzeWwJjBijReQDgkdTycV09FAHLaeNYWTW/EDaJLFd3EKR2ulzXMYkcRBsb2VmjUszHozYGM88C5r9je6toNpJFbhL23ngvPspkHLIwZo93TOMgHpnHat2igDh7vS9a1fTfEF//ZjWU+pRQ28en3M0bSPDGTvDFGaNWcO4GGIHykkdBnWng2/bwjrGm6dY3ek2c8kM1nYX94sk6yRsC4MyPIQrbFAy7Ec9BgV6TRQBweneHcadrci+G7rSLK6WJoNHtpLdJvOQljMu1zErk7MHfzsy1SeH9K1yyXWtcngvJNTu4I4LaHUZoDO3l7sNJ5OIV5c/KnYAn5ia7iigDLNrcaR4beDSYvtN3HExj3EDzZTyXYnA5Ylj+NOTT4bDw89mbQ6ggibzIdqFrpjktkMQpLEnOSBzWlRQByHhnSprHStZE3hz7Dplw+bTQQ0LlU2AOu0MYU3tk7A23nJILECx4K0y506PUSdI/sPT5pw1lpe9GNuoUBjtjLRpuYE7UJHfqSB09FAEV3C9xZyww3MtrJIpVZ4QpeM/3gHVlyPcEe1c5qXhjUJ/Dd1Ztrd5q1yZYp4DfrBGA0bq4XMMScErgkgmuoooA5nTV1S51bUNeudHmsZDZpb21hcTxGWQoXYljGzIoJYAfMe5OOlSa7p2oeJ/h/c2UkH9naheWo3QfaM+VJwdnmJ7jG4fUV0VFAHndt4Qv72PUxpGnxeEbe8WFZbS4hjnW5dWJkd44ZQPnBVS28MwB3DpWnoln4o8P+HtckuYLTVL9rqaeytrSEWwlyeOXlYAHrgkYHHNdjRQBxEejXureFL6KTSr2x1WSeG5eTUpIM3csbK4/wBTJIFT5AoHGB2PJLrmx13WYta1KLTH0u5udPWztrS8liZ3wWZi3ls6DO7C8n1OOldrRQB5vo3gzUU0XU9N0WCfwzpt0IQlrqrLfSZXiQEpOT5bIEXHm5GDgKK3/Cmk61pdrrS6+bO8We7eWGK0tPJEilQOjSuMHGApIxjk88dTRQByng3SpdPutQlg0MeHdLm8sW+l5iyjjO+TbEzRpuyvCk525OCa6uiigDJ8T6XLrPhy6s7UqJ22vFvOFLowcAnBwCVxVDTU1S81y81y70iawKWQtbe0nnjMkrBmckmNmQAkgDnPXIFdLRQBQsbi7vPD8M+q6X9mu5bfdPp4lSbYxHMe/hW9M8A1zfhyzu9DTVLyw8LT6Zp7iP7Lodu9usm8Z3yBVk8lN2V4D87cnk12dFAHKeBf7Tt/D7WGr6Be6c8LSuPtEtu6zB5HbC+XK3IBGd2Bz3qLwvptzp19qd5YeGzoGnyQr5Wlb4VaWcbi0m2J2jTcCq53ZOMnGBXYUUAZel2txp2iF5YvO1CVWnuFUgGSYjJXPTA4Uc9AKZYQ3OkaA08lpLe6hIDPcQ25jDyyt1VS7KvH3RlgMKOa16KAOB0PTtfvvCepaLNp134duJ7ieZLu78idGSSZn2bYZ92dpweVxk4Nang3Rtc0i71n+2p7CSCe5VrYWdmYAQIkXIBlfC/KAF4I2k5IIA6qigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAKOq297d2v2exktoRL8ssk8RlwncBMgEkZGScDuG6UzQ9EttA05bOzkndFA5lkyBgAfKgwkY4+6iqo7AVW8W6peaP4aub3T1XzY9oMrwvMsKkgNIUTDMFHOAR9RWXYeK5NO8I6HfazN/bNzqpjjhk0m0wsjOhZfl3t6YLZx3IUZxp7WfJ7NbCtrc1vE1jqeoaWsOkSqr+apljN09t50fdBMis8fY5UZ4xxnNYVn4S1S38J32lN9n8w3ovbUveyzbz5iy7JJHQsPmG3d8xI5wPu1rWvil73Trya30HU2vbKcQTaaWtxOrEBgd3m+XjawP3/14qpJ4/sotKgvG0vVDLLcTWxs1ijaWOSJWZwxD7OiHkMQeOea3p4upTgoR2Tv81/X9aCcU3cvalYanrnhO5s76G0s76UfKkNy00YIYFcuY1POOfl496bdWOrava6c1/BZWdxa6hHcPHBdPMhRc9GMaHdz0xj3qKLxvp0ul3F6La+XyZo4Y4GhAlnaRVaMKueNwcfe2453YxTG8cWsWkzXVxpt/BdQ3aWT6dIYRMJnxsXd5nlfMGBB345xnPFRHEOKtFLdtb6X+f5jsdK43RsB1IxXMSeHtRTwtodjbPatd6ZLDK3mOwjfywcgEKSM+uOOuO1b2nXc19YpPc6fc6dIxINvdNGzrg9zG7rz14Y1aqadaVP4e9/z/AMwaucfJ4c1iS1lviLE6rLqcV+bbz3EACKEEfm7N33Rnds69qnfw5qV14e1q1vJbUXWoXJuI/KLeWuAm1SSM9UwTj3wOg6mit/rtXTbT9LWXorC5Uc1rWjap4l8NC31CK3sb2K4SeNLW/lKNsbIBlVI3XPIyBx156VStPDl7a6HdRDQtPlubi5WV47rXbq5D4UASefJEXR1wMYXjGQQa7KilHGVIw5F8N72u/wDPy669g5Vuc3beHr6fwVeaPqt1ulukkVMzvceQrfdTzXAeTH95gCaz9dv7y90DTs2T2moQapaxyQXKsI94YH5XAwyH+8ucdxkFa7SinDFtT5pK+t/8/v8A6e9zlORk8M6reWN/dXMtpBqtzeQ3kcSM0sEZh27ELFVZgdvLbRjPA45101PVbTTJbjWdKjE4YLDb6ZO90ZSemS0abee5+UdSRWvRUSxLqK04pr8tlb7kt7haxleG9Nl0vQ44brAuJJJJ5gpyFeRy5UHuAWxn2rVoorCpN1Jub3ZWwUUUVABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAGfrdrqN5pMsGj3dvaXTggSXNuZoyCCCCquh79QePfpWFpPgl7DTNHhmvYvOsL37dL5FvsidzGyFUXd8oy27JJJOT340/GU0tv4J1ia3lkhlSzkKSROVZTtPII5B9xWXr9pf+HvAV7L4a1OW2a2tpbh5b55b6U4jJGx5pDtOQD8wdf9mgA1nwPJqa6n5V/APt97FdNBdWhmt3CRrGY5Yw6+Yp27sZXnGc4wa+l/DxtNs0s4760jtYrieeGG1sPJWMzRMjKAHI2hmJAAGBgHJ+auiu7CPWtAijvZbpN0ayF7S7ltn3Yz9+JlbHtnFN8KyyT+ENJlnkeWR7OJnkkYszHaMkk8k+9AGLf/AA+tdS0e9sbyeKcXEtvPGJrVZI1eFEUb0Y4dTs5HHBIyOtP03wjfaT4euNP0xvDNlJPLucWnh8xW0iFdpV4RPlmP97cOMDBroNVsZdRsfIgvJbN/Njk82EkNhXDFeCOGAKn2NZWoXN54U0O5uIhLq0s14zr9oldUgSRs/O4VykaDqQpAHYDoAWvC+gf8I3oosBLFJ+8aTbbw+TDFuOdkUe5tiDsuTjmtiuaHimc+F7PUEg067vL+YQWkVhqPnW0rMTg+f5Y+XAJJCHGCAD3xh4yn8P2fiDUPESxQSx6jDbRwSXw+zxu8MWAJWA2x5JYsVBxk7c8EA76iuL0f4hw6rp32pYbKdINRSwu5dOvxdQR7wCkiSBF3jLoCCFwSeuOdu4aXX47y1tJ5bJLa6iUXUL/NIyMryLgYwONh57txxyAbNFUtMsJNPiuEmvJrsy3EkytKxJjVmyEGSeB0H9Ku0AFFFFABRRVPVbGXUdOe2gvJbN2dGE0RIYBWDEcEdQCPxoAuUVzepXtz4TsGmC3GsSX2qKkcLTBTEJWACqWJG1euOKdceINW0/Rkk1PR7eLVJ7sWlraw3xkilZvusZTGCq4yT8mRtPB4yAdFRXD6z4z16y8P6q9tpGmrq+lMhuoJb92hCOMq6OIgz56EFUwc8nAzvSapqtl4ZuNQ1W00m0uoVLlG1NhbKo/iedoQVGM5+Q4oA2qK4H/hYGo6h4B1fXNDstIubrTJJI32am01q4VA2+OVYwZOCPlwvORkYzXTWl34hm0Jp7jS9MTUSAYrdNRkaFxxy0hgBU9eAjfWgDYorkNK16TTvh/ZXssU91eTzfZ44Z7sys8zzFAplKA7Qf4tuQo6HGKS78b3emWt3FqWjxnVbSW2VrOzvPMSRJ5NiMkjonOQchlXkdcHNAHYUVy0V/qmvNq2gahEmi38UMcsc9jdtPhHLAHcUjIbKEEdPc1uafYS2M188t7NcrdXHnIkrEiAbVGxck8ZUnt940AXaKp6tZS6jpNxaW93LZSyrtW4iJDRn1GCP51mXtwfCum6lqNxNc6j9oula3ti/Ks+yNIlJOAC3PYDceKAN+iucvPEl/oHhm+1jxZYWNktsAUS01AzK+SANzyRRheSB3GOc1iWvxPjudF1G6htbDUbqwlt0aHR9UW6ilEzhVCzFUG4HOVYDtzg5oA76iuI1bxj4hsNP1xBommx6lptmL2NH1F3ieE7+SRCDvBQ/IBg/wB+tGXxRe6N4NuNd8V2VlZ+SisqWd6ZVcNgDLyRxhPmOOcgDnNAHTUVwVn8TorrR9QuYrbT9QurGa3jaPSNUW6hkEzhF2zFFG4HOVIHQc4Oa6Ly9Z1rRdRs9RhXRLiTdFBcWV2ZjtIGJAdqFWBOMeo4JHNAG3RVHT9Plsbm+llvZrlbqcSokrEiABFXauSeMqW4xyxq9QAUUVV1O0kv9JurSC5ktJJ4WjS4iOGiJGAwwRyOtAFqisK4S68O2Gramj3mruyI8VmCzEFUC4UfMeSNxwPXgnrVsvF5bwpfa3qCabLHaMyhdH1H7YrkYGzc0ce19xxtI44yaAOnorGsr7XmsLqfV9L02ydI98KRak8oY4JxIxhUJjjkbu/45PhnxRB46t9V0+ZrLFsUR59D1hriN1cZG2dFjZWGCCBjHHPNAHX0VxOga1F4b8A6tqOpXF1cW2mXt4A1xctNJsSZgq+ZIxJ7DLN+NLoPi6Pxzb6xo9veafb3kdsCt1o2pi9SNZAyq28Km2RSp+X6EE54AO1orP07TZrG7vJpb+e6W4MZSOViRFtQKduSepG44xya0KACiiigAoqvf2z3mm3NtDcPbSTRNGs0f3oyRgMPcdazVsdQ0iHULu1mm1ad4o/JtJ5yi7kTBwx3YLdenXr60AbVFc5peujxnpN9/Zaz2dq0TW6XjEpKk+CHUJgYMZwCc/eBHbNaWm6ZNYXVzLLqFxdLMkSrHKxIjKLtJGSfvHk+9AGjRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAZniTTp9X8Majp9oY1nurZ4ozKSFDEYGSASB+BrOvtE1TxN4abTtaun0N5Q0UyaRcR3AljK4wXmtxjOeygj1rpKKAMQWOr6R4fFrplx/bl0p2q+rXCW2ExjG6GAjjt8nPc1b0Gxl0zw7p9jclDNbW0cTmMkqWVQDgkA4/AVoUUAFUtUsJ9QtRFa6pd6ZIGDCe0ERf6YkR1x+FXaKAOeHg20XRfsK314Lj7V9t/tAGMTifOTJjZ5ee2Nm3HakXwXZfYLyCW9v5pbu5S7a7klXzUmRVCuuFCjGwHbjb1GNvFdFRQBjxaA76Ld6bq2r32rJdAqZbpYFeMEYwvlRoODyCQTmr2m2EemadFaQvJIsYOZJTl5GJyWYjGSSSTx3q1RQAUUUUAFFFFABRRRQBS1TSoNWjt0uWkUW9zHcp5ZAyyHIByDxTdZ0iHWrAW80s1u6SLLDcQECSGRTlXXcCMj0IIPQgir9FAGDF4Stf7J1Cyvry7v5dSGLq8uDGJXwMLwiKg2jGAFA7nJJJLjwsb7Qf7N1LWtRvHWZJ4ryVLcSxOjBlICxCM4Iz8yGt6igDn7TwfbQWWq2t1f3t9Hqy/6V9oMYLOUCM42IuCQBx90Y4ArQ0fTLjSrQwXOr3uqndlZLxIVZBgDaPKjQY47gnnrWhRQBjP4Xsn8OLo/mTiKOTzYpgw8yOQSeYrg4xkNyMgjjBB5qsvgy1e3kF/qF9f3U08E0t7OYllfyX3xphEVAoOeAoJyec810VFAFGLSYIdeudWV5DPcwRwOpI2hULEEDGc/Oe/pV6iigAqlq+lW2t6VNp98H8mYD5o3KOjAgqysOQwIBB9RV2igDDj8MmXR7rTdZ1nUdYhuAAHuxCjxY5BUwxpzkA5OTkVH/wAIq9xpsllq2v6pqiNNFMr3K26NGY3DgDy4kGCVGcg+2K6CigDKu/DljfX1/c3PmOb+yFjNHuG3ywXPHGc/Oe/pUEPhgHQZ9J1XVr/VoJgAr3QhR4gMY2mGNOhAIJBOe9blFAHP/wDCKvcabJZatr+qaojTRTK9ytujRmNw4A8uJBglRnIPtiugoooAKKKKACiiigCvf2sl5YyQQ3k9jIwG24twheM56jerL+YIrItvCFmmn6lbajdXeqPqgC3dxclEkkAXao/dKirgdCAD71v0UAc6vhJpdGvNL1XX9V1W1uohEBdi3DQgd1ZIlLHp9/dnHPU5n0fw1/ZGpTX76vqF/cXESxztdCECTaTtbEcagEAkfLgY6gnmtuigDIj8M6euiX2kyiWa1vpZpZg74bMrFmwVxjBPHccc1JpGk3emNL9q17UdVVwAiXqW4EWPQxRITn/aJ6Vp0UAFFFFABRRRQAVXvrX7dYzW32ia381dplgYK6jvgkHB9+vpzViigDJ0nw3Y6He3E2leZbQXCIGs02+SGUY3gYyGIAB5wcDjPNa1FFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAISFUliAAMkntSRyJLGskTq6OAyspyGB6EGsTxnpZ1jwrdWavAGYBxHcpvim2/N5brkblIUgj9D0rk9M1VdN+HmjWWjwW3hppryLT7qSGOIpayMuWdeNjM52hSw6uNy5yKAO81TWdM0O0F1rWo2mnW5YIJrudYkLHoMsQM1agniureOe2lSaGVQ6SRsGV1PIII4IrOSynsNAuobrU7rU5PLc+fdrEr429MRIi4/DNc1Z3xs/hV4ejgur+3urq1tobYaakLTyP5YOxfOBjGQpyWwAAeRQB3NFcFo2o+Jda8DyiC7nh1KHUZbdpJxbLdGKOQ5A2hoPN2jHTZ9Oot293q2p+DvL0bUdQ/tKK7MNy+oLbJdptbMka7EMBcD7pwVPc9wAdlRWJ4TvjfaH+9udQuLiCZ4Z/7SSFZ0kB5RvJAjOMjlcjHc1t0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAZfiO30a48P3f/CTWlvd6ZEhlnjuIPOUBec7cHJHbAz6VSsG8Mv4LeJbGKy8PwRNHJb6jYtaRJGBzujmVfl75Iwak8b/8iHrf/XlL/wCgmsj4lzaBb+AbuTxBJpsUotJRYtfNGGExiYDyi38eM/d5oA2fL0DwjoZ+waUlrp7tkwaTpjShiw+95cCEnI6nGKnWw0PX/Ddvbtp9neaRNEjxW01sDEUwCn7thgY4wMcU3Q9V07WPDkNzpF/a38AiCGW1mWVQwUZGVJGR6U3wh/yJejf9eUX/AKAKAK2qaF4RstJlGq6JpYsZpoVkjewR0eTIjjyoU5IyqgkcD0FSW2l+F9b0M6XFpOn3Ol2k7Q/Y5LJfJjkQkECNlxwc8gY9K2poYriPZPGkqZDbXUEZByDg+hANcr46lj03S9OMd5JpUE2rQ/ap7Z/KJRiS+5h2Pc/jkYyADprKxtNMso7PTbWG0tYhiOCCMRog9Ao4FT15fDdT3GnJDo+s6g2kSeIYIbG+S9aZ5oCgMirM5Yum/eMkn2PAxv8AiO0bw14O8m01DU1sjeIbu6kupLie3t2f94RIxZwAP4s5UEkEYoA7GivP73UNCj8LxHw74ie60U6gkeqahFrcty1vEVJOZzIzRDOwEhhgMTx1rONzJfBLLStZvptBk1MRWl7BqMjtNH9kkZ1FxuLOocfe3Eg5AI2jAB6jVbUNRtdLtftN9L5UXmJHu2lvmdgqjAB6kgV5WNQu7XTLcXviDUo4pbrTJLm7e6IYCSJvM56Ip2jIUADk8HJrr/BLQ39pqkcE8mp6Il8P7OuLq4a681AqElZXLM6iTdhiT04OAKAOksdRtdSjmeykMiwzPBJlCu10OGHIHQ9+lWqZFDFAGEMaRhmLsEUDLE5JPufWn0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAV7+xt9T06exvozJb3EZjlQMV3KRgjIII+oNR6Xpdvo9mLW0e6eMMWzdXcty//AH3KzNj2zirlFAFPVNLt9Ysza3b3SRlg2bW7ltn/AO+4mVse2cVLZWcGn2MFnaJ5cFvGscali21QMAZPJ/Gp6KACqWpaVBqv2T7Q0i/ZLlLpNhAyy5wDkHjmrtFABRRRQAUUUUAUtS0qDVfsn2hpF+yXKXSbCBllzgHIPHNXaKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD//2Q==)

#average of four variables

pc$center

mean(train$Sepal.Length)

#calculate standard deviations of four variales

pc$scale

sd(train$Sepal.Length)

#sd, rotations also called loadings

print(pc)

![Text

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMzMwAAkpIAAgAAAAMzMwAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDoxNToyMgAyMDIyOjAxOjA0IDIwOjE1OjIyAAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MTU6MjIuMzI3PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIALwB8AMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APom+v7XTLVrrUJlt7dPvzPwiD1Y9FHucAVOjrIivGwZWGVZTkEetQXwvWtWXTGgjuG4WS4VmRPcqCC30yufUVQ0Hw7baBFIIJZZHmYtJkhI8lix2xJiNOWPIXcf4ix5rZRp+z5m/e7f1t+PoLW5e1DULbSrCS8vpDHBGBuIQuSScABVBLEkgAAEknAqrH4h099M+3ubq3t/NWHN1ZTQNuZgq/I6BsEsBnGKl1m3lutKlht7KzvnbH+j3shSN+e7BWx6j5TyK5xfDWtSeFbyznni+0Pdx3NtbS30tykQR0byzO6byGKk5KnbuwAQK3o0qM4J1HZ3XVbem/z2+Ym3fQ6G717TbBbpru58tbR40mJRjsL42jgc5yOlUIfHHh6e3kmjvz5caqXLW8i7cv5eDlfvB/lZeqn7wFUj4f1i8XUJb9rGOa8u7SdY4XdliWIoWUsVBY/KcHAzxwKhm8IX8kkbCa2wrZOWb/n7E393+6MfX25reFHB2tOTvdbNdlfp3uv8xXl0NnT/ABbo2qrKbC5km8mIzOotpQwAJUjBXJYEEFB8wOAQMimx+MNEfTr2+kuZraCw2/avtdpNbvEDjBKSKrYOeuMdfQ1m/wDCNatCtw9jeQQXDWs8UUgJyrPOZB/Dx8pxnnB7Gs238Gawtnq0Li3i/tKOHiXVbi8aN436eZKm5gV57YPGO9WsPgnd8ztdW1XdX6drtW+fS6vI6iDxTpM8csizzIkU6QO01rLH8znCY3KMqcjDD5TnrV59RtY7/wCxPLi4EJnKbT8qA4yT0HPr1wcdDVXxHJpcfh68Gv3cFpYSRmOWaeQIq54HJI5zjHviszwrYXN34fe81rcb3UogshKlSsYXagweRkZYg9C5rl9lSdJ1dUr2/p2W2t/l3Ku72LFt4hKaNPr2svBY6RtEkOVYuseeJHboN2QdoHyjqT2tWviXSryG8lS4aFLIbrg3ULwbFwSHxIq5Q4OGGQcHB4rmdWe5g+G15pV1bSQXWnxQwh2QmKVQ6hXVuhyBkrnI7joTen8M6lrI1ifVpLazub62S1hjtpGmSNUZmDMWVCSWblcYwMZPWumWHoWc5u2tlZ9Pd6Wu9G3e5N2a1prUeuWc/wDYhnhmVR5ct9p08UZJ6EBwm8f7pqXRdUbU7ST7RCtvd20rQXMKvvCOMHg4GQQQQcDgjioLK+1m3s55vEOn2kSwoCp02eW6aU9/3flKR2wAW6+2aTw5ZXEMd9fXsLW9xqNybhoGYMYl2qiqSOM7VBOM8kjJrmnCEYz02tbVP8Vura7aad9auzZoooriKCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooArahJeRWMr6ZbwXF0ozHFcTmFG+rhHI/75Nc1pnjS7k8Jwa5rejrbpdzRxW1vp9y107l32DdujjC/MfcY5JrpdQjvJbGVNMngt7phiOW4gMyL9UDoT/30K5zSfCOpWnhuz0jU9XtbpbG5hmhlt7FoSVR9+1gZXySe4xj0NACJ8RdMbT5ruSw1OJIkhfY8A3t5kpi+VQxJw4IPrjK7hira+MrRLW+e/sb2xubJo1aznEZlk8w4i2bHZTvPA+YYOc4rB8Q+ELq00NmsZ5Lmcm0gVY7ckrtu/ML4ycgBzkei5zWofBlxd29/Pq+qRz6tdyQSLdW9qYooTA26ILEXY4DZJy+Tk8jjABPL42tLTStQu9U03ULCbTkSSexkSOSYI7YVlEbsrAkHgMTx0zTrnxVdQaJqV+vhjVt9iNy28hgjadMZ3qxk27cdQSGH93PFVpvBl1qNpqT6xqcEupahHDC9xbWZiiSOJy6gRtIxzktkl+/QYrpry1S+sLi0lyI54miYjrhhg/zoAytE1+71fQf7Rm0DULBjEskdvNJA7T5Xd8hSQj2+bb9BVI+OraDTdVutT0nU9Pk0oRtcWsyRSSlX+6y+VI6tnngHPB46Zkh8O6u/hO50TUNZt2DQCC2uLKzeBolAwN2ZW3E45wU4z07Yth8NDY2Gp2sN1pVnFqUcQmi03Sfs0avG+VZU804yvBySSecgcUAbcfjS0Q339q6ff6V9jt/tX+lohM0OSN6CN2PUY2sFbkcVPB4mI0q71HV9G1HRrW1j8wveeSxkX/ZWKR2z7EA89Kj1rwnDrd/dT3F08cdxp/2IrGo3IfM3iQMcjIIHGO1RSeHNU1jw/qGjeLNUstQtbuDyVa10827r6s26WRWPQ42gcHjBxQBd0XxEur3dzaTabe6Zd26pIbe98vc0bZ2uDG7jBKsMEggjkDiruqalb6Ppk19eFhFCMkKMsxJwFA7kkgD61h+EfCI8MSXJFv4fiEyqoOkaKLFmxn/WESPv68cDHPrWvrmkx63o81hJI0W/aySqMmN1YMrY74YA4oAyJvGMy6bfsPD+pxalZwCf+zpWt/NaM5AkDCUxlcg5G/dx05Ga/wAPrrWtQ0lb/XZNZLXMMUirqC2QiywyTELf5tvP/LQ5xjvmrtp4bvXmvr3W9Rt7vULq0+xrJa2Zgjjj5P3Gkck5bJO7HA4HfX0mw/svRbKw8zzfssCQ+Zt27tqgZxzjpQA/UL+20vTri+vpPKtreMySvgnaoGTwOTWRD4qI0u71HVdE1PSbS2jEge78gmYHoFWOR2B6cMFPIHrjT1jS4da0a6026Z1iuojGzRnDLnuPcdaxj4e1nUNFu9M8RazaXkUsarDNaae1vLG6nIdiZXVjkA8KoyPwoAQ+N4Le3uW1TSNT065gWN/sc6xPLIjuEDr5UjqRuOCN24enIzX/AOFjaclnd3NxpuqW6WlvJO6yQKWby5PLkRQGO5lbHT5Tn5SSCAr+D7/UZJbrXtWtri/ZYYo5LSxMEccaSrKRsaVyWYryd2MYwODnP8T+ELiPw7qUtnPJcztbXMaQxQZYma4EvHJztxjpz146UAbaeM7NI9QbUrG+0xrGITmO6RC00TEhXQI7dSMbThgcZAzUUnji3s9Pv7jV9J1PTZrGAXL2k6xSSyRE43p5UjqecjG7d7cjMbeDZ9Rj1KXXtTW4vL2BLeKW1tjAtuiMXQhS75bcckk4OBgCo7jwbf6tb3769q1tPf3VqLOOa0sTDHFGG3n5GlcsxPU7gMAYA5yAX7XxhbSXF1HqOn32ki3tmvA98sYEsAODIoR2Ixx8rBW5HFQL46tUsr64v9L1Kw+yWhvliuEi33EA/jQK7e3yttYZGQKtar4Wg1jUZZryYm3n02TT5IVXBKuwJYNng8dMVgad8NlsdH1TToxoFql9ZtarcaboQtZwCMAyMJSJPXACjPPHSgDUXxtvkkiTw9q4mNsbq1jkEEZvIwQGKBpQUI3KSJNh56HpS6H4zbUvCT6/qmh32kWsdqLomaSGUSLt3HZ5bsTgf3gp9q0JdBE2u2WotccWtnLaGLZ9/eUO7OeMbOmO9VNE0PXNG0N9MTV7CSOCEQ6e405w0IXgGX98fM4xnbs79M8AF/Q9Yn1m1NxNo97piEK0f2uSB/NUjO5fJlcY+uKm0vUv7Thnk+xXln5M7wbbuLy2facb1GeUPUHuKyPC3hWXQL3Uby5nsWm1B1eSLTbE2cBYZzIYzI+ZGJ+Z88gLxxmtfS7W+tIZ11LUft7vO8kb+QsXlxk/LHgddo43dTQBdooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAyvE+pzaL4U1PU7URtNaWskyCUEqSqkjIBBx+Irj7D4g3ptr1473R/EipFCILrSkaGAXEjhFgdvMlGfmDEg5A/h5Ge51fTIdZ0a7026aRIbuFoXaMgMAwwcZBGfwpupaNZavosulahEZrWVAjDcVbjoQwwQwIBBGCCMigCnZ23ihba5F/qukSTug+zNDpkqLC/+2DOTIOnQp09+IfBl9f32i3Lardfa7iLULqDzRGsYKpKyqAo6AAAdz6knmpbPQb+0tbmF/FOsXRljCRSTpalrf/aUiAZP+/upnhvwu/hvzwuu6lqMU8jymK8W3CrI7FmYGOJDkkngkj0FAG9RRRQAVm+I9Rl0jwxqeo2yo01payTIsgJUsqkjOCDjj1rSqpqunRavo93p1yzrDdwvC7RkBgrDBxkEZ59KAOE034hXZtrqb7dpHiOJLeNo7jSI2hijuJHVFgdvMlGSWBzkEAcryK67TrbxGI7gazqmnSeZHiE2Ng8TQN6kvK4fH+6vTpzgW73SLLUdFfSr6Lz7SSMRMrEgkDocjBB4zkYwao2Xh67tbS5t5/E2sXsc0JhjM/2cNb8Y3IyRKxb3Yt69aAKfhqTUl1zUrWTV7nWtOgVAl5dRQqyz5YPGpiRFYABc/LkMSMnoOnrG8O+H5fD1qLY63qGo26RrHDFdx26iED+75USE577s9PrWzQAUUUUAFVNWunsNFvbuEK0lvbySqGHBKqSM+3FW6gvbVL+wuLSYssdxE0TFTyAwwce/NAHnej/Ea9ezlvJr7R/ENsun/aZH0eFohazEqFgkYyyruYt/skbSSCDx2mkQ+Illd9evtMmjdPlhsrKSJom9C7SsHA6Z2rnrjtVhtFspvD40W6i+02X2cWzJLzvQLt5xjnA6jFVtH0G50lmD+IdU1CDy9kUF4ICIh2IZYldiBxlmbPfJ5oAyvDV/dv4p1CxfWL/ULWKINt1S0S2mSTeQfLCxRl4sfx7SCcYY8462sXTPDYsNVfUr3Vb/AFa8MRhjlvPKXyYyQSqrFGi8kDJIJ4HNbVABRRRQAVX1C4a0026uIwC8MLuoboSATzViorm3W7tJreQkJMjIxXqARjigDzfQ/iTeTWRvrm/0fX7Yaa13P/Y0LR/Y5Rt2wyMZZFyxYgZ2kbScHt2FjNrtjDNf+KNR0oWaQmRorWzkjMHfmVpWDgDIzsXPXA6VdXQ7E+G10K5i+1WH2YWrxz4PmR7duGxjqKoWPhQW1vLZ6hq9/rOmyRGH+z9Sjt5YgnYEiIO+Bx87Nnvk80AV/Cuq6vqOs6yNX2xRL5Etpa+WFa3jdSdrHqWOMn0JwOmT09YWieCvD3hzVbvUND0mzsJrpFRxbW0cQVV7LtUEZ6n1IFbtABRRRQAUUUUAFFFFABRRRQBm+IG1NNBum0OMyXwX92ilQx5Gdu/5d2M43fLnGeM1x9zqmsWvg3XpNO1/Ul1iwtjPLFr2nwM9sNjEBPIWNHzj74aRQRjnBFdxqOnQarYvaXfnCJyCTBO8Lgg5BDoQynI6giqlh4a0vTrO5toYZpkuxtuHvLmW5klXGNrPKzMRgnAzgZOOtAFKG71fT/CM97rusaZ9o8oPHdJp8kcUeVGN0fnMXOT0VlzkAAVzlv471pvD2sTLFa3V9YX1tbQtPp9zp6SiUxj5opS0iY3kbuR0OD0rq4fCOkxaLPpRF7PaTkFlutRuJ3UjGCju5ZCCARtIwRkc1HD4K0OHzcQXUnneUZTPfzymRo2DIzFnOWBA+Y8kAAnAxQBkXHijWdEn1e11g2F5PbW0FxatbQPAmZZGjVHDO5OGAO4YyD90Uy0uNS0zxLrk+vajponh0mBvtkdu8UKjfNgtGZGPHoH59s11F3oOm3011Ld2ole8t1tpyWb54wSQMZ4wWJyOffgVTg8GaFBb3cQtJJftkKw3Ek91LNJKqkld0jsWJGThs5HGDwMAHK23jzWv7C8QzFba7u9M8hrd5dLudOWTzCBhopmZxg5+YHBz0456K81PXNB0LUb7WX067dWQWa2sUkQBchQsm5mzhmHzDGR/COlSxeCNDijnQw3cwuI1jmNxqFxM0oVty7i7ksQehPIHAOOK2L2yt9SsZrO9iE1vOhSRD3B+nT60AczoCapH471JNbuLO5uBp1t+9tIGhRh5k38DO5GP9459ulbXiLVW0TQbm+jjWWRAqxoxIUuzBVyR2ywz7VBoOjaHYST3eiHz5ZALee5a8e5dzGzDa7uzElSWHJyOnYCtO9srfUrGazvYhNbzoUkQ9wfp0+tAHCXGr6p4Z1TxFqmtm11C5s9It5F+xQSQrJ+8mwNhaRhycZBbPXHapNO8X+IZ9O1eRrM3T2EUdzHM+i3enpKuT5kIWc5ZwqkhgcfMMr69LZ+EdEskuljs2m+2QiC5a7nkuGnQZwHaRmLfeI5J446AVLpPh6x0Qy/YpL9xKAGW71G4uVUDoFErsF6/w4/SgCOPUrrVZ7tNHlt44Y7dPLuZYWlUzONw+UMuVClSQCM7uoxWV4XnOneEtUuL2awtZYb27ae5WN0g3iRsyFHkYgHGSN/0xXQ6XpNjolgLPTIBBbqxYLuLck5PJJP+AwOgrL02fwprtpqOk6Rf6fqUTO7XsFteLMVaRiWLbWJUk59MEcdKAOd0vxX4g1ix8QW1ve2iXdhbxz295NoVzaqVYMSDbzSBj9w4cNt56HBB3vDD+JLzwhDc6lqunT3t1axyQTJpzxrGzIDmRfOO/k/wlPwq3pvhTStJuWuLRLpppIvJke5vp5zImSQH8x23YycE5IBIGBU+j6BY6DHJHpxuxG+P3c97NOqAdAgkdgg9lwKAOZ0nU5tA8CarfSQWst5Df3Kt9nR4opZTMV3kO7lQSQT8xA5xik1TxP4g8PWuqW2oNpuoahb2AvraWC2kt4T8+wo6mSQ9edwbv0456saNp/8AZ91Ym2VrW7aR54nJYOXJLdfUk1Rt/Bui29jdWnkXFxHeKEme7vZ7iRlHIXzJHZwoPO0EDJJxyaAK+lanrcfihtK12SwmE1mbuE2cDx+ThwpRiztv+8PmATOD8orpKowQabeaj/adq0U9xCj2hljl3BAGBZCAcZDDnuKvUAFFFFABUF7BJdWcsMF3NZyOuFuIAheM+oDqy5+oNT1Be2kd/Zy2s7TLHKu1mgneFwPZ0IZT7gigDC8CSzy+HJPtV1PdPHf3UYlnkLuQs7gZJ9h06DtXQXMCXNrJBK0ipIpVjHI0bAH0ZSCp9wQaydE8JaV4eWddMF8En3eYlxqVxcKSxJYhZJGAJJJJGCc1bsNE0/S9Cj0ewgMNhHGYkiEjEqpzkbid3c85zQBh+GtEt1TULy2vtVNjeL5NutxqtxcYRcgyqZXYoWJOCCPlCmofDumzyyar/ZGqapBo1xHGtncT3TXUvmjO+WNrjzDsI2gBsqcFgMHJ6abS7S40d9KkiP2J4Ps5jV2X93jbjcDkcdwc1QsvCem6fp89lazaoIJ0CN5mr3cjIB02O0haP/gBFAFTwPJcTeGZhc3U9zKl9dxCaeQu5CzuBk+wA+naqXgq3uNI1C40rWVuf7U+zpM0z6xcX0VwmSu9RKR5Tbs5VVA5GCe2xofhPS/DnnDSvtyrNkuk+pXFwuSSSwEkjBWJJJIwTU2keG9M0S4uLixima4ucCW4urqW5lYDO1d8rMwUZOFBwCTxyaAG+KdQuNJ8Japf2QzcW9rJJHxnDBTg49utZWk28mi+LLewt72+u7a+sJLmUXd08+2VGQblLklQwc/KuF4GAOa6mSNJonimRZI3UqyMMhgeoI7iszSvDWl6LJM9hDKJJlCM89zJOwQdEUyMxVBnhFwo7CgC1q323+xrz+ytv27yH+z7sY8zadvXjrjrXF+GL1l8XR6fZtrbWl1p8k12urvOHSdHRcx+d8yg7znZ+74G3oa7HTNGsdG0ePS9MhNvZxqVSNZGJUEknDE7upPOar6X4Z0zR/tBs1umluVCyz3N7NcTFR0USSOzgDJIAIAJJHJoAwPDVt5Wv6tpcj6zZwSWyMllqOoy3E2Nzq00c3mOVU8DCvkYyQpIyyxfTfCum6t4ne/1E6WqCOFL7VZ7hHCtjzAZ3YKWY4ByBtAPc10OmeFtK0k3LWsdzJLdII5Z7q9muZWQZwokldmCjJOAQMknrWlbW0VnaRW1smyGFBHGuSdqgYA59qAOL+HXiCLWbvXoz4itNZuFu0lItbtZkhVokO2MKThA24A9yDnnNdT4gvptM8N6lfWqeZPbWsksaYzllUkfyqxb2NtaXF1Pbx7JLuQSTNuJ3sFCg89OFA49KnZQ6lXAZWGCCMgigDkNHhl0jxDpUMWoX15HqllLPci6unmBkXyyJFDE+WDvI2pheRgDFdgRkYrJ0nwzpWiXEk+nW8iyOuwGW4kl8tM58uMOx8tP9hML044qxpWjWGiab9g0uAwWwd3CCRmwzsWY5JJ5JJ60AczoEP2fxdqOnudYsoJrUlLTUtRkuWnw+DPE/mP5a4YDaGVuQSq4BNvwxotvBqt7f2F5qj2WDaxR3eqXN0shVvnkxK7Y+YFRj0J7itPTPDOmaTczXNqlzJcTLsee7vZrmQLnO1Xldiq55wCBmr9pZQWNhFZWqGOCGMRxqGJIUDA5Jz+PWgDh7TVLbwrrWs3Goyarp1hb2TT/AGbVb9roz7HwZo2aSQIvzKu3cp+YZVcAlfAXiCDX9V8QQyeI7XVZZWimENnfLItsjRgFIyhyAp43Dktk11OleGtM0e7lurRLmS5lXY095eTXUgXOdoaVmKrnnaMD2q7FYW0N1dXEUe2W72+cwY/NtXaO/HHpQBz3hjRoLfVrzULC81SSzANtFHd6pc3SyFW+eTEztj5htGPQnuK3dYu5bDQ767t08yW3t5JETH3mVSQP0qazs4NPsYbS0Ty4IEEca7icKBgcnk/jUpAZSGAIIwQe9AHG6Mk+m6zohj1C+vBq9nJLdrc3LSqZFVGEiKxIjGWI2pheRxxXYTxtLbyRxzPAzqQJYwpZD6jcCMj3BHtWZpfhjSdGu3udPtnSVl2KZJ5JREmc7Iw7ERp0+VMDgccCpNO8P6bpOky6bpsL21rNJLI6xzuG3SMWch924ElieCMdsUAZng03IGtwXd9c3xt9TkiWW5cM2NiHsAByScKABngCse31G28LeItVuNQm1TTrCGykuGg1O/e6FxsfmaItI4jUAgbcqTuGVAAJ6DRvB2k6BeS3WmtqIkmyZBcardXCuTjLFZJGXdwPmxn3qfTPDOmaTfS3lqlzLdSrsM95eTXLquc7VaV2KrnnC4HSgDk/BPib+3NW8QrbeIrHVLySKK4gtre8SaO1yhGxQpPAO0Me7EnuBVfQ9Rv4PEVha2Z1o3d5ZXH9oJqxlEa3MaqQ0aycY3MRmEeXgj2r0KKxt4by4u4o9s9yFEr7j8wUELxnjGT0qlpnhvTdJuprm1W5kuJl2tNd3k1y4XOdqtK7FVzztXA9qAOP8NajcweLNLtUOuGW8tZv7VTVDKEWeMId0SycY3MRmEeXgj2r0WsvS/DmnaRdS3VqtzJcSja013eTXLhc52q0rMVXPO0YHtWpQAUUUUAFFFFABRRRQAUUUUAcv8RJ57fwXO9q10JGuLdMWc5hlcNMgKq4ZdpIJGdw69RWC58QaD4a1G6tTfaXHNeWkdjb6rdfb5od0qpIXYyPlWzwokOB0Kk8eg3FtBdxeVdQxzx7g2yRAwyDkHB7ggEe4ouLaC7i8q6hjnj3BtkiBhkHIOD3BAI9xQBzWrvq/hzw7cu2szX8txdwxRXNxBErWiSOqE4RQrBckjI9M5xzi6xret6DHqumxaxLdPaGxkj1K8hhLJ50+x0cIqIQFGfug4PXoa9BngiureSC5iSaGVSjxyKGV1PBBB4IrCvvB2ly+HDouk2lnpVobiKcxW1qqxkpIrkbFwOduM+/egDCute1bRovEdoNRk1JrD7MY725ijBgMzYYMI1VSEGH6Zwec1FrWr674ft9Z0+21qa/ngsYbqC+vIIS8LvNs2ssaorKQMgYB689Mdctho3hzQZobPSobXTkVme0sLEsGB+9iKNSWJ7gA5ql4atvC174ddfDmlWlvpkszLJbDTvsqmRGw26JkUggr3HagCvquk6zb+FtZz4o1B5miaaCaKC3SSDCElFxGQVJ6ZBYD+LPNTeGtN1A+D4FufEep3Vxd2sbrdTJbmS3JQfcxEFP/AwxroyMjB5FUNL0HSNDEw0XSrLThO2+X7JbpF5jerbQMn60AcnZ6jeaL8Ob+eCVZLmG/nh+0tBGmM3JQzOsaqpIB3EgDJHNQa1q+u+H7fWdPttamv54LGG6gvryCEvC7zbNrLGqKykDIGAevPTHY6ZPpWp6fP8A2YkMlqZ5oZkEO1WkDlZAVIGfm3ZPf3pLLw5omm6dJYado2n2llI297aC1RI3bjkqBgngc+1AGVpMmp2HjKbStQ1efU4pbEXameGJPJfzCpVPLVfl5GAxYjH3jV/xZqdxpHhm6vLLasylEEjDIi3OFLkdwoJb8K1Ps0H2r7T5Mf2jZ5fm7Bv25ztz1xnnFOkjSaJ4pkWSN1KsjDIYHqCO4oA4e8GrI2s+H38RahOI9MF4uoGK2E8ZJcGM7Ygm0hePk3fe56Y1PAGnXFh4P00z6teagslnCY0uUhUQDYPlXy40OP8Ae3HjrWvpuhaRo9lJZ6RpVlYWshJeC1t0iRiRgkqoAPFXIYY7eFIYI1iijUKiIoCqB0AA6CgDO8SW17deHbtdKmkhvkTzbco5Xc6HcqnH8JIwR3BNc/ZeKrbWbLUPEcV/Nb6TZ2flBoRuImIDSHZghmT5UAIOG3DFdpVaLTrKGyezhs7eO1k3b4EiUI24ktlcYOSTn1zQB5vF4k8SWukeKopbnUormxtYJ7R9Yhs2miaTcDkW37sr8oIB+br7V3NlpWqRWt7Hd+Iru4a6AMUot4Ea0JBz5eE2kZxgOGIxyWp1t4U8O2UIis9A0u3jEZjCRWcajYTuK4A6E8kevNa1AHH6DdrpHgrVp9Rv5MWt3diS8W2iWVsSMN5SNAjP0/h5PXNc9F4k8SWukeKopbnUormxtYJ7R9Yhs2miaTcDkW37sr8oIB+br7V6V9itRby24tofJmLGWPyxtkLfeyOhzk5z1rF0bRvCU9rKNE0bS0ggeWzdYrBIwpD/ADpjaONwyexPNAGRdaprXhvUNRSfUptaI0eXUI4poIkEcqNjagjVTsOejFm4+8at282paT4PvPEH9vXPiGQ2DXMMLRwLBuCbh5flxq209PmZuO+ea6j7NB9qFz5MfnqnliXYNwXOdueuMjOKo6d4b0PR7ya70jRdPsLm4/101rapE8nOfmZQCeeeaAOe8EX3iW8umk1eHUn0+4tVmSfUPsQxKT92IWzHMZByN+SMdTmtrxjPc2vgzVZrFmSdLZyrocMgxywPYgZNT6d4b0PR7ya70jRdPsLm4/101rapE8nOfmZQCeeea0z056UAcdotjpei+NTa+Hoba1s59M+03cduQqF94EcrKONzDflurBeScV03m6dq+ktJvtb/AE64jO5srLFKnQ+oI61Q8ODwu1tdjwiNIMBnYXQ0zytplwM7/L43YxnPNXmg0zStGeForSy0yGJg6FVjhjj75HCheue1AHIadYaX4W0PUvE3h7w5Dby3qKtvbabp5BMQOIy0cSknO4uSATg47Vi6LqTReEfGw0uXU2vIpmne5u7Ke2cloY97jzFXB4YhRyo28Yxn0DRfEfh7W98Hh7WdM1D7Oo3R2N1HL5a9BkITgcVctWsHkuvsLW7OJcXPklciTaPv4/i27evOMUAcZFpFtY69eaZ4NFvpwvdGeWX7MdqrMWCxTEL/ABMN/wA/U7e+BVfwpbnT/Hi2mn6CNBibTWfULYPExmlDqEmIjZhk/vMOxDtg5HArqfDyeFZLS8TwoujvbtMwu100RFDLj5hIE43YxnPNJ4YXwpDb3UHgtdGSGObFzHpIiCpJjHziPgNgd+eKAJPF093a+DdXn00st1HZyNEydVIU8j3HWsTRbDTNH8ZW1v4dht7e1utLa5vEt8BZG3oI5WA4LMC/znlsck4rs6xfDo8LmO9HhL+yCnnn7Z/ZnlY83v5mz+L680AXvtenajpEk63Nvc6fLG2+VJA0bJghvmBxjrmuY8NeGdOMmo3elWC6Lo2pQJHDaWGbQyYLfv8A90VKMwIAIw20DODwOpj0ywh006fFZW6WRUobZYlEZU9RtxjByePesLQtI8CXNrqNt4Z0/wAOywSH7PfxafBAytjPyShBg9+G96AKPhOwl/4QfWbDSZfsszX2oRwS7iSjmZwGJ65zznr3rM8OWMNv4zfTovDsWjWculOdUs5Gidbh96hZXEbMp3DzBubDMAdw4FdF4fsvAkGo31p4VtvDsd7GpjvYdNjgEirnG2RU5Az2NWfDcHhJbK7tvCEWii1WUpdRaWsWwSYwQ4j43Y4wecUAUvB3hzRLCa51vRdGsdMW/UJClpapBmBSdpIUDJYktn0KjtWz4imu7fwzqc2mgm8jtJWgA67whx+tJputaJe3U2m6RqWn3E9kNktrazozW4HGGRTlcYxggVpUAcNoNjpml+JNGHh2OGJNQ0yS4vTAf+Pn/V7JpMffclm+c8nJ5NdDq2pG48I6le+HriK7mS2m8h4HDgyKpGAQcZDDH1FN0D/hF/tGo/8ACLf2R53nn7f/AGd5W7zsnPm7Od+c/e561qWlla6fbiCwtobaEMWEcMYRck5JwOMkkmgDjNBsNL0zxJow8PRQRpqGmSXF6YT/AMfP+r2TSY++5LN855OTyap2n2fwh4m1mS38PW1lOdPaeGw0JDKt2qyYEkiqikSksBgIcDdhm6DqtB/4RVrjUk8Mf2OZjMf7QXTvK3ebk583Zzuzn73PWm+G4/CUEl9B4PTRY3jl23seliIFZBkYkEfRuD1560Act4H1O3XUPFTzSao87CO6uprjT7i3+byRu2CVBtAxhV64APPWqXw+00WOtQJqWmaZB/amltJDPp6g/b4twJe74G6Xa6f3hlpPm5wO90rXPD2qahdx6JqemXl4hH2pbO4jkkXHyjeFJPGMc/SjStJ8PafdXyaHYaZazu4+2rZwxozMRkeZtGckHPPrQBk+EvDWg2l/c65omi6fpqTqbe3+x2qQ74lPLnaBncwyD/dC+prf1qS5h0G/ksBuuktpGhHq4U4/WpbSSyUPZWD24+ybY2ghK/ueMqpUfd4xgelWKAOD8P2em6frnh6TQkhR9S06Sa/eJvmugFjKzSY+++4kbm5+Y811F9qS3fhrULvQbiG7ljhmWJ4JA6+agI25B6hhgjsRTtKstDt7i9n0O20+KaWYi8ks40VnlHXzCvVhnvzzVuzsbTT4DDYWsNrEXaQxwRhFLMcs2B3JJJPcmgDzyG3ttJGm3PhOOIXt/otxcXJiPzXTCNCksn9995xubn5jzTrV9O8Ny6RqWgWbXEt1pM11fRWSF5b7aqFZGVQTI5c43HJ+Y11+if8ACM/b9S/4Rv8Asn7X53/Ew+weV5nmc/63Zzu6/e560aJ/wjP2/Uv+Eb/sn7X53/Ew+weV5nmc/wCt2c7uv3uetAHL/D2/juPE+viQ6jJeXC29xcPd6fc26h9pBVfNRdqjgKO4GeeTTtC0uLwj4gvtOhstImv7qzmvI72xsBb3DAP9yc7mLklhh8gHB+Xiuv0/UdGv769GlXljc3cLCO8+zSo8iMMgLJtOQRzwfeqmgJ4WhudQi8LLo8c6zf6cmnCIMJOf9aE53dfvc9aAON+H8TWl9o97c2ejz3Wu6e1xJeW9uftiMoQv50xJMoJbHRNpAGD29NrF0VfC7arqUvh1dIN+ZNuovYiLzS+TxKU5znP3uetbVABRRRQAUUUUAFFFFABRRRQBzHjxmTR7U3CzNpX2xP7U8nORb4Oc452btu7/AGd2eM1iX154U0/wTeXfgC50e2tYby2e8l0SSJI4185N5kMRwBszkn+HrxXoVFAHnN5rf9tz6kdJ1e5Nm2qadFHPazMqtG+zf5bdCrAn5l4OTg5rK/tDUNN0ieV9Zv2jjt7OeWa4umPloLxkdic/Kvlrhj3AJYk5Net0yaaK2gea4kSKKNSzyOwVVA6kk9BQtdEBzvhnWoda17XZbG8N3ZJJAIHViYiDECTGehU5zuXIPrWZpF9FpvgPX7y4jnkii1C/LrbuUcjz36MCCv8AvZGOvau1aaNIDM8irEq7y5YBQuM5z6UsciSxrJE6ujgMrKchgehBp2e4HkugSJr+l+KNIbUTPFJaLcWUVh4lub/f8jKxS4bbIy7wAyjKg8HqRXU+BoPD994OFlo+sTXwa3jS8EWtTTyW77ACobzC0J68KVxXZ1lTeIIbbRbjU7mzvIIreVo2jliCu2H2bgCeVPUHPI5qo05T0ivL7wuYOlWl/deAb+10++u/tlveXK2k011JJJmOdtis7MWYfKFOScjrUN5reqat4R1nxB4eMxkWz8qxhXP3wMyNt2nLBiVHDcocDkiu5pskiRRtJK6oiAszMcBQOpJqAOC+G9893f6ksWs6Ze2gjiYW1r4hl1aWGT5gzM0qK0YYBfl6ZU4A5rX+JMfm/DvVo/Kjm3oi+VKcI+ZF+VuDweh4P0rpo5EljWSJ1dHAZWU5DA9CDTqAPNLrw7eeGfCHiS/tILHw49zbxrFZaE58qBlODMG2IC7bgD8g4UA7q39X0258PeE9XudHvtTnuZo1dmnuXuGi5+d4w2dp2knauFyBgCusqhp+rw6nc3KWkUzQW7bDdFQIpHBIZV5ydpHJxt5wCSCBSjJptbIDze/1WCHRfEH/AAhniG6vtJj00SNfRanJfNb3O/GEldnIbZyUzgcHHzc2v7TlSHxE3g/VbzU7GOzjeS6+1veeVcFyJRGzFsMI+Si8KQOBnFegaxpcGt6RcaddNIkNwu12jIDAZzxkEdvSp7mZrazkljt5blo1yIYtu9/YbiBn6kUkruwHl95qcKaPr6+CvEF1faUmnK5vo9UkvTb3RkxhJnZyG2YJTOBwcDdz2F54Tg/4R3VbYX2sXP22LeQ+pz7hIAT8jBgUDHqikL22gcVu6dqNtqtil3ZOXifI+ZSrKQcFSp5BBBBB5FWaJRcXZ7gcR8P4NAu/BiWGlavNeSG1ijvkj1qaaS2fZgqD5haE9eF24x7VHBLf2Hw51kabcXks1rd3MUUss8lxMkYmIJDOWZiqZxknoK7uikB5bPqlvFo/iP8A4QzXrjUdKi0d5TeLqkl75F1zgLMzMQ23BKhuODgZ539MtZNI8b6dbx6hqF0t/pkstz9svJJg8iNFh1RjtjPztwgUc9OBXZ0UAFYvjGC5uvBmqw2Ks872zhUQZZxjlQO5IyK2qKAON0fUtL1Xxo194euLe4s7XTPIvJrYBlVw4McZYcblG/K9V3cgZro7DXNO1PQk1mxuRJp8kRlWYqygoM5OGAI6HqKv0UAcsz6ovhu81zTLBrvV9QRWhhUxhooifkUF2VTtUliCwyxYZ5rlNHgvH8I+NdMsdE1GxkEpIFy8LyTM0Me8fupHy7cknod4wc5A9UooA4JZdK8Ua1ff2Bf2/wBi/sV7K8vLbBWJyRsQsONyLvJU8qG5xmq/hC/k1zxpFeWc+kT2ljpjWk02jXJuIHbehjBk2qAwAY+WM7A3U7hXotFAGP4ugu7rwbq8GmhjdSWcixKnViVPA9z0rE0XUdM1bxjb3Xh2e3ntbTS2t7x7fBWNt6GOJiOjKA/yHlc8gZrs6KAMZ7uw8V+D7iXTr7bZX1tLGt1tKbQQVLYbBGOeuOlcFZXmoa/fX11oM2lT/YtBmshLolybiGSXgxAybVAcYYiMZ2BvvHcK9WooA8psLu7vPDN9o/hnV11eD+xHEkEMUa/2dOAFEChFBUkFhskLOCvXmtKe9t9bvLqbwTNDctbaBPayNa8iOX5fJiJHR1w/ydVz0Ga9EooA4HwFqW+8t9O0vWI9V06LT1NxEkcajTZlKgQjYoK5BbKSFnG3k11viKK7uPDOpw6aSLyS0lWAjrvKHH61o0UAcNoN9pmqeJNGPh2SGVNP0yS3vRAP+Pf/AFeyGTH3HBVvkPIweBXS2+o2Hifw/PNpl4xtZ1lg89VZChBKMRuAPBB/KtSigDy3QHl17xBa29pe6O1npuk3FhPd6JcmdMHYI9z4URt8rMIvm29d3PM/hK6m1Txhpn2K40a4tNI06W0nn0a4NxG4zGIw7bVEbfKx8obscndzz6XRQB57pGrzWL6lpvg7UT4st7WzaSFVeA/ZZ92Fg81NiHIJO1juG05bkVW8Kz6ppsvitbDw1qI1ELFPi8ltQ1zcGMZLFJiMk89QABjI4Fel0UAcD8PBNb6/4gt59G1CxkZ4Zp5717ctLKYxuZvKlf5j19AMDjGK7e++yf2fcf2l5P2Py28/7Rjy9mPm3Z4xjrnip6KAOD+HWu+G7i81vTdB1TSpSNQkkgtbK4jb9yEjG5UU/c7ZAxXQNq0PiTwnqM/hq585ilxbxSbGTEybkIwwB4YEZxityigDzWG4ttWGm23hOSI3thotxb3IiHzWrGNAkUn9x94ztbn5TxRDcW2rDTbbwnJEb2w0W4t7kRD5rVjGgSKT+4+8Z2tz8p4r0qigDzWG4ttWGm23hOSI3thotxb3IiHzWrGNAkUn9x94ztbn5TxRDcW2rDTbbwnJEb2w0W4t7kRD5rVjGgSKT+4+8Z2tz8p4r0qigDg/D95puoa54ej0J4XfTdOkhv0iX5rUFYwsMmPuPuBO1uflPFd5RRQAUUUUAFFFFABRRRQAUUUUAZ2uRwy6VIk9ndXmfuRWjFJS3bY4Zdh/2ty49RUHh621q3t3Gt3Ucqk/uoz88sYyeHlAVW4wMBARg5Z/vVf1G/h0vTbi+udxit4y7BBliB2A9azND8S/2ppD6hqmmz6GizGEC+nhO879gwUdhyeMHBzwM8E7Kq1T9nb+vLt+Yra3J/E7snhm9KacupZj2tavEZVdScHKAEuAMkqAS2MDk1wOmeHVvvDfijSJdHgkjuYxc2ES6JJZW+7ytoKRS7gj7h0yG74AIJ7+38TaDd2d3d2mt6dPbWJIup47uNkt8cnewOFx74pbXxLoV7pp1Gy1rTriyV/LNzFdI8Yb+7uBxnnpXTh8bKhTcIrqn9zT/Ty39BON2YFlovh7VfAt7pul+HYbeN4jvtrjSGtVefZw+ySNdxBx8wB6dazk0zTX+GN5p2g6HNY3BigS6ii0yW0eSQFdxB2KXIwfmXP1ruLTV9N1Df8AYNQtbrYiyP5MyvtVhlWODwCOQe9Q2XiLRNSsbi907WLC7tbUkTzwXSPHEQMkMwOFwOeapY6cX1+JS1fVd9NfwFykdt4Y0Oztry2t9KtEgvjm6h8oFJzjBLqeGJ7k8nvmuYn0WSH4Y6ppdnp0sQ+1TCG1t4zG2z7QSNgGMDbyCMcc11uk67pOvW7z6HqllqUMb7Hks7hJlVsZwSpIBwRxV+saeLqwd276p6vsNxR5xcaWsmn+I5fDukXFnp8sMGLcWTwNPOkhaSQRMoZjt2jdjLY4zitKaxi8UyeIvtGkSyWt1ZQrbLqNmUErqJMMEkGQQSPvAEHnHQntaK3ePk9lr0d9fs/e/dX4i5Tg7HT4B8N7+x8H6U+lal9kVJANNeyMkwQAkFlTeeo3A/iKz9D0m1j0nXI5Tc29ncwRpNa6X4aurDackF1R9/muQQG2g5CjINemUU/7QklJa6u+6v06teWm1vMOQ5LwXbiLS9RgstKtdOgMn7ia20t9O84lerQP8wK8Dd0btis68kjk+C91aZYzWdmLW6jQ7XSVMBl4wQc8g+4I65rvqpXmjadfrc/arOJ2uo1inkC7XkRSSqlhg4BJwM9z61McZF1faSX2ov7vu3+WvkHLpY4yDTZpE8QP4Q06fTIJ7ERoDbtaNPdZbc4DhTuwQPMPU45OK2vCSeHYEm/sLQpNIm8tftJl0mS0Z8Z+9IyASEHPIZvXPOa6YcDiorm2gvLZ7e7hjngkG14pUDKw9CDwampjHVi4SvZ269rLXvtptqNRsYnhRvtB1a/gffZ3t+0tqwPDoERSw9iysQe/XvXQUABVAUYA4AHaiuWrU9pNysNKyCiiishhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAFTVf+QVcg6e2pK0ZDWa7MzKeCvzkLyM8MQPcV5zpnhjVbz4d3WkTaTcxWct9C0Gm6lJE7xxC4DSqcMw8vaMhSxPUDjaK9OncxW8jrjKqSM+wrm9D1bXpPCcGr6lFBqst3HHNFbabbC3MSsMnc0s5DYzyRg4HCk8UAVtY07XLbXNX1DQLRWaTTLeC3wU+Z0lkLBVYgbgjDbuwucZOM1haf4b1yea9Gp2GoXK3epWN8JtTaz37YmUMriAhdy7NwwCMY+YngdnpWqXviLwbaanYi30+8vbdZUEyNcxxMecEAxlx+K1J4avrzUNGEuptA91HPNDI9vEY0by5GTIUsxGducbjQBxx8EanLoOq6fbwR2LXek/Z0YMgUymaVyDgHqGGSQR83fkU/TNCuntdYl1vSPE2oSXFtDbtb30+nRmZEZiBEbZkAI3E5cr2wa7rU3vY9Jun0qOOW9WFjbxyn5Wkx8oPI4zjuKorqd3p8eo3fiEW9tYW4RoZIwSSNg35AJJO8kAAZPHB7gFfwmdcMN2dcW8SEyg2iagbc3Krj5g5gJjIz93ndjrzXQVlWviPTrvS7nUSbq1tbbJle/sZrQqAMk7ZUUke4GO1Z2neM7TUNW1EbzbafZWUdy8l5by20kZZpAxdZQpC4QEEqPXJoA6aisK28ZaJdWtxcLcTwpbPGkoubOaBk3nCNtdA2wn+PG3g88Grup38qQ3drpIjm1VLVpoIJAdpPIXceAAWGOozg+hoA0KKz9Ok1V7u8GpwwRwKY/szRdWBQF93J6NkDpx+daFABRRRQAUUVXv2uk025fTo0ku1iYwJJ91nx8oPI4zjuKALFFYh1i60m11HUPFBtrPTbWKKQToCcfL+83cngN046evWn2nivR7y2vriK5kjhsBuuJLi3khULgkOpdRvUgHDLkHsTQBsUVz3/AAnGjHS7u+UaiRZqHltzpdylxtPRhC0YcqefmA28Hng4n0TxVYa/o51Kzh1CKBYxIRdafPCxBXPyhkG/j+5uHpQBtUVg2/jPSLqyvrmD+0D9gCme3bTLlJ1DfdIhaMOwPPIUjg+ho0Dxhp3iPRzqVjb6nHCsImK3OmzxMQRn5cpiQ/7hb9aAN6isHQvESalpeoaldTRRWltcSKrPbzWzRRqAf3qzKrKw5J4xjGKWDxnok9leXRnuLeKzhM8wu7Ke3cRjq6pIis6/7SgigDdorDs/Fmm6xJPa6LM8t2tuZoPOtpYo516Bo3ZQsi5IyUJHI55FT6TNrctww1m3toYvssDKYTz5xB81T8x4B24+vU0AatFR3BmW1lNsqtMEJjDdC2OM+2azNNutYDyya9FaW1slpDIXRsbZcMZgSWI2rgYPueTQBr0VkaT4o0zWhK1gbvyok8wz3FhPBCy/3lkkRVcd8qTxz0qC18aaFeW15cRXUyxWcBuJWltJog0Qz+8Tcg8xOPvJuB455FAG9RXOweOtBullNpPd3ASD7Qhi0+4YXEfHzQkJiYfMP9Xu61L4b8Yab4o037dYxahbwiISsb6wlt1CnPR3UI3TnaxAoA3aKwbXxpoV5bXlxFdTLFZwG4laW0miDRDP7xNyDzE4+8m4HjnkVPp3iXT9bNzFo0rzzQxLIpkt5I45FYHYyMygOpweVJHvQBr0VkaPNr0s4/tu2tYY/scDHySci4O7zV+8flGFx9eprXoAKKKRs7Tt644zQAtFYmmXmuLsl8QwWdrbrYLLO8bf6ufJ3jJY/KFAP9TU2keI9P1xZWsFvQkahjJdafPbIynoVaVFDjjqpPb1oA1aKx9K8U6Xrdw8emNdzKqlhcGwnSCQA4ykzII39trHPam6f4n0/Wbu4sNOkuYb2KLzAl7p89vlSSA4EipvXPXafxGRQBtUVzvhjU9VubvWrPXp7GeXTblYlntLZ7dWVokflWkfkbjzuqzpfivSdbu5LXTLiSSZY/MQyW0saTJnG+N3ULKucfMhYcjnkUAbNFY2jz+IJZof7btbWGM2SNL5JOVuNx3KPmPygY/xNbNABRRRQAUUHpx1rE02714NHJrdrbxQCyMk/wBnBZlnDH5QAxJG3ngE579qANuis2x8QaZqhthp10Lg3UBni2Ix+QHGW4+XnjDYOQR2OINJn8QS3EH9s2trDE1pul8k8rPv+6PmPy7cH696ANmiiigAooooAKKKKACiiigAooooAiuQWtJgoJJRgAO/Fcp4Z1C+l8BWdrpGmyHUbO2iglg1aK4sE3BQGw7QktjB5VSPcV2FFAHLeFk1Twx4MhtfElpbqNOhSNW0uSa9aUAYJ8sQq2fZQ1XfB5Z9AMrQzwia7uZUS4geF9rTOyko4DLkEHBANblFABVHWbeW70e4ggsrO/aRcfZr5ysMozyrEK2Bj/ZP0q9RQBxdv4W1qbwzqlje3EdvJcypLaW32+a9S3KENjzpFVyrMo+XGFHSkvfCus+IYtb/ALbksrFtT0+K1jSymkl8hkZ2yXIQsMsDkBT1HbJ7WigDitB8GukOqxa3pscX2+2W2eYa9d6k8iDdxi4QeWBuJG0nk+1bvhzTL6wtJJNZmin1CYqJHhJK7UXaoGQPQseOrGtiigAooooAKKKKACiiigDJ8UaXPrfhi+061aNJriPajSEhQcg84BPb0p3iLSG1vw5c6dHKIpJVGx2GVDKQy5HcZAyPStSigDl7TRdW1HVLvUvEEdnZTS2JsI4LG5e4XaSWLlmjj5ycBdvGOpzgGnaf4li8HS6Q/wBg0+7t7Vbeyu7a6afcVXAdlaJdh4HA34z3xz1FFAHFeE/Cuq6Pqt/cXyRpDqFtHHIG1i5v5InQsBiSZAWBD5/hCkYAOc1q+ELHWNI0iHStVtrFILGFIbe4trt5WmC8bnRolCHABwGbqeeMnoKKAObn8LzXegeINNmnSP8AtWeWSKRAW2BlUDcDjPI5HpWXqXhfXfEMN9NqqadZXR0ubT7aO2u5Jo38wqS7sY0K/cA2hW7813FFAGI2jXB8U6ZqQeLybSxmtpFydxZzGQRxjHyHv6Vt0UUAFUta01dZ0K+0ySRolvLd4TIoyV3KRnHfrV2igDmrWx8Qalod3o3iO2023hltGtxd6feSOzkrt3eW0S7OOcb2x0z3rnrDwFqMWk6laXFpbrcy6XLYW99Jr95ebtwA/wBVMpESkgEhWbGMc9a9GooAwZNCuH8QaPe+ZF5VjYzW8oydxZ/LwV46fIeuO1UdF0DVo/CU/hnV4bOGzS0a0gu7W7eSSRSCu5kMShDjBwGbnjPeusooA85sPAWoxaTqVpcWlutzLpcthb30mv3l5u3AD/VTKREpIBIVmxjHPWvQbWJoLOGJ8Fo41UkdMgYqWigAooooAKKKKAIrtXezmSGOKWRkIVJjhGOOjcHg9+DXK6D4c1SFtRTUI4NMsLq28hNPstRlu4ozyN6eZGnlADgIg29+K6+igDmtCtfE9jpyaTfQ6VHBbWxgg1C2uXZ2KjajGBogq8ckeY3I9+Mnwv4V13S/E0Wq6n5MjNbPbXLPrNzdsxyGEqLJGFTLAgxqFUDGCeg7uigDCtNAlS88RtcyJ5Orygx+WTuRfIWM544OVJ4z2rC8HeC7zw/qlu99aRyiztWtob869eXLMPl6W0qlIg20EhXOMADIruqKACiiigAooooAKbKZBC5hVWkCnYrttBPYE4OB74NOooA5Pw34Xv8Aw/rt1eiW1mj1UefqAUbDHcZ48oBeUIOCCQcjdyWausoooAKKKKACiiigAooooAKKKKACiiigAoqlrLXy6LeHSFDXwhbyAccvjjrgZ+vHrXHeFfEq2XgO71S71XU9anhuXia3vVhS4ikMm1ISFRACSV65HOQduKAO+orGtodU1jTJ7bxNYwacJMBRperTM5HU/vFjiZDn+6Tn1rL8JXlzb+AJZ/N+1S2s12sb6jePgqk0gUSTMHYAADLEMcDvQB1tFcZovj86xoOs3trZWl/caW4Ty9HvvtsU5KhhskVAT15GwkYOAauWPiq7ufCl9q4s9PvpbYsscGi6g16JCMZUt5SlWBPKhWIA7nigDp6KxvDGtza9p0l1P/ZR2ymMHS9RN5Hx1DMY02sDwVwcfpWzQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBBe2z3dlLBFdTWbuMLPBt3xn1G4Mv5gj2rn9P8AA1pb+HrzS9TvrzU2vRia6lZYpMBiybfLChSpOQQM55rorv8A48p/+ubfyrkvCXh2yt/h5p/9iquiT3VpDNcXGnW8KSTNsBO4shBJ5BOM88EHmgDoNG0q60uN0u9c1DV92NrXywAx49PKiTOffNVJPCNjJ4Xn0LzrlbeaV5vNDKZEdpTLkZXacMeAQRgYIPNVfCNvFrfw00mHW411OO4so/PW9Hn+dx/Hvzu/HNT+CraCy8OtbWcEdvbw3t0kcUSBURRO4AAHAA9KAG2vhKSza+li8Rasbm+RBLcEW+7enAkA8naG24XGNuB93OSZLPwubO1vgmtai9/fMrS6kwgE3yjC4URCPgccoc981qanp8OraTdafdbhDdQtDJsODtYYOD681g65H/wh+gaxrOixJLeyiFvLuWPlsyhY1ztGRx35/pQBp6JoKaM91M99dahd3jK091dCMO+0YUYjREGB6Ln1zWrXDan4r17RItdtrr+zb2/sraC7tjFFJDHtlkKeW4LucgqfnGM5+6MYOteanrfh/wAP6rqWtHT70wDfax2kbw8HjY5ZmzgkfOMZHO0dKAOjormLvUfEGgeHrq/1m602/nzGlvHaWckCo7sEG9mlfcoLDkBeAfwz7/xNr+iyXGm3rabe6gq20sNxDbSQQlZZxEVZDI5BHUHdznpxyAdvRXnD+N/Etppd7NdQaVLcw2rPCsaSIjulz5JLEsSAwIO0ZK+r1uQS3ur3+teFfEktrOJLJZBLYxNDtil3oUIZ3yw2n5uAc/dGOQDq6Kz9O0W00u7vLi1377wxmXccj5ECDH4AVoUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAMlj82F4843qVz6ZFc7pXhe8i8NJomu6mt3bQpHHA+mrPp8gRBgBnSYsTwM4Kj2rpaKAMPTvDEPh3RpbLwvNJasVAhN/cXF7HFjoAjy5Ax2Vlq1oGmT6TpK215cx3Vw0ss0ksUJiRmd2c4QsxA+bH3jWlRQAVj+K9Hl1/wveaZAYw9wFA80kLgOCc4B7A1sUUAYsPhLRobG7tPs8ssd4ytcNcXUsskm0gqDI7FsDHAzgdhWrdWsF7aS2t5Ck8EyFJIpF3K6nggg9RUtFAGJZeENIsLG5s41vJrW5jETwXeoXFygUdAqyOwT/gOOg9BS2vhHRrW3eFYbifzHjd5Lq8muJSY23IPMkdn2hhkLnHJ45NbVFAHM+IPBtrqOg3dpp0McVzPGYw0sj7drTCVwevU5PT26Vq6ToVhovnmwjl33DBpZbi4knkfHABeRmbA7DOB2FaNFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB//Z)

print(pc)

![Text

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMwMQAAkpIAAgAAAAMwMQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDoxNjoxOAAyMDIyOjAxOjA0IDIwOjE2OjE4AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MTY6MTguMDA3PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAJoCHAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APo24uI7W3eeYkRoMsQpbA9cDmktbu3vrWO6sp4rm3lXdHNC4dHHqCOCKW4M4t3+yiMzY+TzCQuffHNZGjeG00y9n1C4uWnv7pi85gX7PAzEAEiJTgn5R8zl3HTdjitoxpum3J2fTz/rvf5C1uat5eQafYz3l2/lwW8bSSPgnaoGScDk8VmQeLNGuIbqWO5kEdpB9okaS2kQNFjPmJuUeYvumRSeMf8AkR9b/wCvCb/0A1iP4e1jW7K6m1D7DbyPpMlhZpDM7q3mAEySEoCv3V+Ubsc8murD0KMqfPVdtbbry6W13+RLbvZHQ6d4j0zVnnWwlll8mNZSfs0iq6NnDISoEgODyuaraP4iXUYtVu5XCWdnLhA9pPBLGgjVj5iSqDnkkYGMY71s20ZhtYomwWRFU49hWOdFuDH4hXfFnUyTDyfl/crH83HHIPTPFZx9g3Jara2vmr9P68x6jbbxrod7zZz3M6mEzxtHYzss6DGTEQmJSMjITcR6VJ4d8VWHie387T4NQiGCf9LsJYB1I4ZlCt06KTUcWh3KXXh6QvFjS4HjmwT8xMYX5eOeR3xS+GbDVNItjpt5BZ/Y4C3kXMV0zSSZcn5ozGAvB7M1aVIYX2bdO9/Nru0+iv0fzEua+pJaaxPdS3l83kwaPaeYgcqzSTFD8zjHCqCGGMEtjPHd2l+KNI1mYxafcu58kTozwSRpLGcfOjMoV15GSpOMjOM1krHLpXh3WdGntplWOC5mtrgIWjljbc2Cw4VgWxg4zjIzziHRNF1HVINPu9WNtbwQ6UbW3W1lZ2kEqpudsquwgKMKC3U81rKhRcZSk7Jba9Laabtvrrp8rBdm7p/iOx1p5IdJe4dghKXD2Ewt27ZWQqEcZ/utz2pdF1O4u3urPUooor+ycLKIWJSRSMpIueQGHY5wQRk4yaugprul2kdlq1rp7WdnBsS6tLiRpZQowv7jyuCQOQHbnpnNO0GCe41TUdaubaW0+2eXFBDNw4ijztZh/CWLMcHkDGcHIGNSnTipqOytZ3T1v5W6XdraDTehu0UUVwFBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABQQCCCMg9QaKKAGQwxW0CQ28aRRRqFREUKqgdgB0FPoooDcKKKKACg89aKKAGQQRW0CQ20SQxRjakcahVUegA6U+iigL31YUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQX10LHT7i7aOSUQRNIY4hlmwM4A7niub0PxXqWsaRNq0GnaZqFiELQHRtXF1JK3HyEPHEikDrl+OldNdJNJaSpaTLBOyERysm8I2OCVyM/TIrB0nw3ew+IJta1u9sLq9ktvsu6w082oZM5+fdLIXIxxyAMnjmgBfCfii68TaLHqM/h++0tJIVlj8+WCRZc54QpIT/AN9KvWo4/G0SR6n/AGpoup6XNp1n9teC58hmki+blDHK65ypGCQado/hzVNN0GfRZtYhaxW3NvZPa2jQ3FuvIBaQysHYAjkKvIzjtWDYfDCSxi1BY7zSbZtS057G6Nho5g8zOdkp/fMS4LNuLE7uPu8kgHQWHjO1vLxYbnTtQ02OW1a7t572NEWeJdu4hQ5dCAwyHVT7VVsPFN1qnirT4E0+/sLOeznnVbuOMfaADFsdSrMV4Y/K21ueVq9qHhaLUruzkuLg+Vb2E9k8apgyCUIC2c8Y2eh6+1VLHwpqcd5bT6lrqzm1spbKEWtn5G1X2YfJdjvGzk8A8YUdwCeDxgpu7y21HRdS0yW1tGvAtz5DefEpIJQxyuMjjhtp5HvUukeKo9Vie5bStSsLIWq3Ud5exIkcsZGTgBiykdwyqe4yOa53SPhm+lTzzR3mlxSXNlLZXD2mkmF51YcSSN5rF5d2SWOd2egPNdemkRHw0ujXDmSL7ILV3UbSw2bSfagDD0/xTdar4r063WwvtPsriznnVbuOMfaADFskUqzFRhj8rbW55Wupmmjt7eSedwkUal3Y9FAGSa53SPDWpWmq2N7qmsxXn2G1ktIoobLyVKMUwzEuxLfJyRgHsq996/s4tR064srjPlXETRPtODhhg/zoA5i08Wz3/iaxRrK+03T5bK4uP9MjjAnVTHtkBVmKjDN8rbW55Wp7TxxbXfmH+ydThVrR7yzaVIh9uiXGTGA5IPzKdsgQ/MOOuGWPhK+F3by63q8V9Fb2UtikMNn5KtG+wZYl2JfCYJGAc8Kvet4R+H8PhPUBJbQaB5McBgSW20Rbe8ZeMeZOshD9OcIuTzxQB0UOt2tz9h+xiS4F9AbiIxgY8sAHcSSMZ3KB7n6kZ/hnV7zVb7WTfQXtoYLhESyvI4A0A8pW4aKRw4Oc5JyM4xU+geHV0OS5b7T56udlupj2/Z4QzMsecnOCzc8cYGOKsW2kG3vdWuBctnUXV/kXaYsRhODzk/LnOKAM+DxZJJqU+nzeHtWtrxLZ7mCGVrYm7RWCnYVmKg5K8OU6j3wnhTxVd+JrFrmfw5qGmIN+155rd1kKuV2rskLZ47qB7nrWV4Y+Hb+G9dh1OK60zzVieCdrfSzDJdoxDb5ZPNYvLuXJc5ByflGc1ueH9F1HQ2ltm1C1n0vfI9vCtmyTRl3LfNJ5hDDkjhF7UAV/D+u3F7Prk+qx3lhHaTKPsl7HADbL5SsfnikcODndknI6YosvGlvdMPtOlajp8c1u9zaSXSxYu41G4lAkjFTtIOHCHB6cHF5NBiM2tfaJPNh1YjfHtxsXyhGRnPOcZ7daybbwfqDtCNZ1iC8jsbaS2sPJsjEyB02F5SZG8xtoH3Qg5PHIwAS6b46tdRktC+lapZWt9A09rdXcSKswVA7KEDmQEDP3kGcHBPGbvhzxGfElqt3BpN7aWUsay291cSW7JcI3Qr5crsOOfmC9ag/4RiRLfQkgvwkujQtGjmHIkJh8sNjdxjrjn096j0DwvdaZr15q+oXWnyXV2gSUabp7WiSnOd8gMshd+wbIwMjmgDpa5/Tr3UdX1S+vLe4jXTrOSS1t7UAD7RKnDtI5BKqG+UBQMYJO7IA6Cuf06y1HSNUvrO3t42068kkure6BB+zyvy6yISCylvmBUnOSDtwCQBfDGsanqlxq8GswWkE1jdrCEtXZ1AMSPjewBbljztX6Vv1zHh3w/r+k6zf3epa1pt5Dfy+fNFb6XJAwcIqDaxncAYUcEH6itPTI9WXWNWfUZzJZPKn2GMoimNQg3cryQWz97nrxjGQDUooqlpdrfWkM66lqP293neSN/IWLy4yfljwOu0cbupoAu0VS0u1vrSGddS1H7e7zvJG/kLF5cZPyx4HXaON3U1BpkerLrGrPqM5ksnlT7DGURTGoQbuV5ILZ+9z14xjIBps21Sx6AZrmtJ8c2WqtZMbC/sbW/iaS1u7xY0jlKruZeHLAgAnJUAgEgmuklGYXA5O01wngzwtqT6PoM+v3mIdPtf8ARrFbVreWF3TaxkfeSxALAYVMZ5yeaAOgsfHHhPU72Oz03xPo15dSkiOC31CKR3wMnChsngE1X0HxLc634k1G2WCOPTYreKWzmGfMmDNIpc9tpKfLxyOe+A9PA2kIWzPrUqujIyT69fSoyspUgq0xB4J7cdetR6L4GsNA8RS6pY3WourWqWyW9xqNxOqhSxz+8kYHqABj5cHHU0AWdIvryDXLrQ9UuBdyRQrc21yUCNJExKkOFwu5WHVQAQRwOa0LXUvtWp3tn9iu4fshQefNFtim3Ln922fmx0Poaz9IsbyfXLrXNUtxaSSwrbW1sXDtHEpLEuVyu5mPRSQAByea0LW1votTvZ7rUPtFrMUNtbeQq/ZwFww3Dl8nnnpQBdooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuQ8LWFxLpd/qNrf3P8AaVxc3UayX1zPcwR7Z3C4gMoUAAAYXb9a6+uZ0PStdtLO/wBMuzbWVu808ttf2N15k48yVnGY5IdikBvVxx0oAf4Rub3VfD94usXbXUy311bGaNfJO1ZWUBdmCuAMA5z7k807wrbCxn1mxjuLuaC3vgsX2u7luXUGGNiN8jM2MsTjPejQPDFx4ahu/s2tahqnnNJMsF/5CJ5rsWZt0UKsMk+4GeBU/hyz1O3Oo3OtQWlvcXt0JhFaXDToiiNEHztGhJ+TP3e9AGtcLO1tItpJHFOVIjeWMuqt2JUEEj2yPrWH4RvdQvLXUl1a6W6mttRmgEiRCNdq4wAozgcnqSfUmty4iee2kiinkt3dSqzRBSyH1G4EZHuCPasTw94Wl8P3NzL/AMJBqmopdSNNJDeJbBfMbGXHlwoc8dM49qAN2RS8TosjRsykB1xlfcZBGfqDXNaDaaqNWv2fxLqGp2MSG3T7ZDaj99/EymKJOF+7g5yc+nOzpWmf2Vpv2QX15efO7efeS+ZJ8zE43Y6DOAOwApbPTI7HRU063mmVUiMYmyPMyer5xjcSSc460AYGjnWU1rUbCDXZtWt4rcD7bf20REFzkjyx5KxBwByy9Rx8wzVzwje6heWupLq10t1NbajNAJEiEa7VxgBRnA5PUk+pNGh+Fp9C017GLxJq1zD5Xlw/aEtd0B/vqVhXc3fL7snkijw94Wl8P3N1L/wkGqagl1I00kV2lsF8xsZceXChzx0zj2oAzPDFzrbXF7ZaxqGpxauYS8UGpW9q9uBux5kX2cKzKDgFXcNjGQMg1d8O6lq0uja095KuoXtle3EUQSIRK+0AqoA6DJxySfUnrVm18MGC9ub6fWdRu7+aEwQ3U4h3WsZOdsarGE6gHLKxOBkkDFM8P+FZdAuLqQeIdUv1upHlkiu0tgvmNjLjy4UOeOmce1AHN+HvFtxNrUFrba4fETXtjNPNEIo1FjcR7T5OY1BXO/GyQlxgZJ5p/hjxXLd+I9OtP7e/tn+0beVru3EMajTZ4wpMeUUFPvEbJCz8Zz1rqNM8Oix1F9QvdUvtVvDGYoprwRAwISCVRYo0XkgZJBJwOcUad4dFnqh1G+1S+1a7CNHDJeCIeQjEFlRYo0HJAySCeBzQBe1W+GmaPeXxXeLWB5to77VJx+lc7pF5q9pq+lJqWqPqEesWzzNG8CILaRVVsRlFB2YYjDlm4HzV1csaTRPFKoZHUqynuD1FYuk+FoNKvUuTf316YIjBaR3ToVtYjjKJtUE/dX5nLNx160AbFy8kVrK8EfmSqjFE/vEDgVwXhjxXLd+I9PtP7f8A7Z/tG3la7gWGMDTJ0Ckx5RQU+8RskLPxnPWuy0jS/wCyLBrX7de3u6WSXzr2bzJBvYttBx91c4A7AAVV07w59j1NtRvtUvtVuwjRQyXgiHkIxBZUWKNByQMkgngc0AZWh3l6/iy/0463qF5brAWI1G0jt5YpN+MwgRR+ZGB/EQy524Y8ip9AtNUTXrtpfEmoapp9uvkFbyG1AabIJKmKJD8o4Oc5JPTbVzTvDX2PV21O91a/1W7ETQwyXflKIEYgsqrFGg5IHLAngc1o6bp8Wl6bFZQPI6xg/vJCC7knJZiAASSSScdTQBzmg3t43i6+09tav762SAsU1K0jt5I5N+P3IEUZkjx1bDDOMMeRUuj2eqp4nuM+JtR1KwtYzHLFdw2oUzNggKYokYbV65JzuHoavad4bFnrDapfarf6rdiMwwveeUogRiCyqsUaDkgcsCeBzV/T9Oj02w+ywSSMNzu0rkF2ZmLFiQMZyfSgDntNfVrXxdPZprN1rdolsz3X2mKBRazZBjjRoo05KliVbcQApyM85Hh/xXcz+ItLhl1z+0pdSEkd9poijA0qZUL7cqodejLtkLE9QRg10vh3wxL4e3Iuv6nf253EQXi2+0Mzbi25IlctknlmOc1JZeHPI1galf6rf6pPGHW3F35SrbBvvBFjjQHOAMtuOB15OQDUu7gWllPcMCwhjaQgd8DNclo2pavHeaFd6hqb3kGvxEtaNBGqWj+UZF8tlUNtwCDvLE8EEcg9kyhlKsMgjBB71haX4TttL1CK5F9fXMdrGY7K1ndDFZqeCE2qGPAAy5YgcAjJyAb1chpV5er45uNP/ty/vLYwSM8Oo2kcBjcMu37ORFGZEAYgt84Hy/Nk89Fpem/2ZDPH9tvLzzp3n3XcvmMm452KccIOgHYVQsvDP2fXhq1/q+o6pcRo8dut0YlS2VyCwVYo0znCjL7iAOCMnIBU0az1SPxRcbvE2o6lYWqGOWK7htQpmbBAUxRIw2r1yTncPQ1VstSubTxxcWs2u3tzZLBNLPDqdrHAsRVlIMDCKMyIAxDNlwPlywPXp9N0+LTLIW0LvIN7O0khBZ2ZixJwBzkmsqPwnFJqzX2sale6zhJI4be9WHyYVk4dQsca7sjA+fccfU5AKfh3WtT1XxVqQu28rT3tIJ7G3MYDojNIu9j1ywUHB6DAxnNFhBqdr4iupW8S6lqWn2ULfaILmG1CmUjcqqY4kYFV5OSfvL71b0nwL4a0HXpNW0XRbGwuZIBB/o1rHEFUEkkbVBBOeeedo9K1dO06LTbM28TPIGkeR3lILOzsWJOAO5/KgDlNF1bVvN0DUr3UpLq38QL81k0EYS0JiaVfLZVDYwuDvLZzkEdKuaa2q23jM2S63dazaCB2vBcQwKtnJlTGqNEinJBJ2tuOApyM/Nc03wlbabqEVwt9fTw2qstlaTOhiswwwdmFDHjgF2bA4GBSeH/C8vh+VtniDVL63Yu32a7W2K7mbcW3JCrk5z1Y9ec0Abk8ogt5JWBIjUsQO+BmuM0XVtW83QNSvdSkurfxAvzWTQRhLQmJpV8tlUNjC4O8tnOQR0rtiMjB5FYOm+ErbTdQiuFvr24htQy2VnM6GKzDDB2YUMeOMuzEDgYoA3TnadpAOOCRmuc8OXmrSeIdcsdYvorv7KYDGYbfyUTehJAGWbt3Y/h0rW07TP7OjulF9eXP2id591zLvMW7+BOOFHYdqytK8JT6Xr1xqjeJtXvHuSvnw3CWojk2ghc7IFYYB7Ee+aAKcWoXVv8AED7GNavprZklee21C0SGGPADL9nk8pDLjJzhpAB1IOMv0LXNS1Xxjc+Y6ppEtik1jD5YDEeYy+azdfm6gdhjuTV//hFo59ZF/qup3uqLGXNvaXQhEMG8FWwEjUt8pK/OW4J9aj0zwH4Y0XXhq+j6Hp9hdCDyV+y2kUQUZySNqg5OcE56UAc1p/i+6HiTT45tbN3dXt89pe6GIo/+JcNrlG+VfMX/AFY5kYh9xK4GKdoXiXU7zx79iudRvgjXFzG0E9rEtjLGn3Ps0wQPI443Au2MSZAwtdXF4czri6lqGq32omFme1t7gRCK1LAglRHGpJwSAXLEAn1NVbDwZa2F/DKNQvp7S1mee0sJWj8m2kbdkqQgkP32wGdgM9OBgAwvD3im81TXba9v7jVrewvria3tI1t7cWTsjMqoSQZ95CFt3yoTwCeMnh7xTeaprtte39xq1vYX1xNb2ka29uLJ2RmVUJIM+8hC275UJ4BPGegs/B9pZanHcx3t69rBM9xb6e7oYIJXzudfl3n7zcMxUbuAOMFn4PtLLU47mO9vXtYJnuLfT3dDBBK+dzr8u8/ebhmKjdwBxgA6CiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACioobu3uJZooJ4pZLdgkyI4JjYgHDAdDgg4PYipaACiiigAoqFry2W9Sza4iF06GRYC43soIBYL1IBI596moAKKKKACikd1jjZ5GCIoJZmOAB6k0xbmB7UXKTRtbsnmCUOCpXGd2emMc5oAkoqO3uYLy2juLSaOeCVQ8csTBldT0II4I96koAKKKKACioHvbVL6Oye5hW6lRpI4DIA7qpAZgvUgFhk9sj1qegAooooAKKKQkKpLEAAZJPagBaKitbq3vrWO5sp4riCVd0csTh1ceoI4IqWgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAMbxjPLa+CNantpXhmisZnSSNirIwQkEEcg1xGg6re6Xp/iK+tY9ThNhpqSDTNYv3u5jLtZvOBaSTEbDAG1yCVbgEV6bPBFdW8kFzEk0MqlHjkUMrqeCCDwRUR0+za7iujaQG4hjaKKYxjfGjYyoOMgHaMgccD0oA5KJ9Xi1aHRz4ivrxdR06S7F75NsJLVlZANm2ILtbefvqx460eCGu9P+H0Gr694j1K+VrBZpGvVib7PhSWYFIwzH/eLHium0vQdI0MTDRdKstOE7b5fslukXmN6ttAyfrTbHw7oumXN1c6bo9haT3hJuZbe1SNp8kk7yBluSTz60Ach4X1HW9Q13UtHvNQ1yGF9Pjuba51GKxFwhZ2XeghUptIA4kTOe1aHw9s9TPheK61LxFqmoyTrIoW7EB8kiRhuUrEGJ4/iLD2rc0/wvoGkSRSaVoem2Lw7/Ka2tI4zHuxuwVAxnAzjrgVLZ6Do+n6jcahYaVY2t7df6+5htkSSbnPzMBlufWgDmtImu9Es/F0hmk1W5sZjIss0EMcs5FujAP5SIGPbOM4wKqHVtY0mO3J1ybVf7R0q4vQ0sMIFsyRqytHsRfky2MPuP3eeue7jt4YZJZIoo0eZt0jKoBc4AyT3OAB9BVGx8OaJpn2r+zdG0+0+2Z+0/Z7VI/PznO/A+bqevqaAOa0W71y21Tw62p63LqK6zaO88BtoooonWNXDR7V3jvkM7deMdK7eoBZWoaBhbQhrZSsBEY/dAjBC/wB0Y44qegDj9FkeHwfrWtKAmqTPdyTSkBmDRs6ovPZQoAHT8zUGi3euW2qeHW1PW5dRXWbR3ngNtFFFE6xq4aPau8d8hnbrxjpXSx6Faw6ldXUTSLHeqRdWhIaGZiAN5Ug4bAwcEA9weMWxZWoaBhbQhrZSsBEY/dAjBC/3RjjigCWVS8LqsjRMykB1AyvuMgjj3FcZ4N8QalrOsXNnqN5G66fHtjeOMKNSUsQLkZXhRt24U43bj90rXZyRpNE8UyLJG6lWRhkMD1BHcVANOshPbzCztxLaoY4JPKXdCpABVTj5QQBwPSgCPWf+QDf/APXtJ/6Ca5X4d6ndatpdmtxLJYfYbKGP+y3VDI6lBtmducq2Dt2HAwdxJyq9s6LJGySKHRgQysMgj0IqodJsBNDPFZ28VxbwmC3nSFN8CHGVQkcDgcdOBxQBjaGgsvGmu2FnGI7IxwXZRRhUmk378dhnarEDuSe9b19O9rp9xPFH5rxRs6x4b5iBnHyqzfkpPoDVfSNHt9HtpI4HlmlmkMs9xO26SdyACzHgdABgAAAAAADFX6AOM8N+NNX1rWks77w/9hhZWYzeXqAwQOn76yiT83B9Aa7OiigDk/Dk62+i6xr09pLPfyXVyZ1hQySyCJ2SONQOeFUAL6knqTWN4D1RLvxxrDXA1I315Z28832nTrmBIyGkGxTLGoCgFQOm7DHk7sdpBosFrrc2pWs08JuR/pFurDypnwAJCCCQwAxlSMj72cDF1beFbh7hYo1mkUK8gUbmAzgE9SBk/maAHsCykBipIwCOorivCevanqHiCbStR1FJ009H8u5SIKdUXdt8z7oUbCNrbOCxzwMA9qyh1KuAysMEEZBFULa30aeWNbOGxkk0tjDGIlQm0O0ZQY+4dpHHHGKALF/d/YNOuLvyJrjyI2k8mBC8kmBnaqjkk+lcF4D1RLvxxrDXA1I315Z28832nTrmBIyGkGxTLGoCgFQOm7DHk7sei1F9mhE8k6Rok8ihHlVRuIGcAnvjJxn1NAGBpiCy8f6tZ2aBLWa0hvJUUYVZ2Z1LfVgoz/u571oaa8jaxqqvrUN+qypss0RA1j8g+ViDklvvfNjrUuk6PBpMc3lyTXFxcP5lxc3DBpJmxjJwABgDACgAdgKsw2Vrb3E89vbQxTXLBp5EjCtKQMAsRySBxzQBNRRRQAUUUUAFFFFABRRWdpviLRNZuZ7fSNYsL+e2OJ4rW6SVoucfMFJI5BHPpQBo0UUUAFFFFABRRRQAUUUUAFFFFABRWfbeINGvdVn0yz1axuNQt8+daRXKNLFjruQHI69xWhQAUUUUAFFFFABRRRQAUUUUAFFFRG6txeLaGeIXLIZFhLjeVBwW29cZIGfegCWiiigAooooAKKKKACiiigAooooAKKCcDJ4FZemeKNA1q7ktdG1zTdQuIhmSG0u45XQZxkhSSOeKANSiiigAopsjFIndY2kZVJCLjLewyQM/UisnQPEI11r6J9MvdMuLGYQzQXhiLZKK4IMTupGGHegDYopskiQxPLM6xxopZnY4CgdST2FEciTRJLC6yRuoZXU5DA9CD3FADqKKKACiiqkup2qaTNqUUq3FtFE8peBg+4KDnBzgngjrQBboqCyukv7C3u4Qyx3ESyqGHIDDIz781PQAUUhIVSWIAAySe1ZWl+J9J1m7e20+5d5VXeokgkiEqZxvjLqBInT5kyORzyKANaiisaw8V6TqP2loHuo4bVWaW4urGe3gCqSCRLIiowGDyCfXpQBs0VQ0rXNN1u1ludKu47mCGQxvKmduQAeCeCMEHIyDnrVbTfFWj6tdS29jcyNJHH5o8y3kjEsecb42ZQJF6fMhYcjnkUAad3/AMeU/wD1zb+VeS+EvC2qweE7XWtE0nSNJuk0d/JfTmLT6jI8fytN+7QAgjIBL/Meoxz6TpXibTNZupbaze5jnjTeYruymtXZM43KJUUsueMjIpNO8U6RqupvYWVy7zqhdN9vJGkyg4LROyhZQCRkoWAyPWgDmfCTfDplU6T/AGMurG0b7aJ/LF/twPN+0bv3uc/e39+tM+Hut+F313xBpnh7U9IZGvVe1tLG4iIMSwRAlEQ/dBBHAwMV1em+JNP1a/mtLEXrPCWVpJNPnjhJVtpCysgRuePlY9KsW2sWF5qt5ptrcrLd2IQ3MSg/ut4JXJ6ZIHT/ABoAu0UUUAFFZGneKNI1XUnsbK5d51Uuu+CSNJlBwWidlCygHGShYDIz1Fa9ABRWTYeJtM1HVpdMga6ivI1Z/KurKa33qDgshkRQ4BI5XI5HqKZa+LdGvNReyhuZVkUORJLayxwyBPv7JWUJJjvtY45oA2aKzdH8RaT4gW4bRL6O9jtpBHJLDkoSVDDa3RxhhypI7ZyDUOm+KdK1XUmsLZ7qO5CF1S6sprfzVBwWjMiKJAMjlcjkeooA1Zf9S/8AumvJPBvhbU4/C9nrejaTo+lXUemSmKaxYtcalI6EJ5/7tAMNhsEyc9xjJ9IsvE+mX+sSaXE11FeRqzeXdWM1v5iqcMUaRFEgBI5Ukcg9xS2niXTb/VpNPsmuZ5YyytKlnMbcMvDL5+zy9wPBG7OQR1FAHNeDH8Bm5t20j+yk8R+QftIlMY1Ldj9552f3uc9d3+FO8P69oPi3xfHfadq+mvJp8M0FpYwXKNOULKHkdAdyrlQAuOmCeSAOjtPEum3+rSafZNczyxllaVLOY24ZeGXz9nl7geCN2cgjqKsW+s6fdaxd6Vb3KyXtmiPcRKD+7D525PTJweM56eooAu0UUUAFFZFp4o0i+1ZtNtrl2uFLKpaCRY5Sv3hHKVCSFe4ViRg5xg1r0AFFYdv4w0m51dNNA1GG5kLhPtWlXUEb7BlsSSRhDwM9ataT4h0nXZLhdHvor37MVEjwncnzDIw33W/An0oA0qKw7XxfpV3rEeloupRXUpdYxc6VdQI5UZbEjxhDwOx5qe08SaffaxNplqL154WZHkOnzrAGXqPOKeWT7BqAPPPA/hO6e2sdbsdJ0bS5YDcyC9tGJutQLF1CTfu0CrkhiCz5Kr0xmtXwPJ4LeWxaVdMj8ZGP/S1vDGNT87b+8DZ/eHvjHy7cY+XFdPa+L9Ku9Yj0tF1KK6lLrGLnSrqBHKjLYkeMIeB2PNPh8WaPca3/AGVHPP8Aad7Rq7Wkywu6jLIsxXy2YYOVDE8H0OADBn1i2vviXp9tFqen6s1s8qi0scefpx8vDPOQzZB+6ARHgsPvHGO3rKj8SabNrTaVA1zNcoxV3ispnhRgMlWmCGNWHoWB6Vq0AFFFZNv4o0i61g6ZDcsbjcyqTBIsUjL95UlK7HYYOVViRg5HBoA1qKKyLXxRpd5q50yN7qO6ywQXFlNCku373lu6BZMdflJ456UAa9FZUfiTTZtabSoGuZrlGKu8VlM8KMBkq0wQxqw9CwPSrH9sWH9uDRvtKnUDAbnyACSI923cew5Pfr+FAF2vKfCvha4vdTbVbXStHsDb6vdzNqsTE3t0BLIPJcCNcIc8kyNwo+Xnjuv+Ew0oa1FpbrqUVzNMYYzLpV0kTuATgStGEPCk53Y4qzpniTR9Zvrm00nUIbyW1AM3kHeq5LLjePlJyrAgHII5xQBxXg5/Bxms21ZdMXxuHfz1vzGNRM/O4Lv+fbjO3b8uzGOKZoc+qf8ACz7W51jw3qNrfXtncCaeSW2aOOMPHsVdkzNsXGOmSzk45OO0TxTpD62NKW5f7UzFFYwSCJ3AyY1l2+WXABygbcMHjg0L4q0dtcXSRcv9qZzGrG3kELOBkxibb5ZcAHKBt3B44oA16KKKACiiigAooooAKKKKACiiigCnq8cEui3sd3FNNA8DrLHApZ2UqQQoHJOOgHNcdpF1rd1ZX+m6PealeWsenutte6vpb2VxHcYwi5ZIxIuOciMbccsc8d1NNHbwSTXEixRRqXd3OAoHJJPpWbpXiSw1m4eGyi1FWRdxe50y5t0Yf7LyRqrfgTQB5Zp2lPY+GfEMj4tJv7DmjuraLw3c2Cyy7cmSSeR3SeQHcNyk53E5IrotAt44dRub/wAN6BcxW0eksl5FNbPbNqF1wUGZFBlYAMDL8wO8fMa62TVvDmv6Zqdr/aun3tpDG8OoCK7UiFSCGDlWynAPXGMGrOn6vpF4J7fS9Ss7n7DhJ0guFkMHHAfBO3gd6AOA+Hdo2n+LbiWHSo9Ps7+xUJHY+HrjTYVlRyWVxJnLAMAHITcOgODjrvD9tPD4k8TSzQyRxz3sTRO6ECQC3jBKnuMgjjuKvab4i0jXoJ38Oatp2qtCPmFrdpIqsRwGKbtufpVXw5rl/qtxqdrq2n21jdadcLCy2t21wj7o1cEM0aH+LGMdqAC4vn1zwXqM0On31rJJb3ES211DslJAZR8vPBxkeoIql4d1pdR8MxadYQala6hBp6pm90u5tlVwgX70saqSD2BNdHe3sGnWUt3eP5cEQy7BS2B9BzSXV/a2TwrdTCIzsVj3A4JCljk9gApOTxxQB5L4X0O8to73zlaHUm0eeG8t4PDd1bNdzFR80t0zvHO4bOCCSdzEcVtQ+FX0ddCn8OaWbXUptLniurryz5jyeQuwTSH5iQ4GN54xgV2Hh/xFbeIzfS6dLZ3NlbziKC6tL2O4WcbFJPyE7CCSNp54z3qnJ430J9TNpFqlhLaxwzvd3cd8m20MZQFXIPyn5+5GMUAch4c0zQLnxLpllD4cktRNpVwmpJfaeYRdSZh371cDzjnrJhgc/ePOLXhXRdK0nwfqul6f4dNhrSWdxFcyRaQ8Pn8vtCzeWFl6jAVmrR8Oap4KFlqGreEtWTWrmC0aSTzdWlu5ljXJ2/vXd41JHoAeDzXQ6N4n0nW9kFrqFm+oeQk09jHco8sAZQfmUHI6jkgUAczonhe30TVvCt1pulG3nksnj1G5ERMr/ul2iaQ/MSGHG48YwK72iigCnrFpLf6HfWlu/ly3FvJGj/3WZSAf1rmNGefUtZ0QR6ffWY0izkiu2ubZolEjKiiNGYASDKk7kyvA55rsZZEhieWVgqIpZmPYDqaxdJ8UwarepbGwvrIzxGe0kukQLdRDGXTaxI+8vyuFbnp1oAvaPqn9r2LXP2G9scTSReVew+XIdjFd2Mn5TjIPcEGuY0B47DxBef2Lb60miRQSPdJfQ3RUT78gQJMN5BG/IjGz7uOa7Rm2oWwWwM4HU1iab4mF7qT2F/pV/pFyITPGl75J82MHDMpikccEjIJB5HFAGJ4R1G21G68QWUtlq0C3t5LOhutKubdXiKIuQ8kagHrxnPtVHw/b6jceJdPuHuLy507QrWeJGk0eWxZgwVUQrL80z4UnegVPbJ46PSPGVtqtwFbTr6xglt2ura6uRF5dzCpGXXY7FRhlOHCnB6dcSaX4tttSvVt5LG+sRNCbi0lu0QJdxDGWTaxIwCDtcK2D060AZnhe/h8SarPql9aanb3rW5hjt7vTLi2S2hLZ2h5EUO5OCxUnoAOBk5eh2N9c+J9Ht4J7ybS9BMoR59Jlstq7DGiM0v8Ar25+8gVcKc8kV0uieLodbvY4E0y/tI7iFri0uLgRGO6iBALLsdiv3lOHCn5unXEtn4l87XH0u+0jUNMl8t5YZLryWjuERgGZTHI+MblOGCnB6dcAGBZrcw+Ir6LwbBqUcRhuGuBqq3MdqLotmMx+cM4LbyfKGwjnrim+C9N1/TPFl+mq6TZ29u9lDvuob6SczS75CWy0CBmJYluRt+Xrnje0vxZbapqEVsLG+to7qMyWV1OiCK8UckptYsOCDhwpI5AODizp3iOx1XW9R0uz81pdO2CaQriMlt3CnuQVIPYHjqDgA1aw47HxJIbqPUdX0ya2lhdIktdNkgkRj90lzO4OP90Z9q3KRmCqWY4AGST2oA4bQxc3V34a08affWsmhQkX0k1s0cQbyTGER2AWXJOcoWAC8kZAPW6XqX9pwzyfYryz8md4Nt3F5bPtON6jPKHqD3FZ2l+LLbVNQithY31tHdRmSyup0QRXijklNrFhwQcOFJHIBwcbrMFUsxwAMkntQBxmmXU978QWmtU1W8tkt5lkm1LT3tUsyWXbHCWSPeG2kk4c/KPnAwDi+ErW+s/ElvMY9WJX7Qb+wu7ORbXTi2WzaPsAcFgBhWkyG428g9bp/jG1v76OA2F/bQ3MTS2V1NGpjvVUZPlhWLA45CuqkjkA4NWtD8SWmvvfC0t7yAWUqxP9rgMLNlFcEI2GAww4YKcg8YwaAMDwlrUNz4r8QYstXhW+uUmt5LrSLqBHVYEUndJGAOVIwSCe1S+H9Ui8Q+Jmvr201S1urdJY7S3udLuYI4YywDMZHQI0jYB4bgcDOCTo6f4wtdQ1GG2Fje28N2GNjeTKgivNoydmHLA4yQHVcgEjOKdY+Jri611NLuvDerae0kbyLPcNbNHtUgc+XM7DORjIGaAMmyuJ774g+baDVLu3jhnSWTUdOe2jsiSu1YGZE8wMVOT+8OADuA4bJ8IafqOn3ul2MX9sxXtqJY9V+1LMLNo8NsMef3JYsUIMfzY3b+c12Fp4jM3iA6TeaPqGnSskj28tx5LR3CoQGKmORiPvKcOFOD060yx8T/adZXTL3RtR0yaWN5LZrvyStwqkbtpjkfaRkHD7Tz04OADjfDVhrOnNYWWmjVE1a1jmj1AagJ1sGG1vLKceUcvsOYstjdu5zWl4O0zxDpnjC7Gr6VZwwyWEXnXkF9JOZpfMkYtloEBYliSM/KNuMg8b9j4muLrXU0u68N6tp7SRvIs9w1s0e1SBz5czsM5GMgZp1h4n+1a0umXuj6jpc0sbyWzXYhK3CqRu2mORyCMg4cKcHpwcAG5SMMqQDgkdfSlooA8/0aC7aLw5oLWV9Hd6LceZeXEts6Q7VR1DLKRtk37wcIWIyd2CK7PT9S/tCa9j+xXlr9knMG65i2LNgA74zn5k5xn1BrNsvF1re6nHbCyvYbe4do7S/lRPJunUEsEwxcfdbBdVB2naTW/QBkaYst1qF5ql3FJHtZre2jdGBWJTy2D3dgTnuoSsHw7rcFz461vbZavEl6YBBLcaPdQxtsjIbLvGFXn1Iz2zWza+JvN1tNNvtH1HTWnLi1muvJMdzs5O3y5GZeOcOFOPfinJ4jI8QDSr3SNQsjKH+z3MvlNFcbBk7fLkZhxz8yrn68UAP0tJbzUrvU7uKSIh2traORSpWJTgtg/32Gc91CViWiLD4+2+H4NXSOSSV9W+1LcLacjKtF5vyFi+P9TwRu3dq3NG8R2muXd7b2kF5E1mUDm6t2hLbxkEK2GHT+ID8RzTNP8AEEmo6vcWkOi6gltBK8R1B2g8lnQ4IAEpk68coKAHaWkt5qV3qd3FJEQ7W1tHIpUrEpwWwf77DOe6hK4bQrG+h8cJMkeridtQuJLrTrm0kGn2sbAgTQSlQm8gIcB2JMknyrlsdvF4iP8AwkK6TeaRf2Rm3/ZrqbyWiuNnJ27JGYcc/Oq1JB4jsbnxRc6DB5r3drAJ5XCfu1ycbd3duQSOwI9aAOI8P6dqGm65aWqHW11OPUbiS8Z1lFg9o7yOCP8AlgWO5Mbf3mevANemVjWXiCS/1q4sYdF1Bbe3laJtQZoPJLKBkAeb5nfH3K2aAA8g9q4DS4Lsw6F4fayvku9LvjPdXL2zLDsXzPmWUjY5fcOFJYbjkDBrv6wbXxba3WqR2wsr2O2uJWhtr90TyLiRc7kXDFx91sFlUHHBPGQDQ0/VP7Qur+D7De2v2KfyfMuYdiT/ACht8Zz8y/NjPHII7Vzem6rF4g8YCS+s9Utn0+SVLKCfSriOPONrTNMyeWSRkKA33WPUnjsicDNZOkeI7TWr+9tbWC8iezCFzdW7Q7g+cYV8N/CeoHtkc0AcRoOnalputWtrF/bQ1SPULiS7MgmFg9q7yOD08ksdyYK/vQevANWtD0zxVZePrS41bStOImt7lru/t7+WTcWaPHBgUAgKqqm77oJzkc9PD4mzrkem32kahp/2hnS1ubjyTFcsoyQuyRmX5QSN6rwD9KjTxdBJrQsV06+Nu1y1oNQAiMBmAJKYD+Z2IyU28daALVlHLe67dX1zE8cdqTbWqupXI4LyYPXJwAfReOtc9pmuQS/E3UHFjrCRXNpBbRTS6NdpGZEeUsC7RhQPmHzEgHPBrdk8Rm38Qw6XeaPqFtHcyGK3v38loJnClto2yF14Dcsijj6ZhTxdBJrQsV06+Nu1y1oNQAiMBmAJKYD+Z2IyU28daAOetoLtbex8Nmyvhe2+rG7luvsziAQidpd/nEbCWBA2gl8scjAJqG6069uPEMGiaZPePYW+rLfur6TNCIcOZH/0p8JKpY4CoN3IySAa6/S/E1nq+sXmnW1vexyWkaSO1zbNCGDMy/KHwx5Q84APBBIot/EEl1r0+nQaNqDw28nlS6hugECttDYwZfMPDDolAGxRRRQAUUUUAFFFFABRRRQAUUUUAVtRTzNLukNp9tDRMDbZA87I+5k4HPTniuM0rR9YmtdQ0+0t9Y0XS5NPe3ig1e8iunSZuFeN1klcKBnIZ8dNqjmux1XUYtI0e71G5V2htIXmdYwCxVRk4yQM8etZmk+K49Ru2tb3S77R5hb/AGpFvjCRJFnBcNFI6jBIyGIPPSgDhBoWo2HhTWpNXh15ZrTQJrNHvH0/7LtC9IxbhXIyuQXUYGehJroNKs9ZuLtdSs9HXS1stHNlaQXMkZW5kJVlOImOIhtGN2G+Y/KK118XeH9WsL1QLm7gjh3ywtps7GeI8bo0MeZkPqgYH1qTwz4t0zxNpa3emW2o28KwrJtu9OmgAUjgKWUK/T+AtQBgeErDxDF4wfU9btdWdLuwWBpL9rIG3dHLbQtufuHd8vLng7iOM9DomnXVnr/iG5uItkV5dxyQNuB3qIEUnAPHKkc0/TPE2n67Jc2ulyXEN5DGHMd9p89uyhshX2SqhZcg8j0xkVX8L6lq13e6zY65NZXE2nXSRJNZ2zwK6tEj8q0jnOWI60ATSJqGveEb2DUtO/s67uIpoRb+esuOoRtw45GD7ZxXNeEvD2vWniOG+1m1EUdxC99cjz1k8q8kwhjGOoCADI46+tdze3SWFhcXcwZo7eJpWCjkhRk49+KLO8jvdOgvY8pFPEsq78AhSM8/nQBhx6PfN/wlKKfs7ajJ/os24H/l3RN3HIwwPvxWdoVhqb6/o1xc+HzpcGnabLZu8k0LMWzFgKI2PyHaSCSD1yq8Z2LLxloeoNcC1u5CLeFrgu9rLGkkS9XiZlAlUeqFhyPUUml+M9C1m5SHTruSTzYTPFM1tLHDMgAJMcrKEfGRnaTjv0oAydHs9Ug8H33h2fR7qKSG2uI4rt5YDDcli+3ZtkLj7w++q1NYeHp7CbwitrZR28GmWskVwkWxViLRKMYHXLA9M+tXLbxzoV27pbTXkjrC86oNOuN00akAvEPLzKvzDBTcDnjNQad46std8OXupaPbahG1vbSTKL/Tp4EJXOBuZQrcjorE/SgDqKQjKkAkZHUdq57w5400zX47OGGZzd3Fqs4ItZUhl+UFvKlZdkgBbnazY710VAHPnw1ePYahbXniTU9RjvLZ4BHdR2yrHuGNw8qFDnnuTVLSLPV7vV9KfUtLfT49HtnhaR50cXMjKq5jCMTswpOXCtyPlrqLq5is7Oa6uG2RQo0jseygZJrD0jxJe3moW1vqelLYx38BuLF0ufNLoMErINq7HwwOAXHX5uKANDTL3UrrTJJ9S0k2N0skqpai4WXeqsQjbhgDcADg9M4PSsLwydXvJry+1nQb7TdXmg2i4u5bd4YxklYoxFK52gnJJALdT2A66uY8LeKrrxN9tkig0jybZ2jAtdVM8qOGICzJ5QERwM4yxHvQBz/gnwpd6VqzO2iXWmRzWsiar9puo5or6Zm3b4ArsUXc0jEYjHzj5c9J9D8N6q3iC3vHTVbW30u3nhsU1ee3cqXCqqoLckFFC/ekJfoM9c72l63rkus3Fnrek6daQ29v50lxZak9xsJPCsrQR4JAJ4zwOeoqHwx4wbxNqE6W6aYlvHGJFjTU/MvEVvuGWAJiPcOR85PTj0AMLwJ4YvtF1wTro91pIe3ddTa5uo5o7ycvu3wBXYou5pGIxGPnHy56aFppmpX3i27nXStQ0ywntZobqTUbyOczMxATyFWSQxqMMSMoOR8pPK7Gma1qcviGbSdY0y1tnWD7RFLZ3rXClN23D7o0KMeoHIODzxVbw54pufEOo6hFHDpIgspZIWEGqGa4RlYqBLF5QEedpP3j+NAGVbaPr95FpWmtatpJ0S2eNNSd45UmlMRiVo0V9xUZLHfsPQAHkifwn4b1/Q/Et02oXenT6d9hhhja2sXhZ2VnPVp3ORuJJI+YsORg50tN1nxBN4iOnapo+mwQrAZnns9Tedo+cIGRoE+9huhP3TVbw/4xn1vWBbGwto7eVZWjeG982aLy2CkTxFF8o5OMBm5GKAOrrDi8P3qtdfa/EuqX8NxE8f2e4jtQibu4McKtkdssffNblNllSGF5ZWCoilmY9gOtAHHaNpuryXmhWmoaY9nBoERDXbTxsl2/lGNfLVWLbcEk7wpHAAPJHS6bcXt7b3H9qab9hZZ5I44zOsvmxg4WTI6bhztPIrI0nxTd31/ZLe6UtpZapGZNPuFufMdwF3bZU2jy2K8gBnHByQcZ6OWVIYXllYKiKWZj2A60AcFpPh3UP+Eksrh7TV7fTdGMzWsGoXFs33kKKkIhYkrgnmZtw+UDgmr3hebV/wDhJtak1HwxqWn2+pXCTRzXE1qyoFhRMMI5mbJKnGAR6kVc0nxTd31/ZLe6UtpZapGZNPuFufMdwF3bZU2jy2K8gBnHByQcZntdb1UeKBpOq6XawRzRSTW1xaXrTkqjKP3iNGmwkMMYLDORn1AOe0rw3fS+KrBmtdWs9K0eWSW2j1Ge2ZBlWRUhWEliuGJzKcgbQOpx1ejWtwrXV9qMXl3d1KRtJBMcSkiNMj2+b6saraT4nj1jxJqWmW9qwgsY0Zbsv8s5LOrBR6KyEZzyc+mSaT4nj1jxJqWmW9qwgsY0Zbsv8s5LOrBR6KyEZzyc+mSAZunWmpSeO31CLSdQ0+0Ecq3Mmo3kc4nJI2eQqySGJflyR+7ByMqT913hx9UvdemvfEHh3ULK7KOkVxNNbPBBFuGI08uVny2AxYqMkdgAKuWev6qPEcWla1pNram6hkmtZLW+NxkIVBEgMabD8w6bhnIz0ylhrHiCTxINN1PR9Nhg8lpXntNUedoxnCbkaBMbucYY/dNAF7R7W4Vrq/1CLZeXUh+TKkxxKSI0yOOnzderGsbw4+qXuvTXviDw7qFldlHSK4mmtnggi3DEaeXKz5bAYsVGSOwAFTaD4rn1vWNSg8rSUtNPlkilMWqGW5jKsVBkh8oBAwUkfOeMdey6V4rub68sTdaYltp2qqW065W58x5MKWxJHtGwlQSMM/TnBoA6asi20W9g1KS5n8SapdwOWxZTR2oiUHoAUhV+O2WPvmtegnAyeBQBw+kaNq0a6HolxpskFroU3mHUGnjMdyqoyoI1Vt+TuG7cqgYIG7iur0+6vrma9W/077GkM5jt389ZPtEeBiTA+7kkjaeeKxdO8W3F5eWck2mJFpOpSNFYXa3W+RyASDJHtAQMFYqQzdshc4rpicKSATx0HegDk9Ek1S+8TS3eveHNQtZUMkdrcSTWz28EWeNoSUuWcAEkpx04A5ZDZajL4+XUbbSdRs4EEi3U9/eRzRzptwq28YlcxZYKTgRggfMCcY1dD1+fV9S1KzudLl057ExfJNKjuwdc8hCVHTszfh0pqa1qkPiqLS9R0y1jtrpZWtri2vWlchMcyRmNdgORyGbnA70AZegXGr/8Jnq1xeeF9TsrXUDD5dxNNaMqeWhB3BJ2bk9MA++KdDpMh+IC3+m+Hf7HRDJ9v1EmFf7SBXCjbG5Z8Nht0gUjGB1NP0zxncaj4l/s8afai1aeeAMl8WuYmi6tLAYxsU8YO9vvpx83E2i+KbjWfE+o6bFFpIg0+V4pRHqhe7TBwrPb+UAobnBL9KAKiWGp3Hjr7dZabf6dGqypcXWo3STxSqVwnkRCVzH8wVjgRggcgnGK/hzwv4k0bxVbzX2pade2KWUiSzQ6e8MksjSBiSTO/wAxOWJxjtgcVoaT4zGteJn06zXTBAm87ZNSxesqHaZBbBD+7LDAYuMjnHSrll4njv8AxfdaJb2rmK2t/MN4WGx3D7WjUdTtyMnpnI6g4AM0aTI/j+O/0zw7/ZIjdzf6mTCv9ooUwq4jcu+GwcyBcbeOtdfXJaf40nv/ABQdNSwtfs32mW13JfFrqNo1yWktzGNiHjB3k4dDj5uOtoAyYNGvYtWa7l8R6ncQMWIsZI7YQqD0AKwiTjt8/wBc1z2m6Nq0a6PoU2nPFaaRd/aDqJnQxzou/YqKG37juXduVQMHBPFdvXM2Xi24ury0kk0xI9Iv5mt7S8W53SM43YLx7QFVth2kOx6ZAzwAa+n3eoXF1qCX+mfY4oJ9lrL56yfao9oPmYH3OSV2nnjPeud0W51j/hOdSubrwtqlpaXyQxpcSzWhWPyw+SwSdmwcjGAT6gV2Nclp/jWe/wDFB05bC1+zfaZbXcl9uuo2jXJaSAxjYh4wd5OHQ4+bgANIk1S+8VyXWu+HNQtmhaWOznea2a3hi6ZAWUuXcAEkpxnbwMk41r4Y1NPHn9qf2Xcw6gb55JtVFzGbSe1PyhPJ3lhJs2ruEYOV5cjr0Fl4tuLq8tJJNMSPSL+Zre0vFud0jON2C8e0BVbYdpDsemQM8WYfE8dx40fQYLV3SO3eV7vd8okUoDGB3IDqSe2cdc4AMy6tNTuvH1ndWOk6hbRwSn7TfXl5G9tJDsIxDCJHZHJK8hIzgHJPQ5Nr4Y1NPHn9qf2Xcw6gb55JtVFzGbSe1PyhPJ3lhJs2ruEYOV5cjruWvjM6h4uOkWSaWIUkeNjc6n5d1JsyHaK3EbF0DDbuLLyG4wATZl1/VbLxHaWWpaTax2N/O8FrcQXzSSlgrOC8RjUKpCnkO2OOOeADN0641j/hYd7eT+FtUgsrq3htluZJrQqhRpCXIWcttO8YwCfUCpLrSpZ/Hlte6Z4d/s+SGXdeayzQoLyLyyPLwjmR+Sv+sVQNuR2zJD4ynn8VHTI7C2a3F21ozC9P2pWC7t5t9mBHgZ3b84IOOakh8W3Et9DL/Zif2LcXRs4r4XWZPNDFATFtwIywIDByeR8oByADp6KKKACiiigAooooAKKKKACiiigDN8R6dLq/hjU9OtmRZru1khRpCQoZlIGcAnHPpWba+CNMtdDvLKL7R9ovbQ2s13Pdy3MoUrjCvKzMFBOQoIGe1a2ual/Y2gX+p+V532O3efy923ftUnGcHGcdcVi6X4su2v5bTxHYWenulj/aAe0vmuUWLODv3RRlT6cEHB54oApeEPCN5ot/5mpWUe+K1NtHe/29eXrOuRnEM67YgdoOFY4wBz1q54f0vxDpnhl9EkWwtfstsYLG+huXnZyAQrvE0ShexwGbuPepLXxmLxZlj0LVEuBb/arW3l8hHvIsgb48y4HUZDlGGRxT/Cfii68TaLHqM/h++0tJIVlj8+WCRZc54QpIT/30q9aAMnwn4X1vSPEjanqKQkXFmLe4Da1c3rqytuDqZUAAbccqNoXAxnPHQ6RpM9hrWt3kzxtHqFyksQQnKhYkQ7uOuVPTPFQ6X4ibV7660u40vUtFvY4FmC3XkMxRiVDqY3kXgg8H8sVW8JTagupa9p+parc6oLG8SOGa6jhVwrQo5B8pEU8se2aALwtdYv8AwreWmsGxXULiKaIG1L+UA24J97nOCM++cVS0Sz199E/sjX7DTbW3WyFsJ7HUZJ3Y7dudrQR7eOfvGtjWdQOk6LdX6w+d9mjMhTdtyB15we3tVH/hKbKfUUstM/02VbqS2nVDtMTJF5hHIwf4R1A+brxQByuh+Ab/AE6GW2ubWGR49NlsbfUJNfvLgncoX/j2lUpEDtBO1jjGBmtnUPCtxd2OjQS3MUMdjYTW1xIGORvgEe5eOQCCeccVY8O63cXja3caqLuzS1uADa3scKtaIIkYjdE7hwc7sk55x2qjH4vvrzX7NbbRtUitpLG4uI7aVIFe8CmLYyEyYXhj8rsh55AoAyfB+rTa14s01I7vRb630vTZYHm0W7N1GCTEFLvgBGbYcR84C53HPG5pWia1aeG77w/cQWAtfImitbtLt2eQuWxvjMQCfe7M3SmaX4wv9d8IX2qf2DfaO0dpLLDNcS28iMy7gNux2OQVz8ygfWpvDfi86mul219puo20l7aCWG7uYo447plRS+1Q29TznDIvtQBYi0C6S68NSmSHbpNu8U+GPzExBBt45GR3xXQ0UUAV9Qs49R025sp8+XcxNE+PRhg/zrA0jRdY/tSwm1v7CsWk27QWxtZHdrgsFUyMGVRHwv3AX+8fm4rf1C8j07Tbm9nz5dtE0r49FGT/ACrA0jWtY/tSwh1v7C0WrW7T2wtY3RrcqFYxsWZhJw33wE+6fl5oA2dH/tb7C39v/YvtXnSbfsW/y/L3Hy/vc7tuM9s5xxWXYabrE/ix9Z1aGws1htmtYYrSdpmnUuGDSM0abcbeFAONzc10Vcj4Z8R6hfXGoHW7y2ja1V3Nh/ZU9pNEgYgNvlkIlXA+8ihc9+1AGzp2lSR6JLb6i6vdXm97t42JBd+DtJAOAMKPYCsHw34V1LTLrSY72LTorXQrR7SzktJGMlyGCjLqUAjGFB2gvknORjmt4e8ePqaz399fWiWv2Jr6GxTTp0fywAcrcs3lz4BG7y1wCQM+unpmvatFqFkviBtPFvqds9zB9nRozbbVVjG5ZiJPlbO8BPun5eaAE0HQdRtPE1zqc9hpejW8sbCS10ydpRdyMwPnSkxxgOAMdGJyctwBVi303WLvxgmranDYWcFpDLBAtrO80lwrspy5aNAgG0HaN3J+9xynhnxHea7qWqrPapBaQGJ7IjPmSROpIdwehOMgdgRnngZHhTxrd674lubGS702VbdZftdnDA8c2msr7VWRy7LJnnkKvTIyKAOo0mwuLW0na8kU3t1K8s0kZLAE8KBkDhVCjp2rl/DHgzUNJ16C9ubbTbV4I3S5vrKVzNq2ejToY1AYH5slpDnIBAJzpaL4sm1PVtYM0EcWmWtvHcWkgyZJoz5gLntg+XlQO2D3wI9I8Q6vLfaVLqv2H7DrkZe0jgjdZbZtnmBHYsRJlQeQEwR0OcgA6ysW28KadazXEsc+qSNcRvG63OrXU8eG64jkkZQfQgcdq2qjuJ0trWWeXhIkLtj0AyaAOX0jw9q8V9pUWq/YfsOhxlLSSCR2luW2eWHdSoEeFJ4BfJPUYwduzg1G50+7g1/7ITLLKkf2PfjyDwu7dzvx1xxnpWJpHiHV5b7SpdV+w/YdcjL2kcEbrLbNs8wI7FiJMqDyAmCOhzkdRcTpbWss8vCRIXbHoBk0AcvpHh7V4r7SotV+w/YdDjKWkkEjtLcts8sO6lQI8KTwC+SeoxgxQ+GdTufEt3eyW2n6DBPFNHNJpNyzz3rOAFkkzEiqyAZBO85OMgZzLpHiHV5b7SpdV+w/YdcjL2kcEbrLbNs8wI7FiJMqDyAmCOhzkUvDXjS81rxZcac91p0v2czC7sIoHS40/Y2F8yQuyybvZV65GcGgCXSPAl7perXbf8JLqM1jLpqWMSlbZJI8F+R5cC42hhtPqTnPFTeHfBl74f8AEcl3/b15fWIsYrWK3uEt1xsZjz5cKcAMMYOeWzniq/hrxnPr+sIz3tpDZ3CSPbWY0+ffIqnAIuiwidsDLIqkrnBPBNLpni3UpdR0Z9RfTzZa/wCYtpbwRsJ7ZlUth2LkSDCkHCptbA560AXfDVj4it9UubjxFYaWZJ9269ttQklkxn5I1jaFQiAdg5555JJrY0ixntIriW+ZHu7mdpZWRiVAzhFGQOAoUfXPrWVp03iYeKHtL7UdJvLKKEvN9n02WB42b/VruadwxxkkYHGPUUumzeJh4oa0v9Q0q8sYoi8/2bTZYHjYn92u9p3BOMkjAwMeooAQ6Rq2peLo7/VINPtLK0gmgh+zTvNNcrJj75KIIwAoO0b8kjkY5raR4b1aC50i11H7D/Z2hAi0lhkdpbk7DGpdCoEeFY8Bnye46U/QNd1O/wDE17ZaneWsCxPKIrBtKngmZFfasizPJslXGCSiYG4cjuaBrup3/ia9stTvLWBYnlEVg2lTwTMivtWRZnk2SrjBJRMDcOR3AOrrItfDNhZ6m9/FPqbzSFiyTatdSxfN1xE8hQe2F47YrXpCQqknoBk0AchpnhnVbeXS9Ou/sI0jRZTLazRyO00+FZUV0KgJtDdQzbtoOFziuisP7V8y9/tMWZTzz9jFuXB8rAx5mf4s56cYxXO6Z4m1W4l0vUbv7CdI1mUxWsMcbrNBlWZGdyxD7gvQKu3cBlsZrsKAOT0Oz8UW/izUb/U9O0iK01Ax7jb6nLLJF5aFRhTbqGz/ALwx70ttoGoHxudX/s/StJhDOZ57Gdnn1IbdqCYeWgG3qMlyDwCOc09B8bSa54jSNb+zt7GaSaK3tjp8zNMYyynF3vEO/wCUsYgpYAc98aWkeJrnVvF95ZRwRLpUdqJLa4yd87CRkdvTZkYHrgnoRQBk6P4L1Gx8Tw380GmwyQzyyTatbSt9q1JG3YjmTywMDK8l3xsGAM8bMmmavqHi+0vr2GwtLLTTKYJIJ2lnuQ67drgxqI17kAvkheRio4tS1yy8WW+n6ncade294k0qpaWkkMlqiYwzs0jhwchcgJz0HYVdM8TarcS6XqN39hOkazKYrWGON1mgyrMjO5Yh9wXoFXbuAy2M0AVtN8FX9nLZacVsYdL068mvILy3dhcu0nmfKUKbVI8w5be27b90Z4saF4HvNB8SW12niLUL2xt7JrcQXS2+SS4bkpCpI75zuJ655qronjS+1Xx1Po/2rTXME00dzpqW7rc2aJ9yVpd5Rw2V4CL9/qdprW0vxNc6p4yubCK3iGlJal4LnJ3zSLJscjtsBOAepIJ6YyAZGmeC9RtfFceoS2+mRPFdSzy6xBK/2y+jbO2GVPLA2gFRkyMB5a4Ufw95XKabrup3PjW806+u7a2gjkcW9pJpU8ck6AD50uWk8uTrkhFOB1x1rq6AMm38N2NtqzajHPqbTsWJSXVbmSHnriJpDGB6Dbx2rGsPDOqwS6dptwbL+x9KuTcwTJI7TzY3bEZCoVNu77wZt20cDPHXk4GTXIWHibVZ5dO1K4Fl/Y+q3JtoIUjdZ4c7tjs5Yq+7b90Ku3cOTjkA6HT/AO1vtV//AGr9i+z+f/oP2bfv8naP9Zu43bt33eMYrkdM8Faja+Ko7+a30yJo7qWaXWIJX+2X0bZxDKnlgbQGAyZGA8tcKP4e8rlNN13U7nxpeade3dtbQRu4t7OXSp4pJ0AGGS5aTy5OuSEQkDrjrQBFZeGNVifT9MnayXR9LuDcQTxyM08v3tiMhXam3f8Ae3Nu2jgZ4ZpPgS80fxPYX0PiTUbmxtYJ0aC5W2yzSOrYJSBSQSCxJbdkDnk51NC1jVb3X9V0/V7aztzZpC8a2sjScOG6uwXP3R/CMZxz1qpb67qUnjqfTLu7trS0V9tvbzaVOr3S+WGJS5MgjYgk5VVJAU/WgCnB4Ov7e+FlGlgNJGqnVRdiVxc7y5fy9mzb1ON+/wC7xtq9p1j4iXxbcX2rWGlzQM7Jb3SahIZLeHsqwmHaCcAsd/J9gAHtN4mj8WW9qNR0m4sXLSzQrpsqSxQ8hf3vnlSxbA+4M4Y8YoabxNH4st7UajpNxYuWlmhXTZUlih5C/vfPKli2B9wZwx4xQBkweC9QTxauoSQaarpetc/21HKwvZYiSfszp5YBTB28yEYUELnGLcPhjVUlttKb7D/YdrfG+WfzHNw58wyLF5e3aAGP395JC42jORf0fWdWufFepaXq1tZW6W1vFNELaV5SQ7yD5nZV7IDgLxkjJ61HaeJri+8cHS7eCL+zFtpSLkk75Zo3RWC9to34z3YH05AOlooooAKKKKACiiigAooooAKKKKAKOuab/bOgX+meb5P2y3eDzNu7ZuUjOMjOM9M1Ts/CGh6f4fudH0/TLOytbuIx3C2dukPm5XaWIUdcdzmtqigDkPCPgWPwtcyGOHQFjMPkrJYaILS5Zc8eZKshD8DnCqCeeOlW9H8Oappugz6LNrELWK25t7J7W0aG4t15ALSGVg7AEchV5Gcdq6SigDjPCngKTwxrR1GObSUaa2+z3UdhpJtvPwco5Pmsd+S24tu3ZH3cHPQabo/9narq155/mf2jOk2zZjy9sapjOefu57da06KAMq30q7fw9Pp2s6j/AGjLOsqPceQsXyuTgbV44BAz3xmsfw74GOg6ra30mqPdvFZGCYNAE86Ytuac4PBPTH611tFAGQvh6Jv7cS4mMkWsPl1VdpjHlLGRnPP3c5461R0jw1qVpqtje6prMV59htZLSKKGy8lSjFMMxLsS3yckYB7KvfX1uR4vD+oSROyOlrIyspwVIQ4INeZfs8azqmt+DdTm1nUrvUJUvyiSXc7Ssq+WhwCxOBkniuiFDmoyq32t+Ir62O207wzqNlo97o8mp2smmSwyxWqpZMs0O8scu5lIfG7sq1aj8O+XcaDL9qz/AGPC0WPL/wBdujCZ6/L0z3rbornGFFc1dXVwvxQ0+1WeUWz6XPI0Ic7GYSIAxXpkAnn3rpauUeVLzAiuraK8s5rW4XfFMjRup7qRgisPSPDd7Z6hbXGp6qt9HYQG3sUS28oohwC0h3NvfCgZAQdfl5roaKgCjo9pqFlYtFq2pf2lOZpHE/kLDhCxKJtXj5VIXPfGazbbw9eza1LqOv6jBeH7PJa28Nram3SOJyC27Mjl2O1RnIHHTmugooA5PTfBUsHkW+q6jFf6fY2r2ljAtp5bpG6hT5r7yJG2gAEKg65Bzwsfgp7tPs/iPUv7SsobV7O2hhia2YRMAGMjq5LPhQNy7B145rq6KAOc0PwXZ6DrGoX1reahKLyNIxHc6hcT7AoPeSRsnng4yOg61n2XgFh9mttZ1CK+sLG2ltbWOG2a3mMUi7WWWUSHfxj7oTkZrs6KAOY0jwHp2ja5eX9vc6hNHc2qWv2e61C4uFVQWznzJGBzuAHHy4OPvGnaT4Wu7G/smvdVW7stLjMen2623lugK7d0r7j5jBeAQqDk5BOMYfh3Ur6fWLNJr24kRtNvXZXlYgstzhT16gcA9hXP/s/63qus2fiA6xqd5fmG7VYzdXDy7Bg8DcTgV2vC2pznf4bfi7E82tj2Gsez8IeG9OuprnTvD+l2dzOjRyz29nHG7q33gWUAkHvVfSrmeTxt4ggkmkeGFLYxxs5KplGzgdBmugrlnHldvT8UUc1pPha7sb+ya91Vbuy0uMx6fbrbeW6Art3SvuPmMF4BCoOTkE4xq2Fjdx2d1Bq9+NR86aRlJgWLZEx+WPA64HG48mtCioA5rSvCt3ZX1mb7VVurLTIzHp8CW3lugK7d0r7j5jBeAVCDk5BOMQaR4MubC+09r3U4bq00oSCxRLQxzBXBBEsu9hIMHsqZIBOcVmeGdRvrjXbGOe8uJUbT7x2V5WILLc7VJBPUDgHsK3fAN1PeeA9LuLyeSeaSIl5JXLM3zHqTya6KlHkTd/61/wAhJ3INJ8Hz6deWKTalHcaXpbu+n2y2uySMsCv7yTeQ4AZgMKvbOcUmm+DDb+KpNbvn0sv5jSRpp2mfZWd2BXfM5kcysFJAPyjljjkY6qiucZR0rTjp1tKskvnzzTPNLNs272Y8cZPQYUeyijStOOnW0qyS+fPNM80s2zbvZjxxk9BhR7KKvUUAYUWh6lN4oj1XVtUhnhtVkWztba0MITfjJkYu5cgAAY2DknB4wRaHqU3iiPVdW1SGeG1WRbO1trQwhN+MmRi7lyAABjYOScHjG7RQAVk2nhPw7Yao+pWOgaXbX8hYvdQ2caSsW+8S4GTnvzzWtRQBzGneErizvLOObU0l0nTZGlsLRbXZIhIIAkk3EOFDMFAVe2S2M1tafa31tNetf6j9sSacyW6eQsf2ePAxHkfewQTuPPNXaKAOStvBEkU0Nrcaikui2s8lxbWa2xSZXfdkNMH5UeY2AFUjjLHHMuj+AtN0HxCmpadc6gI47QWsdtPqNzOigEnpJIwxjgLjA6iuoooA5vQdB1zS9Uu59R1fTr+C7keSTbpjxTt/cUyGZl2qOANg49CTlmneErizvLOObU0l0nTZGlsLRbXZIhIIAkk3EOFDMFAVe2S2M109FAHIWfgieK9tVvdUiuNOsJ5p7SNLUx3CmQMGDzeYdw+c9EUnC5PHM2keANM0PxBBqWm3GorHb2hto7abUrmZFGQRxJKwwAMbcY79RXU0UAYUmiaheeJLe/1LUoHsrKRpbO0t7QxsGKlMySGRt+AzYAVOvOa3aKKACuZsvCVxa3lpHJqaSaRYTNcWlmtttkVzuwHk3EMq7ztART0yTjnpqKAKOn2moW11fyX+pfbYp599rF5Cx/ZY9oHl5H3+QTuPPzY7VQl0TUb3xHBf6jqcD2dlI0tna29oY2V2UpmSQyNvwGbgKnXnNbtFAHL6X4f8RWXim61W81vS7iG8CLPbxaVJG21AwXa5uGAPzckqc46Crd1omo6h4htrq+1OA6dZTefbWkFoUk37Sv7yUyMGHzMcKq9sk453aKAKNhpxtLq9uZZfOmu5t5bbt2IBhU6ngc/iSe9FhpxtLq9uZZfOmu5t5bbt2IBhU6ngc/iSe9XqKAOVs/DviKHxdcaxc65pksFzGkEtvHpUkbeWhcqFf7QcN85y20jjoKTT/h7pWk+I7LVNOuNRjSzgkiS1k1K6lj+Yr2eUqFGD8uMZIPVRXV0UAFFFFABRRRQAUUUUAFFFFABRRRQB/9k=)

### **elbow graph**

#screeplot or elbow graph

screeplot(pc, type="lines")

![Chart, line chart

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMzNQAAkpIAAgAAAAMzNQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDoxODowMwAyMDIyOjAxOjA0IDIwOjE4OjAzAAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MTg6MDMuMzQ1PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAYAB4gMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKK8o1/4g+Nf+Fw3Xgjwjpej3O2wW5S4vzKggJwS0hUncvO0KoByw54NSaB8XbqLw94tbxrp0FrrHhM4u4bFyYrgNnyym7JG4jHJPUHvgK65eb1/B2Y7O9v612PU6K8r8O+M/iZfahoN9qnhbTJtB1wB1/s+V/PsY2AKvMznaeDnAHOD0OAfVKqzW5KaewUUUUhhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB4Nq114hsv2p9UuvCmnW+qXMWho01jPceQZ48oMJIQQrbip54wDWppHws13X9B8c3vi4QabrHi3aI7aKTzVs1j5jDMPvc4Bx2X3wPTovCujQ+LpvE8dnt1ie3FrJc+a/wA0QIO3bnb/AAjnGeK16SS5OV+a+9tjbfNf0/BHk3hs/FuH/hHtBm0XTdKsdK2Q32qSXaXC3sKKFGyMYdCQM845x0HFes0UVTbe5KVtgooopDCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuI0ubV/Fuo6yw8S3Ojrp1/JZJZadBbllVDw8pmjkJZgQwxtG0jgnmu3rI1fwt4b1ucXev6FpeoSxx7RNe2ccrIgycbmBwOSfxNLrcfSxj6Tf6jp3j5vDd1rD61C+ntemW5iiW4tmDqgVjEqKUYFivyA5VuSMAdfXO+Fj4faI/8INcaD/YyFhNDpEUZHnnbzvjbaPl6gqScg5GMHoqroierCisTULvxVFfyJpWjaPc2gx5ctzq8sMjcDOUW2cDnI+8cjnjoItD1zVbzX9R0jXNMs7G4s7W3ulazvmuUkWZplAJaKMggwHsfvCkM6Ciq2paha6RpV3qWoS+TaWcLzzybS2xEUsxwAScAHgDNZFp4g1FNTtbbxBpMempqTtHYNHd+e5cI0nlzKFAjfYjN8rSJ8jjf9zeAdBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXn9v4Aj1HVNZPiKzLXUt/9pttZidN81uWBFqxOWCADY0eNjKcg5Jx6BRQtHcOljm4dMvp/iRLrBtvsllb6ebIMzqWvGLq4bCk4RPmA3YOXfjGCekooo6Jf13Drf8ArsFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHQXNtBeWstreQxz28yGOWKVAySKRgqwPBBBwQaw4NBtNGkOp6trN5eW+no72x1SaMx6em0hmD7VLEJlfMlZ3C7vm+d93QUUAFFc3oP8AxTdynhm5/d2S4TRJDyHgWMH7OW7yR7XwDy0QVsuyykdJQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRXBQ+OtSuLF40gtVvrnxFcaLaSGNjFEELkSSLuyxCxngFdxwMr1B1t/W6X6h0v/Wzf6He0Vzemaxqtr4pXw/r8lneTz2b3sN3ZW7wKFV1RkaNnkIOXUht3OSMDbk9JR0uHWwVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQBm69pH9s6U8EM/2S9jzJZXoTc1pOFIWUDIzjJBXOGUsrZViCaFq/8AbFg7ywfZbu3me2u7YvuMMqHB5wCVYbXQkKWR0bA3YrSrn9ftp9P1CDxHpsMk81ugtr22iQk3Fs0ikthfmZ4vmdBhiQ0qKu6UEAHQUVHbXMF5axXVnNHPbzIJIpYnDJIpGQykcEEHIIqSgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK5i++G3g/UNettam0G1i1O1uDcx3drut5GlJB3OYyu85H8We/qa6evPdM8I2Wra14g/4SPTrhda+3PLaawsbLJHbnHk/Z7j+DaOCgI5DblIbkXxf1/V/8ge39f1/w51sGkRWniWfUYLONnu4Qs95LdO8q7SNsaIwIWPliQrKN3O0kk1q15zpMHiL/AIXBajXbGaWOx0W4gXV44gILsNNCyHjhJMK25DjlSV4PHo1H2U/63YdX/XRGJqGvajZX8lvbeE9Y1CJMbbm2ls1jfIB4Ek6txnHKjkdxzWR4cv7nUfiTr8t5pN5pTrpOnKIbx4Wdh516dw8qR1xzjk54PHTPZVzdj/yVPXf+wLpv/o++oA6SiiigAooooA5uy/4pjXoNI+7o2oYTS0HzfZp1WR5Lcd1j8tN8Y5C7ZFyq+UldJVHWdKg1zRrnTbppI0uE2iWEgSQt1WRCQdrowDK2OGUHtVbQNVnvo57PVEjh1WycpcxICoddzCOdQScJIq7hy207kLFkbABr0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFABRRRQAVieINPummtNZ0eLzdT0/KLEWAFxbu8Znh+YgbmWNShJXDomWCFwduigCtpuoWur6Vaalp8vnWl5Ck8Em0rvR1DKcEAjII4IzVmubf8A4pjxIjr8uj6zMsRjXhLO8bexkOeAsx2qQCP3uzCs0zsOkoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK5ZPE2tateXq+GNEs7m1srh7WS51HUWthJKhw4jVIpSVB4y23nOARzXU1zcvg8x311c6Lr+raKt3IZriCz8iSN5T1fE0Um0njIUgHGcZJJXX+v67j6D9K8R30niA6H4g0yKw1B7druBrW7+0wTRKyq2GZEYMCwyCmMEEE8gdDXPaXoA03xD9rupdT1e9ktmj/ALUvHhCxR7gfJEcYQAk/NkR84+ZuFFdDVdF/XUnqwrm7H/kqeu/9gXTf/R99VnUPFunaZfyWlzbaw8seNzW2iXlxGcgHiSOJlPXsTg8dRWR4c1e21n4k6/cWcd5Gi6TpyEXllNavnzr08JKqsRz1Ax1GeDSGdlRRRQAUUUUAFFFFAFbUtPtdX0q703UIvOtLyF4J49xXejqVYZBBGQTyDms3RdQuo7+50TWZd97bfPbXDqEa/t8L++wBt3KzbHC9CFbaiyotbdZGv6VPfRwXmltHDqtk4e2lclQ67lMkDEA4SRV2nhtp2uFLIuADXoqjo2qwa5o1tqVqkkaXCbjFMAJIW6NG4BO10YFWXPDKR2q9QAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBn67rVr4e0O51S/EjQ26g7Il3PIxIVUUd2ZiFA9SKw/+Fh6aviGTSpLHUEEE8Frc3jJH5FvcTKDHCx37ixyoyqlQWGTzWj4wi0qbwjfp4gmkt7DYGeaIEyRsGBRkABJcOFKgA5OOD0rgtEh8NiO2Gpp4giI8Ss10dTaD99qJVWiabySQByoQLhdwAYZxRHWVv63S/X77eYS0jf+tm/68r+R6xRRRQAV57pllceINa8QC61/UtP1+zvnFrDHdOsdvbjHkv8AZsiOVHGcsynJLAMCox6FRR1uHSx5zpPiLVr34wWuj6uk1pcWui3DXVvGXFrO/nQ7J488MCC3qVO5T0yfRqKKPspf1u2HVv8ArYK5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACiiigAooooA5vVP+Kb1466vGm32yLVs8JbbFbZdnH/AI5CQfkEbFkSFs9JUdzbQXlrLa3kMc9vMhjlilQMkikYKsDwQQcEGsPRrmfTNZl8O6jNJMCjXOlzSOZHltk8tXWRzyXjeQDLcsjxnc7iQgA6CiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAMbxda6ZeeE76LXro2ViqCSS5VgrQlGDK65BGQwUgYOTgYPSuItfD32bWbEeKPE6SWuramuqQ2yaPLZie6VU8uN5HdwuNgYRHa5YHsCK7TxnbaXdeD9QTXr1rCwRBLJdqQGgKMHVxkEEhlBAwcnjBrjo72fxFe6baeItU1C6tYbuG4SO18HahZebKjAxmWWTeoQMAxwF5A5AyCR+P7vz/4C+77iXw/f+X/B/E9NooooAKKK5tfHOmyadcXUcF07xalLpcVsEXzbm4RiNsfzYwdpILFQACTgA0eQdLnSUVjaV4kTUdQfTrzT7zSdQWLz1tL3yizxZ271aJ3QjPBG7cOMgAgnZoAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SiiigAooooAKKKKACiiigArN13SP7YsESKf7Ld28yXNpchNxhlQ5HGQSrDcjgFSyO65G7NaVFAGboOr/wBs6Uk80H2S9jxHe2Rfc1pOFBaInAzjIIbGGUqy5VgTpVzfiH/in7//AISuLi3hhEWsj7xNnGJHWRR/eid2YgHlGkG12EYHSUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBzXxD0ubWPAWpWtrNaW8wVJ45r2byoImjdZA7ttb5RsyRjkDGRnIwtL+JTXuoWdpJqHgWR55Ejb7J4r8yRiSB8kf2cbm9F3cnAz3rovHWi3PiDwXf6dYKj3EgSRIpH2rMUkV/LJ7Btu0/WuavPD+sTa4Y7fSJFhutYtdYivWmiC2G1EWeJgH3F2EbL8gZT5vJAzRH4rPb/hv0v93mgl8Onn/X9foei0UUUAFefXXwwul8QWN/pHii5t7S31iTV5bC6s4Z0eVydwR1COgw7jlm6j059Brip/FviZPGtx4dh8O6Ur+SbizmutZkjF5EDhioW2bDLldyk8bhjI5oWkk1v/AE/0v8gfwvt/S/Wxqx6Xjx++qX1zJPP9iaCyijs3WKCEupk3S8q0jMF4yvyrwvBNdBWRpVz4jmumXW9K0uzt9hKyWepyXDlsjgq0EYAxnnP4emvRskg6tmJqHjXwrpF/JY6r4l0exu4seZb3N/FHImQCMqzAjIIP0NZHhzW9K174k6/daHqdnqVumk6dG0tncLMisJr0lSVJGcEHHuK7Kubsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQAUUUUAFFFFABXN6X/xTevDQm402+3y6TjhLbYq77QZ/wCByRgE/IJFCokK56SqOsaVBrWmPZXLSRgvHLHLEQHikjdZI3XIIJV1VgGBU4wQRkEAvUVkaBqs99HPZ6okcOq2TlLmJAVDruYRzqCThJFXcOW2nchYsjY16ACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDl/HkUtt4X1HUbCDULq7EUSfZ7O4ugzoJQSI0gcEPgn5hjPAZtucY+m/8IudStfsw8cCbzU8sXX9ueVuyMb/M+Tbnru+XHXitv4hT6hbeAdUl0mSaGdUXdLbgmSOLevmsmOdwj3kEcgjivP5IoNP8TR21n4g1iW+/tqzn020fXbqYX9hIse8hGlO+Nf3rFsf8s/mJHBIfFb+un/D/ACfYJfDf1/L+l80ey0UUUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHP8AiO2nsZE8R6XDJLdWKE3dtboTJqFsFcmEAZ3OrNvj4zuBQFBK5rctrmC8tYrqzmjnt5kEkUsThkkUjIZSOCCDkEVJXNp/xTHiR0b5dH1mZpRI3CWd42xRGMcBZjuYEgfvd+WZpkUAHSUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAc7rvh/WrzVotT8P8Aie40qZFSOS0mt1ubOZFZicxnawY7sFldTgAVlWHjnULDxBaeHPGGn2aarcKm2XSL1J0fORuMDFZ0XI6hHVRyXwCRq674Wu9f1aKSfxHqllpcSoTp+nSC2MsgZiS8y/vNpBA2qy9M59LugeGNE8LWH2Pw9pltp8OBuEKYaQgYBdurt7sSfeiOm4SNWiiigArBvfGmiWV/LZebd3lxAQJ007T7i88knormFHCNjna2DjnFb1chZ6V4m8N3eox6Ha6Tqlle3kl6pvL2W0lhaRssh2xShxnkN8vBxjjJXUfQ2dI8TaVrk8tvYzSrcwgNJa3dtLbTqp6P5Uqq+09A2MEgjOQa1q5PTrO9n8dRap4hn0yz1BNPkt7bS7K5aZmiMiM8pdlQsMhVwEwufvHdgdZVdF/XUnqwrm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76kM6SiiigAooooAKKKKACiiigAooooAKKKKACq2oafa6rYSWd/F5sMmCQGKspBBVlYEFWVgGDAgqQCCCAas0UAYnh/ULozXejaxL5up6fh2lCgC4t3eQQTfKANzLGwcALh0fChChO3WRrmlT3klnqGmNHHqenOzweYSqTqylXgkYAsEb5TxnDpG5V9m02dG1WDXNGttStUkjS4TcYpgBJC3Ro3AJ2ujAqy54ZSO1AF6iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK5GTx5KPE97oNv4S124vLRBKSrWiLLESQJIzJcLuXI7DIOAQDxXXVA9jaSX0V7Jawvdwo0cVw0YMiK2NyhuoBwMgdcCjqHQz9K1m+1C6aK78NappSBCwmvJLVkY5HyjypnbPOemOOta9FFAGJqHgrwrq9/Jfar4a0e+u5ceZcXNhFJI+AAMsyknAAH0FZHhzRdK0H4k6/a6Hplnptu+k6dI0VnbrCjMZr0FiFAGcADPsK7Kubsf8Akqeu/wDYF03/ANH31AHSUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFUbPSoLHU9QvbdpAdRdJZ4iQU8xUEe8cZBKJGpGdv7sEAEsWvVkeKNKn1vw7PY2rRh3eJzHMSI7hUkV2gcgHCSKpjbhvlc/K33SAWdK1vStetWutD1Oz1K3RzG0tncLMisACVJUkZwQce4q9XN6XDqGp+KhrtzplxokUVk9m1tcyRNLdkurq7eU7qFjw4TLE5ml4Qcv0EVzBPJNHBNHI9u4jmVHBMbbQ21gOh2spwezA96AJKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiqZ1fTVsbm8bULUWtozrcTmddkJT74ds4Ur3z070AXKKo6Vrela7atc6HqdnqUCPsaWzuFmVWwDtJUkZwRx71eoAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsjVfDOnatdLfMslpqcaBItRs38q4RQSQpYffQMd3luGjJA3Ka16KAOb+2+IdA41O2/t7T1/5fLGMJdRr6yQdJMKCWaIhmZgEgrW0rWdO1y1a40q7juUjcxShTh4ZAATHIh+ZHGRlGAYdCBV6sjVfDOnatdLfMslpqcaBItRs38q4RQSQpYffQMd3luGjJA3KaANeiub+2+IdA41O2/t7T1/5fLGMJdRr6yQdJMKCWaIhmZgEgrW0rWdO1y1a40q7juUjcxShTh4ZAATHIh+ZHGRlGAYdCBQBeooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACvJpvDXjDTddsLWLRLbUdIfxRNq81zbagoaOJ2YqJIpFXJUuGG1m5TpnBr1muWTxNrWrXl6vhjRLO5tbK4e1kudR1FrYSSocOI1SKUlQeMtt5zgEc0LSSf9bp/nYb1i1/WzX5XJIdNv5/iVLrDWptLK3077EHZ1LXrGQOGwpOFTDAbsHLtxjk9LXMaZq0k3i5bDxDodpY619jeW2ubacXKSW+9A6iRkRwQxQlduPunJ6Dp6Psr+ur/AFF9p/10QVzdj/yVPXf+wLpv/o++qzqHhLTtTv5Lu5udYSWTG5bbW7y3jGABxHHKqjp2AyeeprI8OaTbaN8Sdft7OS8kRtJ05yby9munz516OHlZmA46A46nHJoA7KiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArI1Xwzp2rXS3zLJaanGgSLUbN/KuEUEkKWH30DHd5bhoyQNymteigDm/tviHQONTtv7e09f8Al8sYwl1GvrJB0kwoJZoiGZmASCtbStZ07XLVrjSruO5SNzFKFOHhkABMciH5kcZGUYBh0IFXqyNV8OWmp3S38MkmnarGgij1OzWMXCx5JMZLqyuhyTscMucMAGCsADXorm/7Z1zRPl8R6b9vth/zEtFgd8f79rlpV5IUeWZs4LN5Yrb0/UrHV7CO+0q8t760lz5dxbSrJG+CQcMpIOCCPqKALNFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFc3L4PMd9dXOi6/q2irdyGa4gs/IkjeU9XxNFJtJ4yFIBxnGSSekooAxdJ8MxadqT6nd6he6rqTReQLu9ZAyRZDbFSNUjAyMkhdx4yTgY2qKKACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKxNQ8KWN3fyajYy3GkapLjzL/AE5lSSXACjzVYNHNhcqvmK+0E7dp5rbooA5v+2dc0T5fEem/b7Yf8xLRYHfH+/a5aVeSFHlmbOCzeWK29P1Kx1ewjvtKvLe+tJc+XcW0qyRvgkHDKSDggj6irNYmoeFLG7v5NRsZbjSNUlx5l/pzKkkuAFHmqwaObC5VfMV9oJ27TzQBt0Vzf9s65ony+I9N+32w/wCYlosDvj/ftctKvJCjyzNnBZvLFben6lY6vYR32lXlvfWkufLuLaVZI3wSDhlJBwQR9RQBZooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKK8ybT9Ei1rVj8QvDV1rF5JeySWdzLo02pxfZSf3axlEkEQAyCnyknLYOQaXWw+lz02iuE8K6fbxeM3uvCmj3GjeHjYslxC9m9jFNdb12stu4UhggYF9gDZUZO3ju6romT1Cubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqQzpKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArE1DwpY3d/JqNjLcaRqkuPMv9OZUklwAo81WDRzYXKr5ivtBO3aea26KAMjUtVn0fT7GKVI77Vbx1tbeOMGCOefy2djklvLQLG7nJYhVIG9sKxo2sz3t1c6dqtpHZaraJHLNBDMZ4jHIXEbpIVUkExupBVWDI3G3azWdV0qDV7VYpmkhlicS29zCQJbaQAgOhIIzgkEEFWUsrBlZgY9I0WPSvOlkurjUL642ie+u9nmyhc7F+RVVVXJwqqoyzNjczMQDSorE1DwV4V1e/kvtV8NaPfXcuPMuLmwikkfAAGWZSTgAD6Cq3/CBaIvEEmsW0Q4SC1129hiiHZUjSYKijoFUAAYAAFAHSUVzf/CFQ2/z6RrviDTpjw0v9qSXmV/u7LrzUHODuChuMA4JBP8AhF9X/wCh78Qf9+NP/wDkWgDpKK5v+yvF9v8AurLxRp88K/dk1LRzLOfXc0M0SHnpiNeMZycknkeN7b97/aPh/Utv/Lr9gnsvM7f67zptuOv+rbOMcZ3AA6Siub+3eN/+he8P/wDg+n/+Q6P7e8R2nyah4OuLmU8h9H1CCaID0LTtAwbrwEIxj5icgAHSUVzf/CV6inz3XgrxBBCvMku6zl8te7bI7hnbA52orMegBOBR/wAJ5pH/AD5+IP8AwnNQ/wDjFAHSUVzf/CwfDEX/ACEtT/sfP3P7at5dO8312faFTfjjO3OMjOMjJ/wsfwR/0OXh/wD8GkH/AMVQB0lFFVtQ1C10qwkvL+XyoY8AkKWZiSAqqoBLMzEKFAJYkAAkgUAWaKo6VrFlrVq09g8hEbmOSOaF4ZYmwDteNwHQ4KsAwGVZSOCCb1ABRRRQAUUUUAFFFFABRRRQAVzkvjDzL65ttE0HVtaFnIYbiazEEcccg6punlj3kd9m4DoTniujrlo/DOt6TeXreGNbsra0vbh7uS31DTWufLlc5fYyTRYUnnDBjknnBwF1/r+u4+hPpWuW2p+Ijb3lhqmkatFbF1s72QbZISy5kAikeFiGwM53r7Bueirn9L8O3kev/wBua/qUV/qCWzWkItbX7PBFGzKzYQu7FiVXJL4wBgDnPQVXRf11/r5k9WYmoaDqN7fyXFt4s1jT4nxttraKzMaYAHBkgZucZ5Y8nsOKNE8NtpGq3upXOs6hq13eQwwNJerAuxImkZQoijQdZnySCenpW3RSGFFFclHe+KtX8Qa7b6VqWj2Nppl6lpGlzpctxI+baGYsWW4QdZiMbegoA62iub+w+N/+hh8P/wDghn/+TKPsPjf/AKGHw/8A+CGf/wCTKAOkorm/sPjf/oYfD/8A4IZ//kyj7D43/wChh8P/APghn/8AkygDpKK5v7D43/6GHw//AOCGf/5Mo+w+N/8AoYfD/wD4IZ//AJMoA6Siub+w+N/+hh8P/wDghn/+TKPsPjf/AKGHw/8A+CGf/wCTKAOkorm/sPjf/oYfD/8A4IZ//kyj7D43/wChh8P/APghn/8AkygDpKK5v7D43/6GHw//AOCGf/5Mo+w+N/8AoYfD/wD4IZ//AJMoA6Siub+w+N/+hh8P/wDghn/+TKPsPjf/AKGHw/8A+CGf/wCTKAOkoridBufG+t6dLdf234fg8u9urTb/AGJO2fIuJId2ftY+95e7HbOOcZrS+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMrN8OXPjfxB4V0rWf7b8P2/wDaNlDd+T/Yk7+X5iB9u77WM4zjOBQB21Fc39h8b/8AQw+H/wDwQz//ACZR9h8b/wDQw+H/APwQz/8AyZQB0lFc39h8b/8AQw+H/wDwQz//ACZR9h8b/wDQw+H/APwQz/8AyZQB0lFc39h8b/8AQw+H/wDwQz//ACZR9h8b/wDQw+H/APwQz/8AyZQB0lFc39h8b/8AQw+H/wDwQz//ACZR9h8b/wDQw+H/APwQz/8AyZQB0lFc39h8b/8AQw+H/wDwQz//ACZR9h8b/wDQw+H/APwQz/8AyZQB0lFc39h8b/8AQw+H/wDwQz//ACZR9h8b/wDQw+H/APwQz/8AyZQBJbeAfB9ndRXVn4T0OC4hcSRSxabCrxsDkMpC5BBGQRVnX9Kn1BbC7sGjF9pd19rtUmJEUreVJEyOQCQCkrgMAdrbWwwBRqX2Hxv/ANDD4f8A/BDP/wDJlH2Hxv8A9DD4f/8ABDP/APJlAFnRNLvk1W91vWlt4dQvYYbY21pK0sUMULSMnzsql2LTSEnaowVUD5SzbdZHhPVZ9e8F6Jq94kaXGoafBdSrECEVnjViFBJOMnjJNa9ABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVkaNpU+nat4gup2jZNS1BLqEISSqi1ghw2Rwd0THjPBH0GvRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAZHhrSp9G0ma1umjd5NQvboGMkjbNdSzKOQOQsgB989eta9FFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWR4T0qfQfBeiaReNG9xp+nwWsrRElGZI1UlSQDjI4yBWvRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAZHhPSp9B8F6JpF40b3Gn6fBaytESUZkjVSVJAOMjjIFa9FFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBBezy21jNNb2sl5LGhZLeJlVpSBwoLEKCfcgVy/gDWte1hvEK+KEt4bqz1QwR21s29LeMwROqb8AuRvOWI5OccYFdfXOeF9KvNO1jxRPeQ+XHf6r9otm3A+ZH9nhTdwePmRhg4PFOO7v2/VA9l6/ozo6KKKQBRRRQAUUUUAFFFFABRRRQAUUUUAFZHiK21y9soLfw7fw6dJJOv2m7dA8kUPJbylIKlzwBuGACTg4ArXrmfHNx4ki0eGDwlYz3E9xOI7ie3aHzLaHB3OizOqs/YZOBnJBxgpjRU8I6rqZ8W+IfD+oamdZh0sQPFfPCkcitKGJhk8sKhZQqnIUcOMiuxrmvBVrHpmltp1t4a1HRYYjvMl/LbyPdSN952aKWQs5IyWbGc/l0tUyUFFFFIYUUUUAFFFFABRRRQAUUUUAFFFFAGF4nGpeVA9trMGh6ZFvl1G/JTzY0VflCeYjRgZ+8zDgDgZORW8Aa1ea94aa7vZhdxpdTQ2t8ECfbYEbCTbQABu9gAcZAAIFXtcvdb0+5s59K0wapZ/Ot3bQsiXHI+RozI6oQDkMCQeQQeMGl4O0a606TWtQvIPsZ1i/N4tjuVjbjy0TDFSV3sULNtJGTwT1JHd/wBdV+n9XCXT+u50tFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFZPiXWxoGiyXUcP2m7kYQ2dqDg3E7cIg9MnqewBPQVrVga94V/tvV7DUo9a1LTbiwWRYfsggZcvgFissTjdgYBGCASO5pDRU+Gmr6prvw/sNQ1+ZJ9RkeZZ3jQKpKzOvAAHACgfzrqq5D4Y+HtT8NeC4rHWri4kufPmfypjEREDKxGDGozkEMcknJPQcDr6olBRRRSGFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB//2Q==)

Figure Elbow graph of PCA

#Kaiser's Criterion

pc$sdev^2

#prediction with Principal components to create training dataset

trg <- predict(pc, train)

head(trg)

#prediction with principal components to create testing dataset

tst <- predict(pc, test)

head(tst)

#now with the above components we'll add target variable, species to the train dataset

trg <- data.frame(trg, train[5])

head(trg)

#adding target variable to the test dataset

tst <- data.frame(tst, test[5])

head(tst)

![A screenshot of a computer

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM1NwAAkpIAAgAAAAM1NwAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDoyNTowNAAyMDIyOjAxOjA0IDIwOjI1OjA0AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MjU6MDQuNTc0PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAk0CQwMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APoq3LDT4jGAzeUNoY4BOPXtWfa+IraS9Sw1GOTTL9yVjt7rA848/wCqcErJwCcKdwGNwXpWhbqW0+JVYoTEAGXGRx154qvp2i2OlySzW0Ra5nx511M5kmlwSQGdsnAycL0GcAAVtB0+WXPv0/rt8vuFqXZJEhieSVlREUszMcAAdSSeled6D8S18Q+LxYWCl4GeVgEu7J8IqhRkJMzkbtzZAzjb1Ga9GrO07RbbTfM8l5XaSJIi0hBOFyeuOpLMT7mt8PVoU6c/aQ5pNaeQmm2rGP4R8UXXiq1guIRarFDEovWUEkzFc7EG7KgZBJOc5wO5oh8ZFvGy+H510tmkMgUWmp+dcR7RuHmw+WuwEf7R5x61csPCdjpclhLYTXEEtnCtu0ilc3MQzhJflwwBOQRgg5wQCQYLXwZBZ3lvNDquoCO1naa2gPk7It+7eo/d7mDbjksS3oRzXRKWClObS0s7LXR69t9bfL0s171h2lXN/L4x1OLUovIZLaIxRw3zTQlC8gDbDGmxzjnBYdOeKTQ/Et1q+sXFpNa2NosQZvIa+Y3igNhWeAxDapxkHeR0xnNbCadEmrzaiGfzpoUhYZG0KpYgjjOfnP6VQs/Dhg1aLUL7V7/UpLcOLdboQhYd3Bx5cak8DHzE/nzWLnQmpNrorb726fPu/TsPUxNN+JNhqfiWDTYX09ormeS3iEeoq90HTdy9uF+VDsbB3E/dyBnjU0DX9V1z7Pctosdtp0wkHnNehpFZWKj92FxtOODuz6qKnsvDp02/Etjq+oQ2XmNJ/Z2IWhyxJPJjMgGSTgPx244q9pWmQ6PpkVjbNI0UWdpkILHLE9gPWrxE8JZ+xh26vzu+mu3dCSl1G2+nyQ61eXzXs0kdxHGiWzMSkJXOSozgFsjOAOlZWh+JbrV9YuLSa1sbRYgzeQ18xvFAbCs8BiG1TjIO8jpjOa6M8isWz8OGDVotQvtXv9Sktw4t1uhCFh3cHHlxqTwMfMT+fNYU505Rl7Xe2m/T00+/11G79DXnmS3t5JpeEjQu2B2Ayaw9Dudf1NbbU7qfT4dPuUEqWSWrtMikZXM3mbSehP7v2963mUOpVgGUjBBHWsTSvDH9izRrp+r6hHp0WRFpjeS0Ea/3QTH5gUdhv46dOKmlKCpyTspeavp1S3s9v811bvci0LxBqutyRT/2LHb6c7yxtO16GkVkZlB8sLgqdvXdkZ5XvTdPudRk8Z6hFfwLD5dmjQJFftLE6l3AYoYl2Occ4LcYHbnX0rTIdI09LO2aRo1Z2BkIJyzFj0A7mnLp8S6vJqIZ/OkgWArkbdqszA9M5yx71pKrR5p8kbJqy37+vYVmYXhvWvEeqahfRarpml29va3LwGS2v5JHBCqQNrRKG6/eyv09aNj8SbC/8TRabC+ntFNdSWiBNRVroSJuyWtwvyoSpw24noSBmugttC+ya1Pf22pXkcNw5llsQsRhdyoUtkpvB4HR8e1R2nh02Gomaw1e/t7QytK2nKIWhLMSW5aMyAEknAcDPTA4rfnwjcm4rVaWclZ21763+XmL3ivoXiDVdbkin/sWO3053ljadr0NIrIzKD5YXBU7eu7Izyvek0251CTxrfxalEIBHaRmFIb5pomQyOAxQxrsfjnBbjAzxWtpWmQ6Rp6Wds0jRqzsDIQTlmLHoB3NOXT4l1eTUQz+dJAsBXI27VZmB6Zzlj3rCVWjzTUI2TVlv3832HZ6GFa+LLmaa1uZ9Nhi0i+uPs9rdC6LTMxJClotgCqxU4IdjyvHJxDH4yv3VbttFjj00agbGSdr395u83yg6RhCCucZyykc8HAJvWvhK3tr2KT7fey2dvMZ7fTnMfkQSEk7lIQOcFmwGcgZ6cDE3/CMWX9k/wBn+bP5X2z7Zu3Lu3+b5uOnTdx647963c8EnpHt321899vLsL3jZoooryywooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAgtwx0+IRkK3lDaWGQDj071kWPiRm1ptG1O2Ed+gBzaMbiMqclS2BuiyF/5aKq54VnrXt1D6fEjZAaIA7SQenqORWbp+oeG9P1E+H9MvdMgvlJkbT4Z4xNk/MzGMHcSc5JIyc5NbQlTUZKSu+nl/Xa33C1NhztjYjqBmuP0TxNrFx/YVzqv2E2+sxsEhtonDwuEL7izOQwIU8bRgkctXXuN0bD1BHNcd4C07w9FaRHTdTs9U1KxhFvcPa6i1zHbsfvBULERZK84VScc1vQlRjSn7RXfT7n92tn+Ane+hpeHb7W9Zji1We4sItNuAzRWaWrmZVzhd0pkxnuR5fHTtmsfSYXsvidfjWGvTcXEYNpOLyVreRSZCEMeQiMFHAK4O0sDkmuisfC+l6bqL3lglzbu7tIYY72YQbm+8fJ3+WCSSfu9TnrTbXwpplprkurJ9qkuZBgLPdyyxx/e5RGYhfvEcYwCQMZOd/rFFOoo3SkrLRLrto9u7d7/cKz0KOja1qs3iB7PXJra0dldorD+z5VYqG4K3JkMcvy8kKoIyMgYrOXUNU1a/8PalcPZ/2fc6gzW8EcTrLEoilALOWIckDOAq46c9a6Kw8Nabp199sgF3JMAQhur6e4EYPXYsjsE9PlA446U2Dwpo1tqCXsVq/nRTNNFuuJGWF2BDbELFUB3HIUAHqRwKPrGHUpOKeqtsuz89Omur0CzOd0fxrqera9AkVpIbG4uJYPLGk3S/Zwm4CVrlsRMCUwVAGNw+Y452tO167vYbOCSKFL8zyRXigHbGsRw7AZ4zlMZP8Y64q1D4a0221T7fbC7glLmQxRX06QFjnJMIfyyTkk/LyeevNW4dLs7fUrjUIYQt1chRLJuJ3ADA4zgdunXAz0qK1bCyf7uDWnlvr+Gu+7srglLqYmm6reya59suZ1Ok6kxhsVA+4yZw2e/mDcR/ur602ysTF4v36Pd38tvH5g1E3N7LNEXOCqIrsQrAnPyAADg9QK6isfS/C2maNdtcaeb5CzOxjfUbiSLLHLHy2coCSSelSsRTtJ2tdWstn67bL111HZmxRRRXAUFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/HnD/1zX+VYXh5BJqnidGyA2pYO1iD/AMe8XQjkVu2n/HnD/wBc1/lWVb+Gxba5e36apetb3zF59OdYWgdtgTP+r8zoo4349qAMvwXYQaZr3im2tfM8tb6L5ppnldj9mi5Z3JZj7kk1p2v/ACPWp/8AXha/+hzUum+DfDGjXgvNH8OaTp90oKrPa2MUTgHqNyqDUmlaE2m6jd3txqt9qU90qIWu1hHlopYhVEcacfOeTk+9AGtXG6RoWlSeMP7W8NadaafbW7TR3d3bRKjahKTgqSv3wrbiWb+Lp3NdlWRY+E/Dul6k2oaZoGl2d627dc29lHHId3XLAA89/WgDRt721u3mS1uYZ2t5DFMscgYxvjO1sdDyOD615rb2F3pHjHRFGii21aa/lW91fzIydSg2Ox+6TIwXEfEgUIQApIxXpVvZWto8z2ttDA1xIZZmjjCmR8Y3NjqeByfSqtloGj6Zf3F9p2k2Npd3RzcXEFskck3OfmYDLc880AeeeFxMutabr2o2Oj3V3qWoXNo8rW++/gZWk5E5P3FVNpiCjaD9499s6daaX8ULO5/sjT9Na+E6xXNgR5182wM32gbFwBgkcyZOMleh6uLRdLg1aXVYdNs49RmXZLeJAomdfQvjJHA4J7Uyy8P6NpuoXF/p2k2NpeXOfPuILZEkl5z8zAZbnnmgDzzwuJl1rTde1Gx0e6u9S1C5tHla3338DK0nInJ+4qptMQUbQfvHvtPp1rpXxOtLldH0/TpL4TrDc2BHnXzbAzfaBtXAGCRzJk4yV6HrItF0uDVpdVh02zj1GZdkt4kCiZ19C+MkcDgntTLLw/o2m6hcX+naTY2l5c58+4gtkSSXnPzMBlueeaAOF0K2tYU8L6vBFEmvaldumozocS3GEk81ZD1YIygAHIXaAMVt6b4V8Oy+MJtW07QtOtHsHdBc29okck07D94xdQCQAcc/xFu4FdFBo2l2uqXGpWum2kN/dACe6jgVZZQOgZwMt0HU9qc8ljpnkw7Y4BdTlERI8B5GyxzgdThiSaaTbsgOd8NWEGm+OPEUFsZinlWrFp53mckh+ruSx/E8DiutOcHHWubsfDfgyw8S7dN8P6Pa6vBGLkSwadGkiKxK7g4XqcMODmukocXHdAebaTb20cfh3WIo4l8QX2ovDezqcSzqPM8yNz1ZU2jCnIXauMV6Fb31pdy3EVpdQzyW0nlTpHIGMT4B2sB904IOD2IqKLR9Mg1WbU4NOtI9QnUJLdpAolkUdAzgZI4HBPaoRNpGl6t9lhihhvtRczOlvBl5SFx5km0cDChd7cdBnOBTjGUnZK4HnGhW+zx1b63NY2Bs77VbqG21OAY1CR8MPKuDgZjBSTABPCx5C7TXVab4W8Oy+MZdX03QtNtHsHdBc29okck07D94xdQCwAOOf4i3cCt+Dw/o1trEur22k2MWpTArLex2yLNIDjhnA3HoOp7CrkNvDbIUt4o4lZmcrGoUFick8dySSTUgeVaFb7PHVvrc1jYGzvtVuobbU4BjUJHww8q4OBmMFJMAE8LHkLtNTackh8SHxFqOn6TeXJ1yTTx9otvMvYBvKIYpS2I1Vfm8sLyCzbsk16HB4f0a21iXV7bSbGLUpgVlvY7ZFmkBxwzgbj0HU9hT/wCxdK/tn+1/7Ms/7T2eX9t+zr523+7vxux7ZoA8505JD4kPiLUdP0m8uTrkmnj7RbeZewDeUQxSlsRqq/N5YXkFm3ZJrpLfwt4dvPG7anaaFpsE2myF3vIrRElluXXnLgZO1W5z1L/7NdF/Yulf2z/a/wDZln/aezy/tv2dfO2/3d+N2PbNWYoIbff5ESReY5d9igbmPVjjqT60Aeaahp9zpfibT5m0gLrM2sgJrZkjzdWzsxMIwxkIWPgoyhBsyDkCtbVtOsNO+I+j6i+k6fYyXd00SahZkC6vJDC+UmG1T5YC5+8/KrwoGa6m30DR7TVp9UtNJsYNQuBia7itkWWX/ecDJ6Dqaqwad4btPFkkttpthBrtxAZpLiO0VZpI9wBLSBcnkDgnsKai3sgNqvNLW3thFpuuGKEeJJtca1luM4mkTzmDwlupRYxkIeBtB7Zr0usixg0C81261GzsrT+14R9nuLg2oS5VeysSA+04yOxAyM0KLabS2A0Yb21uLieC3uYZZrZgs8aSBmiJGQGA5BI55rldH023074oasLbzmMumW7u887zMSZpjjc5JAGeFzgdgK6qGytbe4nnt7aGKa5YNPIkYVpSBgFiOSQOOayofBXha31Iajb+GtHivlkMouksIllDk5Lbwuc+9IDC1vTLKw+IOj6o+kafZvc3YjGpWhAu7mRonHlyjap8vAHO5/ur8oAyMjWbC60zxDbXJ0gf2zNrKeRrfmRlprdpMmAYbzTti3AoV2AKWBzXfQ+HtFt9Zl1e30iwi1OYESXqWyLM4OMguBuPQd+1LB4f0a21iXV7bSbGLUpgVlvY7ZFmkBxwzgbj0HU9hQBwWla6mo/FSxu7y31eC5uLa6git59Luo0gjDR7fmaMKScFmYHAyq56Z3k8LeHr/wAcHULbQtNiuNNk82W9jtEWWW5ZeAZAMnarZOepZfSura3ha4S4aKNpo1KpIVG5QcZAPUA4H5CiKCGDzPIiSPzHLvsUDcx6scdTx1oA801jT7rTfEVrcHSB/bM+sp5GuGSPM1u8mTAMN5hCxbgUK7AFLZzRrGn3Wm+IrW4OkD+2Z9ZTyNcMkeZrd5MmAYbzCFi3AoV2AKWzmu/g8P6NbaxLq9tpNjFqUwKy3sdsizSA44ZwNx6Dqewog8P6NbaxLq9tpNjFqUwKy3sdsizSA44ZwNx6DqewoA89tlkPiWbxBqFhpN9PFrpsEW5t/NvIQWCxmGUtiIBSG2BTkbm3DNepVSOi6U2srq7aZZnU1Tyxem3Xzgv93fjdj2zV2gDzSe3t2hvdcmihHiOHXhaw3Gf3yp56hIQ3UIYjkp0O4tjvXosd7ay3ktpFcwvcwKrSwrIC8Yb7pZeoBwcZ61A2jaW+sLqz6baNqSR+Ut6YFMyp/dD43Y5PGe9Tx2VrFeS3cVtClzOqrLMsYDyBfuhm6kDJxnpQB51Pb27Q3uuTRQjxHDrwtYbjP75U89QkIbqEMRyU6HcWx3res9PgsfipM0BmZp9KMjtNO8pyZ+gLk7V9FGAOwroG0bS31hdWfTbRtSSPylvTApmVP7ofG7HJ4z3qj/whfhb+0/7S/wCEa0f7d5nm/avsEXm7853b9uc575zQBwepWwfx7ca49jY3Fhbavb276gR/xMbaTCr5cZx/qSzJkbs4aT5SGzXS3WhaVqXjWO60XTrSDULK6WbUdWiiVZW+X/Ubx8zEgrkHgLjvgV0T6Bo8mtLrEmk2Lami7VvWtkMyjGMCTG7GD61B/wAIn4d/tn+1/wCwNL/tPf5n237FH527+9vxuz75oAxLrQtK1LxrHdaLp1pBqFldLNqOrRRKsrfL/qN4+ZiQVyDwFx3wKlh0+Cy+KokhMzNcaXLI5lneXnzk4XcTtX0UYA7Ctb/hE/Dv9s/2v/YGl/2nv8z7b9ij87d/e343Z981G/grwrLqf9oy+GdHe+MvnfamsIjLvznfv253Z5znNAGH4t06ztfFGk6xPpOnw/6ZBGdWhx9uZydqxY2jMZyATvJxn5O4x/Fthd2Gp3F9/Yon1STUIG03WzLH+6RnRfs4580HG/5FUowJJIycd/8A8I/o39tf2x/ZNj/amNv277Mnn4xjHmY3dOOtKNB0ca0dYGlWI1MrtN8LZPOIxjHmY3Yxx1oAv0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAV4tg0xPNbYnkjc27bgbeTnt9awdDvNXl1Fo7fzr7RwflvNQj+zyj72QmBmUD5QCyJxyHkzXQ2n/HnD/wBc1/lUtbQqKMZRavf8P+D8/W4rDZY1mheNywV1Kko5U4PoRyD7iuD8EW+i6bfajZR6pN/bEd1dZsZ9XlldYzISrmF5DyQVO/bk5znmu9Y7VJPQDNVdJ1KHWNJttRtldYbmMSIsgAYA+uCa1pVpwozjrZ22dtdd+/UTV2c/4I095NB0vWbnUtSuruazAkE927xvnBHyE7QRjAYDJ7k9awdI1SG41rR2/tm8k1ma/kTU7EXkjJCAkuEaHJWMDaMcLuxn5utek1jReHj/AGxHqF/q19qHkOz21vcCFY4GYEZXy41JwCQNxbg+vNdMMXGUqkqnW9vxstttfLZdhcu1jZOdp2jJ7ZNcxBeajJr8cfiF5tPXd/o8Fqu62mPH3rjG4nPRSIs5I2vjNbl5qMVjcWcMquWvJvJjKgYDbWbnnphTTH1aEawumwxTTz7Q8xjUbYFOcFySOuMADJ74xzXJS5op+7e637efb9exTIrW4159SZL3TdOhscttmh1CSSUj+HMZhUDPf5zj3rTqOK4huN/kSxy+W5R9jA7WHVTjofapKxm038Nvv/VsDzTwzqPn3uhm01m81DVZJ5hqFvJetIIrf95gtFnauG2BX27j6nmt7wVpz3Gl2Ws3ep6nc3TCVWWa8domUyNgGP7vGOGxu9Sa6HStMh0fTIrG2aRoos7TIQWOWJ7AetM07V4NRmubcRTW91asFmt512uoP3WGCQykdCpI6jqCB6WIxTqqfso6d/K8vLbVLysl2JUbbnn/AIf1TU5/GkC6hqlhbXxu50ubKfXZTNJF8+1VsjGEXgIwdTkgE5OTUlpe2l5rejvNql1LrR1Zxe2X2l5Ft8JMFVouVhGAMEBS2M5bJr0uinLMISbahbS2j9fLbXbyQuR9znNNtRYeONQhhuLx4pbOOcx3F5LMquZJMlQ7EIOBwuBwKydCvdJudckXXNcmj8Q/a5kGnSapJDhckIEtw4V12YIbac9c56dzRXN9a0ldO7SV766K3bZ9V6alcpwfhKy0XSfFWq2TapOmqfbXaGyudYmkeSIxqd/lPId/f5iCeOvFbuh/8jH4g+0bftP2iPb/AHvI8pdn/Ad3mfju9636qT6XZ3GoW9/JERdW+RHKjsjbT1VsEbl5ztbIzg4yAadTFe2lJzvqkt77W9NHb/hwUbHn/h7UhPqGk/ZdavL7V3vZ0vLV7x3EdsHk5aHO1QMKFcjJ4GT0rT0C+0qfXn/tvXJo/EQu5UXTpdTkhAUEhAttvCuuzBDbTnrnPTrNK0yHSNPSztmkaNWdgZCCcsxY9AO5q5W1fGwnKXLF2fW9nu/LbXby3EospQ6vYz61c6TFPuvbWJJpotjDajkhTnGDnaeh7VdPIqFLSCO8lu1T9/Kqo7liflXOAB0A5PT1qavOny39zy+/r+OxZwPh2z0TSfHer21xqk8OpSXYe1tLnWZmadDCvzCJ5D5nIbkg4247caHhTT3vlbVbvU9Slnhv7tEja7fytgldQhjztIHUEgkYABwMV11FdlXGyqJ73aSu3fZW7bMlRseY3HiKJfiDay2159kiXUmtr1LjXJWcAoyrutGzHEjOF2tkE5Xj5q6y2tRZePZVhuLxo7mxaZ4pruWWMP5gGVR2KpweigCuiop1cZGaSjG3u23vf/hhKNjziNbpNHXWm1TUpLtNcMCK15J5SxG78soYwQrDaT94EjsRgY6i6z/wsDT/ALN977DN9qx/c3Jsz/wLdj/gVb9VbPTLSwlnltotstw++aVmLu57ZZiTgdAOgHAxRPFqd21rrb0fT5brzDlsWqKKK88sKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAK8Ww6YnmrvTyRuXbuyNvIx3+lYOh2erxai0lv51jo5Py2eoSfaJT97JTBzED8pAZ344CR4robT/AI84f+ua/wAqlraFVwjKKW/9ff5/cK1xsgzEwHXaa880Twwum6d4RvbbSnh1MShby4aJjMsZikyrsfmCBtvyngcAAcV6LRWlHEzoxlGOz3+5r9RONzzLwjpN5a+KoJdTYQakjzfa3j0C4RrrOcCS9LtHIv3SOmMAADGKNPgmHxBtdVGiR6e32iaK6+y6HNHKN4IUyXP3Z1JUElV2rxk9z6bRXZLMpSlKTW6t0218ttdOq01toLkPOdK05Bq+jyHRLpNYjv3bVL42boHPlygFpSAJF5G0gsF4Hy8Cul0Xy4tc13T7wq1xPcfaVRwP3kDRqoI9QCpU+mPeuhqKW1t55oZZ4IpJIGLRO6AmMkYJUnocHHFYVcZ7ZvmXS2/nf7uluiGo2ON8J6JoeheI9Qt4fD0dnftdyvb3MOksqCBgCFE4TYB1+Xd+FWvBfhexstLstRn00RasglUzzKwmCtIx2knnb3C9B2ArrawNN8b6Fqt9FaWk90HmLrC9xYXEEUxXO4JJIio54JwpJwCegNKrjalRS1fvWvr2TX3O+wKKRyOm29pBr2h/aNIuINd/tGT7ffSWjR+cfLlx+9IAlGPu7SwUAZ28CushkW9+IMslnKrx2Nibe7KnIEjOrIh/2goJx2Dj1qlpFx4Yn8SNNpx1a9usybLmZb64tVP8XlSSZhHp8h9h6Vp+HdZ02/kvLHSbGeySxZdyS2htgfMBbIRgGHOc5Uc885zWuIxkKj5o3va2vm2330WyX+WqUWjbooorzCwooooAKKKKACiiigAooooAKKwLXxtod5qYsIZ7oSmdrdZJbCeOF5VJBRZmQRs2QRgMc4OKlt/FukXmq/2fZyXVzJ5jRGaGwne3DrncpnCGIEEEEbuCMdeKANqisI+J/K16HTb7R9Rs47mVoba9m8kwzuAW2gLIzrkKxBZVHH0zu0AFFFFABRRRQAUUUUAFFFFABRRWBB410O41T7BHPdCX7Q1sJZLCdIGlUkFBMyCMtkEYDcngUAb9FY0XizSbjVv7Otnu7iUSGIywWE8lurjqpnVDGCDwQW4PB5ovPERsNbgsbvSL9Le4lWGPUR5LQGRhwuBJ5g54yUxnvQBs0UUUAFFFFABRRRQAUUUUAFFFFABRWA/jfQo9Wk06Se6SWO4Fs8rWFwLdJTjCGfZ5YJyB97qQOtTP4r0ldYOmRvdz3CyCJ2trCeaKJz/C8qIY0I4yGYYyM4zQBs0VlXHiOxtvE9noLea97dxPKNiZSNVGfnbsTg4HU4PpWrQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/8AXNf5VLUVp/x5w/8AXNf5Vh2WvaqPEkWk63pNrafaoZJraS0vjcZCFQRIpjTYfmHQsM5GemQDoaKKR2KxsyoXIBIVcZb2GeKAForE8O+IJ9budThutLk02SwnSLyppkdyGjV8tsyoPzYwGYcZz2G3QAUVy1l4wuJ9QsmudMjg0rUpmgsbsXW6V3AJHmRbAEDbGwQ7dshScCPTPGk+o+JPsH9n2q2rTzwB0vi1zE0XVpYDGNinjB3t95OPm4AOtrhPD3gS5TQoF1vUr9rmFZ/s1q7Q+VZPJvXcnlqCx2txvZsZ7GtTTvFtxeXlnJNpiRaTqUjRWF2t1vkcgEgyR7QEDBWKkM3bIXOKmg17VYvElvpus6Va28V75ptJrW+adiE5/eIYk2ZBHQsM8Z6GgCHwzdaxYWdnompeHLmL7HCITf28tubWQIuAVHmeaMgDgpwT6c1V0C41f/hM9WuLzwvqdla6gYfLuJprRlTy0IO4JOzcnpgH3xU+leNP7Z8SSafZJpnkIJCFk1IC9dUJUuLbYfkLDAYuPXHSr+h6/Pq+palZ3Oly6c9iYvkmlR3YOueQhKjp2Zvw6UAbdFFFABRXM2Xi24ury0kk0xI9Iv5mt7S8W53SM43YLx7QFVth2kOx6ZAzx01ABRXOxaz4hXxLDp15o2mi2lDuZrbVHkkjjXo7RtAoGTgYDnknqATU+jeIJ9U1bUbG50qbT3sliYLNKju4cN1CEqPu/wB49e3SgDborE0XxBPqur6jY3Olzac9ksTATyo7uHDdQhZR93sx4PbpVK28X3EuoWjz6ZHDpF/cta2t2LrdKZAWA3xbAFVijYIdj0yBngA6iisKy8Tx3/i+60S3tXMVtb+YbwsNjuH2tGo6nbkZPTOR1BwaT4in1LxDf6Xc6TNp5tIY5VM8yM0gdnXOELAD5Mj5icHkA8UAYvh/wTcrvm1vUL8rHqFzdW2nl4RBEzSuUkBRA7Ha2cM5AJ6ZAxa8KvrOiWdl4f1Dw/cyJagwjVLaaA27oM7XKtIJQxGNwCHDE4JHNW21nxDD4mttPm0bTTaXDuRNDqjtMkSj/WNEYAOpUYDnlu9RQ+LbiW+hl/sxP7FuLo2cV8LrMnmhigJi24EZYEBg5PI+UA5ABDZPql94yebWvDuoJFbSulhcedbNbwpjHm4EvmF3GRynyg4GMsT1tYWk+Ip9S8Q3+l3OkzaebSGOVTPMjNIHZ1zhCwA+TI+YnB5APFbtABRRXMQ+LbiW+hl/sxP7FuLo2cV8LrMnmhigJi24EZYEBg5PI+UA5AB09FFc9ca9qth4htLTUNJtU0++uDb21zBfGSYttZgXiMYAUhTyHYjjjrgA6GisG61vVbHxLaWV1pdqdOvZjDBcw3rNMGEZfLwmMAL8pGQ7Y4454r23im5vPG93oVvDpWyzI87fqZF3tKBt624iOVywXJcd/pQB01FctF4yN54u/seyTTBGkrRMbrUvKuZSn32hgCMZFU8ZLLyG9Mm3da3qtj4ltLK60u1OnXsxhguYb1mmDCMvl4TGAF+UjIdsccc8AG9XFaD4LuRPPPrd/feUuqXF5b6dvhECEys0cmUTeTg52s5GT04GLQ8Yzv4qbTI7C2a3S7Fo5+2kXQbZu3+Rsx5eOd2/OOcU6Lxkbzxd/Y9kmmCNJWiY3WpeVcylPvtDAEYyKp4yWXkN6ZIBH4XOsaBa2vh+90G6nit2Ma6pbTQeQ6ZJDsrSCQNz8wCHnOCabrFlqF74ysZ9P0rUI3tpkL39xeI1mYhneFg81iJCCVDiNW/2scHSXxPHL41GgQWrSKtu8kt3vwqSKU/dgdziQEntkdc8Vv8AhKbiXx3L4etotJPkKjyCbVCl0yFQS6W4iO5RkDO8c5oA6aiiigAormJPFtwl9JLHpscmiw3Yspb0XX70S7ghIi24MYYhS28HOflwMnp6ACisSz8QT3PiubRp9Kms1jtjcJNNKhMoD7MhULYU9QSQfVRRZ+IJ7nxXNo0+lTWax2xuEmmlQmUB9mQqFsKeoJIPqooA26KwtR1rVNN16zgl0y1k028nW3juI71jOHKk5MJjA2jByQ5IHOKryeKbhvHbeHbWLSSY40lkE+qGO5ZCCS0cAibeBjruFAHS0VzFx4tuIryaWLTEl0e1uhZ3F59pxIshIUlYtuGQMwBJcHg4U45LjxbcRXk0sWmJLo9rdCzuLz7TiRZCQpKxbcMgZgCS4PBwpxyAUrDwZcXOsarcazfXwsZtU+1w6crQiCTaEKOSqeZ95c7S4HHIxUugf2z4cZ9GudCub+3N3LJFqdnLAI/LkkZ8yLJKrhxuwdqsDjI64Etz4zA8XJodkul7hKInN9qX2eWVtoZhBEEYy7VYZ5UZOM9cXbjxPHF4ys9AhtXmMyOZrkMAkDBdyoR3YjJx2GCeoyAYMXhXxPaeMLG//tTTbu1+2T3Fw/8AZrpKqsm1VLfaCDhcICFGMZIPNd3XL33i+4s7yeYaZG+j2d0tpdXjXW2VJCVG5YthDIC6gkuD1wpxz1FABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQ2v8Ax5Q46+Wv8q53w1Y+IrfVLm48RWGlmSfduvbbUJJZMZ+SNY2hUIgHYOeeeSSa6K1OLKEngeWv8qwNA8TXOt+JdRthBEmmxW8UtnMM75wzOpc9tpKfL6jnvwAdLWPZ+G7TTL6W+s5tSluGVsJdavdTRZPP3HkZV+oXjtWxRQByfhux8T2fiLVLrWNP0mG11KZZma11KWZ4isSoF2tAgbO3OcjGehrf0/8AtTzr3+1fsfl+efsf2bdu8nAx5m7+POenGMVjWOo69b+Lo9K1afTr6K4tnuAbK1kha1CsAoctI4cNkgH5OVPB5x0pztO0AnHAJxQBxVv4Lll8YRajc2NpZWdndPdQrDqM9z5khDLkROix2+d5ZvLyWPU9zDpHgrULPxNFfTwabC8U8sk+q20rfatSjfdiOZNgGBled742DAGeN3QNX1S+1rV7HWLezt2sjDsS1kaQAOhJy7Bd3T+6vpz1rIs/F+of2jpVxfyaf/Z2s3clnbWscbC4gdQ2NzlyH/1bbgEXaSBk4yQCbTPDOq28ul6dd/YRpGiymW1mjkdpp8KyoroVATaG6hm3bQcLnFWNBsvEUWvXN3r9hpT+czhbyDUJJJI48/JGsTQqFGAN2H5PPPGKNp4v1L+0NLuL19O/s/WbuSztbSNGW4gkUORvcuQ/+rO4BF2kj72MnX0DV9Uvta1ex1i3s7drIw7EtZGkADoScuwXd0/ur6c9aAMfSvB2oadcWFl5WnLpmmXs19b3MUjCeVn3/IybML/rDlw7bsfdGeLeh2fii38Wajf6np2kRWmoGPcbfU5ZZIvLQqMKbdQ2f94Y96fa69fnxxLpX9paTqVuiu1xBZwsk+njAKecfNcHdnAG1CeoBANQaZ4m1W4l0vUbv7CdI1mUxWsMcbrNBlWZGdyxD7gvQKu3cBlsZoA7CgjIwaKCcDJoA5Cw8M6rBLp2m3Bsv7H0q5NzBMkjtPNjdsRkKhU27vvBm3bRwM8dDp/9rfar/wDtX7F9n8//AEH7Nv3+TtH+s3cbt277vGMVz1h4m1WeXTtSuBZf2PqtybaCFI3WeHO7Y7OWKvu2/dCrt3Dk456+gDO02xnt7i+ur1ke5uZiV2MSFiXiNeRxxyf9pmrD0iz8VQeML/Ub/TdHjs75YkYw6pLJJGIw2CFNuobJYcbhj1NVdG8bSaz4nEKX9nbWLzy28Fu2nzO07RllOLreIQ+VJ8vDMAPyvw63qP8AwnR0ldR0rUbfDtPa2sDJcWC4yjSt5rA7jwBtQnORnBoAi0iz8UweMb7UNQ03R47O+WJHMGqSySRCMNghTbqGJ3DjcMepqo3gia88VLeT2ltp9nb3TXcTQajNcM8m1lDLC6CK3PzFiUyWPU8klmk+Nr3UvH8+iC605mt7iWK40xbeRbm1jVQVmaXeUcNuTACD7+M5Rq04tc1AeOTpS6jpWo2+Hae1tYGS4sFxlGlbzWB3dANqE5yM4NAFbQvA95oPiS2u08Rahe2NvZNbiC6W3ySXDclIVJHfOdxPXPNPsLLxTH45utUu9N0dLK6hit2MWqSvIixs5DhTbgEnf93cMY6mksPE2qzy6dqVwLL+x9VuTbQQpG6zw53bHZyxV9237oVdu4cnHMFl4zn1LxabaO+s7TT1u3tEik06eVp3TII+0hxFGxIOIyGYgZ/iwADprCxni1C/vb1kaW4kCxbGJCQqPlXkDByWY+59q5+HwxqqS22lN9h/sO1vjfLP5jm4c+YZFi8vbtADH7+8khcbRnIsSa1qUXjqHS4tR0m/gkJM1jDAyXVlHsJWSR/NYEFgByi53DB45e03iaPxZb2o1HSbixctLNCumypLFDyF/e+eVLFsD7gzhjxigCtYWXimPxzdapd6bo6WV1DFbsYtUleRFjZyHCm3AJO/7u4Yx1NddXE2XjOfUvFpto76ztNPW7e0SKTTp5WndMgj7SHEUbEg4jIZiBn+LA7agArj4fDGqpLbaU32H+w7W+N8s/mObhz5hkWLy9u0AMfv7ySFxtGcjsK4+HxPqry22qt9h/sO6vjYrB5bi4Q+YY1l8zdtILD7mwEBs7jjBAOjs/7U/tC+/tD7H9j3r9i8jd5m3b83mZ4zuzjHasSysfEQ8YT3up2Glz2hkZLe5XUZPMtoMcBYTDt3E/eO/n1woFdRXHJ4o1RpI9V/0H+w31A6f5BjcXAPm+UJfM3bSN4+5sHBzu7UATXeg6leeNbfUorDS9OiglDSalb3Dtd3cQUgQunlqAmTnl3A2ggZ5FjVNM1jVvEmnM8On22mafci6W5EzyXMpCFdgTYFjB3HLb2yBjHORkr4zvZPiI2gJdacJEuPLbS2gf7SYNm77QJd+zb/ALOz2zmrCeKNUaSPVf8AQf7DfUDp/kGNxcA+b5Ql8zdtI3j7mwcHO7tQBEvg/UItQls4ksBpM2qjVWu/McXKvuDmPZs2nkY37x8pxt71bu9B1K88a2+pRWGl6dFBKGk1K3uHa7u4gpAhdPLUBMnPLuBtBAzyBNd1M+PJNMuby1srMSBbeGfSp912PLDHy7kyCIsDu+UKThTx3FW48Xaja3iX8zWC6S2qf2WbQxt9qDl9gk8zft64bZs+6c7u1AEX/CF6gfFn9oNBpodb77SutrKwvTFnP2Yp5eDHjKcyYxg7c1IPB2oR38tlElgulTaqNVa7EjC5WTcHKBNm08jG/ePlONtXbjW9Sg8dW+mQ6jpN7BM2ZdOigZbu0i2EiV381gV3DHKLncMHI5kg8TXF346TSrWCI6YIJt1yc7nmjZAyr22rvwT/AHgRxg5AKOneBLzSvFGn38HiTUbiytUuN8FyttlmkZWxlYAxBIJJLbsgc9a0da0zV9Y1mxiENhb6baXMd0Lvz2e5LJzsWPywq56Ft5+UkY54ju9R17TvFNhBPPp13Y6hcPGlrDayJcQoFLeYZDIysBgAjYv3hz650njaSbxhJYQ39nZWVteCykM2nzXBlkwpKmZHWO3J3BVD5LHoOQCAdvRRRQBx8vhjVDLPpUX2H+xLi/8At7ztK/nqTIJGiEe3aQWH394wDjbxk9HB/an9sXf2n7H/AGbsT7L5e7zt3O/fn5cdMY981zkvifVBLPqsX2H+xLe/+wPA0T+exEgjaUSbtoAY/c2HIGd3OB2FAHJfY/FP/Cef2r/Zuj/Yfs/2TP8Aakvm7PM3b9v2fGcfw7sf7VH2PxT/AMJ5/av9m6P9h+z/AGTP9qS+bs8zdv2/Z8Zx/Dux/tUyXxPqgln1WL7D/Ylvf/YHgaJ/PYiQRtKJN20AMfubDkDO7nAlm13Uk8e/2XLd21lYkoIUn0qdjd5TLBLrzBEGzn5Npb5ScGgA1TQNQ1DxfbX9vp+lWIgkQtq8U7G9liU5MBTywNjHggyMO+3OMWdd03V9Z1Ozt0hsYNNt7mK6N4Z2a43Ic7Vi8sKuem7eeCeOaY3ia5l8dWukWcETacUmSe6YncZ0CnYnbAB+Y+pA7GjUZvE0HiK1hstR0l7W4mz9lfTZfNSFcb2MonxnnAOzqwGOpoAq3XhjVHku9Lg+xf2NfXovJpnkfz4/mV2iEe3awZl++XGA33TjkuvDGqPJd6XB9i/sa+vReTTPI/nx/MrtEI9u1gzL98uMBvunHMl3rupxePE0x7u2sbBhH5QuNKnf7UxBLKtyJFiVuOFILexq3b6xqp8bNpN9bWcVo1o9xC0MrySNtkVQWJVQuQ33QDjH3jQBkXvg2/fUtTt7OLTzpusX0V9c3UkjLcQMmzhECEOf3Ywxddu48HHMkfgS9tPEthqFr4l1KS2hup7ma3nW2OTIDwCINxHOOWyFAweKvajN4mg8RWsNlqOkva3E2fsr6bL5qQrjexlE+M84B2dWAx1NGozeJoPEVrDZajpL2txNn7K+my+akK43sZRPjPOAdnVgMdTQBna94Ll13xEzNY2kFhLJFLPcDUZ2aYxsrc2m0Q78qB5pYsAOO2O2rkLrxPqiSXeqQfYv7Gsb0Wc0Lxv58nzKjSiTdtUKzfcKHIX7wzx19ABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAVDaw32jfZLlS0M8HlyKGKkqVwRkEEcelYmi+BrDQfEUuqWN1qDK1qlskFxqNzOqBSxz+8kYHqABj5cHHU10Np/x5w/9c1/lXK6FdapH4tubbX73Vo3ladrO2njtPsksQfho2jXzAyqVyJGBOTwccAHX1k2PhTw9pWoPqGlaDpdleuGDXNvZxxyNu5OWUAnJ6881rVk2Hivw7quovp+l69pl7epuL21veRySLg4OVUkjB60AUvDeha5o11cNqWr6ffxXDtLK0WmvDPI5PBaQzMCAvygBBwBjGK1bC1v7eS9a91EXizTl7ZTAqfZ48DEfB+fBBOTzzWHprarbeMzZLrd1rNoIHa8FxDAq2cmVMao0SKckEna244CnIz83VUAcvo+geIbDxLeanf63plzDfFPOgh0qSJvkUqu1zcMB15ypz7U228GAeLn1y9bS9wlMqCx037PLK20qpnlLsZdqsccKMnOOmI4b69i+IP2CLWb+eGRJWlttQs0iiQ4BT7O4jQy4zzhpAB1IOM2vD13q8mv67Y6tfQ3TWpgMRhtvKRN6EnC7mb06sfw6UAQ2/gz/AIq2TXLttLDiQyxix0z7PLI+0qpnl8xjLtVjjhRk59MO0fQPENh4lvNTv9b0y5hvinnQQ6VJE3yKVXa5uGA685U59qf4evtUOva7Z63fw3Qs/IZGitxBGgZCTgFmOOP4mP4DioNC1zUtV8Y3PmOqaRLYpNYw+WAxHmMvms3X5uoHYY7k0AXP7A1G78TW+p6vqVrNBYmQ2lva2TQsN42kSSNI+8Y7AKCcE9BUGneErizvLOObU0l0nTZGlsLRbXZIhIIAkk3EOFDMFAVe2S2M1BDfXsXxB+wRazfzwyJK0ttqFmkUSHAKfZ3EaGXGecNIAOpBxm14cvNWk8Q65Y6xfRXf2UwGMw2/kom9CSAMs3bux/DpQB0lFFZMHivw9das2l2uvaZPqKFlazivI2mBXqNgOcjvxQBn2XhK4tby0jk1NJNIsJmuLSzW22yK53YDybiGVd52gIp6ZJxzsafaahbXV/Jf6l9tinn32sXkLH9lj2geXkff5BO48/NjtXLabrOrSLo+uzai8tpq939nOnGBBHAjb9jIwXfuG1d25mBycAcV29AHK2ng6e1v4I/7SjfRrW7e+gs/suJVmYs2DLvwUBdiAEB6ZY45tPoOpXvia11LVNTtZLWwkkktLe1smikBZSuJJGkbeME8KqZOCemKoWN3qkPjmeHWrzVoLeeZ10+F47Q2c6hc4VkUzBwAThyucHGcVkaT4n1O5+IDWVzqN8kZu7iLyZrWJbCWJFyv2eYIHeXpuUucFZcgALQBs2Xgu6t9UtWuNUhn06wu5by0iFmVuVeTdkPNvIZfnbgIpPy5Jwc3X0DUr3xNa6jqmp2slrYSSSWlvbWRicFlK4kkaRt4wTwqpk4J6YrH0/WtVaPSNeuNSeSz1a68htPaGMRwI2/YyMF37htG4szA5bAHFXNF13UdV8aS5dV0aaxMtlFsG59sgXzi3XDZ4HoAe/ABNZeEri1vLSOTU0k0iwma4tLNbbbIrndgPJuIZV3naAinpknHMcfg2aPUPLXUYv7F+3HUPsX2X9755ff/AK3fjZv+bGzPbdjinWtlqq+MNsXifUru0gDSXVtcQ2vljcDsjUpCrgj72Sx4AzndmnaLeax/wmuq6dq1/DdRRWkE0KwW3kqm95R3ZmJwq5JbGRwB0oAlu/D+p6l4ks73UNUtTYafcG4tba3sSk27YUAeZpGBXDNkKi545xkHTsNONpdXtzLL5013NvLbduxAMKnU8Dn8ST3riJPFt3b+IYTLrW66Opiyn8PiKM+VA0hRJuF81SRtbeW2HOAMkUSeLbu28QxNLrW66Opiyn8PiKM+VAzlEm4XzVyNrby2w5wBkigDbj8GzR6h5a6jF/Yv246h9i+y/vfPL7/9bvxs3/NjZntuxxXVVyWna/qGp+Oo0ikVdEms5mt02DdO0bxgy7uu07iFA6gZ5yMdbQBkp4U8Ox61/bEeg6Ymp7y/21bOMTbiME78bs4OM5rOh8JXEV9DF/aaf2Lb3RvIrEWuJPNLFwDLuwYwxJChAeB8xAwenrhrfWtWdLPxC2pSGzutR+xNphgj8tYzMYlcMF8zzMgEksVwSNo4IAOss7W+h1C+mu9R+0287qba38hU+zKFwV3Dl8nnJ6dKxV8I3C3yQjUoxoiXhvlsRa/vfO3+Zjzd2PL3ndt2Zz/Fjiunrho9b1V44vEI1GT7HJqhsDpfkRmMR+eYQ4YL5nmZG7O4rjjb3oAu/wDCGXLamPM1OF9LXUP7SSE2h+0pNu3YE+/GzORjZnacbsVKvhG4W+SEalGNES8N8tiLX9752/zMebux5e87tuzOf4scVmx63qrxxeIRqMn2OTVDYHS/IjMYj88whwwXzPMyN2dxXHG3vWjJZ6r/AMJlClp4m1KSBSbi6s5IbUwpGchYwRCJASeh3E4U5PSgC3faHqWp6/aXF3qkK6XZzi4is4LQrK0gUgb5S5BUZJwqKenOMg0rrwYdQ8XDV719LEKSJIottM8u6k2YKLLcGRi6Bhu2hV5C84BBk0m71geO9S07VNQhurdLGGeGOC2EKx7pJR3ZmJwqgktjjIC81mR63qrxxeIRqMn2OTVDYHS/IjMYj88whwwXzPMyN2dxXHG3vQBsX3h/UtU8QWl1qGp2v9nWNx9ptra3smScOFKgNMZGBHzNkKik8DOM5q2Xw80rTPEVjqmn3GoxJZxyqts+p3UsZLlTwrSlQBg/LjByD2FYt34tu7PxAGk1n/S11RbOTw8I4zi3eTy1n+75oJBV9+7Yfu4zW7JZ6r/wmUKWnibUpIFJuLqzkhtTCkZyFjBEIkBJ6HcThTk9KAJLDQtcs/FF3qUur6dcW11Jlo20xxcLEB8kSy+ftCqefucksepzUVx4Onl1C5WLUo49JvbtL26s2td0rSqVOFl3AKhKKSCjHrgjPGHd+Lbuz8QBpNZ/0tdUWzk8PCOM4t3k8tZ/u+aCQVffu2H7uM10Nnd6vH4/m0+/voZ7RrA3EUUNt5YT97tGSWYs2OCcgH+6KAOkrJfwp4dk1r+2JNB0x9T3h/trWcZm3AYB343ZwMZzWtWS/ivw7HrX9jya9pianvCfYmvIxNuIyBszuzg5xigDOk8JXD30kUepRx6LNdi9lsha/vTLuDkCXdgRlgGK7Cc5+bBwNqC1vo9Yu7mfUfOspUQQWfkKvkMM7m3jlt2RwemK5OXWtWZLnxBFqUi2dtqf2H+zPIjMbxiYRM5bb5nmZJIIbbgAbepruaAOYk8JXD30kUepRx6LNdi9lsha/vTLuDkCXdgRlgGK7Cc5+bBwLWqaJqGratbG51OBNJt5o7gWkVoRM8iHK7pjIRt3YOAgPGM9c4cutasyXPiCLUpFs7bU/sP9meRGY3jEwiZy23zPMySQQ23AA29TV/Ujqln4sshYa3dXbXU4MulPDB5MNvghpNyxiRcEcFnILHGPQASH4eaVaeILHVLG41KH7I8sht21O6eNmk5OFaXaozkkAYOeRW7bacYdXvL+WUSvcBEjGzHlRqPu9ecsWbPHXHauH1jxfdabrtw8mtlLu2v4rdfDwijPnWzuqed90y8787wwQYCkZBNXrrWdWKX+vQai8dpp+ofZP7N8iMxyxh1R2Ztu/fksRhgOBlTzQBt6vomoaxqVuJ9Sgj0mGWOc2sVoRO8iNuXMxkI27gDgIDxjNU5fD/iN/GKa1HrmlrAkZtxbNpMhbyS4Yjf9oA38Y3bcf7NY934pvJfFd40lxq9ppGmXyWcsljb25gDFUOZ2lUyEEuF/dDCjliOo1Ndvbyy8XaclprN/GLiaNXs57SMWRjOQ378xA+YeyCQknHy4zgA37bTjDq95fyyiV7gIkY2Y8qNR93rzlizZ4647UW2nGHV7y/llEr3ARIxsx5Uaj7vXnLFmzx1x2rh9W8TanB8QzYLqN9bQLdW8UQW1ibTnRxl0mmKb1m64UOM7osA5at7UbLVW8VWyaf4n1JBJIJ5rLybVoIoF4I5h8z5jwPnz94/w4oAW48JXEt5NFFqaRaPdXQvLiz+zZkaQEMQsu7CoWUEgoTycMM8dPXJa7e3ll4u05LTWb+MXE0avZz2kYsjGchv35iB8w9kEhJOPlxnHW0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBFaf8ecP/XNf5VlW/htU8Q/2xe6pf6hNGrraxXBjWK1Dn5tixouSQAMuWIA4Iyc6lsdthEcZxEDj8K8+8Ialez6jper61Besda8xYJv7VmZEbDNsa0GIkUKpCsNzHGWwSaAPR6DyPSismw8SWOpai9lbwamkqbstcaVdQR8HBxJJGqH2wee1AFbw/4Xl8Pyts8QapfW7F2+zXa2xXczbi25IVcnOerHrzmtLT9N/s+a9k+23l19rnM+25l3rDkAbIxj5U4zj1JrntH08weMXk0W91KbT4o5I79ry+muI5J8rtWMSMwUr827ZhRnb1GF61jhSQMkDp60AYqeGt2uJqd/q+oX7QM7WkE/krFalgQSoSNSx2kgby2AaraX4Rn0zXLjUz4n1i7e62+fFOloEk2qVX7kCkYB7Ee+aw9Gnu1i8Oa817fSXetXHl3lvLcu8O1kdgqxE7Y9mwDKBScHdkmtKysDB4zMmiXepTW8Il/tM3V/NPC0hAKRosjFVYE5OwAAcHqBQBZ07wdJY6xdX8/iPVdQF6At1bXUdp5UwClQCEgU4APYjPfNSaZ4D8MaLrw1fR9D0+wuhB5K/ZbSKIKM5JG1QcnOCc9KwNGnu1i8Oa817fSXetXHl3lvLcu8O1kdgqxE7Y9mwDKBScHdkmq3hvVL+51mx1rWLW8MWpXc9tBKNWlCxMGcKps1/dbNqH5yWfPJA7AHXJ4a3a4mp3+r6hftAztaQT+SsVqWBBKhI1LHaSBvLYBqvpXhKfS9euNUbxNq949yV8+G4S1Ecm0ELnZArDAPYj3zXM+G9Uv7nWbHWtYtbwxaldz20Eo1aULEwZwqmzX91s2ofnJZ88kDseG9Uv7nWbHWtYtbwxaldz20Eo1aULEwZwqmzX91s2ofnJZ88kDsAek0UVk2/iOyutWbTYodTWdSyl5NKuY4cjriVoxGfY7sHtmgCva+ErW11SO5F7eyW1vK01tYO6eRbyNnc64UOfvNgMzAZ4A4xoafpf8AZ91fz/br26+2z+d5dzNvSD5QuyMY+Vflzjnkk96xfDq3dv4w16zutTvNQSKO2dGumX5SwfOFRVVeg6AZxzk8100siQxPLKwVEUszHsB1NAGR/wAI6sviBNVvtSvb3yGZ7W0m8oQ2zEbSVCIrMcEjLs2MnFVbPwXa2epRzjUb+WzguHubbTpGj8iCVskspCCQ/ebAZyBu6cDHN+FfGtj4j+IDvb+JbO4hvLBja6bBeRv5QWTglAc+Yy5Yg8gYHY53/Dq3dv4w16zutTvNQSKO2dGumX5SwfOFRVVeg6AZxzk80AWIPB1lDqCTPd3k9pE7ywadKyG3hd87mAC7jnc3DMyjccAcYbp3gHwvpGvprGk6Fp9hdRwmFfstnFEBk5LfKoO7tnPQ4rPdDY/Ea1KHVrKK6aRWe6v3mtr1im4JFEZGERXBOSsfQgbsnCW1vc6T49aXWBcPHqVxIthPHrNxJGPk3eW9q2I04VsFd3I5xmgDqbDT4tPWfy3kka4neeR5CCxZj04A4AwB7AVi2fhCe08TSa0fE+sTyyhUlglS08t41LFUO2AMANx5DA+pNULa3udJ8etLrAuHj1K4kWwnj1m4kjHybvLe1bEacK2Cu7kc4zWTdX1/YeIbaeVtZ/tZtWW3ljYzCxe1kkKrtB/ckhNp+X94CDnjNAHXyeHPtOtpf6hqt/eRQy+db2MvlLBA+MBhsjV2wCcb2bGc9QCCXw2LvWlvtR1S+vYYpPNt7CYRCCF8YDDZGrtgE43sw5z1AIztEW8tfH+sWdzqt7fxiyt5UFyy4Qs8vCqiqo4AGcZOBkk80JoVtL42E9je6sv2JvOugdXunheRwdsXlM5jxg7iABj5MdaALFr8P/Cun+IbfWtO0HTrO8t0dUa2s4o+Wxl+FzuwCAc9Gb1ro68zt9QvT4/W5nbUlsJNTe3i1Rb52tJQAVFsbbcVRg4K+YVGSud2WxXplABWBH4RtY9WS6F7em1jna5j00un2dJiSTJwu8nJJ2lioJyFyBjfrz62nu2t7HxIb2+N7casbSW1+0uYDCZ2i2eSTsBUAHcAHypycEigDtLPTfseoX119tvJ/tjq/kzy7o4Nq7cRrj5QepHrWcPCNqNWF19tvfsq3Bul03en2cTk58z7u/OSTtL7c87c1vV59HcXjW8XiU3l8L19ZNk1r9pfyPJ+0mHZ5JOzIX5t+0PnvjigDox4RtRqwuvtt79lW4N0um70+zicnPmfd35ySdpfbnnbmtSz0+Kynu5kd3ku5vNkZyDj5QoUYHQBRiuIjuLxreLxKby+F6+smya1+0v5Hk/aTDs8knZkL82/aHz3xxV/VIjY+PtOuI21ezS4uAktxLfvJZ3OY2AhWDzGCNkA7iiDjhiTggF638IT2/id9bPifWJZZFWN4HS08po1ZmWPiANgFjyG3epqYeEbUasLr7be/ZVuDdLpu9Ps4nJz5n3d+cknaX25525qkdCtp/GyTWV5qyNaN9oux/a100LMwOyLyS5jxzuIAGML60HQrafxsk1leasjWjfaLsf2tdNCzMDsi8kuY8c7iABjC+tAGjN4b+163Hf3+rX93BDKJoNPk8lbeKQDAYbYw7Y5IDuwyc4yBjQs9Pisp7uZHd5LubzZGcg4+UKFGB0AUYrm5tPP/CcW8miXupNPHMZNU82+mktkiZDiMRMxjVidpAQAgDJ4PzP0iO7tfiNqlrcare30R0+CZVuXXbGWll4VEVVHAAzjcQBknFAGjN4b+163Hf3+rX93BDKJoNPk8lbeKQDAYbYw7Y5IDuwyc4yBir/wiM//AAlH9t/8JPrHm7fL+z7LTyvK3bvL/wBRuxnvu3e9UdUiNj4+064jbV7NLi4CS3Et+8lnc5jYCFYPMYI2QDuKIOOGJODQmuLt7e78SfbL6O9ttX+xx2wuXEHkicRbDDnYSwJbcRuyRhsACgD0GiiigDAl8I2surNdG9vRavOLqTTQ6fZ3nBBEh+XfnIB2hwpIztznOlBpvkaxd6h9tvJPtKIn2aSXMMW3PKLj5Sc8nvgVxc1xdvb3fiT7ZfR3ttq/2OO2Fy4g8kTiLYYc7CWBLbiN2SMNgAV6DQBgS+EbWXVmuje3otXnF1JpodPs7zggiQ/LvzkA7Q4UkZ25zkt/C8tr4judWh8Q6qFuphLNZsts0TYXaEyYfMCj0D9z6mudmuLt7e78SfbL6O9ttX+xx2wuXEHkicRbDDnYSwJbcRuyRhsACia4u3t7vxJ9svo7221f7HHbC5cQeSJxFsMOdhLAltxG7JGGwAKAOovPDn9oasl1f6rfXFpHIssemsIhbq68q3yxiRsEZwzkZ7cCorjwla3GqNcte3qWsk63M2no6CCaZcYdvl39VU7QwUkcg854/Ub6+Hj+S5dtSGnxalDbrqkN+62sHygNbPahtrEsQvmFCB5n3gUArpYFu7X4l+TLql5dQT6dJMIJmURxHzVACqqqOATyctzyTQBZu/B9rd6rJdfbr2G3uJknurCJk8i5kTG1nypcfdXhWUHaMg85l1Dw1/auqRXN9q1/LZxSpMumjylg3pyrEiMSHBAOC+M9u1Z9/oVte+MIDaXurRXEbLd3Zj1a6ESqDhE8nzPL+Yqcjb0Vu5Brm9Yv79fH01wTqX9nW99bQ/2pb37rbWhwN8ElqGxISSo8wqQPN5I2CgDrLnwXa3OqT3B1G/js7mdbm501Gj8iaVcYYkoZByqkhXAO3kcnOzbafFbX93eB5Hluyu7eQdgVcBV44HU455Y+tcTeT3b2+p+Iftt9HeWGqC1gtkuWEJiEiJsMWdjFgxO4gsNwwRgVQ1i/v18fTXBOpf2db31tD/alvfuttaHA3wSWobEhJKjzCpA83kjYKAO01Dw1/auqRXN9q1/LZxSpMumjylg3pyrEiMSHBAOC+M9u1bdea+JtRv8ATNUvLxzrX9pwXsP2FYjKLF7ZnRNrdISTufIb95n7vG2vSqACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAitP+POH/rmv8qzbHwtpGnao+oWds6TsWKqbiRooi33jHEWKRk9yijPOetaNqM2UIPI8tf5Vy/h/wAL+Hk8TXGt6PoenWH2ffawy2lokTStn965KgbhkbRn0Y96AOuoIyMUVk2GsX15qL21x4b1OwiXdi7uJLUxtg8YEczPz2yo98UARaL4R0rw/P5mlnUEG1lEMup3M0S5OTiN5GQHPcD19avafo9jpU17LYQeU99Obm4O9m3yEAFuSccAcDArmfD+haX/AMJUdZ8M6da6bp8ccsEstrEsf9oyFh852/eVSGwzcklscct1tve2t28yWtzDO1vIYpljkDGN8Z2tjoeRwfWgDOtPC+kWOrNqVtbOtwxZlDTyNHEW+8Y4ixSMt3KqCcnOcmo9J8I6Vod61zpp1CNmZ2MUmp3MsOXJZj5TyFASST93vWEdOtNL+KFnc/2Rp+mtfCdYrmwI86+bYGb7QNi4AwSOZMnGSvQpaaPbeHPiMk81po9zPrc07w3UdiI76D5d7B5dzGRMfLnC4+Uc54AOitPC+kWOrNqVtbOtwxZlDTyNHEW+8Y4ixSMt3KqCcnOcmi28K6PaawdTt7V1uNzOq+fIYkdvvOkRbYjHJyyqCcnJ5Nc7aaPbeHPiMk81po9zPrc07w3UdiI76D5d7B5dzGRMfLnC4+Uc54xfC4mXWtN17UbHR7q71LULm0eVrfffwMrScicn7iqm0xBRtB+8e4B3lt4V0e01g6nb2rrcbmdV8+QxI7fedIi2xGOTllUE5OTyaLbwro9prB1O3tXW43M6r58hiR2+86RFtiMcnLKoJycnk1w1vYXekeMdEUaKLbVpr+Vb3V/MjJ1KDY7H7pMjBcR8SBQhACkjFa9po9t4c+IyTzWmj3M+tzTvDdR2IjvoPl3sHl3MZEx8ucLj5RzngA7mgjIxRQc4OOtAGBYeCtH03WTqlq2qfa2OXaXWLuVXwCAGR5SrAZOAQQO1aOn6LYaVdX9zYW/lS6jP9oum3s3mSbQu7BJxwoGBgcVwmk29tHH4d1iKOJfEF9qLw3s6nEs6jzPMjc9WVNowpyF2rjFegwX1rdyXEVndQzy2z+XOkcgYxPgHawH3Tgg4PYigANjbnURfGP8A0kQmASbj9wnOMZx1HXrWRYeCtH03WTqlq2qfa2OXaXWLuVXwCAGR5SrAZOAQQO1cppVvbRxeHtYijiXxBfajJDezqcSzgeZ5kbnqyptGFOQu1cYpdJt7aOPw7rEUcS+IL7UXhvZ1OJZ1HmeZG56sqbRhTkLtXGKAOzh8M6ZDrR1YpczXmWKNc3s0yQlupjR3Kx5HHygccdKdF4c02LXG1cpPLenO1p7uWVYs9fLR2Kx5xzsAzXNRaPbeHviNHeT2mkXU2t3Evk3KWAS9tyI9x3S7iZEwuOAuMjrmiLR7bw98Ro7ye00i6m1u4l8m5SwCXtuRHuO6XcTImFxwFxkdc0AdLF4c02LXG1cpPLenO1p7uWVYs9fLR2Kx5xzsAzSJ4a01db/tZ1uZrsMWT7ReTSxxMRgmOJ3KRnGRlVHBI7muduNOs9M+JunXh0nT9Pe+eVI7uxx596/l7mE42rhRgkHL5OM7e8kWhaXe+OY9S0DTrWzksZ5DqGpwRKkl27KQYCw5cAkM27gFVAyQdoBp2vgnR7PXDq8Dap9tYjc8msXbqwBJClGlKlRuOFIwM8Ctm1soLPzvs6bTPKZpCWJ3OcZPP0HHTivM9OSQ+JD4i1HT9JvLk65Jp4+0W3mXsA3lEMUpbEaqvzeWF5BZt2Sa6CLQtLvfHMepaBp1rZyWM8h1DU4IlSS7dlIMBYcuASGbdwCqgZIO0A2ovCWjQ6wdSjt5RMZTN5ZupTAJD1kEG7yw/fcFzkk55rZrkNC06DTfiRrcdsZmD2FtIzT3DzMSZJv4nJOPQZwBwMCuvoAKyE8LaQmtjVVtn+1Bi6qZ5DEjkYMixbvLDkE5cLuOTzyaVNYvm1r7E3hvU0t95X+0GktfJxj72BN5mD0+5n2rirW3thFpuuGKEeJJtca1luM4mkTzmDwlupRYxkIeBtB7ZoA76z0ex0/UL6+tIPLuNQdZLl97HzGVdoOCcDgY4xVX/hF9I/tsar9mf7SHMgUzyeSJCMGQQ7vLD4/j27vetGG9tbi4ngt7mGWa2YLPGkgZoiRkBgOQSOea43W9MsrD4g6Pqj6Rp9m9zdiMalaEC7uZGiceXKNqny8Ac7n+6vygDIAOh/4RfSP7bGq/Zn+0hzIFM8nkiQjBkEO7yw+P49u73oPhfS311dXmS6nukbfGJ72aWKJsY3JCzmNDjjKqDyfU1jaPptvp3xQ1YW3nMZdMt3d553mYkzTHG5ySAM8LnA7AUz+wtLvvHEeoaFp1ra3Fjcs+o6pDEqyXDFCDAXHL/eUtu4GFA5HygHWW1lBaNO1um1riUzSksTuYgDPPTgAY6cUW1lBaNO1um1riUzSksTuYgDPPTgAY6cVyf9haXfeOI9Q0LTrW1uLG5Z9R1SGJVkuGKEGAuOX+8pbdwMKByPlw9ZsLrTPENtcnSB/bM2sp5Gt+ZGWmt2kyYBhvNO2LcChXYApYHNAHaWvhHSrHWJNTtTqEdxLM08iDVLnyXdupMPmeWf8Avn09Kig8E6Pba6dYibVPtrEFnfWLtlYAkhShlKlQWOFI2jPSuS0rXU1H4qWN3eW+rwXNxbXUEVvPpd1GkEYaPb8zRhSTgszA4GVXPTLo7e38mDXHhhHiRtfNobjOJjH9oKmHd1KCEZ2dMDdjvQB2h8L6W+urq8yXU90jb4xPezSxRNjG5IWcxoccZVQeT6miTwvpEutDVXtnNyHEm3z5BCZAMCQw7vLLgcbyu7gc8CuEtlkPiWbxBqFhpN9PFrpsEW5t/NvIQWCxmGUtiIBSG2BTkbm3DNJcCaTxTqWvX9jo982na1HZxRXtv51yiN5YQwSEgQnL78bW3eo7AHqdFFZL6xfLrX2JfDepvb7wv9oLJa+TjH3sGbzMDp9zPtQAknhfSJdaGqvbObkOJNvnyCEyAYEhh3eWXA43ld3A54FWoNHsbbWLvVYINt7eIkc8u9jvVM7RgnAxk9BXAz29u0N7rk0UI8Rw68LWG4z++VPPUJCG6hDEclOh3Fsd69FjvbWW8ltIrmF7mBVaWFZAXjDfdLL1AODjPWgDOk8L6RLrQ1V7ZzchxJt8+QQmQDAkMO7yy4HG8ru4HPAok8L6RLrQ1V7ZzchxJt8+QQmQDAkMO7yy4HG8ru4HPAri57e3aG91yaKEeI4deFrDcZ/fKnnqEhDdQhiOSnQ7i2O9afifTrS08ZaRq8ukafb77yGM6rbkfbpJGyoiI2DMZ4yd7HA+5j5gAb0nhLRpdYbU3t5fPeQSvGLqUQPIMYdoQ3lswwPmK54BzwKhk8E6PLro1h31T7aGyHXWLsKBuDbdgl27MgfJjb7Vyk9vbtDe65NFCPEcOvC1huM/vlTz1CQhuoQxHJTodxbHeqOs2/mePbzW3sbC5sLLU7WCW+Yf8TG0kAUbITj/AFJLx5G4H5pflbcDQB6lBZQW1xczwoVlunDysWJ3EKFHU8cAcCsyfwhotxrB1OW2l893WSSNbqVYJXUYV3hDeW7DAwzKT8q+gxheLdOs7XxRpOsT6Tp8P+mQRnVocfbmcnasWNozGcgE7ycZ+TuMfxbYXdhqdxff2KJ9Uk1CBtN1syx/ukZ0X7OOfNBxv+RVKMCSSMnAB3M/hfSLjWF1Oa1ZrgOJConkETOPuu0QbYzjAwxUsMDB4FRz+ENFuNYOpy20vnu6ySRrdSrBK6jCu8Iby3YYGGZSflX0GOPvre2eHVdZuI4v+EhtdaW3tbgnE0amSMJErdQjIclRwdxJHNafi3TrO18UaTrE+k6fD/pkEZ1aHH25nJ2rFjaMxnIBO8nGfk7gA6Kbw3ptzrKapcrczTxsGSOW8maBGAwGEJfyww/vBc981q15ZfiaXxVq+uahY6Pf/wBk6rDbQwX9v51wsbLFt8hyQITuct91t57jt6nQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/9c1/lVPT9T0WS8n0nSr2wa5s+Z7O2lQvBk5+ZFOVyT3HerdsM2MIyRmNeR9K800OVrjxVoOkaZfaRepoMk4nuNNufPk8ooy4nAUCFi+35NzFmUnjaaAPUaCMjB5FFZNjc+IX1B11XS9LtrIBts1vqUk0h9Mo0CAcdfmOPegDN8N2vgL+17mXwhB4c/tGEFLl9LSDzkBPIcx/MMkd+4roreytbR5ntbaGBriQyzNHGFMj4xubHU8Dk+lcb4f17QfFvi+O+07V9NeTT4ZoLSxguUacoWUPI6A7lXKgBcdME8kAdXp+sWOqzXsVhP5r2M5trgbGXZIACV5AzwRyMigDK0NvBb69fnw02gtq+T9uOnmE3Gd3PmbPm+9/e707RZ/B82v6g3h2XQ5NXJIvzYtCbgkHB83Z83B/vd6yNJ8QaB4r8aQvY6xppfSTPFbWUVyhuJW+7I7IDuVBggDHP3jjijSfEGgeK/GkL2OsaaX0kzxW1lFcobiVvuyOyA7lQYIAxz9444oA2dJk8InxJqC6E+if222ft4szD9pOD/wAtdvzdf73eoNO1XwNd+KZZNIv/AA9Pr8wMcrWs0DXTheqsVO84x0PTFZg1e31D4nWcMOp6dq/2bzkW308DzdN+QBmnIds5I2gYjwT0Y8je05l1jWJ9TbDQWjva2nQ/MDiWT6lgU+in+9QBDpZ8HW3ie+ttFOhw67IC17FaeSt0wyCTIF+c8kHn1o0648HQ+Kr230mXQ49fmz9sjtmhF0+OT5gX5zjrzXEeGr0v40tIRqNteRLf3bjQwoF3pDNvzLKclmU/N94KB5wwW+WuisNQgsvHraZomu/2ql1NNJqGnAxSf2a2N2/cihky3y7ZCxOeMYNAHa0UUhxtO7GMc5oAzrWy0NdevLuyttPGrbVS7mijT7RtIyodh82MDgH0q3b2NpaS3EtpawwSXMnmzvHGFMr4A3MR944AGT2ArhPCWu+EYfH+s6doOqaIgnjt1t7WyuIh5jgSFwiKeSOpwPrXZ2GtadqtzqFtZTiWTTp/s92pRl8uTaG25IAPysDkZHNADLWy0NdevLuyttPGrbVS7mijT7RtIyodh82MDgH0ohsdEg8QTXMFrp8esTQgzSpGguJI84BYj5iuRjnjiuM8L6/4Tt/HWuWHh7UdFzLFALWysbmFfOdVkLqiqcE5646d6j8Ky6kPiOZ9Y8O6hZahfaczXU88tsyLiQbVHlzMdij5RxnJJIGSaAOrhfwjp3i2aG3bRbXxDeruljjMSXc465YD52HGefSiF/COneLZobdtFtfEN6u6WOMxJdzjrlgPnYcZ59K4zwxqF7Ya7DZDWlk1S41S5/tDQ/KjBWEu5FwePNHy+Xhy2wggADIpnh3Ur/TdYS0i1cXGrzancm+0ARxhvKLuROSR5gOPLw7NsIKgAZFAHf2ek+HrDXriewsNMttWuE8yeSGGNLiVCfvMQNxBI6nvWaLPwJpnjCMC38O2fiO4JkjGyCO8kLZyw/jOcNz3wa53wrLqQ+I5n1jw7qFlqF9pzNdTzy2zIuJBtUeXMx2KPlHGckkgZJqDR7+807xJNbJq6f2xc61L9o0Qxx5ltmcgTnK+b8sYUhw2zChcZoA7ZR4XfxixQaQ3iVIPmx5RvFi9/wCPbyPbmqttp3gi38YOtpZ+H4vEmDO4iigW8wernA3856+9cxa3NsYtN0MywnxJDrjXUtvjM0aecxeYr1CNGcBzwdwHfFQ3LMfElr4e0y90m8nt9bF8z21z5t5CrOzyCWILiIBWK7yx3Ahdo3UAdNbaR8PrXxYILPT/AAzD4hQmYRxQ263akjJfAG8dc5966uvKbO+Y+PFhXUbaaP8AtmR28Oso+2WzYK/at2SxjP38FQAH4Y4APq1ABWLH/wAIv/wmEvlf2R/wknkfvNvlfbPJ46/x7ent0qRLnxEda8qTS9MXTN5H2ldSkM23HB8ryAuc9vM/GuKtbm2MWm6GZYT4kh1xrqW3xmaNPOYvMV6hGjOA54O4DvigD0WGytbe4nnt7aGKa5YNPIkYVpSBgFiOSQOOazrfS/DcXie5urSx0pNd8sPcTRQxi62NwC7Ab8HaRk8Hb7Vas9YsdQ1C+sbSfzLjT3WO5TYw8tmXcBkjB4OeM1xGh634Qs/ipqNlpGp6JA09nFGILW4hUyXHnSl12qeZMnJHXnmgDYtdL+Hi+LWgsrHwwPEMLmZo4Ybf7WjfeLkAbwec596sR6b4Ih8ZfubLw/H4l5uPligF5yOX6b+QTz71l6zrFpdfEDSLBNT07UpLa7B/sy15u7R/KYGaQhm+QBuhVPvD5jwpxdSkb/hIo/Dml32k3d0utpqB+z3PmX0AMgeTzIgv7tQhK+YW5BVdvzCgDrotM8EReMT5FjoCeJQDcHZDCLzBGDJwN/IP3veljk8FWXjR1ifQbfxNcja4UwreygjOD/GeFB+g9q5eO4t/Jg0N5oT4kXXzdm3xmYR/aCxm29QhhON/TB257Vq3OpW2l/EGO20fXftl5qN0v2/RV8qQwJ5WDP8AKvmR4Cpy7FTnAGSKAOhi1rw9eeIWsINS0yfWLZWVrZJ42uIl43DaDuUfdz+FVre58I3PjGb7LNokviWKMxy+W8TXiIMZVsfOAOODx0rFfX9A8ReOLbTE1fTYZdHvGZLX7TGLm4uQjBgsedwVQzEnqxz2GWH1/QPEXji20xNX02GXR7xmS1+0xi5uLkIwYLHncFUMxJ6sc9hlgDbaTwmfGah30X/hJhFtUExfbRHjOB/Htxn2p848LyeL4Fuf7IbxGkO6ASeUbxY+eVz84Xr0461wi3zf8J60K6hbSxnWt7eHHUfa42xt+1hs7jH0kxtAx/F2Nqe4t1hvdDmlhPiObXhdQ2+P3zJ56lJgvUoIhgv0G0rntQB6XRRWS9z4iGteVHpemNpm8D7S2pSCbbjk+V5BXOe3mfjQBHJ/wi//AAmEXm/2R/wknkfu93lfbPJ56fx7evt1rUjsrWK8lu4raFLmdVWWZYwHkC/dDN1IGTjPSvOp7i3WG90OaWE+I5teF1Db4/fMnnqUmC9SgiGC/QbSue1d9BrFjc6xd6VBPuvbNEkni2MNivnackYOcHoaAKUn/CL/APCYReb/AGR/wknkfu93lfbPJ56fx7evt1qRNL8Or4ne8jsdLGu+VvedYY/tXln5clsb9vGM9OMVxU9xbrDe6HNLCfEc2vC6ht8fvmTz1KTBepQRDBfoNpXParNprnhDT/i1LbWGqaJbTTWJjlihuIUaS5M3KkA5Mh9DzQB0dxdeEIfGUIu59ETxK0Yjh814ReFDnCrn58Hnge9OuYPCbeMLZ7uLRj4k8vdbtKsX2zYARlM/PjG7px1rH1TUINK8dRLpOu/aNRv54Uu9BBikPl42mbAXzI9qgHcW2cYxkisq+uLZIdV0W4ki/wCEhutaW4tbcjM0iiSMpKq9SioMFhwNpBPFAHaf2V4d/wCEn+2/YdM/t3yt/n+TH9q8v7ud2N+3tnp2qF4fCkPjCN5I9Gj8STREozLELySPGMg/fK4H04rmE13whpnxbEFrqmiWlxNZyRzxx3EKO9y0yfKwByZDjoeTUF9cWyQ6rotxJF/wkN1rS3FrbkZmkUSRlJVXqUVBgsOBtIJ4oA6u8u/CEPi62F/caJH4i2BLcTvCLza2cBM/Pg88DrzSyw+EoPGMUk0eix+JJo8xM6xC8dMYyD98jAI47CsjWdQg0nxtCdK13ztUvZYI7jQQYnLxdDNtC+am1SW3FtnHTmsPxQ0qavfaBpl5o9xeahqNveoi3Je/gcNHnMAH3VVCfNLjaDjae4B214PCz+LLMX40dvEKxk2nneUbsJzny8/Pj73T3rbry7xQ0qavfaBpl5o9xeahqNveoi3Je/gcNHnMAH3VVCfNLjaDjae/qNABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/HnD/1zX+VS1Xi2HTE81d6eSNy7d2Rt5GO/0rB0Oz1eLUWkt/OsdHJ+Wz1CT7RKfvZKYOYgflIDO/HASPFbQpqUZSbtb8f+D8vWwrnTVHDcQ3Ks1vNHKquUYxsGAYHBHHcHginSxRzwvFMiyRupV0cZDA9QR3FcR4N0fRNC1K/tYfD4stTW4uGW4h0l41MDPuVVnCBCNpX5Q3bGOKulSjOnKV3dW0Sv9+ugN2Z3NRxXENxv8iWOXy3KPsYHaw6qcdD7VwvhCws7TxDPBpujq9pLbv599d6LJZ3W4sPlklkVRcbsnkAY285zmp/CeiaHoXiPULeHw9HZ37Xcr29zDpLKggYAhROE2Adfl3fhXRUwkIc65m2kmtPzV7q3/BJUmzt6KDnadvB7EiuYgs9Rj1+OTxCk2oLu/wBHntW220J4+9b53A56MTLjBO5M4rkp01NO7tb736f16XKbOnorMtbfXk1JnvdS06axy22GHT5I5QP4cyGZgcd/kGfatOonFRdk7/f+qQworzDwjY28s+gzaVpk8d/DPO99fyWzqGgJkHl+cww4LFSEBO3HQYrovBXhewstLstRuNN8rVkEqmeZWEwVpGO0k87e4XoOwFd+IwdOhzXm9PL/ABee2n4kKTZ1tVb3UIrGW0jmVybucQJtA4bazZPPTCmvOvD+kXsHjSCfVGEOpJdztLNHoFwZLmNt+1HvQ7RlMFSAQMbVGARU9hp6f2zpbvod4Nai1R31K/Fm6Ky7ZQpaYgCVMFQACwXgELxWrwFOEn790lfa3fv003V73SFzM79b3dqj2X2a4GyES/aDH+6bJI2hv7wxkj0IqzXOabolppfjjULjT9Mhs4rqzjaWWC3EazS+ZISWIHzNzk555rJ0Kz0qHXJBrugzSeIGu5iNRl0uSYMjE7CtyEKouwhdpYY5GPXmeHhK7g3ok9tdVr10S6v8Crs7WK4hnMggljkMT7JAjA7G9DjoeRxVSXV4U1mPTIYpri4ZQ8vlKNtuhzhnJIxkjAAyx64wCRy3hfQ9C0HxTqMEXh6K0vXune1uYNJZUWEovAnVNijhvl3DntzWxori28Ta5Z3MgFzcTrdQq3BeHy0TI9QGUg+mR6inUw9OEpct2lG6urXvb10VwuzoKK8w8L2VvNdaRLpmlzpqUV9cPd6g9s4H2ffLlPOIwwJK4jBOOuBitfQLTS7bXn/tvQpn8Rfa5WXUpNLkmDKSdhW5CFUXYQu0sMdMeulXAqm5Lmbt0tru9bX20381oJSudxRWfDq8c/iC60gW9ykttBHOZnQCJw5YAK2eSNpzx3FaBGRg9K86UZRdpf1csjjuIZpJUhmjkeFtkiqwJRsA4PocEH8akrhdC0PQtD8b6kv/AAjsdvdz3IlsrqDSGKIhiUHE6x7E+YPkFhyffnMttJvl8dmfU3EN6NRaSO5j0C4mlkgJO2P7YrmNYypwVIGPTPJ9L6lTcnabsopq8d9PK+nd9COZnptRx3EM0kqQzRyPC2yRVYEo2AcH0OCD+NcJpNpa2/j0y6bpJuWnlmN3d32iSw3EBOclbt1CyJnChBk4OQxAxUuhaHoWh+N9SX/hHY7e7nuRLZXUGkMURDEoOJ1j2J8wfILDk+/MywcIqXvO/Ldaeet9fx7ahzM6yy1aG8vriyaKa3urfloZlALISQHUgkMpx2OR0IB4q9XPzsLvx/Zi1cMbGzm+1lT9zzCmxT7naWx6D3roK5K0FHla6q9u39bryZSCiiisBhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBBbusenxPIwVViBZmOABjrUyOsiK8bBlYZVlOQR61DbsV0+JlUuRECFXGTx054rB0bw/eWuqSX+6PSYJG3HTLBt8bnLZaTcNoY7tx8tUOeruK2hCMoycpWt+P6/p3sI6Rm2oW64GaxNC8WaZrdvZqLy0h1G5t1uDp/2lWmRSM528Ej3xW1IC0bAdSCBXG6Z4au7Hw/4TtYrJLeWxuRLeLGUGwmKQM3BwxLMM4znOa2oQozpy53Z9Pub/NITvfQ6eDWdMutSm0621G0mvrcZmtY51aWMf7SA5HUdR3plt4g0a81SXTbTVrGe/hz5lrFco0qYODlAcjGR2rj/DHhvU9N1exh1Qa1MunvM0U++x+xkvuyflCznIbowPzdc4Bp8Fj4mn8XWF/qdtfPHaXEqtGDaC2RHVlV4sHzSAMFt5zzwp6Dqlg6ClJKomkr3ut9fLrbbS1931XM+x0lx4o06PWrfS7W6tbq7e4EE8MdwpktsozgsoyRnbjBx1qZtYL6zJZW1uHitVDXl1JJsSHIyFHB3NjBI4ABznoDzWnaVqyS6HZz6OUXS72SSa+eWLEoZJPnQAluSw3bgpyeh5I19LlTSvEWo2F6xjfULn7TaO/CzAooZFPTcuw/L1xg+uIqUKMbqHvWXe/W19PLW3TrfUE31J9J8ZeG9eu3tdG13T724UsDDDcKznHUhc5I9xx71Yh8RaJcahNYW+safLeW4ZprZLpGkjC/eLKDkY756VQ0RL7TdX1Gzm0u5aC5vJLpL5Xi8nDAEKRv8zORj7mPeqegW+q2utLDbadqGm6Oqv5lvfS28kYYnIMLRu0nLEkhzgDoB0qZ0KF5OL0STV5L/Lfyt6tdS7LfhvxH4Su1GleGdZ0+4aEuFt4boO/ByxAJJYZPUZHvV/TdWkur65sL60NneW+H2796Sxn7ro2BkcEEEAgjpjBNHRI77TdY1Gzm0u5a3ubyS6S+V4vJwwGFI3+Zngj7mPem2Mses+Mn1KxZns7K0a088L8k0jOGYKf4gu0AkcZJGcg4KtOm5TcdVa927u/ytvtZ69QTZ0dFFFecWFFFFABUM1pbXMsEtxbxSyW7+ZC8iBjE2CNyk9DgkZHYmpqKabWwFexsbbTbRbayj8uFWZgu4nliWPJ56k1Yooobcnd7gMWCJJpJUiRZJMb3CgM2OmT3xT6KKV2wCiiigAooooAit7W3tEZLSCKBXdpGWJAoZicljjuTyTUtFFNtt3YBRRRSAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIrT/jzh/65r/KpaitP+POH/rmv8qloAKKKKACiiigAooooAKKKKAOV0zx5b6hc2izaPqdha3ryR2t7c+QYpmTcSMJKzrwjEFlA49cA3dL8TPrFwhs9D1P+z5VLQ6lJ5KwyjHBCmTzcHsSg9enNZfh/4e2GnaOItS824vWjmRpGvJpo4hIWyYkkJWMlWwdqr6Ve0CDxNpcdvpd/b6ZdWNrH5SX6XjpNIqjCFoPK2g9AcSH1HpQBY0PX59X1LUrO50uXTnsTF8k0qO7B1zyEJUdOzN+HStuuT0Oz8UW/izUb/U9O0iK01Ax7jb6nLLJF5aFRhTbqGz/vDHvXWUAFFFFABRRRQAUUUUAFcvaeOYLq/SJ9H1O3tJbx7KLUJfIMLzKzLtwspkGSpAJQD1xXUVyOgeA7PT5JbvUxJc3jXdxPHm8mkhiEkjEMkTHYj7WwWVQeTzycgGhp/ik6teounaJqc2nu7IuqYhSA7cgkK0glK5GAwQg9Rkc0yXX9VsvEdpZalpNrHY387wWtxBfNJKWCs4LxGNQqkKeQ7Y4454g8O6f4k0CK10Z4NMvdJtcxx3xu3iuBEPugw+UVLAYBPmDOM4HSjTrHxEvi24vtWsNLmgZ2S3uk1CQyW8PZVhMO0E4BY7+T7AAAHUUUUUAFFFFABRRRQAUUUUAFcvb+OYJtQ8l9H1OGzN61guov5JhaYMVxhZTIAWBAJQD1xXUVyeheBbSxu7i+1MPc3b31xcxKbyaSCLe7FWWFj5auFP3guck880AXrLxQdSv1j07RNSubBpDH/ai+SsGQSCQGkEhGRjIQg9Rkc0XWt6rY+JbSyutLtTp17MYYLmG9ZpgwjL5eExgBflIyHbHHHPFXw/p3iLw8lvo6Qabe6RbtsivHu3iuEi7KYhEysy9M7xnrgUy70HUrzxrb6lFYaXp0UEoaTUre4dru7iCkCF08tQEyc8u4G0EDPIAOrooooAKKKKACiiigAooooAK5eXx1BBqdxBJo2qCztrxbKXUgIDAsrbQPlEvm4y6jOzv6c11Fcpp3ga0j1zUdT1UPcyT35uoIjeTNAg2qFJgLeXvBUnO0kcHOaALsXig3eqNbaboupX1rHMYJdQh8lYI3Bww+eRXbaeCVVh1AyQaW48TxxeMrPQIbV5jMjma5DAJAwXcqEd2IycdhgnqM0tH03xH4dmbTrOHTtQ0hrl5Y7ie7eC4gR3LFNixMr7STg7lyMA9MmtH4EvbTxLYaha+JdSktobqe5mt51tjkyA8AiDcRzjlshQMHigDs6KKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIICw0+MxgM/lDaGOATjucHH5VjeGdY1XUr7WbbWoLOCWxuUiRLR2dVDRI+C7AbjljztXjHHc7MAY6fGIyFfyhtLDIBx3GRn8657w/4f8QaXrl/falrWm3kOoSCWeG30uSBgwjVBtY3D4GFGQQfqKAOoooooAK5qHUdds/F1tp2pXGnXtveJLIqWlo8Mlqi4wzs0jhwchc4TnkDsL9h4U8O6VqL6hpeg6ZZXr7g9zb2cccjZOTllAJyetUdA0LXNK1S6uNQ1fT76G6laSQpprxTtz8imTzmXao4ACDj0JOQDoznadoBOOATisHQNX1S+1rV7HWLezt2sjDsS1kaQAOhJy7Bd3T+6vpz1rRsLW/t5L1r3UReLNOXtlMCp9njwMR8H58EE5PPNYuj6B4hsPEt5qd/remXMN8U86CHSpIm+RSq7XNwwHXnKnPtQBmaJ40vtV8dT6P8AatNcwTTR3OmpbutzZon3JWl3lHDZXgIv3+p2mtXSfE11q3i29sobeEaZHaiS1nJO+dw7I7egTIwD3wT0xVW18DTJdW0d9qcVxptjNNNaRJatHcgyhgyvOJDuGHb7qKThcnjmfSPAWnaFr66lplzqCrHZi1jt7jUbmdEAJOcSSkYxwFxgdRQBa0DV9Uvta1ex1i3s7drIw7EtZGkADoScuwXd0/ur6c9aq2uu6i3jiXSU1HSdThVXaa3tIWjn0/gGPzm8xwd2cD5UJ6gEA0uj6B4hsPEt5qd/remXMN8U86CHSpIm+RSq7XNwwHXnKnPtVg6Bqd14lt9T1TU7WSKxMhs4LayaJl3rt/eOZG3jHYBATz2FAC6Bq+qX2tavY6xb2du1kYdiWsjSAB0JOXYLu6f3V9Oetb9cvo+geIbDxLeanf63plzDfFPOgh0qSJvkUqu1zcMB15ypz7V1FAATgZNchYeJtVnl07UrgWX9j6rcm2ghSN1nhzu2Ozlir7tv3Qq7dw5OOdm38K+HrTVm1W10HTINRYszXkdnGsxLdSXAzz35rPsvCVxa3lpHJqaSaRYTNcWlmtttkVzuwHk3EMq7ztART0yTjkA6aua0zxNc6p4yubCG3iGlpal4Lgk755Fk2OR2CAnAPUkE9MZ1LOwvUl1IalqRvbe6mLW8QhEX2aIoAY9ynLchjuPPzY7Vj6T4A0zQ/EEGpaZc6gqW9obaO2n1K5nRRkEcSSkYAGNuMd+ooAtaFrGq3uv6rp+r21nbmzSF41tZGk4cN1dgufuj+EYzjnrWFpPja91Hx9caILrTmNvcSx3GmLbyLc2sSqCszS7yjhspgBB9/Gco1aml+H/EVl4putVvNb0u4hvAiz28WlSRttQMF2ubhgD83JKnOOgqGy8F3VvqlqbnVIZ9NsbuW8tIhZlbhXk3ZDzbyGX524CKT8uScHIAlh4m1WeXTtSuBZf2PqtybaCFI3WeHO7Y7OWKvu2/dCrt3Dk45SHxPqry22qt9h/sO6vjYrB5bi4Q+YY1l8zdtILD7mwEBs7jjBtWXhK4tby0jk1NJNIsJmuLSzW22yK53YDybiGVd52gIp6ZJxy2PwhcJeRQHU0/sSC6a8jsVtsS+aWLgGXdjywzEhQgPA+YgYIA+08TXF944Ol28EX9mLbSkXJJ3yzRuisF7bRvxnuwPpyNN4mj8WW9qNR0m4sXLSzQrpsqSxQ8hf3vnlSxbA+4M4Y8YqHT/h7pWk+I7LVNOuNRjSzgkiS1k1K6lj+Yr2eUqFGD8uMZIPVRW7YacbS6vbmWXzprubeW27diAYVOp4HP4knvQBeooooA4+HxPqry22qt9h/sO6vjYrB5bi4Q+YY1l8zdtILD7mwEBs7jjB7CuYh8JXEV9DF/aaf2Lb3RvIrEWuJPNLFwDLuwYwxJChAeB8xAwdqztb6HUL6a71H7TbzuptrfyFT7MoXBXcOXyecnp0oAy9H1nVrnxXqWl6tbWVultbxTRC2leUkO8g+Z2VeyA4C8ZIyetRweJri78dJpVrBEdMEE265OdzzRsgZV7bV34J/vAjjBzFZeHvEUHi6fWbnXNMlhuY0hlt49KkRvLQuVCv8AaDhvnOTtI46Cm2fw80rTfEVjqen3GpRJZxyots+p3UiEuVPAaUqAMH5cYOQewoAng8TXF346TSrWCI6YIJt1yc7nmjZAyr22rvwT/eBHGDnLXxneyfERtAS604SJceW2ltA/2kwbN32gS79m3/Z2e2c1esvh5pWmeIrHVNPuNRiSzjlVbZ9TupYyXKnhWlKgDB+XGDkHsKT/AIQy5bUx5mpwvpa6h/aSQm0P2lJt27An342ZyMbM7TjdigB9xrepQeOrfTIdR0m9gmbMunRQMt3aRbCRK7+awK7hjlFzuGDkcyQeJri78dJpVrBEdMEE265OdzzRsgZV7bV34J/vAjjBzJfeH9S1TxBaXWoana/2dY3H2m2treyZJw4UqA0xkYEfM2QqKTwM4zmrZfDzStM8RWOqafcajElnHKq2z6ndSxkuVPCtKVAGD8uMHIPYUAS3eo69p3imwgnn067sdQuHjS1htZEuIUClvMMhkZWAwARsX7w59c+38ZzX3i1rSO+s7OwjvGswkmnzzNO68EfaFZYoWJyFRgzEAHuBWlYaFrln4ou9Sl1fTri2upMtG2mOLhYgPkiWXz9oVTz9zklj1OahPg6Yag6LqMQ0aS+GoPZG1zL524PgS78BN4DY2E9fmxxQB1VFFFAHHy+J9UEs+qxfYf7Et7/7A8DRP57ESCNpRJu2gBj9zYcgZ3c4HYVzEnhK4e+kij1KOPRZrsXstkLX96ZdwcgS7sCMsAxXYTnPzYOBtQWt9HrF3cz6j51lKiCCz8hV8hhnc28ctuyOD0xQBzkvifVBLPqsX2H+xLe/+wPA0T+exEgjaUSbtoAY/c2HIGd3OBY1HXL+08aWem22paTdLcMpk0pYWF5FEQczl/NI2AjvGAemc4ysnhK4e+kij1KOPRZrsXstkLX96ZdwcgS7sCMsAxXYTnPzYOBPqmg6lq+sWz3ep2q6Xa3KXMVvDZMs+9ORmYyEYz1AQEjjPXIAWesaq/jWbSdQtrOG2FmbiEwSvI7fvNoLEhQMj+EA4/vGom8TXMvjq10izgibTikyT3TE7jOgU7E7YAPzH1IHY0z+wPEX/CZf21/bel+R5X2f7N/ZUm7yd+7G/wC0Y39t23H+zTIfh5pVp4gsdUsbjUofsjyyG3bU7p42aTk4VpdqjOSQBg55FABNrupJ49/suW7trKxJQQpPpU7G7ymWCXXmCINnPybS3yk4NTavqOuaVrlkwn0+4sb27S2jsVtXW4wR8ziXzCp2gFiPLHAPNWNU0TUNW1a2NzqcCaTbzR3AtIrQiZ5EOV3TGQjbuwcBAeMZ65gj0LXIvF9xq39r6fLazFUWCXTXaaGEAZjSUTBRlssTsOT1zgYAJLfWNVPjZtJvrazitGtHuIWhleSRtsiqCxKqFyG+6AcY+8aytW8X6hp095qBk0+PSdOv47Ge2lRvtEhcoN6vvCrzIMIUO4D7wzxcl8P+I38YprUeuaWsCRm3Fs2kyFvJLhiN/wBoA38Y3bcf7NGreDBrXiZNRvG0wQJsG6PTcXrKh3CM3Jc/uywyVCDI4z1oA6miiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yrltNvb2Px9LYf23fXls0UryW+o2kcAjYMu37OwijMqgMQTlwPlywJ56m0/484f8Armv8qybTw15Wurqt/q+oanNEHFtHdeSsdsH+9tEcaZ4AGX3HA68nIBt0UUUAZNh4r8O6rqL6fpevaZe3qbi9tb3kcki4ODlVJIwetZdqdUtPGsdpHrd1q1u6SSXsFxDAEsgeYwrRxqwJJwFcsSoJ7ZPVVgaJ4Xl0O9mmTxDqt3BNLJK9rcrbFC7nJO5YVkOOgy54AHQUAb9cranVLTxrHaR63datbukkl7BcQwBLIHmMK0casCScBXLEqCe2Tu6fpv8AZ817J9tvLr7XOZ9tzLvWHIA2RjHypxnHqTWbonheXQ72aZPEOq3cE0skr2tytsULuck7lhWQ46DLngAdBQBz3h7xTeaprtte39xq1vYX1xNb2ka29uLJ2RmVUJIM+8hC275UJ4BPGTw94pvNU122vb+41a3sL64mt7SNbe3Fk7IzKqEkGfeQhbd8qE8AnjPQWfg+0stTjuY729e1gme4t9Pd0MEEr53Ovy7z95uGYqN3AHGCz8H2llqcdzHe3r2sEz3Fvp7uhgglfO51+XefvNwzFRu4A4wAc3oXiXU7zx79iudRvgjXFzG0E9rEtjLGn3Ps0wQPI443Au2MSZAwtN0/xfdDxJp8c2tm7ur2+e0vdDEUf/EuG1yjfKvmL/qxzIxD7iVwMV0dh4MtbC/hlGoX09pazPPaWErR+TbSNuyVIQSH77YDOwGenAxai8OZ1xdS1DVb7UTCzPa29wIhFalgQSojjUk4JALliAT6mgDktP8AF90PEmnxza2bu6vb57S90MRR/wDEuG1yjfKvmL/qxzIxD7iVwMV6NWNF4czri6lqGq32omFme1t7gRCK1LAglRHGpJwSAXLEAn1NbNAATgE1xGm6zq0i6Prs2ovLaavd/ZzpxgQRwI2/YyMF37htXduZgcnAHFdvWDa+ErW11SO5F7eyW1vK01tYO6eRbyNnc64UOfvNgMzAZ4A4wAb1ckt7eQfEGKyj1m/mgmEhmtL60jihQbcqLeQRI0jA9QGkwM5wcZ39P0v+z7q/n+3Xt19tn87y7mbekHyhdkYx8q/LnHPJJ71SHhrzNfj1S/1a/vvs7tJa2s3lLDbMwK5XZGrN8pIG9mxk9+aAOU0jxNqd18QjY3Go3yRm8ni8ma1iWwljRfl+zzBA7y9NylzgrLkABaNI8TandfEI2NxqN8kZvJ4vJmtYlsJY0X5fs8wQO8vTcpc4Ky5AAWujs/BdrZ6lHONRv5bOC4e5ttOkaPyIJWySykIJD95sBnIG7pwMFn4LtbPUo5xqN/LZwXD3Ntp0jR+RBK2SWUhBIfvNgM5A3dOBgA5218X3K+JLJJdb+0XdzqLWV5oSxR/6Cp37JDhfMXhVO52Ktu+UDIrambVbTxtZwWmt3WoR3Du95p8sMPlWkG07XDIgcHcAo3M275uOMjSXw5v1xNS1DVL6/EMjSWtrOIlitmIIyoSNWY4JA3lsZPfmodN8Ly6ZrVzfxeINUljup2nls5VtjGzEYxuEIkwAAAN/AAHSgDFt9a1Z0s/ELalIbO61H7E2mGCPy1jMxiVwwXzPMyASSxXBI2jginJ4tu7fxDCZda3XR1MWU/h8RRnyoGkKJNwvmqSNrby2w5wBkiumj8I2serJdC9vTaxztcx6aXT7OkxJJk4XeTkk7SxUE5C5AxLJ4c+062l/qGq395FDL51vYy+UsED4wGGyNXbAJxvZsZz1AIANqslPFfh2TWv7Hj17TH1PeU+xLeRmbcBkjZndnAzjFa1FAHDW+tas6WfiFtSkNndaj9ibTDBH5axmYxK4YL5nmZAJJYrgkbRwR3NYEfhG1j1ZLoXt6bWOdrmPTS6fZ0mJJMnC7ycknaWKgnIXIGNKz037HqF9dfbbyf7Y6v5M8u6ODau3Ea4+UHqR60Acnb61qzpZ+IW1KQ2d1qP2JtMMEflrGZjErhgvmeZkAkliuCRtHBFu+vb208fWNvBrd80VzLiaxu7SNLUJ5bECKbylZ5MqDtEjnG7IAGRfj8I2serJdC9vTaxztcx6aXT7OkxJJk4XeTkk7SxUE5C5AxJP4a+2a7FqF/q+oXUFvMJ4NPfyVgikAwGGyMO2MnAZ2GT04GAChdNqtp40sorPW7q+W4lZ7rTZIYPJtbfa2HDKgkU7gANztu+bjj5ZNJu9YHjvUtO1TUIbq3SxhnhjgthCse6SUd2ZicKoJLY4yAvNT2PhebT9eudRh8Q6o0d1OZ5rKRbYxMSMBd3k+ZtAAwN/GBUVv4Qnt/E762fE+sSyyKsbwOlp5TRqzMsfEAbALHkNu9TQBlR63qrxxeIRqMn2OTVDYHS/IjMYj88whwwXzPMyN2dxXHG3vWjJZ6r/AMJlClp4m1KSBSbi6s5IbUwpGchYwRCJASeh3E4U5PSrQ8I2o1YXX229+yrcG6XTd6fZxOTnzPu785JO0vtzztzWpZ6fFZT3cyO7yXc3myM5Bx8oUKMDoAoxQBw//CS6ifiL9gfUb2KL7d5CRm1j/s+SLZkqJ9m/z8gjZv6/w4ya2LptVtPGllFZ63dXy3ErPdabJDB5Nrb7Ww4ZUEincABudt3zccfLYXwZarqTTfb742TXX2z+zCY/IE+7d5mdnmfe+bG/bntT7HwvNp+vXOow+IdUaO6nM81lItsYmJGAu7yfM2gAYG/jAoA36KKKAOGl1rVmS58QRalItnban9h/szyIzG8YmETOW2+Z5mSSCG24AG3qa7msCXwjay6s10b29Fq84upNNDp9necEESH5d+cgHaHCkjO3Oc6UGm+RrF3qH228k+0oifZpJcwxbc8ouPlJzye+BQBycutasyXPiCLUpFs7bU/sP9meRGY3jEwiZy23zPMySQQ23AA29TVvV768svGunw2usX6rcTIJLK4s0Wy8sgg7ZzECZcjhBIxz/DjJF+Xwjay6s10b29Fq84upNNDp9necEESH5d+cgHaHCkjO3OcyXvhr+0tXiu7/AFa/mtYZUmj00+UsCyLyrZWMSHB5wXIz2oApXlnqjeLbZLHxNqQRn+0XFkYbVoI4Rxtz5PmfMeAd+eGOeMVJZ3erx+P5tPv76Ge0awNxFFDbeWE/e7RklmLNjgnIB/uitq10+O1vby6V5Hlu3VnLkHaFUKFXA+6OTjnlj61i/wDCIz/8JR/bf/CT6x5u3y/s+y08ryt27y/9Ruxnvu3e9AHO6x4vutN124eTWyl3bX8Vuvh4RRnzrZ3VPO+6Zed+d4YIMBSMgmtfUbvVLTxxG19eataaNI0UcDW8do1q8jZGyUsrTqS2ACML05BNa154c/tDVkur/Vb64tI5Flj01hELdXXlW+WMSNgjOGcjPbgUah4dXVNVhub7Ur2S0hdJV00eUsBkU5VyQnmEg4OC+3IHFAFDUbLVW8VWyaf4n1JBJIJ5rLybVoIoF4I5h8z5jwPnz94/w4o1Gy1VvFVsmn+J9SQSSCeay8m1aCKBeCOYfM+Y8D58/eP8OK3rbT4ra/u7wPI8t2V3byDsCrgKvHA6nHPLH1ottPitr+7vA8jy3ZXdvIOwKuAq8cDqcc8sfWgC1RRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBDanFlCTwPLX+VedeEtQvZPF1tLfNqUcN99oMF7LfvNbaoM7k8uEsRAQoJxhSQON3NejWv/AB5Q/wDXNf5Vl6d4T0fSr/7XZW8qyAsY0kupZIoN3Xyo2YpHnJ+4B1xQBs0UUUAZNh4ksdS1F7K3g1NJU3Za40q6gj4ODiSSNUPtg89qyLDTzD4136JeajLbReaNTa6v5p4S7AFI0WRiqsCcnYAAOD1ArraxNJ8I6Vod61zpp1CNmZ2MUmp3MsOXJZj5TyFASST93vQBtEZUgEjI6jtXK+H5J9P8QeJYtR1W7vYbQW8nm3br8gMZLEKqqqjj+FR09a3bDRrDTJL2SxgMT385uLkiRjvkIALcnjgDpgVnab4L0jSdWfU7NtT+1SHMjTavdzLJgYG5HlKtgHjIOO1AHM+EPGdn4i8fXDw+JLO6jvLBXttNgvY3EAWRuqqf9YVwzemQO3NPRtVuYfGKX2py6jBYTXN0ItTk1B5LS/RQSsa2+4rCVCt821c+VwW3mvSfsNuNSN/5f+kmIQmTcfuA5xjp1NZtn4S0aw1M39rbyrLvaRI2upXhids7mjhZjHGTk8qoPJ9TQByfhLxrZ+IfHlzLB4jtLuO708SWumQXsb+SFduqqT+8K4Zu4yB25m0ea7EHh3XTf3zXet3Hl3kElyzxBWjdgEiY7IymwcqATg7skmu4+w241I3/AJf+kmIQmTcfuA5xjp1NULXwrpFnqr6jb20izsWKg3EjRxFvvGOMtsjLdygBOTnqaAM7wyt3b+KPENnd6neagsJtij3TLkboyThVCqv/AAFR+fNdRWBpvgvSNJ1Z9Ts21P7VIcyNNq93MsmBgbkeUq2AeMg47Vv0AZMHiSyudWbTooNTE6lgWk0q5jhJHXEzRiM+x3c9s1y2lz3Yh0LxA17fPd6pfGC6tnuWaHY3mfKsROxCm0cqAx2nJOTXf1k2/hfSLXWDqcNqwuNzMoM8jRRs33mSItsRjk5ZVBOTk8mgDWPI9K5fw6t3b+MNes7rU7zUEijtnRrpl+UsHzhUVVXoOgGcc5PNbOn6Lp+l3WoXFhB5UupT/aLpt7HzJNoXdyeOFAwMDis+w8FaPpusnVLVtU+1scu0usXcqvgEAMjylWAycAggdqAOV0HVL661y21vVrW8a3vdQnsoZV1aVVhZXdEU2a/uimE++SXyckAcg0HVL661y21vVrW8a3vdQnsoZV1aVVhZXdEU2a/uimE++SXyckAcjsYfCujwa0dVitnW53NIF+0SGFXbhnWHd5auecuFDHJ55NEPhXR4NaOqxWzrc7mkC/aJDCrtwzrDu8tXPOXChjk88mgDMsdCtj4ye5sL3VhHZFjcLJq11LFJK4zs8t5CgCqd3AGCVA6EVk20921vY+JDe3xvbjVjaS2v2lzAYTO0WzySdgKgA7gA+VOTgkV3VpZQWMbpaoUWSV5WyxbLsSzHJPqaz08LaQmtjVVtn+1Bi6qZ5DEjkYMixbvLDkE5cLuOTzyaAMNra50vx8LzVhcyWuoXPlWM0WsXGyJvK+49qcRAHa5DDcckZA60NbXOl+PheasLmS11C58qxmi1i42RN5X3HtTiIA7XIYbjkjIHWt//AIRvTTr39sSR3E14pJjM93LJHCSNpMcTMUjOOMqoPJ9TR/wjemnXv7YkjuJrxSTGZ7uWSOEkbSY4mYpGccZVQeT6mgDUooooA8+tp7trex8SG9vje3GrG0ltftLmAwmdotnkk7AVAB3AB8qcnBIr0GshPC2kJrY1VbZ/tQYuqmeQxI5GDIsW7yw5BOXC7jk88mrVno9jp+oX19aQeXcag6yXL72PmMq7QcE4HAxxigDB0Rby18f6xZ3Oq3t/GLK3lQXLLhCzy8KqKqjgAZxk4GSTzWRHc3ZtovErXt8t62smza2+0v5HkfaTDs8knYCF+bfgNnvjiuitfBOj2euHV4G1T7axG55NYu3VgCSFKNKVKjccKRgZ4FWf+EX0j+2xqv2Z/tIcyBTPJ5IkIwZBDu8sPj+Pbu96AON0jx1p+ufEy0+zeJbNraa3uYINNjvUJLK0eHdAc72+cgHkKOgO6rEdxeNbxeJTeXwvX1k2TWv2l/I8n7SYdnkk7Mhfm37Q+e+OK7mSxtpdQhvnjzcwRvHG+4/KrFSwx052r+VUP+EX0j+2xqv2Z/tIcyBTPJ5IkIwZBDu8sPj+Pbu96AMO4trnTPHqahqouZbK9uVhs5YdZuAkLmLASS1yIipKt83zHLDgdRY0iO7tfiNqlrcare30R0+CZVuXXbGWll4VEVVHAAzjcQBknFaz+GtMl16PWZ4557yIkxeddyyRQtjbuSJmMaNjI3KoOCeeTVSDwTo9trp1iJtU+2sQWd9Yu2VgCSFKGUqVBY4UjaM9KAKmkR3dr8RtUtbjVb2+iOnwTKty67Yy0svCoiqo4AGcbiAMk4qDVIjY+PtOuI21ezS4uAktxLfvJZ3OY2AhWDzGCNkA7iiDjhiTg6UHgnR7bXTrETap9tYgs76xdsrAEkKUMpUqCxwpG0Z6VZPhfS311dXmS6nukbfGJ72aWKJsY3JCzmNDjjKqDyfU0Aa9ZL+JLGPWv7LaDUzcbwm9dJujDkjP+uEfl4992K1qKAPPpri7e3u/En2y+jvbbV/scdsLlxB5InEWww52EsCW3EbskYbAAr0GsiTwvpEutDVXtnNyHEm3z5BCZAMCQw7vLLgcbyu7gc8CrUGj2NtrF3qsEG29vESOeXex3qmdowTgYyegoA4ua4u3t7vxJ9svo7221f7HHbC5cQeSJxFsMOdhLAltxG7JGGwAK2LNLu1+JM1vNql5dwy6aZlinZQkZ87ACqiqOBxkgt6k1pSeF9Il1oaq9s5uQ4k2+fIITIBgSGHd5ZcDjeV3cDngVX/4QrR/7e/tjfqn27Od/wDbF3txndt2ebt2Z/hxt9qAMvU7e503xxHqupi4k0y4mhgt5INZuIxBIwCgPajETqW/iyTlh8uBkWLrQra78aQvaXmrRzQMLu72atdeVjokfk+Z5eGIJI29F9wa15/Dmm3OtxarcpPNcwkNEst3K0MbAYDLCW8sNgn5gueetXbeygtZ7maBCsl1IJJWLE7mChR1PHCjgcUAeezapfzeJ77Vb61vJdN07VVsR5OrS23lD5AGFvH8s4LvlvMIOOgIHMOsX9+vj6a4J1L+zre+tof7Ut791trQ4G+CS1DYkJJUeYVIHm8kbBXcTeFdHuNZGqS2r/ad6yMqzyLFI6/dd4g2x3GBhmUkYGDwKZP4Q0W41g6nLbS+e7rJJGt1KsErqMK7whvLdhgYZlJ+VfQYAKEC3dr8S/Jl1S8uoJ9OkmEEzKI4j5qgBVVVHAJ5OW55JrIvJ7t7fU/EP22+jvLDVBawWyXLCExCRE2GLOxiwYncQWG4YIwK6CTwTo8uujWHfVPtobIddYuwoG4Nt2CXbsyB8mNvtVqfwvpFxrC6nNas1wHEhUTyCJnH3XaINsZxgYYqWGBg8CgDWooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAggQSafGjZAaIA7WIPTsRyK5jwXYQaZr3im2tfM8tb6L5ppnldj9mi5Z3JZj7kk108CLJp8aSKHRogGVhkEY6EVjaN4a8HWGpTTeHtF0O2vrRvJlksbSFJYWKg7WKDKkqQcHsRQBi6RpFp4Z+IXlSWmjz3esC6uIryCyEV7GocMyyPljInzgbvlxhRg547qsPSF8KQ69qUWgDRo9WJDailkIhPnPBlC/N1J+961uUAZNhrF9eai9tceG9TsIl3Yu7iS1MbYPGBHMz89sqPfFYekaFpUnjD+1vDWnWmn21u00d3d20So2oSk4Kkr98K24lm/i6dzXZVh6Z4e8KWWtXFzo2kaNb6nCcXEtpbRLMhcZwxUbhuHPPWgDVgvLW9aeO1uYpmgcxTCKQExPjlWwflOCOOtct4ctYNG8UeKUt1uJI4xbOd8sk8r/uifvMSzHsMk9hXUwWNpbNOba1hhNy5knMcYXzWIwWbHU4A5Nc3pWmfD608UPbaJY+GoNetgWeKzht1uoh3JCjev3hn6+9AGD4P1hdR+I9xdXcWqxX1/pql4brTbqCO3VZG2xgyIqjAPLdGYnHYDQfTrXSvidaXK6Pp+nSXwnWG5sCPOvm2Bm+0DauAMEjmTJxkr0PYB7E6oyq1ub9YQWAK+aIiTjPfbnPtnNUtN0vw7aaxfT6PY6XBqTEC9ktYY1mJb5h5hUbuevPXrQBxehW1rCnhfV4Iok17Urt01GdDiW4wknmrIerBGUAA5C7QBitG00e28OfEZJ5rTR7mfW5p3huo7ER30Hy72Dy7mMiY+XOFx8o5zxqaXqvgefxNcHRb/AMPy67c5Sc2k0BupdvUNtO9sY79MVo6fp+g2+s39xpVppsWpuQL6W2ijEzE8jzCo3c9RuoA888OWwi8bWWszWNj9l1G/u47TU7cYvp2+b93dcDKDY+AC33Y8hcc+r1hWEfhJfFd9/ZaaKPEAXN79nEX2vBwf3m358dOvtW7QBk2+r3s+rNZy+HNTt4AWAvpJbbySB0ICzGTnt8mfXFZHhqwg03xx4igtjMU8q1YtPO8zkkP1dyWP4ngcV1pGRg8iue0/wt4NtNaefStC0KDU7RgzyW1nCs0JYHklRuUkE/UUAbVvfWl3LcRWl1DPJbSeVOkcgYxPgHawH3Tgg4PYiuX03wt4dl8Yy6vpuhabaPYO6C5t7RI5Jp2H7xi6gFgAcc/xFu4FdRb2NpaS3EtpawwSXMnmzvHGFMr4A3MR944AGT2Aqlp+saBJqVxpOl6jpr3sLM89nbTxmSNicsWRTkHJ5JHU0AYmneFvD0njCbV9M0LTbSTT3dBc29okck1ww/eMXUAsADjn+It3ArF0m3to4/DusRRxL4gvtReG9nU4lnUeZ5kbnqyptGFOQu1cYrtdP1jQJNSuNJ0vUdNe9hZnns7aeMyRsTliyKcg5PJI6morT/hGf+EqvPsP9k/8JB5Y+1+T5X2vZxjfj58dOvHSgDifsF3pXi7R86KIdXm1R1uNYMsZN/bEOxUbSZGCrsG2RVVSBtJ4zBaw/wDFeprklhYyWMusyW0epoMaismGj8mTgfudwOACTjbleprt7b/hD9L8VzW9n/Yln4gvBvlji8mO7nB5ywGHbpnmq1vqPgJ/GDPa3nhxvEjsYWaOWA3jEDBQ4O8nA6e1AEFv4W8O3njdtTtNC02CbTZC73kVoiSy3LrzlwMnarc56l/9muf1DT7nS/E2nzNpAXWZtZATWzJHm6tnZiYRhjIQsfBRlCDZkHIFd9b6losWsS6Ra3lgmpEG4lso5UE2DjMjIDu5yOSO9Z1vJ4MtPGE8do+gweJLgfvliMK3koxn5gPnPAB5oA6KiiigDzS1t7YRabrhihHiSbXGtZbjOJpE85g8JbqUWMZCHgbQe2a9EjvrWea4hguYpprUgTxRuGaIkZAYDkEjnBrMj/4Rf/hMJfK/sj/hJPI/ebfK+2eTx1/j29PbpWpDZWtvcTz29tDFNcsGnkSMK0pAwCxHJIHHNAHnOha8uo/FK1u7y31eC6u7K4iS3uNLuokt41eMqu5owuThiz5xlgufu5ZrGn3Wm+IrW4OkD+2Z9ZTyNcMkeZrd5MmAYbzCFi3AoV2AKWzmu6i1nw/deImsIdS02bWbdGVrZJ42uIlOCwK53AfdJ/Cq0EXhK28ZS/Zo9Fi8SzRFpfLWJbySM45bHzleB144FAHF24k/4SSfxDqNhpN9NFrpsFW5t/NvIVLBYzDKWxEApDbApyNzbhmpdL15NR+KljeXtvq8FxPa3UEVvPpd1GkEYaPb8zRhSTgszA45Vc9M90+n6F/wkkV5Jaad/bbQny52iT7SYhwcNjdtG4A9ufeqw8T+FJvECWI1vRpNYjZoEt/tcRuFJxuQLncD8oyPb2oA47StdTUfipY3d5b6vBc3FtdQRW8+l3UaQRho9vzNGFJOCzMDgZVc9M7yeFvD1/44OoW2habFcabJ5st7HaIsstyy8AyAZO1Wyc9Sy+lbSaz4fuPEX9nJqWmy61bow+zCeNrmJSAWG3O4AjaT+FSRanosGtSaRBe2EepyA3D2SSoJmyOXKA7jwOuKAPPrcSf8JJP4h1Gw0m+mi102Crc2/m3kKlgsZhlLYiAUhtgU5G5twzUula6mo/FSxu7y31eC5uLa6git59Luo0gjDR7fmaMKScFmYHAyq56Z7kWWgTeJnuhbaa+uwQrumEcZuo4myFyfvhThgOxwaRNZ8P3HiL+zk1LTZdat0YfZhPG1zEpALDbncARtJ/CgDVooooA80nt7dob3XJooR4jh14WsNxn98qeeoSEN1CGI5KdDuLY716LHe2st5LaRXML3MCq0sKyAvGG+6WXqAcHGetZcn/CL/wDCYReb/ZH/AAknkfu93lfbPJ56fx7evt1rUjsrWK8lu4raFLmdVWWZYwHkC/dDN1IGTjPSgDmLPT4LH4qTNAZmafSjI7TTvKcmfoC5O1fRRgDsK5zxPYXen6096NFEmrTarAbHXDJHlYmkQG3HPm8L5mUC7CMsSCTXUNongJPFixPpnhxfEDn7UqG3gF23OfMAxv6g/N7VZuf+EP0vxXDcXn9iWfiC8GyKSXyY7ucHjCk4dumOKAOLuBNJ4p1LXr+x0e+bTtajs4or23865RG8sIYJCQITl9+NrbvUdtvxPp1paeMtI1eXSNPt995DGdVtyPt0kjZUREbBmM8ZO9jgfcx8w2bu58Hr4wtlvptDHiRVCW4meH7YFOcBM/Pg88D3q0dJ8PQeJEvzYaZHrc6NsuTDGLmRQAGw2NxABAP4UAee6lbB/Htxrj2NjcWFtq9vbvqBH/ExtpMKvlxnH+pLMmRuzhpPlIbNXb63tnh1XWbiOL/hIbXWlt7W4JxNGpkjCRK3UIyHJUcHcSRzXVXB8HJ40g+1HQ18TMmIfM8kXpXB+7n58YB6ds0+afwm3jCFJ5dGPiRI9sSu0X2xUIJwoPzgYyeOOtAHG+LbC7sNTuL7+xRPqkmoQNputmWP90jOi/Zxz5oON/yKpRgSSRk4PFthd2Gp3F9/Yon1STUIG03WzLH+6RnRfs4580HG/wCRVKMCSSMnHXK/g3/hNG2NoX/CT7MHBh+27dvT+/jb+lXH0vQIfEceoPY6bHrU6ssdyYYxcyKByA2NxAGM+1AGrRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBWj8r+y0+0bPJ8keZ5mNu3bznPbFcN4B1rwq3iPxDpfh3VNH8uS5jNpa2FxFgoLeMExoh6Ag9BgEGu9tP8Ajzh/65r/ACrM03xTpWq6k1hbPdR3IQuqXVlNb+aoOC0ZkRRIBkcrkcj1FAHDaHK1x4q0HSNMvtIvU0GScT3Gm3PnyeUUZcTgKBCxfb8m5izKTxtNeo1kWHijSNT1N7CzuXadQxQvBIiTBThjFIyhZQD1KFsd616AMizudfkvpE1fS9Lt7ABsTQalJNIfTMbQIBkdfmOPeuV8Ga54STxtrum+H9U0VVlNuLa1sbiIB9sZ37EU84Oc4HHevQax7HxTpeoaq2nQvdR3Q3bVubGeBZdpw3lvIirJjr8pPHPSgC3p+sWOqzXsVhP5r2M5trgbGXZIACV5AzwRyMivMtA1CQeLIEhvLfUhHe3kkfh9Aq3eluwf55GJJKsdwG4KB5w5b5a9arHsfFOl6hqradC91HdDdtW5sZ4Fl2nDeW8iKsmOvyk8c9KAOO8JyX6/EG5l1rw9f2d7e6YHvbi5ktmQYkbAHlzMdgHyqMZ4JIGSaseDNc8JJ4213TfD+qaKqym3Fta2NxEA+2M79iKecHOcDjvXS2vi/SrvWI9LRdSiupS6xi50q6gRyoy2JHjCHgdjzU8PiTTbnWX0u2a5mnjYq8kVnM0CMBkqZgnlhh/dLZ7YoAgsGi1jVLjU5drW1oz2truwRkcSyfiQU+in+9XNeDNc8JJ4213TfD+qaKqym3Fta2NxEA+2M79iKecHOcDjvXWReJdMn1iTTYHuZZoyVkkjs5mgRgMlWnC+WGHcFs0/SfEOk67JcLo99Fe/ZiokeE7k+YZGG+634E+lAHn9i8snirRtC0y90e8Gj6jLNNNYXJmuFiZZN4nQACElmUHLNvPOB29SrItPFWj3usNpltcyNcAsFLW8ixSlfvCOUqEkK9wrEjBz0Na9AGTBceIG1V473S9Li03LYuI9SkeUjsTEYAoz3G/j3rk/CWu+EYfH+s6doOqaIgnjt1t7WyuIh5jgSFwiKeSOpwPrXoROBk8Cs3S/EOk63PcRaRfw3pttvmtAdyDdnGGHyt0PQnBGDQBJp+tWGq3V/bWE/my6dP8AZ7pdjL5cm0NtyQM8MDkZHNctPrFtffEvT7aLU9P1ZrZ5VFpY48/Tj5eGechmyD90AiPBYfeOMdvWTb+KNIutYOmQ3LG43MqkwSLFIy/eVJSux2GDlVYkYORwaAOdn1i2v/iVYW0Op6fqzWzzKtpY487Tm8vDPOQzZBPygER4LD7xxjO0m4tpI/DujxSRN4gsdRea9gUZlgU+Z5kjjqqvuGGOA25cZrtLbxJp93rU2l24vXuIWKSP/Z84hDAZI84p5ZPPTdVhNZ0+TXJdGjukbUIYFuJLcZJSMnAY9hkg8daAPO/DGoXthrsNkNaWTVLjVLn+0ND8qMFYS7kXB480fL5eHLbCCAAMiu3tyus+IJrhgGttLkMMIOCDPj53/wCAg7R9XqWPxJps2tNpUDXM1yjFXeKymeFGAyVaYIY1YehYHpTU8U6Q+tjSluX+1MxRWMEgidwMmNZdvllwAcoG3DB44NAHF2tzbGLTdDMsJ8SQ6411Lb4zNGnnMXmK9QjRnAc8HcB3xWs2o2+nfEAWeja79vuL66zqOjqYpDaDyv8AXfKoeP7qD5yQd3AyRXQR+JNPl1yTSIhevdRttdl0+cwo20NgzbPLBwRxu701fFWjtri6SLl/tTOY1Y28ghZwMmMTbfLLgA5QNu4PHFAGvRRRQB5pa3NsYtN0MywnxJDrjXUtvjM0aecxeYr1CNGcBzwdwHfFd9Z6xY6hqF9Y2k/mXGnusdymxh5bMu4DJGDwc8ZqqninSH1saUty/wBqZiisYJBE7gZMay7fLLgA5QNuGDxwa16AOG1TWrS7+I2kWCalp2pyW902NOtObmxbynDTSkM3yDOMFY8FxyxwDjalI3/CQx+HNLvtJu7pdbTUP9HufMvoQZA8gkiC4jUISvmF+QVXb81d/pniTR9Zvrm00nUIbyW1AM3kHeq5LLjePlJyrAgHII5xUf8AwlGkf22NK+0v9pLmMMYJPJMgGTGJtvll8fwbt3tQBxelT6qfijY3WseG9Rtry7t7pHmkltWjjiDR7FXbMW2r34yWcnHXHYwldZ8QyyMA1tpT+XGDghrgrlm/4CrBR7s3oKcninSm1waSz3UV0ztGhmspo4pXUZKpKyCNzgHhWJ4PoaE8U6U2uDSWe6iumdo0M1lNHFK6jJVJWQRucA8KxPB9DQBz+s6xaXXxA0iwTU9O1KS2uwf7Mtebu0fymBmkIZvkAboVT7w+Y8KcXUpG/wCEij8OaXfaTd3S62moH7Pc+ZfQAyB5PMiC/u1CEr5hbkFV2/MK7ZvF+lR61Hpcq6lHcyzeRG0mlXSxO+CcCUx+WeATndjirGneJdH1fUrmw0vUIby4tVDTCAl1TLMuN4+UkFGBUHIxyBxQBx+h634Qs/ipqNlpGp6JA09nFGILW4hUyXHnSl12qeZMnJHXnmrms6xaXXxA0iwTU9O1KS2uwf7Mtebu0fymBmkIZvkAboVT7w+Y8KeibxPpia8ujzNdQ3cjbIzNYzRwytt3bUmZBGxxk4DE8H0NNTxTpTa4NJZ7qK6Z2jQzWU0cUrqMlUlZBG5wDwrE8H0NAGxRRRQB5pPcW6w3uhzSwnxHNrwuobfH75k89SkwXqUEQwX6DaVz2rvoNYsbnWLvSoJ917Zokk8WxhsV87TkjBzg9DVWTxRpEWtDSnuXFyXEe7yJDCJCMiMzbfLDkc7C27kccitegDzSe4t1hvdDmlhPiObXhdQ2+P3zJ56lJgvUoIhgv0G0rntUJv73S/F2q+XrSwavPq8fk6OYkzf2xEahjuBkKqu8hkKqpU7gcHPdSeKNIi1oaU9y4uS4j3eRIYRIRkRmbb5YcjnYW3cjjkU6fxLpttrcWlXLXUNzMwSN5LKZYXYjIUTFPLLYHTdntQBz+qahBpXjqJdJ137RqN/PCl3oIMUh8vG0zYC+ZHtUA7i2zjGMkVkwT6o3xQ0y91bw1qMN1M11BHO0tq0cduAu0LtmLY/ibKgkt0OBjvZtZ0+DW7bSJbpF1C6ieaG3wSzImAzewGR1qtJ4o0iLWhpT3Li5LiPd5EhhEhGRGZtvlhyOdhbdyOORQB5/f3pXx9dQrqNsUbV7d5PDcij7VcFQoF1G2d2wfK+0LjER+YfMK6DxXrFs/ijS9NGp6fevHeQO2iw4N6HzkS5DEhFB3EbBkD74HB3rjxZpFrrS6XNPOLgyLEXFpM0KSMMqjTBfLVjkYUsDyOORl1x4p0e11hdMmuXFwzrFuFvIYkkblUaULsVzkYVmBORxyKAOe1PxBoOt+MIfDr6xptrLp17FNLDJcotxPOBuWONCQ3dSWHX7o6kjM8/VG+J2lXuq+GdRjuJLi4t4ZzNatHHbhCBtxMWwfvtlQTkDB2iu2m8SafDro0gi9ku/l3eTp88kSbum6VUKL0/iYVHdeLNHs9ZXTLiedbgukZdbSZoUdvuq8wUxoxyMKzA8j1GQDZooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAhtTiyhP8A0zX+Vcho2oR+Jtemuru21SzvIoZobOG50u5gjt4yQCxldAjSNgHhuBwM4JPXW7rHp8TyMFVYgWZjgAY61MjrIivGwZWGVZTkEetMDg9Ciupm8MaSbG+t59BX/TpZrZ44siFowEkYbZNxbPyFsAc4Nd7TZZY4IXlmdY40Us7ucBQOpJ7CsjR/GHhzxBO8Gi65YXsybt0UNwrPhTgttznbn+LocjBq40qkouUYtpbu2wrofYW/iKPUXfVNU0y4sju2Q2+myQyDnjMjTuDgdflGfasTSNVi8Q+LfPvrPVbaWyaWOyguNKuYo1H3WlaVkCFmA+UBuFPck46O11zSb28+yWWqWdxc+WJfJiuEd9h6NtBzj36UkevaRLqb6bFqtk99G217VbhDKpxnBTOQcDPSj2VTblffboF0O0/Uv7QmvY/sV5a/ZJzBuuYtizYAO+M5+ZOcZ9Qa5vSNVi8Q+LfPvrPVbaWyaWOyguNKuYo1H3WlaVkCFmA+UBuFPck47GmSTRwhTNIsYZgilmAyx4AHuaz3GZelpLeald6ndxSREO1tbRyKVKxKcFsH++wznuoSuK8M6bqGnavYWiHW01GG8uDqBmEosXtmaRgV/wCWJYkoQU/edd38VemUUAeZ+GtO1DTNVsLZf7bXUILy4OoGVZfsT2zNIwKj/UsxJTBT9513fxVr+HdbgufHWt7bLV4kvTAIJbjR7qGNtkZDZd4wq8+pGe2a3LjxRp0etW+l2t1a3V29wIJ4Y7hTJbZRnBZRkjO3GDjrU8PiLRLjUJrC31jT5by3DNNbJdI0kYX7xZQcjHfPStnQqpXcXtf5dxXRxNppt9ceKNL0yyubuTS9Gv3uR5uky2vlLtkGwzyfLPy+F8tRwMsT1PpFYuk+MvDevXb2uja7p97cKWBhhuFZzjqQucke4496tQa/o91qsmmW2rWM2oRZ8y0juUaVMdcoDkYz6USoVYNqUWmtdnsF0Q29v4hTVmlu9U0yXTssVt4tNkSYDsPMM7Akd/k59q5/Qtcgn+IOrkWWsRpeR28cEs+j3cUbFFfdl3jCqORySAc8ZrtWYIpZiFUDJJPSuR0nx/Z694nk07R7rRLm2jkMfmDVwbiXChi0cKoQy5OM7x0Ppy6WHq1YylBXUVd+QNpbnQWGp/2jc6hB9ivbX7FP5HmXMOxZ/lDb4zn5l+bGeOQR2rj9LguzDoXh9rK+S70u+M91cvbMsOxfM+ZZSNjl9w4UlhuOQMGuwh13SLjUFsLfVLKW8dDItulwjSMoJBYKDnAIIz7Gkg8QaNc6rJpltq1jNfxZ8y0juUaVMdcoDkY+lR7Kp/K++3QLo5sIYPHR/wCEag1VZJJJG1T7Wtylk3yfKyGQbNxfbzD1G7NUvDGmeJ7Dxskms6Vp6iayka7vra/ll8yQyA5w0CDPAAXPCgcnFdjFr+jzSpFDqtjJJJII0RLlCWcruCgZ5JUE49BmnrrOmPqzaUmo2jaii72sxOpmC+pTOccjnFHsqi+y++3QLo4Dw/p2oabrlpaodbXU49RuJLxnWUWD2jvI4I/5YFjuTG395nrwDVu2gu1t7Hw2bK+F7b6sbuW6+zOIBCJ2l3+cRsJYEDaCXyxyMAmuubVpJNc/s6ytfOWEBry4eTYkAIJVRwdzng7eAAck9Aa+neM/DOrak+n6br2n3N4jlDBHcqXYgZO0Z+bA7jI6+hq/q9Vq6i2rX72Xn2+YXRkTKsXj6L+wINXW5lnzqpkS4WyaLy8bgZB5RfIQAxfNwQeM1lXWnXtx4hg0TTJ7x7C31Zb91fSZoRDhzI/+lPhJVLHAVBu5GSQDXcprmkyX8djHqlk13Ju2W63CGR9pIbC5ycEEH0waRtd0ldUOmtqlkL4Yzam4TzRnp8mc89uKj2VT+V99ugXRfrJS28RDWvNk1TTG0zeT9mXTZBNtxwPN88rnPfy/wrWoJwMnpWYzz62gu1t7Hw2bK+F7b6sbuW6+zOIBCJ2l3+cRsJYEDaCXyxyMAmu0s9S+2ahfWv2K8g+xuqedPFtjn3LuzG2fmA6E+tUdO8Z+GdW1J9P03XtPubxHKGCO5UuxAydoz82B3GR19DV1Nc0mS/jsY9Usmu5N2y3W4QyPtJDYXOTggg+mDW0qFWDtKLXXZ7CujltM1yCX4m6g4sdYSK5tILaKaXRrtIzIjylgXaMKB8w+YkA54NVY7e8W3i8NGzvjeprJvWuvsz+R5P2kzb/OI2ZK/Ls3F89sc12Mev6PLq76VFq1i+opndZrcoZlwM8pncOPaoYPENreeJJNJsZrO5MELPcmK8jaSBwwARogdwyCTk8cY70vY1P5el/l3C6MNdVi1vxqltqFpqkEenXLCzjbSrkRTSBSDM0+zy9uCQo3e5ySABdVi1vxqltqFpqkEenXLCzjbSrkRTSBSDM0+zy9uCQo3e5ySAOhbxDoy30Vk2r2Au52ZIoDcp5kjKcEKuckggggelV5NW1F/FDaXZWFrJbwxRy3FxLdsjqHLAbUEbBvuHqy9aaoVH0tpfXTT5hdD7WOW+1+5u7mKSOKzP2e1V1K7iQC8nPXOQoP+y3qa56y1yCT4oXjix1hYprKG0SZ9Gu1iMiySlhvMYUDDD5idpzwa6GPXZJ9dm06DSL6SKCQRy3waEQoxQPjBkEh4I6IeTSRapqA8S/2be2NrFbyRSS288N20jsEKg7kMahT846M3Sj2E/wvutvv/DcLow9TuZrrx5p0dkNUvPs9wDNb3GnvHZ267GBmScooZ/mAA3yDk4UdQq6rFrfjVLbULTVII9OuWFnG2lXIimkCkGZp9nl7cEhRu9zkkAdBbaq7axLpt9bfZpwplgZX3pPGDjIOAQwyMqRxkYJHNaVRKEoOzGFZL23iI615seqaYumbwfszabIZtuOR5vnhc57+X+Fa1FQB59Nb3aW934b+x30l7c6v9sjuRbOYPJM4l3mbGwFQCu0ndkDC4INdpBqXn6xd6f8AYryP7MiP9pkixDLuzwjZ+YjHI7ZFXaKAPPpre7S3u/Df2O+kvbnV/tkdyLZzB5JnEu8zY2AqAV2k7sgYXBBq9r089z4x06Gx/tW7eC5jMllLp7pYovO6YT+WoLqDwPMYZx8meR2dFAHnlrpviq3+IFhe6hpOmyrNLcGa9hv5XKxEAIu0wALhei7uSWOeadNb3aW934b+x30l7c6v9sjuRbOYPJM4l3mbGwFQCu0ndkDC4INeg0UAeY3tlfjx7cXEEWqrdNqULrpwtXOnXMKgL57ShdglCljy45jUbCQDU/iXTb+61W80PR7m78nULuG5mi/smULEwdGdxeN+62bU+4AXycAjt6PRQBxutosXjG2l0OHV/wC2JJYRcMi3Asntwfn3lv3BIXOMfPnGKwdUsb7/AIT65uYI9XS7a+t2i09LSR9NvIlA/fSSBdiyAF+rrzHH8rELn1CigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAgt2K6fEyqXIiBCrjJ46c8Vg6N4fvLXVJL/dHpMEjbjplg2+NzlstJuG0Md24+WqHPV3Fb1uwTT4nbJCxAnaCT09ByaSx1C01O2+0afcxXMW4qXiYMAwOCp9CDwQeQetbwqThCXKtHo/62/XsKyLFc34fiv9Omv9MuNKuhE91cXEd/vhMLiRy4UDzPMz82OUAyDz0ro3O2NiOoGa5jwz43sNbsdNWeXF9eRZPl20ogMgBLIspBTcMHK7iwweOK0oxqulNxjdaX30310+e+gna5b8I6N/ZPhXS7a5s4re7t7fa+1VJRm5fkep5OOtczaRX1jqPhrSb/AElopLXUJmF40sbC4zHKS6BSW53AtuC4JA+auus/E2lX+ptYWtxI8w3BWNvIschX7wSQqEcjuFJxz6Vn6ZL4Us/FE1vpulR2Gq3Jk3zjSXt/tBBy+JjGFk554Y5611wqVlKo6kHd3ez0vfXfRavv+pNlpY6UjKkA49x2rm7TQ7zTvEC3twses78qt7cNtubYHAIVf9XtPfYI/uj5XPNLP4utZNbsdP05jK0141vK728ioQEcny5CAjkMgB2lscg4q4up3V1rVxBaJGtjYHbdSsrO8jld3loo6YBUlueuAO45o069FNNWTXXtt67/AH9dCrpklrpN5b6k11L4g1G6hYsRaTR2wiXPQArEr8dst9c1pnpxWDofjHTvEF3NbWVvqcbwyPGxudMnhTK9fnZAo69CQ3tUuneLdG1a8jttOuZJ3lDlHW2lEZKHDL5hXbuBHK5z7VNWjiLvng1bfS1vWyBNGBp2laskuh2c+jlF0u9kkmvnlixKGST50AJbksN24KcnoeSIrex8TTeLrDUNTtr6SK0uZVaMNaC2RHVlV4sHzSAMbt5zzwp6DpIvFejz6ounx3EpneVoY2NrKI5XUEsqSFdjEbTnBOMYNO07Urv+17jStWSAXCIJoJoMhZ4icZ2kkqyngjJHQg84HZLEV1zOVNJ2e6d7Nu7V359P8ybLuVdEjvtN1jUbObS7lre5vJLpL5Xi8nDAYUjf5meCPuY96wlsfE1x4usb7Uba+lhsr2Q+UptFtljdWRXiwfNOAQW3kdThTwB31FcscZKMpS5Vdq3Xta++jZXKUrG6vri5vUvdP+yRQzbLaTz1f7Sm0Hfgfc5JGDzxnvVTQLG5srjV2uY9gudQeaL5gdyFVAPHTkHrWxRXP7XRpKydvwHYwfCeiDStDhiurKGG5W4nmOFUkM8jHdkdypGT1rn/ALB4nufFllfahbX0sNneSHylNotssbq6K0WD5pwCC28jqcKeAO+orojjJxnObSblffpe97a6bi5VaxwFh4TvraKyb+z445YksVdgyZGyd3k5B9wff3NN0nw1qlj4ghi1D+2ri3h1Ga8imhaxFoC5cgtkC4zh8Ec89yK9BorV5lWakmlr/wANpqLkRzunzR6R4o1GzvnMbapcC4s5H4SU+WqtGp/vjyydvUjkdDhNOjv9M8U6nG2l3U1rqNys63sbw+VEPKVcMDIHzlOykcj3x0dFc7xG+m6Sfytqtuy7jsYHhfRP7O0+UXllFHcNqFxcg7VJ+eRtr5HcoQPXHFc3LFf6fc6dpl7pZ51/z0v3mjKzBmd8ooJfcFOCGCgAHBPQ+h1nwaBo9rqsmp22k2MOoS58y7jtkWV89cuBk5x61tTxlpznUV7/AJ6+em/n6Ccew2PVJX8TzaV9kAhitUn+0iUHLMxGwpjI6ZyTzz6VpUUVxScXaysWc5p0d/pninU420u6mtdRuVnW9jeHyoh5SrhgZA+cp2Ujke+JPC+if2dp8ovLKKO4bULi5B2qT88jbXyO5QgeuOK36K2niZyi42te19+it3J5Tgbyx8T3fiqzu7q0vpbfT9SMqwxNaC2aIq6BkyfNLgOC24qPvYB4B6mSznbxdb3oj/0dLKSJn3Dhi6EDHXoDWrRV1MXKpb3UrJrRdwUbHEjwzeR+Gr6CGxjS8uda+2NtKBpEFyGDls8nyx3OcDHtV9NV06x+I17a3t/a29xdWdstvDLMqPMQ0uQqk5bqOldPRTeLc1JVFe99vO3rpog5bbHK32myz+NLS603QPsk0Uoa61ktEgnhCEeV8rGR8kjh1CjGc5ABnGq6ffeP7e1sr+1uLi1s7hbiGGZXeEl4sBgDlTwetdHRU/Wbpcy2Vlr+d7/crIOU51pE1jxnaSWLeZBpUcyzzqPkMj4Xyw3QkYJYDpxnmuioorGpU57JLRK36/mxpBRRRWQwooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCC3LDT4jGAzeUNoY4BOPXtWRY+G2XWm1rU7kSX7gDFopt4woyFDYO6XAb/lozLnlVStm0/wCPOH/rmv8AKpa1hVnBNR0uK1xHG6NgOpGK5i08M3kGi+GbOSWAvpMqvOVY4YCJ0+Xjnlh1xXUUU6dadNNR/rRr9WDSZxHh3wXc6Lq9t59sl1b2bOYLt9aunZdwIBFqwMSnDFeG9xjOKS18L6+nii11S8liuGt7iQtI+qTsJY3DLlYCnlxFRtwFzu5yw6nuKK6pZhWlJylq2rPfzv163em3lexPKjkbDw9rdvJpNrMbAWOlXTSJKsrtLOhRwCV2gIw3jIy2euR0OjYRy6R4gvreS2me21Gf7TDcRoXVXKAMj4+793IY8HOM54O7RWU8VKpfmW6/W9/v/wAh8tjC0mw1TTNYvo/Is5NNurl7kXH2phMrMB8vleXtxkdd/wCFWfDmmTaR4etrC5ZGli37mjJI5YnjIHrWpXE6d49vZZNPm1fSbOz07UmmW3mh1FppV8sMxZ4zEgVcIckM2CRxzkZzrymmn1t+F/8AMdrGZpN0517RtAtL7SL+LS72V2NhdGacIEkG6ZAAIiCwU8tuJ7YxXVWEc2p+KZNXe1ntra2tzaWxnXY0xZgzvsPKrlVA3YJwTjGCTRtZ1zV2iuzotrbaVcJ5kMsl+32kqRlS0Ii2rn/roSAfXijQNX1S+1rV7HWLezt2sjDsS1kaQAOhJy7Bd3T+6vpz1rorYxVHeMbO1vvbbfTe/wDWlko2N+iiiuAoKKKKACiiigAooooAKKKKACiuMtfHF+97A97pNnBplzqMunwzR6gzzl0Z13GIxKAvyEnDkgdjWjo+vazrcsF5aaNax6JOx8u5nv2FwycgOIREVw2ARmQHackA8UAdFRXM3Gpa7p/i2wtLmfTruy1CWREtoLV457dFUt5jSGRlcAhVPyLy457HpqACiiigAooooAKKKKACiiigAoorjIPG+oG+R7rSLSLS5dUfTIp01BmuGkV2Td5JiC4ypJw5IHODQB2dFc7pWvavrU0V3YaRaDRJXIS6nv2Wd0BI3rCIiu0kZGZASOcDpUOo65f2njSz0221LSbpbhlMmlLCwvIoiDmcv5pGwEd4wD0znGQDqKKKKACiiigAooooAKKKKACiiigAorjLnxvqNrqF00mj2h0q21NNOacai32hncoAVhMW0jLjjzM4BPtWjZa/q+rXxk0jSLSTSEnaFru5v2jlfaxV2jiETBlyCBl1JweAMEgHRUVzU3ia5bxxZ6RZW8T2DebHdXLE7hMqbwiDpwPvE+oA5zjpaACiuVPiu+uvF1zomk2mkyPZsonS81RoLnaQCZEhWF9yYYANuGSCOKluvG9pa395AdN1GSDT7hYLy8RIxDBuVWDElwzL84ztDEdwBgkA6Wiue1LxjaabqEtubK9uYLVkW9vIFj8mzL4279zhjwQTsVsA84qS58T7Nak03TdH1HVZICgupbQwrHblhkBjLImTtOcKGIGPUUAbtFc9e6veL4003TRBe2trIJSZjHA8N2QmdufM8xCvX7mD0zRqXjG003UZrc2N7cw2rIt7eQrH5NmXxt37nDHggnYrYB5xQB0NFYS+JxP4jn0mx0i/u/srol1dxNAsUBZdw3B5FkPBByqEemcHG7QAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/HnD/wBc1/lUtRWn/HnD/wBc1/lXNaa2q23jM2S63dazaCB2vBcQwKtnJlTGqNEinJBJ2tuOApyM/MAdVRRWPZ+KtA1a+l07R/EGlXeoIrZt4LuOV0I4JKK2cA9elAGxRXNeFLzVptT1601u+jvZLO7jjjaG3EKKDBGxCrljjJJ+ZmPPXGBXS0AFFec6f4vuh4k0+ObWzd3V7fPaXuhiKP8A4lw2uUb5V8xf9WOZGIfcSuBil0TxNqV147a0utRvgnn3KNBNaxLYyxp937NMEDySDjcC7YxJkDC0Aei1zfh3wLovh/TJbeKwsmublHS7vIrVYpLhXYkh2HJ69yay9I1nVpF0PW7jUpJ7XXZvLOntBGI7ZWRmQxsq78jaN25mBySNvFXrU6paeNY7SPW7rVrd0kkvYLiGAJZA8xhWjjVgSTgK5YlQT2yQCzomi67oxhs/7btbvSbdDHDHPYN9pCgfKGmEu1scDPlgkD15qDR9A8Q2HiW81O/1vTLmG+KedBDpUkTfIpVdrm4YDrzlTn2rG8P+Kb3Vdbt72+udWtrG+nmt7NBb24sWZGZVQkj7RvIQtu+VCeAemd3w5eatJ4h1yx1i+iu/spgMZht/JRN6EkAZZu3dj+HSgDpKKKCcAmgAoriNN1nVpF0fXZtReW01e7+znTjAgjgRt+xkYLv3Dau7czA5OAOK7egAorl7ay1VfGG2HxPqV3aQBpLq2uIbXylLA7IwUhVwR97ljwBnO7NSaBeau3ibWrDV76G6FtHA8Xk23kom8PnALM3YdWPtjpQB0lFc34fvNWbxPrNhq99Ddi2jt3i8i28lE3h8gAszdh1Y89MdK5238YXEfiKzE+uefdXGoNZXuhCKPFih37JDhfMThVO52Ktu+UDIoA9Gork9F13UdV8aS5dV0aaxMtlFsG59sgXzi3XDZ4HoAe/E2i3msf8ACa6rp2rX8N1FFaQTQrBbeSqb3lHdmYnCrklsZHAHSgCTw/4J0jQZrm7SxspdRupp3lv1tESZlkkLbC/LEDIHXnApui+H9Z0CSGys9atZdEgY+XbXNgz3CRnJEYmEoXC5wCYycDBJPNR/YtV/4TKJLbxPqU1tHm4u7SWG1MKo2QkYKwiQEnJB3E4TnqKzrfWtWdLPxC2pSGzutR+xNphgj8tYzMYlcMF8zzMgEksVwSNo4IANXS9C1ux8SXmoXGr6fdW93KWZDprrcLGPuRiXzioVc/3Ock9STXSVzOi3msf8Jrqunatfw3UUVpBNCsFt5KpveUd2ZicKuSWxkcAdK6agAoorhrfWtWdLPxC2pSGzutR+xNphgj8tYzMYlcMF8zzMgEksVwSNo4IAO5oorlbptVtPGllFZ63dXy3ErPdabJDB5Nrb7Ww4ZUEincABudt3zccfKAdVRXI317e2nj6xt4NbvmiuZcTWN3aRpahPLYgRTeUrPJlQdokc43ZAAyEa61S28eldUvdWttNmmEdiscdo1nOfKzsY7TOrbg5ySqnAAPOCAdfRXn9v4nvLvxPJc3V1qtrpMOpNYJ9mgt/spdW2BZmcGYlm7x4UZUE5zWlfXt7aePrG3g1u+aK5lxNY3dpGlqE8tiBFN5Ss8mVB2iRzjdkADIAOurntB8F6Tod7d6gtlZS6ldXE8r34tESYrI5bYX5YgAgde3Sue/4SXUT8RfsD6jexRfbvISM2sf8AZ8kWzJUT7N/n5BGzf1/hxk0638T3l34nkubq61W10mHUmsE+zQW/2UurbAszODMSzd48KMqCc5oA3NI8P6xoM0Vpp2sWraJE5KWlzYs88aHny1mEqjaD0yhIHBJqTVNB1LV9Ytnu9TtV0u1uUuYreGyZZ96cjMxkIxnqAgJHGeuaVnr+oaj48t47eRV0SW1uBEuwZuHjaMGXd1C5YqAOuCeQRTby71S18dr/AGheavaaRLJHHamCO0a0kcr9yQlTOrFs4Pyr0GcnBAOvooooAKK4aXWtWZLnxBFqUi2dtqf2H+zPIjMbxiYRM5bb5nmZJIIbbgAbepruaACiubs7vV4/H82n399DPaNYG4iihtvLCfvdoySzFmxwTkA/3RRZ3erx+P5tPv76Ge0awNxFFDbeWE/e7RklmLNjgnIB/uigDpKK5HV768svGunw2usX6rcTIJLK4s0Wy8sgg7ZzECZcjhBIxz/DjJCajd6paeOI2vrzVrTRpGijga3jtGtXkbI2SlladSWwARhenIJoA6+iuHutZ1Ypf69BqLx2mn6h9k/s3yIzHLGHVHZm279+SxGGA4GVPNF1rOrFL/XoNReO00/UPsn9m+RGY5Yw6o7M23fvyWIwwHAyp5oA2NK8GaTpuvX+tPZWU+p3dy063htEE0SlQuwScsRx6jr0qLT/AA5q+iXrxaLrNqukSXDTmzvLF5pY97FnWOUSrtUkkgMrbc9xgDDu/FN5L4rvGkuNXtNI0y+Szlksbe3MAYqhzO0qmQglwv7oYUcsR1Go2v6hd+OtPgsZETRi09vJ8gLXMyJkkN2VCNvHVt3pyAOX4eaVBr9jqdlcalAbWeW4aA6ndPG7vknCGXao3EkgDB6EYrq68617xfc6XrV47635N1Z3cUcWgLFGxurZmRTLjaZTyzfOrBF24IODXotAHMav4a1bXL1I7/VNOfSo7pLiOIaWftMZUhhtmMpUHPG4R5wSOvNZK+GdV1fW/EVvNefY9Iu9RjeeJ7NjJcosUX+rl3AKpKlSdrdwCDXe1y83iy6j8aLof2TT7eNnCRvf6g0E918u5mgi8oiUKDg4cYIOccZAKOr/AA5tb7xRLrVtb6DJLcNG8/8Aa2ii8dWQAAxP5iFOAODu55GOc6cvh/VrTXrq/wDD+r2lrDfMkl3bXlg1wC6qF3RsssZUlQAc7hwDxznI1/4oadofiKfTGfTcWbxpdLc6msNyxfBHkwbSZcBhnlfQZNXYdf8AFE3ju80hdJ0g6fbxQzCY6jKJdjs43bfJIJwn3cgD+8c8AG9eaX9r1fTb7ztn2FpDs2537029c8Y6965jV/hza33imXWra30GSW5ZHn/tbRReOrIAAYn8xCnAHB3c8jHObepeMbqym1K5g0yGbSNIk8u+unuykoIUMxji8shwAwzl15B9OXSeLrkeMk0ZbXToIZGCxSX2oNBPdDaGZreLyiJQoODhxg5yBxkAbq3hK+1rxFZ315faaLexnWW2aPTGW9hAwSi3Hm4CsRhsR8qSD611dch4n8c/8Izr1nZ3CaQ0N1LDGscmrCO8fzHCbktzH86gnrvHQ+nPX0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAENrzZQ9v3a/yrG8P+F5fD8rbPEGqX1uxdvs12tsV3M24tuSFXJznqx685rUN3BYaL9su5BHBb2/mSOf4VC5J/IVw/gjxfa+IPG2o7PEVne/arKGeDT7e9jlW2AeQFQqk/Pt2Fz6kDpigD0OkdS0bKrlCQQGXGV9xnilrJsPEljqWovZW8GppKm7LXGlXUEfBwcSSRqh9sHntQBS0TwlNour3OoHxJq1+12we4huktQkjBQgb93CrDAUdCBxzmtbT9N/s+a9k+23l19rnM+25l3rDkAbIxj5U4zj1JrntH08weMXk0W91KbT4o5I79ry+muI5J8rtWMSMwUr827ZhRnb1GF60jKkAkZHUdqAMeLw5nXF1LUNVvtRMLM9rb3AiEVqWBBKiONSTgkAuWIBPqaq2Hgy1sL+GUahfT2lrM89pYStH5NtI27JUhBIfvtgM7AZ6cDEXhlbu38UeIbO71O81BYTbFHumXI3RknCqFVf+AqPz5rnLTUL+x8UaUJTrR1S61B7bUkuTMLMxlJGUxB/3XARSDFzjO/kmgDrLLwja2Wpx3Ivb2a3t3aS0sJXTybV2BDFMKHP3mwHZgNx2gUaJ4Xl0O9mmTxDqt3BNLJK9rcrbFC7nJO5YVkOOgy54AHQVydrqF/ZeJtKWRtb/ALVu797bUluTKLMxlJGUwh/3RwEUgxZOM7+Sa6Pwyt3b+KPENnd6neagsJtij3TLkboyThVCqv8AwFR+fNAFi08HWtnqSXEd9fNbQyvPb2DOhht5Xzudfk3k/M2AzFRngDjDNK8JT6Xr1xqjeJtXvHuSvnw3CWojk2ghc7IFYYB7Ee+azwraf8RYtg1aziuBKCby/ee3v32hgsMZkcRFcMeVj6YAYZxS0ae7WLw5rzXt9Jd61ceXeW8ty7w7WR2CrETtj2bAMoFJwd2SaAPQKKKCcA96AMG18JWtrqkdyL29ktreVprawd08i3kbO51woc/ebAZmAzwBxjQ0/S/7Pur+f7de3X22fzvLuZt6QfKF2RjHyr8ucc8knvXHaXPdiHQvEDXt893ql8YLq2e5ZodjeZ8qxE7EKbRyoDHack5Nd/QBUsdOj09LgRPI7XE7zyPIQWLMenAHAGAPYCsbTvCNxp/iCbVj4o1i6kuNongmS08uQKCFB2wKwxuPQg+ua5rQdUvrrXLbW9Wtbxre91CeyhlXVpVWFld0RTZr+6KYT75JfJyQByNd0Nj8RrUodWsorppFZ7q/ea2vWKbgkURkYRFcE5Kx9CBuycAF7TfCM+neIZtWPifWLp7jaJ4J0tBHKFBCg7IFYAbj0YH1JqyfDKXGsC+1TUr3Uo42Z7ezuVhENuWBUlQkalvlJHzlsAmuL0a/v28ex3F2dSSzuNQuIoNSN+8lpeqAQsIttxWEghhv2rnysgnea3ZENh8RLVkOrWcVyZFZ7q/ea2vW2bgkURkcRFcE5Kx9CBuycAGhp3gHwvpGvprGk6Fp9hdRwmFfstnFEBk5LfKoO7tnPQ4ptn4QntPE0mtHxPrE8soVJYJUtPLeNSxVDtgDADceQwPqTWJpc92IdC8QNe3z3eqXxgurZ7lmh2N5nyrETsQptHKgMdpyTk1V0/U7y48QnXNUt757P+1pNPiaPVpolgIkMSD7ImI5FJ6u5LZPTAGADv7LT4rGS6kjd5HupjNI0hBOcAADAHAAAFZUfhG1j1ZLoXt6bWOdrmPTS6fZ0mJJMnC7ycknaWKgnIXIGMy/iNj8QdPmjbVrKO4nKSTT3zy2l0TE2Ikh8xhG2VB3FEHy4BJODOmhW0vjYT2N7qy/Ym866B1e6eF5HB2xeUzmPGDuIAGPkx1oAns/CE9p4mk1o+J9YnllCpLBKlp5bxqWKodsAYAbjyGB9Sa6SvNtP1O8uPEJ1zVLe+ez/taTT4mj1aaJYCJDEg+yJiORSeruS2T0wBj0mgArAj8I2serJdC9vTaxztcx6aXT7OkxJJk4XeTkk7SxUE5C5AxZTxJYya1/ZawamLjeU3tpN0IcgZ/1xj8vHvuxXKW0921vY+JDe3xvbjVjaS2v2lzAYTO0WzySdgKgA7gA+VOTgkUAdpZ6b9j1C+uvtt5P9sdX8meXdHBtXbiNcfKD1I9azbHwvNp+vXOow+IdUaO6nM81lItsYmJGAu7yfM2gAYG/jArfrz6O4vGt4vEpvL4Xr6ybJrX7S/keT9pMOzySdmQvzb9ofPfHFAHTT+Gvtmuxahf6vqF1BbzCeDT38lYIpAMBhsjDtjJwGdhk9OBhbnw2t9r0Go32qX9xDayCa309jGtvFIBgP8qB2IycBmYAnOMgY43+0Lz/AIT/AO0ytqI086p9mj1VL9/sh42/Zmtd20Nv+XzCmM87s4FW47i8a3i8Sm8vhevrJsmtftL+R5P2kw7PJJ2ZC/Nv2h898cUAdCfCFr/a5uxe3q2rXAu300Mn2dpwc+Z93fnIB2h9uRnbmpZ/DX2zXYtQv9X1C6gt5hPBp7+SsEUgGAw2Rh2xk4DOwyenAxj3Ftc6Z49TUNVFzLZXtysNnLDrNwEhcxYCSWuREVJVvm+Y5YcDqMnUr/UNO16O5kOs/wBrf2tHBsJmFg9pJLtUAH9yTsIPH7wMOeM0AdOvgy1XUmm+33xsmuvtn9mEx+QJ927zM7PM+982N+3PanN4PtDqzXX229Fo9wLt9N3J9nacc+Yfk35yAdofbkZ25rM1WP7B49065RtWso57gJLczX7yWdxmNgIVg8xgjZAO4og44Yk4OTpHjrT9c+Jlp9m8S2bW01vcwQabHeoSWVo8O6A53t85APIUdAd1AHS2/wAPvCtn4gttasNB06zvLZXCNb2cUeWbGXJC53DBwc/xN61bvvDq6lrEF5falfS21vIssenfu1txIv3XOEEjEHnBcrnBxwKyptPP/CcW8miXupNPHMZNU82+mktkiZDiMRMxjVidpAQAgDJ4PzYk2qX83ie+1W+tbyXTdO1VbEeTq0tt5Q+QBhbx/LOC75bzCDjoCByAek0UVkv4ksY9a/stoNTNxvCb10m6MOSM/wCuEfl4992KAK0vhG1l1Zro3t6LV5xdSaaHT7O84IIkPy785AO0OFJGduc50oNN8jWLvUPtt5J9pRE+zSS5hi255RcfKTnk98CuLmuLt7e78SfbL6O9ttX+xx2wuXEHkicRbDDnYSwJbcRuyRhsACvQaAOb/wCERn/4Sj+2/wDhJ9Y83b5f2fZaeV5W7d5f+o3Yz33bvej/AIRGf/hKP7b/AOEn1jzdvl/Z9lp5Xlbt3l/6jdjPfdu96wpri7e3u/En2y+jvbbV/scdsLlxB5InEWww52EsCW3EbskYbAAq9qdvc6b44j1XUxcSaZcTQwW8kGs3EYgkYBQHtRiJ1LfxZJyw+XAyADYvfDX9pavFd3+rX81rDKk0emnylgWReVbKxiQ4POC5Ge1O1Dw6uqarDc32pXslpC6Srpo8pYDIpyrkhPMJBwcF9uQOK4+28dafq/xN09LbxNZLa5ubNNNjvY90jrtG+RM53FgQoPYE9+N6/wBCtr3xhAbS91aK4jZbu7MerXQiVQcInk+Z5fzFTkbeit3INAF248JWtxqjXLXt6lrJOtzNp6OggmmXGHb5d/VVO0MFJHIPOS48JWtxqjXLXt6lrJOtzNp6OggmmXGHb5d/VVO0MFJHIPOcrWLe507xpFq+pC4k0qSSCCJ4NZuIvIkY7RutRiJ1LEZYknn7pAq1At3a/EvyZdUvLqCfTpJhBMyiOI+aoAVVVRwCeTlueSaALN34PtbvVZLr7dew29xMk91YRMnkXMiY2s+VLj7q8Kyg7RkHnMbfD7wp/btrrEOgabb3ttK0wlhs4lLuw+8x25JB5BznPNQX+hW174wgNpe6tFcRst3dmPVroRKoOETyfM8v5ipyNvRW7kGi/wBCtr3xhAbS91aK4jZbu7MerXQiVQcInk+Z5fzFTkbeit3INAGlfeHP7T1RLi/1S+ms0dJV0wiIW+9TlWJEYkOCAcFyM9q2a8/vJ7t7fU/EP22+jvLDVBawWyXLCExCRE2GLOxiwYncQWG4YIwK9AoAKwL/AMKnU9TWe/1vUprJZ0uF0wiAQB0IK/MIvNwGAb7/AF46cVv1yV/r2r2PjCO2v57XTdKlmSK3aXTZZ/tOQM5uEkCQEsdoWReSON2cAA0bvwyZNXk1DTdZ1HSZLgq1zHaCBkuCowCwljfB2gDKlcjHoKfeeHTca9Hq1pqt9p8+xIp0tlhZLlFYsqv5kbEfeYZUqeevTHM61471O28UXljpVnLNHp0sUcsCaPd3LXRcKx2zx/u4cBv492cc4HNXbe58VzfEW/sRrGmDTYLeCcW7aW5cK7yAqHEw+bC/eII6YUc5ANC+8G219fXUp1C+gs75w97p8Rj8m6YALliULjIVQQjqDj3OXX3hT+0tSWa+1vUpbJJ0uF0wrAIA6EFfmEXm4DANjf146cVl6p4o1i3/ALb1O0Niul6FKY57WW3dp7naiuxWQOBHw+ACjZx78S3niDVrTxZDBezW2m6TNKkds0umzT/acqM5uEkCQMWO0LIvJHG7OAAT6p4FttTvb6catqVol88cs0FuYdhmj27JQXjZsjYvy7tnHKnJz06KVjVWcuQACzYy3uccVw/irxle6Hr8MNjd2txALi3hns10m5lZPMdVJa6RvLiOGBCuuSPqK7mgAooooAKKKKACiiigAooooAKKKKACiiigAooooAitP+POH/rmv8qYljbJqUt+seLmWJYnfceUUkgY6dWP50+0/wCPOH/rmv8AKuK0jSLTwz8QvKktNHnu9YF1cRXkFkIr2NQ4ZlkfLGRPnA3fLjCjBzwAd1QRkYorJsNYvrzUXtrjw3qdhEu7F3cSWpjbB4wI5mfntlR74oAi0XwjpXh+fzNLOoINrKIZdTuZolycnEbyMgOe4Hr61dsNGsNMkvZLGAxPfzm4uSJGO+QgAtyeOAOmBXNeH9C0v/hKjrPhnTrXTdPjjlglltYlj/tGQsPnO37yqQ2Gbkktjjlutt721u3mS1uYZ2t5DFMscgYxvjO1sdDyOD60AY2m+C9I0nVn1OzbU/tUhzI02r3cyyYGBuR5SrYB4yDjtVq18N6baaw+potzNdtu2vc3s06xbuvlrI5WPP8AsAccVzb6baaZ8T7Sc6Rp+mtfidIrnTyPOvm2Bm+0AKpAGCQcyZODlehueF9Pg0/xd4mtrYzFM2pLTTvK5JjPJdyWP4mgDYtvDWm22rSakq3Ut2+4B7m9mmEW773lq7lY8/7AHHFVdN8F6RpOrPqdm2p/apDmRptXu5lkwMDcjylWwDxkHHas7w5awaN4o8UpbrcSRxi2c75ZJ5X/AHRP3mJZj2GSewrG8H6wuo/Ee4uruLVYr6/01S8N1pt1BHbqsjbYwZEVRgHlujMTjsAAdnbeGdMttZbVVS5mvDu2vdXs06xbvveWkjlY89PkA446Ulp4X0ix1ZtStrZ1uGLMoaeRo4i33jHEWKRlu5VQTk5zk1zr6baaZ8T7Sc6Rp+mtfidIrnTyPOvm2Bm+0AKpAGCQcyZODlehu+FrCDTfF/ia3tvNKA2p3TTvM7Exnku5LH8TQB1lFFZMGsX02rNZyeHNTt4QWAvpZLYwtjocLMZMHt8n1xQAW/hfSLXWDqcNqwuNzMoM8jRRs33mSItsRjk5ZVBOTk8mrGn6LYaVdX9zYW/lS6jP9oum3s3mSbQu7BJxwoGBgcVwmk29tHH4d1iKOJfEF9qLw3s6nEs6jzPMjc9WVNowpyF2rjFehW99aXctxFaXUM8ltJ5U6RyBjE+AdrAfdOCDg9iKAM6Hwro8GtHVYrZ1udzSBftEhhV24Z1h3eWrnnLhQxyeeTTofDOmQ60dWKXM15lijXN7NMkJbqY0dyseRx8oHHHSuci0e28PfEaO8ntNIuptbuJfJuUsAl7bkR7jul3EyJhccBcZHXNc/oduY/HVvrctjYNaXuqXUNrqcAxqEr4YeVcHAzGCkmACeFjyF2mgDv7Xwhotnqx1G3tpVm8xpVja6laCORvvOkJYxoxyfmVQfmbnk5kh8M6ZDrR1YpczXmWKNc3s0yQlupjR3Kx5HHygccdK4rTYrW2ttA1yOFP7fvNQkjvpY+Z7hR5vmxtjlwm0YU5C7Vxil8Ka0upfEpru7h1aG9vtNbMF1pt1CluiyApGC8YUYGct0LEjJ4FAHaW/hfSLXWDqcNqwuNzMoM8jRRs33mSItsRjk5ZVBOTk8mkHhbSBrf8AawtpBc7/ADNouJPJ8zGPM8nd5e/H8e3d71j6b4W8Oy+MZdX03QtNtHsHdBc29okck07D94xdQCwAOOf4i3cCjQtOg034ka3HbGZg9hbSM09w8zEmSb+JyTj0GcAcDAoA2P8AhFtKOvLrEsdzPeIxeL7RezSxQsRgtHE7lEOMjKqDgkdzWha2UFn532dNpnlM0hLE7nOMnn6DjpxXm+oafc6X4m0+ZtIC6zNrICa2ZI83Vs7MTCMMZCFj4KMoQbMg5Ao1KwudK8SWFw2j41mXWAE1rzIy11bMzFoQAxkIWPgoyhBsyDkCgDuB4W0ga3/awtpBc7/M2i4k8nzMY8zyd3l78fx7d3vWvXmeha8uo/FK1u7y31eC6u7K4iS3uNLuokt41eMqu5owuThiz5xlgufu59MoAKyE8LaQmtjVVtn+1Bi6qZ5DEjkYMixbvLDkE5cLuOTzya1680tbe2EWm64YoR4km1xrWW4ziaRPOYPCW6lFjGQh4G0HtmgDvrPR7HT9Qvr60g8u41B1kuX3sfMZV2g4JwOBjjFVf+EX0j+2xqv2Z/tIcyBTPJ5IkIwZBDu8sPj+Pbu960Yb21uLieC3uYZZrZgs8aSBmiJGQGA5BI55rzqO3t/Jg1x4YR4kbXzaG4ziYx/aCph3dSghGdnTA3Y70AdkvhPR11htSFvL5zS+cY/tUvkeZ/z08jd5e/vu25zznNO/4RfSP7bGq/Zn+0hzIFM8nkiQjBkEO7yw+P49u73ri47e38mDXHhhHiRtfNobjOJjH9oKmHd1KCEZ2dMDdjvW4nhbw9f+ODqFtoWmxXGmyebLex2iLLLcsvAMgGTtVsnPUsvpQBtP4a0yXXo9ZnjnnvIiTF513LJFC2Nu5ImYxo2Mjcqg4J55NJ/wjOmHXRq8i3U12rFoxPezSxRMRjckTOY0OMjKqDyfU1i6Pptvp3xQ1YW3nMZdMt3d553mYkzTHG5ySAM8LnA7AViR29v5MGuPDCPEja+bQ3GcTGP7QVMO7qUEIzs6YG7HegDtD4X0t9dXV5kup7pG3xie9mliibGNyQs5jQ44yqg8n1NX5LG2l1CG+ePNzBG8cb7j8qsVLDHTnav5V5xrGn3Wm+IrW4OkD+2Z9ZTyNcMkeZrd5MmAYbzCFi3AoV2AKWzmugTwt4ev/HB1C20LTYrjTZPNlvY7RFlluWXgGQDJ2q2TnqWX0oA1LXwjpVjrEmp2p1CO4lmaeRBqlz5Lu3UmHzPLP/fPp6VJN4V0e41kapLav9p3rIyrPIsUjr913iDbHcYGGZSRgYPArh9Y0+603xFa3B0gf2zPrKeRrhkjzNbvJkwDDeYQsW4FCuwBS2c10Vnp8Fj8VJmgMzNPpRkdpp3lOTP0BcnavoowB2FAHW0UVkvrF8utfYl8N6m9vvC/2gslr5OMfewZvMwOn3M+1ACSeF9Il1oaq9s5uQ4k2+fIITIBgSGHd5ZcDjeV3cDngVag0exttYu9Vgg23t4iRzy72O9UztGCcDGT0FcDPb27Q3uuTRQjxHDrwtYbjP75U89QkIbqEMRyU6HcWx3r0WO9tZbyW0iuYXuYFVpYVkBeMN90svUA4OM9aAM6TwvpEutDVXtnNyHEm3z5BCZAMCQw7vLLgcbyu7gc8Cnz+HNNudbi1W5Sea5hIaJZbuVoY2AwGWEt5YbBPzBc89a4ie3t2hvdcmihHiOHXhaw3Gf3yp56hIQ3UIYjkp0O4tjvWzdaFpWpeNY7rRdOtINQsrpZtR1aKJVlb5f9RvHzMSCuQeAuO+BQB1Utjbz3tvdyx7p7YOIn3EbdwAbjoc4HWlgsoLa4uZ4UKy3Th5WLE7iFCjqeOAOBXm3iewu9P1p70aKJNWm1WA2OuGSPKxNIgNuOfN4XzMoF2EZYkEmpr63tnh1XWbiOL/hIbXWlt7W4JxNGpkjCRK3UIyHJUcHcSRzQB21z4c0281mLVLtJ5riEho0ku5WhRh0YQlvLDDP3tufeqcngnR5ddGsO+qfbQ2Q66xdhQNwbbsEu3ZkD5MbfauMvxNL4q1fXNQsdHv8A+ydVhtoYL+3864WNli2+Q5IEJ3OW+6289x23PFunWdr4o0nWJ9J0+H/TIIzq0OPtzOTtWLG0ZjOQCd5OM/J3AB2EFlBbXFzPChWW6cPKxYncQoUdTxwBwKILKC2uLmeFCst04eVixO4hQo6njgDgV5brNv5nj281t7GwubCy1O1glvmH/ExtJAFGyE4/1JLx5G4H5pflbcDXVXnhbw7q/jVJxoWmm6snS6ur4WiCZ5f+Wa+YBuyMbjz02joaANmfwvpFxrC6nNas1wHEhUTyCJnH3XaINsZxgYYqWGBg8CtauI8W6dZ2vijSdYn0nT4f9MgjOrQ4+3M5O1YsbRmM5AJ3k4z8ncdvQAVizeEtKuNX/tG4F7LL5ol8l9RuGt946HyC/lZBAP3evPXmtquM1W91bTPFcd1qOoagmiy3McEK6elq0CE4ULcB0MwLOcAxkjGM7eSQDbv/AAtpmo6kL+YXkFzhQz2d/Pa+bt6bxE6h8dt2eOKkvvDmn6hqkGoz/a47qEKoe2vpoA4ByA6xuokAOeGBHJ9TXH6vr3iu58YajaaDZ6k6aZJAqRW/2IW8wZVZjMZnEuOSAYwMY/iOQL1tp+rS/E7UVbxRrCWkdrb3C2m23MXzPJlMGEkD5QMghj3Y4GADdvPCej32qG/uYJjKxVpI0upUhmK9DJCrCOQjA5ZT0HoKSbwlpVxq/wDaNwL2WXzRL5L6jcNb7x0PkF/KyCAfu9eevNc5rGs6xGviLV7fVJrddCnEUWmJFEY7keWjDzCyF8sXIGx17dTnNnUr7V9O8UQ3mpX+oxaNNcRQwpYJatBGWwu24DoZstIcZjJGMZ28kgGtqPgvQ9VvLi5vILgvcgeasV9PFG7DG19iOF3jAw+NwwMHgVuogjjVFyQoAG5iT+JPJrz3xd4k1Gx14SaJeatJFa3tra3caRWn2KMyOgKuZAJyxVwcxkgZHvXodABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBFaf8ecP/AFzX+VY2nN4RsPE15ZaS2i22uXH7y7gtjElzLjnc6r8x65yfWti2z9gi29fKGPyrzbwLqF1a3el6bFq63V47zDV9I8uMGyb5mMzYXzFZnxy7EPvyoAxQB6fQRkYPIorJsbnxC+oOuq6XpdtZANtmt9SkmkPplGgQDjr8xx70AZvhu18Bf2vcy+EIPDn9owgpcvpaQecgJ5DmP5hkjv3FdFb2VraPM9rbQwNcSGWZo4wpkfGNzY6ngcn0rjfD+vaD4t8Xx32navpryafDNBaWMFyjTlCyh5HQHcq5UALjpgnkgDqrHV7LVZL6LTp/NlsZzbTjYy+XIADjkc8EcjIoAz9Mt/CMPiLUItGh0WPWiM36WixC5IPP70L83OQfm9ao6Hpvw7fXJh4asvDDaraFhN/Z8VuZ4Tna27YNy85Bz9KwdCubWZPC+kQSxPr2m3bvqMCDMtvlJPNaQdVDswIJwG3AjNaWl6/oXizxjE+n6xpvmaV58VrZxXKG4kb7ruyA7lQYIAxz949qANHSdF8B2viOaPQ9N8Ow61ZjdKlnBAtzBuHVgo3LkHv1zWodX0FfEf8AZ51DThrTRY+zedH9pKfe+7ndt6n071xGhXNrMnhfSIJYn17Tbt31GBBmW3yknmtIOqh2YEE4DbgRmoPCN/e2WrWdiutLNqM1/cjU9F8pAYULSMLg8eaDwgDMxRgwAAyMAHYWieDdO8UXFpYroVpr12paeGEQpdTKfmJZR87DvzVax0r4f6V4pS102w8NWWvqC6Q28NvHdAEckAAPyM8+lcx4Rv72y1azsV1pZtRmv7kanovlIDChaRhcHjzQeEAZmKMGAAGRg8I397ZatZ2K60s2ozX9yNT0XykBhQtIwuDx5oPCAMzFGDAADIwAeo0UVkwXHiBtVeO90vS4tNy2LiPUpHlI7ExGAKM9xv496AJLWy0NdevLuyttPGrbVS7mijT7RtIyodh82MDgH0q3b2NpaS3EtpawwSXMnmzvHGFMr4A3MR944AGT2ArhPCWu+EYfH+s6doOqaIgnjt1t7WyuIh5jgSFwiKeSOpwPrXY2euWWpS6lBpshubjTZjBcRBSu2XYHC5YAHhl5HHPWgBtrpuhWevXM9lZ6dBq9zH5lxJFEi3EqZxucgbmGR1PemWmleHU8RXd9Y2OmLrIAW6uIYYxcYYAgOwG7kAdeuBXF+FpdRHxGafWfDuoWV/faa7Xc88tsyKBINqjZMx2KPlHGckkgZJqx4S13wjD4/wBZ07QdU0RBPHbrb2tlcRDzHAkLhEU8kdTgfWgDpbCfwnN4qvP7Ml0Z9fCbbv7O0RugoxxJj58Djr7VPHrnh6bxG2nxappkmtRoUa2W4jNyq/eIK53AdDj8a56fWLa++Jen20Wp6fqzWzyqLSxx5+nHy8M85DNkH7oBEeCw+8cYda6hBYePzp+i67/ahvLiR9R0wGKT+zzsz5mUUOmWAGJCc7uMYoA37TW/DqavJoljqemLqKszyWENxH5wY/MxMYO7POScd81mWui+AbbxX5NlpnhuHxBHm48uK3gW7XPWTAG8devvVO11CCw8fnT9F13+1DeXEj6jpgMUn9nnZnzMoodMsAMSE53cYxWHcsx8SWvh7TL3Sbye31sXzPbXPm3kKs7PIJYguIgFYrvLHcCF2jdQB3dppnh6DxFd3NhZaZHrLIGupYYoxcFW6FyBuwdvfrj2rNstR8BReLJhp154cTxDcOYphBLALuVh1VsHeTxyD6VheHdb8IWvxP1Sw0XU9Eh8+1gSO3tLiFfMm8yYuAqnl8nJHXnmurtyus+IJrhgGttLkMMIOCDPj53/AOAg7R9XoAn/ALX0F/EY0/8AtDTm1qOMgW3nRm5VDgn5c7gDgH04FadeU2d8x8eLCuo200f9syO3h1lH2y2bBX7VuyWMZ+/gqAA/DHAB9WoAKxY/+EX/AOEwl8r+yP8AhJPI/ebfK+2eTx1/j29PbpW1Xmlrc2xi03QzLCfEkOuNdS2+MzRp5zF5ivUI0ZwHPB3Ad8UAeiw2Vrb3E89vbQxTXLBp5EjCtKQMAsRySBxzWWP+EY/4TFtv9kf8JL5HzY8r7Z5P/oezp7Vds9YsdQ1C+sbSfzLjT3WO5TYw8tmXcBkjB4OeM1wMdxb+TBobzQnxIuvm7NvjMwj+0FjNt6hDCcb+mDtz2oA7Ef8ACMf8Ji23+yP+El8j5seV9s8n/wBD2dPapbbWfD41ufR7PUtNGqbjLPZRTx+fnAJZowd2cY5I6YriY7i38mDQ3mhPiRdfN2bfGZhH9oLGbb1CGE439MHbntWnrOsWl18QNIsE1PTtSktrsH+zLXm7tH8pgZpCGb5AG6FU+8PmPCkAlt4fhjF4qEVpH4STXxcHCRLbC6E2cngfPvzn3q8mreB28YEx3/h8+JD/AKMSs0H2w4/5Z9d/b7tW4Sus+IZZGAa20p/LjBwQ1wVyzf8AAVYKPdm9BRCV1nxDLIwDW2lP5cYOCGuCuWb/AICrBR7s3oKAK9k3gw+Mbr+zW0H/AISUqRc+QYftmOM78fPj7uc+1bFvLp8d9cWdrJbLdgCeeCNlEnzZAdlHPO0jJ67fauRfX9A8ReOLbTE1fTYZdHvGZLX7TGLm4uQjBgsedwVQzEnqxz2GWp6HrfhCz+Kmo2WkanokDT2cUYgtbiFTJcedKXXap5kyckdeeaAOjtD4MTxncixOhL4mZSLgQ+SL0rgE78fPjG08+1QNongJPFixPpnhxfEDn7UqG3gF23OfMAxv6g/N7Vn6zrFpdfEDSLBNT07UpLa7B/sy15u7R/KYGaQhm+QBuhVPvD5jwpzJ7i3WG90OaWE+I5teF1Db4/fMnnqUmC9SgiGC/QbSue1AHpdFFFAGLJ/wi/8AwmEXm/2R/wAJJ5H7vd5X2zyeen8e3r7da1I7K1ivJbuK2hS5nVVlmWMB5Av3QzdSBk4z0rzqe4t1hvdDmlhPiObXhdQ2+P3zJ56lJgvUoIhgv0G0rntXfQaxY3OsXelQT7r2zRJJ4tjDYr52nJGDnB6GgClJ/wAIv/wmEXm/2R/wknkfu93lfbPJ56fx7evt1qq2meCU8ZKXstAXxK4+0qTFCLxu3mDjf2Pze1cxPcW6w3uhzSwnxHNrwuobfH75k89SkwXqUEQwX6DaVz2onuLdYb3Q5pYT4jm14XUNvj98yeepSYL1KCIYL9BtK57UAdWx8HWnjRd50OHxNcJhc+St7KuO38ZGFP4D2q9JZaHL4jjuZbbT31qKEmOVo0NykWccH7wXJI9K86v70r4+uoV1G2KNq9u8nhuRR9quCoUC6jbO7YPlfaFxiI/MPmFaia74Q0z4tiC11TRLS4ms5I5447iFHe5aZPlYA5Mhx0PJoA3bzVPAr+LIBf33h5vENs3kwiaaA3cRP8C5O9Sd3QevvUs//CG23jOJrn+wovE0yDyjJ5K3sikEfLn5yMAjj0NTuU1jxE1uwDWulMryA4Ie4I3KCP8AYUhvqy/3a4DWL0x+Pr2FdTtgj6nas/huZR9pvSoXFzExO7aPlJUKV/cH5ly1AHeXMHhNvGFs93Fox8SeXut2lWL7ZsAIymfnxjd0461ZbWNAsNdGmPqOm22q3hEgtDPGk8/GA2zO5uFxnHRfauJvri2SHVdFuJIv+EhutaW4tbcjM0iiSMpKq9SioMFhwNpBPFUNYvTH4+vYV1O2CPqdqz+G5lH2m9KhcXMTE7to+UlQpX9wfmXLUAd3LD4Sg8YxSTR6LH4kmjzEzrELx0xjIP3yMAjjsK3q8u8UNKmr32gaZeaPcXmoajb3qItyXv4HDR5zAB91VQnzS42g42nv6jQAVl/8IxoH9uf2z/Yem/2pu3fbvskfn5xtz5mN2ccdelalecarq1jZ/EePdrSarcyXUcI0u31yWC4s/lA/480bZOvJdiwUhcn5gBQB2up+G9D1q5hudY0bT9Qnt/8AUy3VqkrR85+UsCRzzxTr/wAP6Nqt3bXWqaRY3txaHdbzXNskjwnIOUZgSvIB49K858VatqsXjq7guNV07STHJB/Zb3/iCWxV0IUsRAsZS4y25TuY44Hy9ToTWOgaV8Wbi41nV7iwlvLa3ezWfXJ4VuJfMkDIiGUBwCV+TBA3dOeQDtrjQNHu9Wg1S70mxn1C3GIbuW2RpYv91yMjqehqP/hGNA/tz+2f7D03+1N277d9kj8/ONufMxuzjjr0rhvEGqeVqmuGbWLi38RwTAaHpy37xC4TYhXbbhgswLFwSVbHIyNvEmpatZ2nxEh83WY9Tu5bmKI6Vba5LBcWXygYFmjbJ1yS7FgpC5PzACgDtb3wzoOpXr3mo6Jp13dSRGB557SN3aM/wFiMlfbpWmiLHGqRqERQAqqMAD0Arynx34jS08VMbO7NldafPamcz6/Nbkw71LulmAY5IgjMGkbbjDc/LXqyOskavGwdGAKspyCPUGgBaKKKACiiigAooooAKKKKACiiigAooooAKKKKAIbU4soT/wBM1/lWTY+L9K1DV00yFdRiupFdkW60q6t1cLjcQ8kaqcZHQ9617T/jzh/65r/Ks7R45bq5utUvIpIpJnaGCORSpjhRiBwehY5Y+xX0FAGtRRWTY2/iGLUHk1TVNMubLDbYbbTJIZB6ZczuDgdflGfagBum+KdK1XUmsLZ7qO5CF1S6sprfzVBwWjMiKJAMjlcjkeorYrjvD+qReIfEzX17aapa3Vuksdpb3Ol3MEcMZYBmMjoEaRsA8NwOBnBJ6TT9S/tCa9j+xXlr9knMG65i2LNgA74zn5k5xn1BoAr2/iXTbjW20hWuorwbiq3FlNCsu373lu6BZMZ/hJ45otPEmn32sTaZai9eeFmR5Dp86wBl6jzinlk+wasGOee8+IsElr/at7DD5qzLf6e9vBYjbjMEhjTzCzAA8ycE4Kjqtoiw+Ptvh+DV0jkklfVvtS3C2nIyrReb8hYvj/U8Ebt3agDdtPEmn32sTaZai9eeFmR5Dp86wBl6jzinlk+waiHxJptzrL6XbNczTxsVeSKzmaBGAyVMwTyww/uls9sVhWiLD4+2+H4NXSOSSV9W+1LcLacjKtF5vyFi+P8AU8Ebt3asXwzpuoadq9haIdbTUYby4OoGYSixe2ZpGBX/AJYliShBT9513fxUAdraeKtHvdYbTLa5ka4BYKWt5FilK/eEcpUJIV7hWJGDnoadaeJNPvtYm0y1F688LMjyHT51gDL1HnFPLJ9g1cZaabfXHijS9Msrm7k0vRr97kebpMtr5S7ZBsM8nyz8vhfLUcDLE9TrWiLD4+2+H4NXSOSSV9W+1LcLacjKtF5vyFi+P9TwRu3dqAOyoooPIPagDJt/FGkXWsHTIbljcbmVSYJFikZfvKkpXY7DByqsSMHI4Na1cBpcF2YdC8PtZXyXel3xnurl7Zlh2L5nzLKRscvuHCksNxyBg12Fhqf9o3OoQfYr21+xT+R5lzDsWf5Q2+M5+ZfmxnjkEdqAILfxRpF1rB0yG5Y3G5lUmCRYpGX7ypKV2OwwcqrEjByODRb+KNIutYOmQ3LG43MqkwSLFIy/eVJSux2GDlVYkYORwa5XTILs2+h+HzZXyXml3pnurl7Zlh2L5mHWUjY5fcOFJYbjkDBpdLguzDoXh9rK+S70u+M91cvbMsOxfM+ZZSNjl9w4UlhuOQMGgDqrbxJp93rU2l24vXuIWKSP/Z84hDAZI84p5ZPPTdRbeJNPu9am0u3F69xCxSR/7PnEIYDJHnFPLJ56bqwokWHx+o8Pw6unmSyNq32hbhbMrs4aPzf3Zfdt/wBT1G7dREiw+P1Hh+HV08yWRtW+0LcLZldnDR+b+7L7tv8Aqeo3bqAN2LxLpsuuHSN11FefNsE9lNEku3r5cjoEfA5+UnimReKtKl1saTvuorpmZIzPYzRRSsvJVJWQI5wCcKxOAfQ1itPNefES1NoNUvIoHkWdL3T3gtrIbMb4ZDGgkZjgfek4JxtGckGqRa741SPULTVLddNncWUUmlXKxSOFKmZpinl4wWCDd3JOSQFANz/hJtMOunSI2uprtWCyGCymliiYjO15VQxocYOGYHkeopsXirSpdbGk77qK6ZmSMz2M0UUrLyVSVkCOcAnCsTgH0NcZpun6jp/iD7PH/bK6qdXlnZws32B7N5CxJI/cltpxz+8DY7CtmDVItd8apHqFpqluumzuLKKTSrlYpHClTM0xTy8YLBBu7knJICgG/pniTR9Zvrm00nUIbyW1AM3kHeq5LLjePlJyrAgHII5xWnXEaZrkEvxN1BxY6wkVzaQW0U0ujXaRmRHlLAu0YUD5h8xIBzwa7egArITxTpD62NKW5f7UzFFYwSCJ3AyY1l2+WXABygbcMHjg0qW3iIa15smqaY2mbyfsy6bIJtuOB5vnlc57+X+FcpbQXa29j4bNlfC9t9WN3LdfZnEAhE7S7/OI2EsCBtBL5Y5GATQB6DWS3ifTE15dHma6hu5G2Rmaxmjhlbbu2pMyCNjjJwGJ4Poas2epfbNQvrX7FeQfY3VPOni2xz7l3ZjbPzAdCfWuZ1O5muvHmnR2Q1S8+z3AM1vcae8dnbrsYGZJyihn+YADfIOThR1ABv6d4l0fV9SubDS9QhvLi1UNMICXVMsy43j5SQUYFQcjHIHFRp4p0ptcGks91FdM7RoZrKaOKV1GSqSsgjc4B4VieD6GsCy1yCT4oXjix1hYprKG0SZ9Gu1iMiySlhvMYUDDD5idpzwalXVYtb8apbahaapBHp1yws420q5EU0gUgzNPs8vbgkKN3uckgAA2k8U6U2uDSWe6iumdo0M1lNHFK6jJVJWQRucA8KxPB9DS/wDCU6R/bi6T9pf7UzmMN9nk8kyAZMfnbfL34H3N272rEXVYtb8apbahaapBHp1yws420q5EU0gUgzNPs8vbgkKN3uckgDJ1LTr2515dB0qa8ezXVU1CRH0maJYSJBK5+1v+7kUngKgLZbrgGgDu21nT01yPRmuV/tCSBrhYACT5YIBY9hycc9ecdDVX/hKNI/tsaV9pf7SXMYYwSeSZAMmMTbfLL4/g3bvauT0nTPFVp8QLG61XStOcTR3Rur63v5ZOCY9o2mBQuAoCpu5AY5yDl0dveLbxeGjZ3xvU1k3rXX2Z/I8n7SZt/nEbMlfl2bi+e2OaAOsfxLpq63/ZKNczXYYK/wBns5pY4mIyBJKiFIzjBwzDgg9xRP4k0231ldLLXM12xUMttZzTLFu6eY6IVjz1+cjjmuKtdP1Gx8Ryww/2yuqvrDXCOqzfYXtHfLbiP3JOzI+b94CBjjFNl03ULPxPqAhOtrqtxq63NnJAJRZNbt5YfzCv7o4VXGJPn4G3+GgD0yiisl7bxEda82PVNMXTN4P2ZtNkM23HI83zwuc9/L/CgBJPFGkRa0NKe5cXJcR7vIkMIkIyIzNt8sORzsLbuRxyK168+mt7tLe78N/Y76S9udX+2R3ItnMHkmcS7zNjYCoBXaTuyBhcEGu0g1Lz9Yu9P+xXkf2ZEf7TJFiGXdnhGz8xGOR2yKAKsnijSItaGlPcuLkuI93kSGESEZEZm2+WHI52Ft3I45FOn8S6bba3FpVy11DczMEjeSymWF2IyFExTyy2B03Z7Vyc1vdpb3fhv7HfSXtzq/2yO5Fs5g8kziXeZsbAVAK7Sd2QMLgg1e16ee58Y6dDY/2rdvBcxmSyl090sUXndMJ/LUF1B4HmMM4+TPIANyTxRpEWtDSnuXFyXEe7yJDCJCMiMzbfLDkc7C27kccim3XizR7PWV0y4nnW4LpGXW0maFHb7qvMFMaMcjCswPI9Rnl5re7S3u/Df2O+kvbnV/tkdyLZzB5JnEu8zY2AqAV2k7sgYXBBqhqljff8J9c3MEerpdtfW7RaelpI+m3kSgfvpJAuxZAC/V15jj+ViFyAd3c+JdNs9Zi0u7a6hnmYJHI9lMIGYjIUTbPL3H03Z7U248U6Pa6wumTXLi4Z1i3C3kMSSNyqNKF2K5yMKzAnI45FYniOea48U6fb2I1S7lhuYmeyfT3FiFzlpjP5YG9QcgeYRkD5CeRleJdNv7rVbzQ9HubvydQu4bmaL+yZQsTB0Z3F437rZtT7gBfJwCOwB2M/ijSLfWF0ya5ZbguIywgkMSufuo0oXYrnIwpYMcjA5FLc+JdNs9Zi0u7a6hnmYJHI9lMIGYjIUTbPL3H03Z7Vyl5Bdpb6n4e+xX0l5f6oLqC5S2YwiIyI+8y42KVCkbSQx2jAORV7xHPNceKdPt7Eapdyw3MTPZPp7ixC5y0xn8sDeoOQPMIyB8hPIAN268SabaawmmO1zNdtt3JbWU06xbunmNGhWPP+2RxzWrXmd5p2oWfijUzCdbXVLvU47jTpLZZfsZhKxq/mlP3RACOCJfm6bOSK9MoAKKK841WztI/iPHfWGjtqeovdRrMdQ0GZ/JUKBut74qI4lUZcqS2TkDaTQB6PUS3MDXT2yzRmeNQ7xBxuVTnBI6gHB59jXl3irRr+48dXc+oOsSPJA2mXi+HbnUZbdVC7hHNE+IDvBzuXnOTkcDUuPD3h7TPifLqWoeGYpmvYYDbXcGitcbbgSPvdnjjby2+ZCWYj68HAB6FRXmXiDS/N1TXBNo9xceI55gdD1FbB5RbpsQLtuApWEBg5ILLnk4O7mTUrO2j+IkN7Z6QdU1NrmJZzf6DM/kqFA3W96VEcSqMvtJbJyBtJoA9Joryjx3a3F54qa5g0GJLmwntZY7yPQp7m6nhR1Z2jukIWPA3jyvmZsHA+YCvVkcSRq65AYAjcpB/EHkUALRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBDanFlCTwPLX+VY2neL7XUdSgthY3ttDdhjY3k6oIbzaMnZhiwOMkB1XIBIzitm1GbKEHkeWv8AKuG0rw3fS+KrBmtdWs9K0eWSW2j1Ge2ZBlWRUhWEliuGJzKcgbQOpwAd/RRWTY6PfWeoPc3HiPVNQiYNi0uI7URrnpgpCr8dBlvrmgCGw8T/AGrWl0y90fUdLmljeS2a7EJW4VSN20xyOQRkHDhTg9ODjcrkvDj6pe69Ne+IPDuoWV2UdIriaa2eCCLcMRp5crPlsBixUZI7AAV0Gn3V9czXq3+nfY0hnMdu/nrJ9ojwMSYH3ckkbTzxQBQtfE3m62mm32j6jprTlxazXXkmO52cnb5cjMvHOHCnHvxRa+JvN1tNNvtH1HTWnLi1muvJMdzs5O3y5GZeOcOFOPfis7RJNUvvE0t3r3hzULWVDJHa3Ek1s9vBFnjaElLlnABJKcdOAOTRJNUvvE0t3r3hzULWVDJHa3Ek1s9vBFnjaElLlnABJKcdOAOQDUi8RH/hIV0m80i/sjNv+zXU3ktFcbOTt2SMw45+dVqG28TXMuvQ6XdeG9WsjN5hS5ma2aIhOrHy5mYA5GMqOSBWfBZahN4/XULfStQsoE8xbq41C8SaKdNuFFvGJXMWWCscCPIHIY4xt6Va3H2y91DUIvLuJ5DHGhIPlwoSEGR68v8A8Cx2oApWXjCC+1iOzj02/S3mmlgt9QYRGCaSPO5QFcyD7rcsij5TzyM2NP8AEEmo6vcWkOi6gltBK8R1B2g8lnQ4IAEpk68coK5LQfDGp2fjRdSOlXFpetcztqWoPdI9reRPnAii3lkb5YudifcOS3GdeHSZD8QFv9N8O/2OiGT7fqJMK/2kCuFG2Nyz4bDbpApGMDqaAOvoJwM0UHgetAGTpHiO01q/vbW1gvInswhc3Vu0O4PnGFfDfwnqB7ZHNaxOBmuO0W51j/hOdSubrwtqlpaXyQxpcSzWhWPyw+SwSdmwcjGAT6gV0Wn3eoXF1qCX+mfY4oJ9lrL56yfao9oPmYH3OSV2nnjPegCDSPEdprV/e2trBeRPZhC5urdodwfOMK+G/hPUD2yOaWDxHY3Pii50GDzXu7WATyuE/drk427u7cgkdgR61gaTPrbeNNVuJfDGp2NvqEcUcV3NLaOkRjV/mZUnLYJIxgE+uKi8OeF/EmjeKrea+1LTr2xSykSWaHT3hklkaQMSSZ3+YnLE4x2wOKAOgs/Ef9oas9rYaVfXFpHI0UmpKYhbq68MvzSCRsEYyqEZ78Giz8R/2hqz2thpV9cWkcjRSakpiFurrwy/NIJGwRjKoRnvwa5HR/B11p3iCzVdFaK6tb+a4k8QedGfPt3Z2EH3vNOd4BQqEG0kHOKZpfg29sNatkg0g297bXs87eIjJG/mwOzsIfveaeXGUKhBtJBzigDtYPEdjc+KLnQYPNe7tYBPK4T92uTjbu7tyCR2BHrUUPiT7XrclhYaTf3cEMphn1CPyVt4pAMlTukDtjgEojDJxnIOMDw54X8SaN4qt5r7UtOvbFLKRJZodPeGSWRpAxJJnf5icsTjHbA4qlaeELu08QoE0dhdJqj3q+IPNiOLd5C7Qfe8zkEqU27Od2c0AdPH4utZNWS1Flei1kna2j1Ion2d5gSDHw28HII3FQpIwGyRlF8YWjatHa/Yr0Wks7WsepFU+ztOCQY/vbwcgjcUCkjAOSM41vourIln4ebTZBZ2uo/bW1Mzx+W0YmMqoFDeZ5mSAQVC4BO48AxXXhq9vfE0Vtb2uq2ukwait832me3+yllbeTCqEzEs56SYUZYgZxQBvJ4ugk1oWK6dfG3a5a0GoARGAzAElMB/M7EZKbeOtdBXnNr4Y1NPHn9qf2Xcw6gb55JtVFzGbSe1PyhPJ3lhJs2ruEYOV5cjr6NQAVgR+LrWTVktRZXotZJ2to9SKJ9neYEgx8NvByCNxUKSMBskZspo98utfbW8Sam9vvLf2e0dr5OMfdyIfMwOv38+9c5b6LqyJZ+Hm02QWdrqP21tTM8fltGJjKqBQ3meZkgEFQuATuPAIB3NY+m+JrTVdcu9Lt7a9jltIllaS5tmhVwzMvyh8MeUPO3aQQQTVuzur6bUL6G7077NbwOotrjz1f7SpXJbaOUweMHr1rmbO41j/hY11ey+FtUisp7WK0W5ea0KqUkkJcgTltpDDGBu9hQBsz+Iza+IINMvNH1CCK5l8mDUG8loJX2FtuFkMi8BuWQDI69MwnxhaLqy2xsr0WjXH2QantT7P5+ceX97fncNu7ZtzxuzVC+s9Ru/HVnc2Ok6hbrbzDz767u43tZIdhBEUPmMVclgNwRDwcsRwc/UPDV9qHiVbO1tNWttKXUEvpWuJ7b7IXVxIWiVCZyzN/C+EHzHGcZAOhHi61OrC1+xXv2Vrg2q6lsT7OZwceX97fnII3FNueN2ali8QST+IZtMt9F1CWK3kEc1+GgEEbFA+CDKJDww6IeT9a5+PRNVSOLw8NOk+xx6ob86p58YjMfnmYIFDeZ5mTtxtC453dqtahpU1x46srvS/Dn2KaKYPea4zQoLiEIR5WEYySZJXh1CjbnOQAQDTfxP9n12LTr7R9RtIbiYwW9/KITBNIASAAshcZCnBZAOOvIyP4n+z67Fp19o+o2kNxMYLe/lEJgmkAJAAWQuMhTgsgHHXkZzreTVL3xoX1jw5qItraZlsLgTWxt4l2kGYgS+YXbJH3DtBAAGWJLeTVL3xoX1jw5qItraZlsLgTWxt4l2kGYgS+YXbJH3DtBAAGWJAL3/AAl0H9tfYV06+e3+0/YzqCiIwCfGdhG/zPbOzb70S+LrWLVmtTZXptUnFrJqQRPs6TkgCM/NvzkgbghUE43ZzjmV8M6n/wAJ4dVXS7iPUft/mNqwuUNpJa/d8sw793meWdu4Rg5H38Vcl0XVlS58PxabI1nc6n9u/tPz4xGkZmErIV3eZ5mQQAF24IO7qKAO5oorJfR75ta+2r4k1NLfeG/s9Y7XycY+7kw+Zg9fv596AK0vi61i1ZrU2V6bVJxayakET7Ok5IAjPzb85IG4IVBON2c4364aXRdWVLnw/FpsjWdzqf27+0/PjEaRmYSshXd5nmZBAAXbgg7uorrILq+k1i7tp9O8myiRDBeeereexzuXYOV24HJ65oAzZfF1rFqzWpsr02qTi1k1IIn2dJyQBGfm35yQNwQqCcbs5xYs/ElpfeIJtIhgvEmhhMzST2zRIwD7SF34Lc9wNp7E1zsui6sqXPh+LTZGs7nU/t39p+fGI0jMwlZCu7zPMyCAAu3BB3dRVj7TrH/Cxvtv/CLap9h+yfYvtXnWm3Pm7vMx5+7Zj/Z3f7NAGwfEEjeIpNKttF1C4SFkWe+RoBDEWXcMhpRIeCPuoetRXHi21t9Ua2ayvXtY51tptQREMEMzYwjfNv6so3BSoJ5I5xna1pMl54xsrnTPDv2e9imjabXyYUDQD70OVfzXyPl2soXvngVWutG1YJf6DBpzyWmoah9r/tLz4xHFGXV3Vl3b9+QwGFI5GWHNAHQ23iS0u/EUmjRQXizxxNKZJrZoo2CsFIUtgtyRyAVPY1BceLbW31RrZrK9e1jnW2m1BEQwQzNjCN82/qyjcFKgnkjnGXNc6wPiLFep4V1R7KO1azNys1ptJaRT5mDPu2YBP3d3+zUN1o2rBL/QYNOeS01DUPtf9pefGI4oy6u6su7fvyGAwpHIyw5oA338QSf8JE2lW2i6hcrFs869jaAQw7gSMhpQ54H8KGoLrxfa2mpNbtZXr2kU620+ooieRBK2MI2WD/xKNwUqCeSOcUNe0mS98WWVxpnh3yb+KWJn8QEwoBCpy8WQ/mtkZXaV285zxWf4i8MXura3PYWNvq1vp95cQz3TtcW62TMrKzOACbjeQgXb8qE8kdcgG/deL7W01JrdrK9e0inW2n1FETyIJWxhGywf+JRuClQTyRzjoK4DxF4YvdW1uewsbfVrfT7y4hnuna4t1smZWVmcAE3G8hAu35UJ5I657+gArNuPEeh2msRaTdazp8GpTY8uzkukWZ89MITuOcelaVcVe22tQ+L/ADPD2manZLNdo97cSS2r2N2gVQWZS5mVggwNirlgN2RzQB093rmk2Go22n32p2dte3X/AB7201wiSTf7ik5b8Kzv+E78Kf28+iHxFpi6lGwQ2zXSB9xJAQZPLZH3RyOMjkVy2v8AhbVpfFOqSH+3brTdVkgcrpT2AVBGFG2Q3AEgwV3Axsep6Hr0M0WoaZ46l1CDSLvUbW/tILcy20kI+zlHckuJJFJGHB+UMeDx0yAa9xr+j2mrQaXd6rYwahcDMNpLcossv+6hOT0PQU248R6HaaxFpN1rOnwalNjy7OS6RZnz0whO45x6VymsaNrEi+ItJt9LmuF12cSxamksQjth5aKPMDOHypQkbEbt0OcT3Vrrdv4sDeH9N1S0Et0jXtzJLavY3iBVVnZS5mVggwNirlsbsjmgDpLjxHodprEWk3Ws6fBqU2PLs5LpFmfPTCE7jnHpWlXnXjPTfFeranPDbW1/JYwXFvc28Vo1msFwsbo7LIZT5vmkqQu3an3ct1r0RGLRqzIUJAJVsZX2OOKAFooooAKKKKACiiigAooooAKKKKACiiigAooooAgt2CafE7ZIWIE7QSenoOTSWOoWmp232jT7mK5i3FS8TBgGBwVPoQeCDyD1pbcsNPiMYDN5Q2hjgE49e1ZFj4bZdabWtTuRJfuAMWim3jCjIUNg7pcBv+WjMueVVK2hGm4ycnZ9PP8Arvf7xam5LIsMLyOGKopYhELHA9AOSfYVh6D4w07xFJKljBqURjeRWN1p08KfI20/Oyhc5/hzu9QMGt6sDRbDVtKury1a3sn0+W4muIrn7U/mlpGL7Wi8vAAJIyHPTpzgXSjSlTlzfFpbVL19emgO9y1p3iXTtWeUWH2yRY1Lea1hOkTgHGUkZAr+20nPbNVtD8Y6d4gu5rayt9TjeGR42Nzpk8KZXr87IFHXoSG9qq6DourWevNdTwWmmWXklDZWWoS3EUjEghhG8aLDjn7g+bdz0zVvSbDVNM1i+j8izk026uXuRcfamEyswHy+V5e3GR13/hXRUpYaPOo6uya95fPpZ+if47SmzdqrcalZ2t5BaT3Ea3VxnyoAcyOBjJCjnAyMnoM84q0RlSD39DisKw8Py6Lqbz6XOkltcsDcxXal5jjgET/fbAzxJvzwAygVyU402nzu3bz+f/A+aKdzdorMtfD9nZ6k19FNqLTMWJWbU7mWLnriNpCg9sDjtitM8iomoJ+67/K36sZzk/i61k1ux0/TmMrTXjW8rvbyKhARyfLkICOQyAHaWxyDirieJ9MfVjppN3HdYcqJbCeNJdn3tjsgVz7KTntWRYeHtbt5NJtZjYCx0q6aRJVldpZ0KOASu0BGG8ZGWz1yOhq2nhfX4/FFrqt5JDctbXEhaR9UnYSxuCuRAU8uIqNuAud3OWHU+o6OEd1zbJ9Vq9bdPTTdX9bZ3kbWh+MdO8QXc1tZW+pxvDI8bG50yeFMr1+dkCjr0JDe1WY/EmmvrQ0otdR3TFgnnWU0cchUZISRkCOcc/KT0NV9JsNU0zWL6PyLOTTbq5e5Fx9qYTKzAfL5Xl7cZHXf+FYkXhbXx4ottVupYrlrW7eQSSapOVlidWXAg2eXEVUjG3JbBywyTWfscLKctbK11qnrb076Nb/LZ3kduzbVLHOAM8DP6VxuieLrzX/FFxBas9vYQTmIQz6FdrI4CAkmdiqRnJ+6y5wPeumsf7T+03v9p/ZPI87/AEP7Pu3eVtH+szxu3bunGMVBo2mTadNqbztGwu71riPYScKVUYOR1+U1hSdKnCfNq7K23X1T/Qbu7EVh4t0bU76O0sLmSeSQuquttL5ZZCQyeZt2BhtPy5z3xipE8S6a+tDSi11HdMWCedZTRxyFRkhJGQI5xz8pPQ0vhzTJtI0SOzuWjaRZJGJjJIw0jMOoHY1zUfhXX/8AhJ7fVLqWG5a2u3kEkmqTlZY3VlwINnlxFVYY25LYOWGSTtGlhZTmrtJJ21Wr1t0Wm3n8tleVjbtvG3h+8uIoLa/LySuqIPIkGd2dpyVwFJBXceN3y5zxVmLxNpU2sf2ZHcO1wXaMN9nk8pnUZZBLt2Fxg5UNkYPHBrDtfCN/Bb2kbzWxMC2QbDNz5MrO2Pl7hhj+lV9L8E3Gma/HI9ut5Zx3kl1HcS63dqYi5ZuLXBiJG4jO4Z64BrSVDBe9yyei01X62+7fsK8jo11G8vNfktLBYVs7IgXc0ilmdyuRGgBGCAVYsc9cAHORW0rxnpusatcafa2+qJNby+UzT6ZPHHnaG++UwvB/iIJ7DBBK2aSaP4lvYntppLbVZhPFcRIXVJPLCsj4+6MICGPy84yDjJZWGq6d4lv5ILezm07UJ1nkme6dJoiI1TaIxGQwyo53jqeOOceSjZpr7Ka1S16379dPKw9S1a+I9OvdTksbT7XLJGzK0q2M3k7l+8BNs8skHjAbrx1qppXjPTdY1a40+1t9USa3l8pmn0yeOPO0N98pheD/ABEE9hggmnZ6JrCeKkvhb2el2ivIZhZ6jLIt2DnG63Maxo5JDFwS3GMkGrtlYarp3iW/kgt7ObTtQnWeSZ7p0miIjVNojEZDDKjneOp445qVLDJSS1fLde8t769LPTW17/MLs3qCcCs2O51FvE81s0MX9mJao6y7GD+aWIK5PykYGcDkd+orSrglFxtcswNK8Z6brGrXGn2tvqiTW8vlM0+mTxx52hvvlMLwf4iCewwQTa/4SXSv7Y/swXEhuN/l7hbyGLfjOzzduzfj+Hdn2qtZWGq6d4lv5ILezm07UJ1nkme6dJoiI1TaIxGQwyo53jqeOOcW28FXFn4jMxt1vbJr5r1ZZdbuovKZmLf8ewBiYgng5Ge/PJ9H2WEcnq0uVNap6213ts+m/Yi8jpLXxHp19qcljafa5ZI2ZWlWxm8jcv3gJtnlkg8YDdeOtU9N8Z6bqms3GmW9tqqTwS+UzS6XcJHnaG5cphRg/wARGe2QQTUs9E1hPFSXwt7PS7RXkMws9RlkW7BzjdbmNY0ckhi4JbjGSDV21sNV0/xRfT21vZzafqEqSyyyXTJLERGEwsYjIYfKDkuvU+nMypYZcyWr5br3lvf0ttrbf5hdite6tceMJbG0uLKGxtYIpZVltXkll3lwQriRQv3O6t1qO38SXF14xudFgi0zZakebv1Ei62lA29YBGcrlgMlx3+lMF2LHx9dLPb3pW8tbdIZYrKWSIsrSZDSKpVMbh94jrUupadq2p+ILBnisbfT7G4FwtwJmkuJDsK7AmwKgO45bc2QMY5yDlhe04q3Lo9tbLX+876f8MGvQljutVg8VrZ3dxZzWVxBLNCsVq8ckWxkGGcyMG+/2VelSQaldQa+2maksJE6NNZzRArvVSNyMpJwy5HIOGB6DGKqreLe+OIVgt7wC0tZ45ZZbOWOPczx4CyMoV/un7pPSnCOXVfFkF39nmhtNLSVFklQp50r4B2qedqgH5uhJ4zjNS4K3vq3u+mutvv09Vr5j9DeooorzygooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAgt2K6fEyqXIiBCrjJ46c8VX07W7HVJJYbaUrcwY861mQxzRZJALI2Dg4OG6HGQSKsW4Y6fEIyFbyhtLDIBx6d6z7Xw7bR3qX+oySanfoS0dxdYPknn/VIAFj4JGVG4jG4t1raCp8suffp/Xb5/eLU1ZCVjYjqAcVyPhfxlJfaZoy6nZXwe/j2DUJIo0ilmCklQu4OPutg7ApxwTkV17LuQr0yMVgW/hbyNK0GyN3vGjyK+7ysediNkxjPy/ez36VtQlQ9nKNRavb7n+thO99B9h4stb/AFGG3SzvIoLkutpeyqgiuSvLBMMXHAJG5VBAJGakXxERr8Wl3ek39p55cW91KYTFMUGSBtkLjjJG5R0rJ0DwFb+HtZW5s4dE8hC5SQaQFvQGzwbgPz1xnZkjg881FY+AHsvEUWrrd2DXEU7v9oOnH7TMj5DLLN5mXOCApAAGPunjHVKGB5pcstLaaPfW36X3W9rdF7xal8UzXesaXDYWl5DZ3F60P2uRI/KulEchIXDFgNyjllXOOMir8F7eajrl2beYx2Omv5RijVS9zLsBIJboo3ADGCT1OODTsvCd5az6ej6sj2GmXDS21utptYqVddruXO4jfwQF6cg9RetbS70vX7owW4nsNQk85nRgGt5doDbgcZU7RyMkEnjHIio8PqqVtF+vn1t/wOgK/UreHvFF3rt3cwzeHNQ09Led4Wnmmt3QFccEJIWzz2BHvU+k+JP7Zklaz0m++yJ5gS8Z4PLlZG2lQokLg5B+8q9OcU7T9Hv9O1e7kgvrY6ddTPcNbtaN5wkYDOJfMxjIzjZ+NVbDw1eR+J/7a1K8sJJ1jaPdZaebaSZTwBM5kfzAMcDAwefapn9Vbk1ZaK3xb9vXzvbyfQ94Xw94ou9du7mGbw5qGnpbzvC0801u6ArjghJC2eewI96n0+8vLXxBNo+pXIug8X2m0nKBHKbsMj4wpKkjBAGQwyMgku0/SL/TdYupIL62OnXUzXDW7WrecHYDOJfMxjIzjZ+NN0+zvLrxBNrGpWwtQkX2a0gLh3Cbss74yoLEDABOAoJOSQFN0W5OCSjbzvf56+ttLBqbdFFFeeWFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/HnD/1zX+VS1Faf8ecP/XNf5VLQAUUUUAFFFFABRRRQAUUUUAeaaD8RL+9u7eSfU9F1KJjcG8sdOt3FxpyRhyHlbznH8AXBRMlhg8YPVaFP4k1JLfU7250yCxuohKljHaSNNEGGVzN5u1j0ziMegPetLStHttJ0WPS4d8tugZf32GLBiSQcADue1Z+keFm0SZEsNd1NdOiBWHTH8h4YlPRVYxebgdgXOOnTigCLw5eatJ4h1yx1i+iu/spgMZht/JRN6EkAZZu3dj+HSukrnNK8JT6Xr1xqjeJtXvHuSvnw3CWojk2ghc7IFYYB7Ee+a6OgAooooAKKKKACiiigArzjS/H9/d+IFtjqei3h/tCa2l0m0t3+12sKOy+c7ea2FAUE5jUHcADyM+j1R0nSLfR7KS1tmkeOSeWc+aQTukcuw4A4yxx7UAY/h+/8Ra6lrrBuNMttJusyR2X2SSScxHOwmbzQoYjDEeWcZxk/eqKZtVtPG1nBaa3dahHcO73mnyww+VaQbTtcMiBwdwCjczbvm44yLemeE/7GvFOla3qdtpySNIulDyXtxuJJUFozIq5OQocAdBgcUum+F5dM1q5v4vEGqSx3U7Ty2cq2xjZiMY3CESYAAAG/gADpQBv0UUUAFFFFABRRRQAUUUUAFec2Hj3ULrxI1oNS0W7YanLZvo9tA/2yGFXZfOdhK2FAAY5jAOQMjIr0aqOlaTBo9tNBbNI6zXEtw3mEE7pHLsOAOMnigDH0LUPEGvLbaxHc6bbaRcHfHZtaSSTtF0VjN5oVSeGx5Zx0yetV769vbTx9Y28Gt3zRXMuJrG7tI0tQnlsQIpvKVnkyoO0SOcbsgAZF6w8Kf2TfB9K1rUrSwEpl/stPIa3yeWALRmRVJOcK4A7YqWfw19s12LUL/V9QuoLeYTwae/krBFIBgMNkYdsZOAzsMnpwMAG3RRRQAUUUUAFFFFABRRRQAV5zL481JfFd5YW+paJcPb6mlouiJbub6SI7N0u4THAAYsT5WML1HWvRqpadpUGmSXrwNIxvblrmTeQcMQBgYHT5RQBi6XqHiDXrj+0bG50200gXDxJbzWkks8yI5Uv5glVUJIOBsbHGSc4ELa/qF3460+CxkRNGLT28nyAtczImSQ3ZUI28dW3enNy38Irp+pyXGj6zqOm2ss5uJdOgEDW7yMcufniZ13HkhWUZyRgkmmN8PvCn9u2usQ6Bptve20rTCWGziUu7D7zHbkkHkHOc80AdJXG3niHVk8WSWMmoWGi2qTJHCNQ0qaQXgIB/d3PmpHuJJUJgsNpODXZVgXnhaTUL5pLzX9VlsWmWU6YfIEBIIYLuEXm7dwBxv8AbpxQBnzeNb6G7vX/ALFj/szT9QFjc3TXuJDu2AOkYQ7gC4yCykY43VT1X4padpviiXSt+mFLa6jtbhZtTWO6LvtwYrfaTIo3rkllP3sA45sWXgyW61bU59XurxLKXVTdpYK8ZguMBNjt8pcYZc7QwBxyDWtL4YI1iW/03WtR0z7RIstzb2wgaK4cADLeZE5XKqAdpXp680ARrr2rX2uXNpomk2k9nZTrBdXV3fNC2/AZvLRYn37Qw6lcnj3qPULrUV8daRbzQiKwfzvKlgv2BlYR5Ilh8rBA7EP15xU8vhYjW5tS03WtS0w3LrJdW1t5LRTsoA3ESxuVJUAHYVyAO/NadzpsN1qVleyM4ksi5jCkYO5dpzx6UAchr/xQ07Q/EU+mM+m4s3jS6W51NYbli+CPJg2ky4DDPK+gya0pfFlynjNNE+yafbxO4WN7/UGgnuvlDM0EXlEShQcHDjBByBxm5d+GTJq8moabrOo6TJcFWuY7QQMlwVGAWEsb4O0AZUrkY9BUd94UOp6ks9/repTWSTpcLprCAQB0IK/MIvNwGAb7/XjpxQB0FFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQQKW0+NVcoTEAGXGV46jPFc54QW6g1jxJaXepXmo/Z72JUlu3Bbm3jJwFCqoyScKoGcnHJro4EEmnxo2QGiAO1iD07EcisjSPBmkaHqUl/p7al9olOZDcatdTrIcBcsskjKxwAASMjFAG9RRRQBk2HiSx1LUXsreDU0lTdlrjSrqCPg4OJJI1Q+2Dz2rIsNPMPjXfol5qMttF5o1Nrq/mnhLsAUjRZGKqwJydgAA4PUCutrE0nwjpWh3rXOmnUI2ZnYxSancyw5clmPlPIUBJJP3e9AG0RlSASMjqO1cx4ZW7t/FHiGzu9TvNQWE2xR7plyN0ZJwqhVX/gKj8+a2rDRrDTJL2SxgMT385uLkiRjvkIALcnjgDpgVnab4L0jSdWfU7NtT+1SHMjTavdzLJgYG5HlKtgHjIOO1AHG6NqtzD4xS+1OXUYLCa5uhFqcmoPJaX6KCVjW33FYSoVvm2rnyuC281b8I+M7PxH48uXg8S2lxHe6er2unQXkcnkBXbnaCf3hXDNnpkDtz1ln4S0aw1M39rbyrLvaRI2upXhids7mjhZjHGTk8qoPJ9TWkbC2OoNfeWftLQ+QZAxHyZzjGcdT160Ac/wCGVu7fxR4hs7vU7zUFhNsUe6ZcjdGScKoVV/4Co/Pmqio1l8RoVQ6vYxXQlUtd37z296+0MBDGZHERXDHlY+mAGGcamm+C9I0nVn1OzbU/tUhzI02r3cyyYGBuR5SrYB4yDjtViDwxplvq76oFuprtt217m9mnEW773lq7lY89PkA44oAzvDK3dv4o8Q2d3qd5qCwm2KPdMuRujJOFUKq/8BUfnzXUVgab4L0jSdWfU7NtT+1SHMjTavdzLJgYG5HlKtgHjIOO1b9AGTB4ksrnVm06KDUxOpYFpNKuY4SR1xM0YjPsd3PbNctpc92IdC8QNe3z3eqXxgurZ7lmh2N5nyrETsQptHKgMdpyTk139ZNv4X0i11g6nDasLjczKDPI0UbN95kiLbEY5OWVQTk5PJoA1JZEhieWVgqIpZmPYDqa868K+NbHxH8QHe38S2dxDeWDG102C8jfygsnBKA58xlyxB5AwOxz3On6LYaVdX9zYW/lS6jP9oum3s3mSbQu7BJxwoGBgcVMbG3Ooi+Mf+kiEwCTcfuE5xjOOo69aAOf8Ord2/jDXrO61O81BIo7Z0a6ZflLB84VFVV6DoBnHOTzXMaPqF+3jxLm7OpJZ3F/cRQakb95LS+UKQsK224rCQQw37Vz5WQTvNdhYeCtH03WTqlq2qfa2OXaXWLuVXwCAGR5SrAZOAQQO1S2vhDRbPVjqNvbSrN5jSrG11K0EcjfedISxjRjk/Mqg/M3PJyAc1pc92IdC8QNe3z3eqXxgurZ7lmh2N5nyrETsQptHKgMdpyTk023uboWtl4me+vheT6qbSa2Ny3keSZ2j2eSTsBUANuADZU5OCRXV2/hfSLXWDqcNqwuNzMoM8jRRs33mSItsRjk5ZVBOTk8mkTwtpCa2NVW2f7UGLqpnkMSORgyLFu8sOQTlwu45PPJoA47QfHWn698Src2/iWzkt7q0njttMivUJBR02syA58xhvODyFHQHdW6mhW0vjYT2N7qy/Ym866B1e6eF5HB2xeUzmPGDuIAGPkx1ro3sbZ9Siv2jzcxRNEj7jwjEEjHTqo/KltbKCz877Om0zymaQlidznGTz9Bx04oAnooooA8+tp7trex8SG9vje3GrG0ltftLmAwmdotnkk7AVAB3AB8qcnBIr0GshPC2kJrY1VbZ/tQYuqmeQxI5GDIsW7yw5BOXC7jk88mrVno9jp+oX19aQeXcag6yXL72PmMq7QcE4HAxxigDB0Rbu08faxaXWq3l/EtlbzL9qZcRlnlyFVFVRwAM4ycDJJ5rB0nx1p2t/Eu0+z+JrI2s1vcwQabHeoSWRo8O6A53t85APIUdAd1dTa+CdHs9cOrwNqn21iNzyaxdurAEkKUaUqVG44UjAzwK2JLG2l1CG+ePNzBG8cb7j8qsVLDHTnav5UAefaR460/XPiZafZvEtm1tNb3MEGmx3qEllaPDugOd7fOQDyFHQHdTP7QvP8AhP8A7TK2ojTzqn2aPVUv3+yHjb9ma13bQ2/5fMKYzzuzgV6JJY20uoQ3zx5uYI3jjfcflVipYY6c7V/Ks5fCejrrDakLeXzml84x/apfI8z/AJ6eRu8vf33bc55zmgDF1WP7B49065RtWso57gJLczX7yWdxmNgIVg8xgjZAO4og44Yk4OTpHjrT9c+Jlp9m8S2bW01vcwQabHeoSWVo8O6A53t85APIUdAd1dkfC+lvrq6vMl1PdI2+MT3s0sUTYxuSFnMaHHGVUHk+pq/JY20uoQ3zx5uYI3jjfcflVipYY6c7V/KgDmZtPP8AwnFvJol7qTTxzGTVPNvppLZImQ4jETMY1YnaQEAIAyeD82Lb6nez+Ipda1O3vZLGHV20+No9VmhEOHEaf6KmElUsclnO7LcKQBXW2vhHSrHWJNTtTqEdxLM08iDVLnyXdupMPmeWf++fT0qQ+FtIOt/2t9mcXO8SlRcSCEyAYEhh3eWXx/GV3dOaANeiiigDz6a4u3t7vxJ9svo7221f7HHbC5cQeSJxFsMOdhLAltxG7JGGwAK9BrIk8L6RLrQ1V7ZzchxJt8+QQmQDAkMO7yy4HG8ru4HPAq1Bo9jbaxd6rBBtvbxEjnl3sd6pnaME4GMnoKAOLmuLt7e78SfbL6O9ttX+xx2wuXEHkicRbDDnYSwJbcRuyRhsACr+vo1n4y026j/tazSS4jSW9a/drKQNlRB9n8wgOxx8xjUDOd+eDtyeF9Il1oaq9s5uQ4k2+fIITIBgSGHd5ZcDjeV3cDngUs3hnTLnWk1S5S5nuI2DxpLezPCjAYDLCX8sMPULmgDMs0u7X4kzW82qXl3DLppmWKdlCRnzsAKqKo4HGSC3qTXP23jrT9X+JunpbeJrJbXNzZppsd7Hukddo3yJnO4sCFB7Anvx1X/CFaP/AG9/bG/VPt2c7/7Yu9uM7tuzzduzP8ONvtWvLY2897b3cse6e2DiJ9xG3cAG46HOB1oA5TU7e503xxHqupi4k0y4mhgt5INZuIxBIwCgPajETqW/iyTlh8uBkTarYFvF1o2i3mo/2l58ct2DfTNbQ23IYNCW8sFgMKAu7PzdATWzP4c0251uLVblJ5rmEhollu5WhjYDAZYS3lhsE/MFzz1qBPCGlRa7Lq8R1CK7mlE0oj1S5WKRwAuWiEnlngAYK44oAowLd2vxL8mXVLy6gn06SYQTMojiPmqAFVVUcAnk5bnkmue8Tajf6Zql5eOda/tOC9h+wrEZRYvbM6JtbpCSdz5DfvM/d4211UngnR5ddGsO+qfbQ2Q66xdhQNwbbsEu3ZkD5Mbfarc3hvTbnWU1S5W5mnjYMkct5M0CMBgMIS/lhh/eC575oA1aKKKAOSk13WLfxkLPUpbbTdOkn8q1WTTpZTdjaDkXKy+XGxYkBHTcdpxnINZl/wCPNTXxXdWWm2U01vY3sdpLbpo13O0+4IWcXCDyotofOGDZ28kZFdP/AMIppR1j+0pBeSzCXzhHLqFw8Cv/AHhAzmMEHkYXg8jmlu/C2l3mq/2iwvILklWdrTUJ7ZZSvQyJG6q/Ax8wPHHTigDG0y48Vz+PNVs7jWdMfTrTyXEA0tw+x9x2h/P4bAGWIYHsq9KZqnijWLf+29TtDYrpehSmOe1lt3ae52orsVkDgR8PgAo2ce/HQ3Ph7T7vWYtUf7VHdxhRut72aFZApJAdEcLIBk/eB61DeeE9HvtUN/cwTGVirSRpdSpDMV6GSFWEchGByynoPQUAZN54g1a08WQwXs1tpukzSpHbNLps0/2nKjObhJAkDFjtCyLyRxuzgVfFXjK90PX4YbG7tbiAXFvDPZrpNzKyeY6qS10jeXEcMCFdckfUVvzeEtKuNX/tG4F7LL5ol8l9RuGt946HyC/lZBAP3evPXmo9R8F6Hqt5cXN5BcF7kDzVivp4o3YY2vsRwu8YGHxuGBg8CgDeopEQRxqi5IUADcxJ/Enk0tABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/HnD/1zX+VcZaaZZaP8UYmj0jT9KkvoLgxvppG69wyMz3ACrhgen3+WPzAnB7O0/wCPOH/rmv8AKsTRF8HWuvX9v4cXQ4dWJJvorAQrcdesgT5up/i7mgDoKKKKAMmw1i+vNRe2uPDep2ES7sXdxJamNsHjAjmZ+e2VHvisPSNC0qTxh/a3hrTrTT7a3aaO7u7aJUbUJScFSV++FbcSzfxdO5rsq5fQrXwEfEFy/hiDw4dYgLC5bT0g+0RknDb9nzDng570AdFb3trdvMlrcwztbyGKZY5AxjfGdrY6HkcH1rk9I0LSpPGH9reGtOtNPtrdpo7u7tolRtQlJwVJX74VtxLN/F07must7K1tHme1toYGuJDLM0cYUyPjG5sdTwOT6Vk6Z4e8KWWtXFzo2kaNb6nCcXEtpbRLMhcZwxUbhuHPPWgDiPC4mXWtN17UbHR7q71LULm0eVrfffwMrScicn7iqm0xBRtB+8e54XEy61puvajY6PdXepahc2jytb77+BlaTkTk/cVU2mIKNoP3j39Bh0/Q4vEU91b2mnprMkQM0yRILho84BYgbiuVxzxx7VTtJvCTeL7pbCTRT4j8vF0IWi+2bBjh8fPj7vX2oA4bw5bCLxtZazNY2P2XUb+7jtNTtxi+nb5v3d1wMoNj4ALfdjyFxzPb2F3pHjHRFGii21aa/lW91fzIydSg2Ox+6TIwXEfEgUIQApIxXd22l+H7XxDcXNnY6bDrM0e+4lihjW4dCcZYgbiCR1PpVfSovCdv4j1CLRI9Gi1ogNfpaLEtzzzmUL83Oc/N60AcZb2F3pHjHRFGii21aa/lW91fzIydSg2Ox+6TIwXEfEgUIQApIxXqFZWm6Z4es9Wv5tHsdMg1FmAvpLWGNZiT8w8wqM5PX5vrWrQAHODjrXm2k29tHH4d1iKOJfEF9qLw3s6nEs6jzPMjc9WVNowpyF2rjFek1jWn/CM/8JVefYf7J/4SDyx9r8nyvtezjG/Hz46deOlAGlb31pdy3EVpdQzyW0nlTpHIGMT4B2sB904IOD2Irj7jTrPTPibp14dJ0/T3vnlSO7scefev5e5hONq4UYJBy+TjO3v2FvY2lpLcS2lrDBJcyebO8cYUyvgDcxH3jgAZPYCqFhpXh211y9udLsdMh1VsfbJbaGNZzu5HmFRu5xnnrQB55oVvs8dW+tzWNgbO+1W6httTgGNQkfDDyrg4GYwUkwATwseQu00aFb7PHVvrc1jYGzvtVuobbU4BjUJHww8q4OBmMFJMAE8LHkLtNdzGPB1l4ycRDQ7fxNcplwvkreyqRnn+NhhR+XtRGPB1l4ycRDQ7fxNcplwvkreyqRnn+NhhR+XtQByH2C70rxdo+dFEOrzao63GsGWMm/tiHYqNpMjBV2DbIqqpA2k8Z3ItC0u98cx6loGnWtnJYzyHUNTgiVJLt2UgwFhy4BIZt3AKqBkg7bek6j4CXxLcLoV54cGuXLMtwLOWD7TKwOWDbTuYgg5z6VLbab4Jg8XyCzstAj8RhTO4iihF4AernA34OevvQBy9rb2wi03XDFCPEk2uNay3GcTSJ5zB4S3UosYyEPA2g9s1HqGn3Ol+JtPmbSAuszayAmtmSPN1bOzEwjDGQhY+CjKEGzIOQK7BbrwgnjNlSfRF8TPH5bAPCL1kxnaf48YAOPamW8ngy08YTx2j6DB4kuB++WIwreSjGfmA+c8AHmgDoqyU1i+bWvsTeG9TS33lf7QaS18nGPvYE3mYPT7mfataigDzS1t7YRabrhihHiSbXGtZbjOJpE85g8JbqUWMZCHgbQe2a9FhvbW4uJ4Le5hlmtmCzxpIGaIkZAYDkEjnmsuP/hF/+Ewl8r+yP+Ek8j95t8r7Z5PHX+Pb09ulakNla29xPPb20MU1ywaeRIwrSkDALEckgcc0AedWtvbCLTdcMUI8STa41rLcZxNInnMHhLdSixjIQ8DaD2zWnremWVh8QdH1R9I0+ze5uxGNStCBd3MjROPLlG1T5eAOdz/dX5QBkdLFY6EfEk95Ba6cdbSFVmnSNPtKxt90Mw+badvGeOPaqkFv4Sg8ZSm2i0WPxLJEXl8tYhePGcfM2PnK8Dk8dKAMr+wtLvvHEeoaFp1ra3Fjcs+o6pDEqyXDFCDAXHL/AHlLbuBhQOR8r9H023074oasLbzmMumW7u887zMSZpjjc5JAGeFzgdgK1E8O+FLfxIl4mj6NFrcm+dJxaxLct2Zw2Nx+9gn396pwaH4Cg8V+VbaX4cj8QLm52R28AuxnnzMAb+/3vegDnI7e38mDXHhhHiRtfNobjOJjH9oKmHd1KCEZ2dMDdjvW4nhbw9f+ODqFtoWmxXGmyebLex2iLLLcsvAMgGTtVsnPUsvpWg114Pj8aBWn0RPEzx+UAXhF6yYzt/vkYGcegrVt5dPjvriztZLZbsATzwRsok+bIDso552kZPXb7UAeaCD/AIr0669hZS2H9tfZV1JRjUY5MeX5J4H7jd2BztP3e9dF/YWl33jiPUNC061tbixuWfUdUhiVZLhihBgLjl/vKW3cDCgcj5d1NO8Ot4olu47PSzr0cStLMsUf2pY2yqktjeFO0gZ4OD6Vm21n4C/4TOQWlv4c/wCEmjZpXESQfbVJHLHHzg4bk+h96AOoooooA80nt7dob3XJooR4jh14WsNxn98qeeoSEN1CGI5KdDuLY716LHe2st5LaRXML3MCq0sKyAvGG+6WXqAcHGetZcn/AAi//CYReb/ZH/CSeR+73eV9s8nnp/Ht6+3WtSOytYryW7itoUuZ1VZZljAeQL90M3UgZOM9KAPOp7e3aG91yaKEeI4deFrDcZ/fKnnqEhDdQhiOSnQ7i2O9afifTrS08ZaRq8ukafb77yGM6rbkfbpJGyoiI2DMZ4yd7HA+5j5hvSf8Iv8A8JhF5v8AZH/CSeR+73eV9s8nnp/Ht6+3WpE0vw6vid7yOx0sa75W951hj+1eWflyWxv28Yz04xQBjz+FvD2qeN1uo9C00XVhItzc3y2iCZ5yPkXzAN3A+Y8907E0tnp8Fj8VJmgMzNPpRkdpp3lOTP0BcnavoowB2Fa7a34dsNcOltqemW2q3TBzZm4jSeZiMA7M7mOAOcdBWE0PwxTxX5bx+El8QfaM7StsLvzs56ff35/GgDC8T2F3p+tPejRRJq02qwGx1wyR5WJpEBtxz5vC+ZlAuwjLEgk1r+INHttL8aWvia8tNIvlubi3tEW4sAbuBydoaGYseBnJTaOATurauf8AhD9L8Vw3F5/Yln4gvBsikl8mO7nB4wpOHbpjilnk8I2/jKE3T6JF4lmjCw+YYReOmDgLn5yMA9OODQBnXnhbw7q/jVJxoWmm6snS6ur4WiCZ5f8AlmvmAbsjG489No6Gi88LeHdX8apONC003Vk6XV1fC0QTPL/yzXzAN2Rjceem0dDXSxvYQ6jLbxNbpezL58kSlRI44XeR1I4Az7YqH+0dGtNa/s77ZYwapdjzvsvmos8wAxv253NgLjPoPagDQooooA425vNXsPGEc2rahfppVxdiC0WxW2e15AASbcnnhy+7lCV4GSvIrMu9e8WXvjLUINHs9SeHTb6K38mH7ELWSMqjO0pkfzs4ZiCgA4HDc12UXhnQYdabWIdE06PU3JLXqWkYmYkYJMmN3I96NQ8NaFq19De6roun3t3b48m4ubVJJI8HI2swJGDzxQBzuladqx+ImsCbxTrElrbi3lS0dbbymD78p/qchRjGVIY45JNV9Y1nWI18Ravb6pNbroU4ii0xIojHcjy0YeYWQvli5A2Ovbqc56680HR9Q1G31C/0qxur21/1FzNbI8kPOflYjK8+lJcaBo93q0GqXek2M+oW4xDdy2yNLF/uuRkdT0NAHN6lfavp3iiG81K/1GLRpriKGFLBLVoIy2F23AdDNlpDjMZIxjO3kmh4u8SajY68JNEvNWkitb21tbuNIrT7FGZHQFXMgE5Yq4OYyQMj3rr/APhGNA/tz+2f7D03+1N277d9kj8/ONufMxuzjjr0ovfDOg6leveajomnXd1JEYHnntI3doz/AAFiMlfbpQBqUUiIscapGoRFACqowAPQCloAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCG1OLGE4z+7XgfSvMPBd60vinT4hqNtqESG526VGoFzoZYkkTHJLA4KZYLyw+91Hp0DrHp8byMERYgWZjgAY6k1U0fxFpPiBbhtEvo72O2kEcksOShJUMNrdHGGHKkjtnINAGlRWTYeJdO1PU5rCyF68sLOryNp86Q5VtrATMgjYg8YDHofStagDJsLnxFJqLpqml6Zb2Q3bJrfUpJpDzxmNoEAyOvzHHvXPaT4g0DxX40hex1jTS+kmeK2sorlDcSt92R2QHcqDBAGOfvHHFdvWPY+KdL1DVW06F7qO6G7atzYzwLLtOG8t5EVZMdflJ456UAWbLWNP1V76K0nEpsZjbXQZCoRwASvIGeCORkVxXhPX/CsHi/xDY+Gr/RpC6wG0sbC5hXzisbFlRVOOvX0716GSFUliAAMkntWdpPiHSddkuF0e+ivfsxUSPCdyfMMjDfdb8CfSgDifCEmor8RJ5dX8PahZ6he6aHu7ieS2ZQRI20Dy5mOwD5VGM8ZIGSazdA1CQeLIEhvLfUhHe3kkfh9Aq3eluwf55GJJKsdwG4KB5w5b5a9Mi1nT5tcn0eK6R9Qt4UnmgAOURiQpJ6c4PHWoLfxLptxrbaQrXUV4NxVbiymhWXb97y3dAsmM/wk8c0AcX4SfUh8QriTVPD+oWWo3umh7q4uJLZlDCRtoHlzMdgHyqMZ4yQMk03Rbmzmh8M6RHLA+t6bdSPqcAAMluCknmtIOqq7MCCcBtwIzXaWnijSL7Vm022uXa4UsqloJFjlK/eEcpUJIV7hWJGDnGDTrTxJp99rE2mWovXnhZkeQ6fOsAZeo84p5ZPsGoA5PwZrnhJPG2u6b4f1TRVWU24trWxuIgH2xnfsRTzg5zgcd69BrGtvFmkXetf2XDPP9oLOiM1pMsMjJ95UmKiN2GDkKxPB9DjZoAyYLjxE+rNHdaXpkWn5bbcR6lI8xH8JMRgCjPcb+PeuM0m4tpI/DujxSRN4gsdRea9gUZlgU+Z5kjjqqvuGGOA25cZr0knAyeBWbpfiHSdbnuItIv4b0223zWgO5BuzjDD5W6HoTgjBoAfYa1p2q3OoW1lOJZNOn+z3alGXy5NobbkgA/KwORkc1xnhLXfCMPj/WdO0HVNEQTx2629rZXEQ8xwJC4RFPJHU4H1r0KsODxhpU+sx6WF1KK6ldo4/tGlXUMbsoJOJHjCHgE5B57UAcV4Y1C9sNdhshrSyapcapc/2hoflRgrCXci4PHmj5fLw5bYQQABkUeGNQvbDXYbIa0smqXGqXP9oaH5UYKwl3IuDx5o+Xy8OW2EEAAZFdrB4w0qfWY9LC6lFdSu0cf2jSrqGN2UEnEjxhDwCcg89qmt/FGkXWsHTIbljcbmVSYJFikZfvKkpXY7DByqsSMHI4NAEdiU1jWptQYBrewke2tRwf3g4lk9jnKD2Df3q461ubYxaboZlhPiSHXGupbfGZo085i8xXqEaM4Dng7gO+K7S38U6Pc6z/ZcNy5uSzKhNvIIpGX7ypKV2OwwcqrEjByODSDxVpJ1saV5032kyGIObSXyTIBkoJtvll/9ndnjpQBhNqNvp3xAFno2u/b7i+us6jo6mKQ2g8r/AF3yqHj+6g+ckHdwMkUNqNvp3xAFno2u/b7i+us6jo6mKQ2g8r/XfKoeP7qD5yQd3AyRWz/wmGlDWotLddSiuZpjDGZdKukidwCcCVowh4UnO7HFSr4q0dtcXSRcv9qZzGrG3kELOBkxibb5ZcAHKBt3B44oA16KKKAPNLW5tjFpuhmWE+JIdca6lt8ZmjTzmLzFeoRozgOeDuA74rvrPWLHUNQvrG0n8y4091juU2MPLZl3AZIweDnjNVU8U6Q+tjSluX+1MxRWMEgidwMmNZdvllwAcoG3DB44Na9AHnXh3W/CFr8T9UsNF1PRIfPtYEjt7S4hXzJvMmLgKp5fJyR155qFLmAQQaG0sTeJE183ZtsAzCP7QWM23qEMJxv4GDtz2rvv7YsP7cGjfaVOoGA3PkAEkR7tu49hye/X8Kq/8JTpH9uLpP2l/tTOYw32eTyTIBkx+dt8vfgfc3bvagDi9Kn1U/FGxutY8N6jbXl3b3SPNJLatHHEGj2Ku2YttXvxks5OOuCO4t/Jg0N5oT4kXXzdm3xmYR/aCxm29QhhON/TB257V2z+JdNXW/7JRrma7DBX+z2c0scTEZAklRCkZxg4ZhwQe4qw2s6emuR6M1yv9oSQNcLAASfLBALHsOTjnrzjoaAOWudSttL+IMdto+u/bLzUbpft+ir5UhgTysGf5V8yPAVOXYqc4AyRVHQ9b8IWfxU1Gy0jU9EgaezijEFrcQqZLjzpS67VPMmTkjrzzXbtrOnprkejNcr/AGhJA1wsABJ8sEAsew5OOevOOhqg3i/So9aj0uVdSjuZZvIjaTSrpYnfBOBKY/LPAJzuxxQBy+h634Qs/ipqNlpGp6JA09nFGILW4hUyXHnSl12qeZMnJHXnmrms6xaXXxA0iwTU9O1KS2uwf7Mtebu0fymBmkIZvkAboVT7w+Y8KejfxLpq63/ZKNczXYYK/wBns5pY4mIyBJKiFIzjBwzDgg9xVhtZ09Ncj0Zrlf7Qkga4WAAk+WCAWPYcnHPXnHQ0AXayXufEQ1ryo9L0xtM3gfaW1KQTbccnyvIK5z28z8a1qKAPNJ7i3WG90OaWE+I5teF1Db4/fMnnqUmC9SgiGC/QbSue1d9BrFjc6xd6VBPuvbNEkni2MNivnackYOcHoaqyeKNIi1oaU9y4uS4j3eRIYRIRkRmbb5YcjnYW3cjjkVr0AeaT3FusN7oc0sJ8Rza8LqG3x++ZPPUpMF6lBEMF+g2lc9qs2mueENP+LUttYapoltNNYmOWKG4hRpLkzcqQDkyH0PNdhZ+ItI1HVptMsL+G5u7dC8qQneEw20gsOAwPBXOR6VFL4q0eHW10qS5kFyziPcLeQwrIRkRmYL5YcjnYW3cjjkUAYOqahBpXjqJdJ137RqN/PCl3oIMUh8vG0zYC+ZHtUA7i2zjGMkVt7l1nxG8Zw1rpLKSDgh7grkf98KQfq/8As1LP4k0231ldLLXM12xUMttZzTLFu6eY6IVjz1+cjjmifxLpttrcWlXLXUNzMwSN5LKZYXYjIUTFPLLYHTdntQBwZv73S/F2q+XrSwavPq8fk6OYkzf2xEahjuBkKqu8hkKqpU7gcHNfWL0x+Pr2FdTtgj6nas/huZR9pvSoXFzExO7aPlJUKV/cH5ly1egXHizSLXWl0uaecXBkWIuLSZoUkYZVGmC+WrHIwpYHkccjL5/FGkW+sLpk1yy3BcRlhBIYlc/dRpQuxXORhSwY5GByKAOSTXfCGmfFsQWuqaJaXE1nJHPHHcQo73LTJ8rAHJkOOh5NQX1xbJDqui3EkX/CQ3WtLcWtuRmaRRJGUlVepRUGCw4G0gniuzuPFOj2usLpk1y4uGdYtwt5DEkjcqjShdiucjCswJyOORRceKdHtdYXTJrlxcM6xbhbyGJJG5VGlC7Fc5GFZgTkccigDXooooA85k1Oyt/iUqHWk1i4mvPLFja61NFNYjaF2tZK/lyoCCxdgpAYHDYzWbrWrasvxAuobrVtO0qWK+hXThfeIJbTzIMJu22oj8u43EuuSxIPA24FesUUAedW2n6DpHxV1A6lq1zZ3V2LeSyhudcnT7Sx37gsbS4kAOBswQM4AFV/EGqeVqmuGbWLi38RwTAaHpy37xC4TYhXbbhgswLFwSVbHIyNvHpKXMElxJBHNG00QBkjVwWQHpkdRnBxUlAHm2patZ2nxEh83WY9Tu5bmKI6Vba5LBcWXygYFmjbJ1yS7FgpC5PzACqPjvxGlp4qY2d2bK60+e1M5n1+a3Jh3qXdLMAxyRBGYNI23GG5+WvV6KAER1kjV42DowBVlOQR6g0tFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQQOI9PjdskLECdqknp2A5Nch4R1mG68Wa+BZatAt9dJLbyXWkXUCOqwIpO+SNVHKkYJBPauvgcR6fG7ZIWIE7VJPTsByaz9D8SWmvvfC0t7yAWUqxP9rgMLNlFcEI2GAww4YKcg8YwaAMPSlWDx28WgW+sR2TCd9T+2JOtsJSwKGHzuCS28/uvkxknnbXZ1gad4vtdR1KC2Fje20N2GNjeTqghvNoydmGLA4yQHVcgEjOK36AMmwt/EUeou+qapplxZHdsht9NkhkHPGZGncHA6/KM+1YmkarF4h8W+ffWeq20tk0sdlBcaVcxRqPutK0rIELMB8oDcKe5Jx2BO1STngZ4GaytG8R2muXd7b2kF5E1mUDm6t2hLbxkEK2GHT+ID8RzQBYsNT+3SXqGyvLb7HOYd1xDtE2ADvj67l5xn1BrldD1xbjxnr5tbHVI3vVh+ySXmkXcELskZB3O0QCjPr17ZruK56y8YQX2sR2cem36W800sFvqDCIwTSR53KArmQfdblkUfKeeRkAwfCmmeJdO8aM2s6VYIsthm6vre+km82UyEk/NAgz225+VQMZ6VbWae9+IcLWh1W7hi81Jhfae9vBYjbjdBIY08wswAPMnBOCo671v4ksbrxLe6HAJnubKBZpnEf7sbiRtB7sMZIHTIo0bxHaa5d3tvaQXkTWZQObq3aEtvGQQrYYdP4gPxHNAHK6NBdtF4c0FrK+ju9FuPMvLiW2dIdqo6hllI2yb94OELEZO7BFXrRFh8fbfD8GrpHJJK+rfaluFtORlWi835CxfH+p4I3bu1acHie4fXYtMuvDWr2fnCRkuZWtnjKp1bEczOAcjGV6kCrOjeI7TXLu9t7SC8iazKBzdW7Qlt4yCFbDDp/EB+I5oA4fw5ZX8HjKGVYtVEpvLl7zTrq1dbGyV92JbeUqELEheAz58x8BctXp1c/Z+MLW81SG1+w3sNtdO0dpqEqoILp1zlUw5cHhsblUNtOCeM9BQBk29v4hTVmlu9U0yXTssVt4tNkSYDsPMM7Akd/k59q5/Qtcgn+IOrkWWsRpeR28cEs+j3cUbFFfdl3jCqORySAc8ZrticDNZOkeI7TWr+9tbWC8iezCFzdW7Q7g+cYV8N/CeoHtkc0AWNP1T+0Lq/g+w3tr9in8nzLmHYk/yht8Zz8y/NjPHII7VX01JbzVrvUbqKSMRs1rapIpUiNT8z4P95h17qq1rVjL4iKeIY9KvNIv7MTl1truXyWhuCo3ELskZl4yfnVehoAdp0ct7ql5qN1HJF5bNa2qSKVKxqfmfB/vMM57qq1y+lwXZh0Lw+1lfJd6XfGe6uXtmWHYvmfMspGxy+4cKSw3HIGDXTL4iKeIY9KvNIv7MTl1truXyWhuCo3ELskZl4yfnVehqK18W2t1qkdsLK9jtriVoba/dE8i4kXO5FwxcfdbBZVBxwTxkA5aPTb+48TafpNhc3cmmaXqZvCJNJlthEoDkqbiT5ZwWfCiMA46kgcwWdlqCePBPHHqq3B1R5JtNktX/ALOWEgr9ojl2hBIVwxG85Yt8gPI7Wz8R/wBoas9rYaVfXFpHI0UmpKYhbq68MvzSCRsEYyqEZ78GoW8TXMevW+mT+GtWiS4laOO8LWzREAE7yFmLheOpTuAcZoAs2Uct7rt1fXMTxx2pNtaq6lcjgvJg9cnAB9F461x11p17ceIYNE0ye8ewt9WW/dX0maEQ4cyP/pT4SVSxwFQbuRkkA11Efi61k1ZLUWV6LWSdraPUiifZ3mBIMfDbwcgjcVCkjAbJGZ7fxBJda9Pp0Gjag8NvJ5UuoboBArbQ2MGXzDww6JQBsUUUUAefW0F2tvY+GzZXwvbfVjdy3X2ZxAIRO0u/ziNhLAgbQS+WORgE12dpqRvL6/tVsruA2bqgluItkc+V3Zjb+IDoT2NZ0fi61k1ZLUWV6LWSdraPUiifZ3mBIMfDbwcgjcVCkjAbJGd+gDzzQ9M8VWXj60uNW0rTiJre5a7v7e/lk3FmjxwYFAICqqpu+6Cc5HMWo6deXOvpoOlzXjWQ1WO/lV9JmiWEiQSuftb4jkUnoqAtluuAa66TxGbfxDDpd5o+oW0dzIYre/fyWgmcKW2jbIXXgNyyKOPpmE+MLRdWW2Nlei0a4+yDU9qfZ/Pzjy/vb87ht3bNueN2aAOUttP1Gx8RTQwf2yurPrDXCOqzCxe0d8tvI/ck7cj5v3gIGOMVPpWm+K7Tx/ZXeqaVpziaO6a6voL+V+CY9owYAFwFAVN3IDHOQc9efEdj/wAJWnh9fNe8Ns1wzKv7uNQVG1mz947gcenJxkZqy+JrmDXYNOn8N6skdxOYY73dbNEcAnfhZjIFwOpT04oA5vSdM8VWnxAsbrVdK05xNHdG6vre/lk4Jj2jaYFC4CgKm7kBjnIOettY5b7X7m7uYpI4rM/Z7VXUruJALyc9c5Cg/wCy3qajn8Rm18QQaZeaPqEEVzL5MGoN5LQSvsLbcLIZF4DcsgGR16ZhPjC0XVltjZXotGuPsg1Pan2fz848v72/O4bd2zbnjdmgDlLbT9RsfEU0MH9srqz6w1wjqswsXtHfLbyP3JO3I+b94CBjjFWNJ0zxVafECxutV0rTnE0d0bq+t7+WTgmPaNpgULgKAqbuQGOcg56vTfE1pquuXel29texy2kSytJc2zQq4ZmX5Q+GPKHnbtIIIJps/iM2viCDTLzR9QgiuZfJg1BvJaCV9hbbhZDIvAblkAyOvTIBtUUUUAefTW92lvd+G/sd9Je3Or/bI7kWzmDyTOJd5mxsBUArtJ3ZAwuCDXaQal5+sXen/YryP7MiP9pkixDLuzwjZ+YjHI7ZFZsvi61i1ZrU2V6bVJxayakET7Ok5IAjPzb85IG4IVBON2c436AOJ/tyD/haG77FrHlfYPsfnf2Pd+V5vm5x5nl7cY53Z2+9Zuv6bfXesz6FpFzdm2utQhvZozpMqLEwkSR2F437op8v3AC+TgEDp1Mvi61i1ZrU2V6bVJxayakET7Ok5IAjPzb85IG4IVBON2c4mbxHv1x9O0/S76/EMix3V1AYlitmIBwxeRWY4IJCBsZHfigDjJdN1Cz8T6gITra6rcautzZyQCUWTW7eWH8wr+6OFVxiT5+Bt/hrZ16ee58Y6dDY/wBq3bwXMZkspdPdLFF53TCfy1BdQeB5jDOPkzyNo+IJG8RSaVbaLqFwkLIs98jQCGIsu4ZDSiQ8EfdQ9akm8R2MPim28PnzXvbiB58omUjVcfebsTk4HfBoA4a9sr8ePbi4gi1VbptShddOFq5065hUBfPaULsEoUseXHMajYSAavXkF2lvqfh77FfSXl/qguoLlLZjCIjIj7zLjYpUKRtJDHaMA5Fb8/jCCDWmsV02/mgjuUtJr+MRGGGZwCqMC/mH7y8hCBuHPBxYv/ER03V4LS70i/W1nlSFNRXyWg3t91SBJ5g54zsxk9aAOR8S6bf3Wq3mh6Pc3fk6hdw3M0X9kyhYmDozuLxv3Wzan3AC+TgEdjxLpt/dareaHo9zd+TqF3DczRf2TKFiYOjO4vG/dbNqfcAL5OAR26u88Tf2fq8dre6RqENpLMkCakfJMBkbhVwJPMGTxkpjPep7jxHY23iez0FvNe9u4nlGxMpGqjPzt2JwcDqcH0oA1aKKKAPOZLG0i+JS3thpDajfS3n7+XUNCl32y7Qu6C+KhAgAzsyxO4gEdKzda0XUJfiBdXGpOsTtfQy6dep4cub6aKEBMolzE+2AFg4YMo+8Scg16NJ4j0OHWk0ebWdPj1OTGyxa6QTNkZGI87jxz0qS41zSbTVYNMutUs4NQuRmC0kuEWWUeqoTk9D0HagDjYfDvh3R/ibeXdx4YhE155Elld2+itKEly/mMZUjIjYkgksVznOapeINL83VNcE2j3Fx4jnmB0PUVsHlFumxAu24ClYQGDkgsueTg7ueut/HfhS61yTRrfxHpj6jG4jNsLpN5fkbQM/MwIOQMkd8VfuNf0e01aDS7vVbGDULgZhtJblFll/3UJyeh6CgDhtSs7aP4iQ3tnpB1TU2uYlnN/oMz+SoUDdb3pURxKoy+0lsnIG0mqPju1uLzxU1zBoMSXNhPayx3kehT3N1PCjqztHdIQseBvHlfMzYOB8wFei3HiPQ7TWItJutZ0+DUpseXZyXSLM+emEJ3HOPSi48R6HaaxFpN1rOnwalNjy7OS6RZnz0whO45x6UAaKOJI1dcgMARuUg/iDyKWiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIIGK6fGyoXIiBCrjLcdBniuV8Lzav/wk2tSaj4Y1LT7fUrhJo5ria1ZUCwomGEczNklTjAI9SK6y0/484f8Armv8qwrXxDqcXiBNM17S7WzW4gknt5rW+Nx8sZG7zFMabDhh0LDORnpkAwtK8N30viqwZrXVrPStHlklto9RntmQZVkVIVhJYrhicynIG0Dqcd/XM6V4rub68sTdaYltp2qqW065W58x5MKWxJHtGwlQSMM/TnBrpqAMix0e+stQkup/EeqahEQ2LO4jtVjXPTBSFW46DLfXNYugXGr/APCZ6tcXnhfU7K11Aw+XcTTWjKnloQdwSdm5PTAPviuxrnoNe1WLxJb6brOlWtvFe+abSa1vmnYhOf3iGJNmQR0LDPGehoA1NPur65mvVv8ATvsaQzmO3fz1k+0R4GJMD7uSSNp54rg9H8Lava+LDqEWmz2GpSTXDX+qSXEctpdI4IXyofMLK2ViJ+SPOw5LcZ9JrnoNe1WLxJb6brOlWtvFe+abSa1vmnYhOf3iGJNmQR0LDPGehoAyPDXhjxHofihZb6/0+9sUsDG8kFg0Mk0hkZjktO/zEksWxg5xxU+gXGr/APCZ6tcXnhfU7K11Aw+XcTTWjKnloQdwSdm5PTAPvir9trHiA+JotNv9G01LeRHkae11R5ZI0HCs0bQIBuPGAx79cGoNJ8ZjWvEz6dZrpggTedsmpYvWVDtMgtgh/dlhgMXGRzjpQBq6XbXAur7Ub+EpczSGOKPKkpChIQAg4+bl/wDgWD0rC0C41f8A4TPVri88L6nZWuoGHy7iaa0ZU8tCDuCTs3J6YB98VPpXjT+2fEkmn2SaZ5CCQhZNSAvXVCVLi22H5CwwGLj1x0q/oevz6vqWpWdzpcunPYmL5JpUd2DrnkISo6dmb8OlAHN23hi9uPFlkq2+rWmkaXevdxJfT25gB2uAIFiJkIJcn98flAwoHQd/XLWXjC4n1Cya50yODStSmaCxuxdbpXcAkeZFsAQNsbBDt2yFJwOpoAybfR76DVmvJPEWp3MBLEWEkdqIRnoAVhD8dsv9c1iaLc6x/wAJzqVzdeFtUtLS+SGNLiWa0Kx+WHyWCTs2DkYwCfUCuxPA9axNF8QT6rq+o2Nzpc2nPZLEwE8qO7hw3UIWUfd7MeD26UAXdPu9Qubq/jv9N+xRQT7LWXz1k+1R7QfMwPuckjaeflz3rnxZ6jceP4b610q/s4Yi63V1fXccsM0e3AEEYkcxksFJIWPIHOTgV11czZeLbi6vLSSTTEj0i/ma3tLxbndIzjdgvHtAVW2HaQ7HpkDPABW+xajc+Por210rULOGMyJdXV9dxywzR7cAQRiRzGSwUkhY8gc5OBVfTdG1aNdH0KbTnitNIu/tB1EzoY50XfsVFDb9x3Lu3KoGDgnitLSfFNxq3izUdJii0kQ6fIY5duqFrteBhmt/Kwqkngl6sWXieO/8X3WiW9q5itrfzDeFhsdw+1o1HU7cjJ6ZyOoOADldH8HXWneILNV0Vorq1v5riTxB50Z8+3dnYQfe8053gFCoQbSQc4rs7C1uJNYvdQv4tjbvItVJB2wjBLcd2bJPsq+lZOm+Mxq/ip9Lsl0sQIXBE2pbbxwhKs62wQ5j3AgMXGcE46ZfD4tuJb6GX+zE/sW4ujZxXwusyeaGKAmLbgRlgQGDk8j5QDkAGbb6LqyJZ+Hm02QWdrqP21tTM8fltGJjKqBQ3meZkgEFQuATuPANq60qWfx5bXumeHf7Pkhl3Xmss0KC8i8sjy8I5kfkr/rFUDbkds2rLxTcX/jS90SCHSvLsWAlzqZ+17SisH+ziL7uWAyXHf6VGPGE41CGSTTI10We8Ngl79q/eiYMUGYdmAhdSoIcnkZUDkAHU0UUUAcNb6LqyJZ+Hm02QWdrqP21tTM8fltGJjKqBQ3meZkgEFQuATuPAPWWd1fTahfQ3enfZreB1Ftceer/AGlSuS20cpg8YPXrWLD4tuJb6GX+zE/sW4ujZxXwusyeaGKAmLbgRlgQGDk8j5QDkdPQBx91aandePrO6sdJ1C2jglP2m+vLyN7aSHYRiGESOyOSV5CRnAOSehz9R8NX2o+JFs7W11W10pdQS+la4ntvsZdXEhaJUJnLM38L4QfMcZxno9J8RT6l4hv9LudJm082kMcqmeZGaQOzrnCFgB8mR8xODyAeKqr4uuGvkmGmxnRHvDYrfC6/e+dv8vPlbceXvG3dvzn+HHNAGXpfhXxPpnjKwu7jVNOvbNUuWuZl0545XaRkOCTcNljtABC4ATGORjp7O1uJdbvL++i2bD9ntFJBxFgFm46Fm/RFqlca9qth4htLTUNJtU0++uDb21zBfGSYttZgXiMYAUhTyHYjjjrguNe1Ww8Q2lpqGk2qaffXBt7a5gvjJMW2swLxGMAKQp5DsRxx1wAUb6z1G78dWdzY6TqFutvMPPvru7je1kh2EERQ+YxVyWA3BEPByxHBz9Q8NX2oeJVs7W01a20pdQS+la4ntvshdXEhaJUJnLM38L4QfMcZxndm1nxBB4ltbB9G017S5lYLNHqjmZYlHMhiMAHHyjAc8sOal0zxFcX/AInvtJudImsBbW6To88yM0oZ3XO1CwA+TIO7JzyFxQBk2dxrH/Cxrq9l8LapFZT2sVoty81oVUpJIS5AnLbSGGMDd7CpL6z1G78dWdzY6TqFutvMPPvru7je1kh2EERQ+YxVyWA3BEPByxHB0brW9VsfEtpZXWl2p069mMMFzDes0wYRl8vCYwAvykZDtjjjnhlxr2q2HiG0tNQ0m1TT764NvbXMF8ZJi21mBeIxgBSFPIdiOOOuADoaKKKAOGl0XVlS58PxabI1nc6n9u/tPz4xGkZmErIV3eZ5mQQAF24IO7qK6yC6vpNYu7afTvJsokQwXnnq3nsc7l2DlduByeuaxZPFtwl9JLHpscmiw3Yspb0XX70S7ghIi24MYYhS28HOflwMnp6AOGl0XVlS58PxabI1nc6n9u/tPz4xGkZmErIV3eZ5mQQAF24IO7qKo3Xg66/4SS6dNFM11caot9a6750f+hR/J5kY3N5ikhWG1FKsGG48mugk8W3CX0ksemxyaLDdiylvRdfvRLuCEiLbgxhiFLbwc5+XAybWo61qmm69ZwS6ZayabeTrbx3Ed6xnDlScmExgbRg5IckDnFAGbrWkyXnjGyudM8O/Z72KaNptfJhQNAPvQ5V/NfI+Xayhe+eBVO18K+J7LxjYXz6ppt3a+fczXMg050lw4UBSxuDk4AUELgBelb0viiNfGlv4fgtXm8yKR5roOAkLqFIjx3Yq2fYY9RVWTxbcJfSSx6bHJosN2LKW9F1+9Eu4ISItuDGGIUtvBzn5cDJAMC98ManN48k1WPSrgaj9tikg1ZLpPsq2qjBjeEvuL7WkAYRk5YYcDpsa7Z6jfeK7GTTdKv0ktpo2OoT3cZshF1cCDzCfMKkqG8sEZ+8B1dc+M7iLxW2lw6fayQRXUVrKWvil0WddwdIPLw0YHO7eOFc4+XmS+8X3FneTzDTI30ezultLq8a62ypISo3LFsIZAXUElweuFOOQCKaTVL7xoqal4c1CTTbSZTZTxTW3kbtvM7gyiQkZIC7DjGcEkYoxeFfE9p4wsb/+1NNu7X7ZPcXD/wBmukqqybVUt9oIOFwgIUYxkg81rSeKbhvHbeHbWLSSY40lkE+qGO5ZCCS0cAibeBjruFV73xpPb+K30qCwtZYoZ4YJd98UuiZRkPHB5ZDoOfm3j7knHy8gHW0UUUAcX9m1i38YFtE0zU7G3nvPNvpJ5raSyuVwFLgb2mR9qrgKFXP3gc5rJ1Pwrq3/AAleotL/AG9dadqN/Bdj+zH08RJsCACQzATDaUz8hPHTByK7MeJ9NfXDpMX2ya5V/LdobCeSFGxna0yoY1OOxYYyKS78V6PZawumXFzILhnWNiltI8UTt91ZJVUpGxyMBmBORjqKAKSx6hpnjm8uU0m6vbTUooE+028kIW3Kbgd4eRWx8wPyq1Y+saNrEi+ItJt9LmuF12cSxamksQjth5aKPMDOHypQkbEbt0OcbNr460q88SXGiRWuri6t3VGd9IuRFls/x7MAfKfmbCnsTVu88WaPY6obC5nmEqlVkkS1leGEt0EkyqY4ycjhmHUeooAwrq11u38WBvD+m6paCW6Rr25kltXsbxAqqzspczKwQYGxVy2N2RzVDxnpvivVtTnhtra/ksYLi3ubeK0azWC4WN0dlkMp83zSVIXbtT7uW611z+J9MXXDpKm8mulYI5gsJ5Yo2IyA8qoUQ4IOGYYBHrSah4q0vStTisb9ruKSV0RZfsM7QBnOFUzBDGpJIGCw6j1FAGujFo1ZkKEgEq2Mr7HHFLRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAENr/AMeUOOvlr/Kub8P6b4gW/vJPEthpZa6VxJe22oyyyFc/LGsbQqEQDsHPPPJJNdLaf8ecP/XNf5VLQByOkeG9WgudItdR+w/2doQItJYZHaW5OwxqXQqBHhWPAZ8nuOlddRRQBk2Hhux03UXvbefU3lfdlbjVbqePk5OI5JGQe2Bx2rN0Gy8RRa9c3ev2GlP5zOFvINQkkkjjz8kaxNCoUYA3Yfk888Y6is/SdU/tT7b+58r7LdyW33t27bj5ugxnPSqUZNOS2QD9P/tTzr3+1fsfl+efsf2bdu8nAx5m7+POenGMViaDZeIoteubvX7DSn85nC3kGoSSSRx5+SNYmhUKMAbsPyeeeMdRRUgZ2lWM9tJeXN8yPc3U5YlGJCxjiNRkDovJH95mrmdJ8G3+n3Wn2LR6emlaZfS30FzC7faJWff8jR7QF/1hywdt2Ogzx29FAHEaV4O1DTriwsvK05dM0y9mvre5ikYTys+/5GTZhf8AWHLh23Y+6M8W9Ds/FFv4s1G/1PTtIitNQMe42+pyyyReWhUYU26hs/7wx711lFAHE2/guWXxhFqNzY2llZ2d091CsOoz3PmSEMuRE6LHb53lm8vJY9T3PbUUUAZNv4bsrXVm1KKfU2uGLNsl1W6khyf+mTSGMD0AXjtWRpFn4pg8Y32oahpujx2d8sSOYNUlkkiEYbBCm3UMTuHG4Y9TXW1lazez2l1pKW8mxbi9EUo2g7l8tzjnpyB0q4Qc5cqDYm08asbrUBq32L7P5/8AoP2bfv8AJ2j/AFm7jdu3fd4xiufsPDOqwS6dptwbL+x9KuTcwTJI7TzY3bEZCoVNu77wZt20cDPHTLBdDVHna8zaNCEW18ofK4JJff1OQQMdOKs1LSXUDm7zStY1XxRa3F0lnY2OntI0Fxb3DSXE29CmCGjVYxzngvkqvTFUtC8D3mg+JLa7TxFqF7Y29k1uILpbfJJcNyUhUkd853E9c810Ol6p/aUt+nk+V9jumts7s78Kp3dOPvdKpi9vL3xlNYR3BtrWwgimkVEUtcNJvAViQdqjbn5cEnHOMg6qjK7T0sr/ANfehXMTTfBt/Y3tpYiLT10my1KXUorqORhcu7lzsMezaP8AWEF95yBjaM8Tw+GNVSW20pvsP9h2t8b5Z/Mc3DnzDIsXl7doAY/f3kkLjaM5HYUViM52/wBN1jVPE9hLNDYW2nabOZ4rhJ3kuJiUK7ChjVYwdxyQzZAHAzxmXHg2e/8AFqXctlaWlhDeLeb49Qnmad15B+zsqxQsW5Z1LMQCP4ia6HXbyezSwNs+wzX0ML/KDlGPI5rUq3BqKl3AKyU8N2Metf2os+pm43l9jatdGHJGP9SZPLx7bcVTtnv7Tx21nNqtzeWlxZPcLBPHCBCwkUAKURWxg/xE10VVUpum1re6uJO5x8PhjVUlttKb7D/YdrfG+WfzHNw58wyLF5e3aAGP395JC42jOR0dn/an9oX39ofY/se9fsXkbvM27fm8zPGd2cY7VdrO03Vf7QvtTtvJ8v7BcCDdvz5mY1fOMcfexjnpURhKSbXT/hhmFYWXimPxzdapd6bo6WV1DFbsYtUleRFjZyHCm3AJO/7u4Yx1NMTwvqiyR6T/AKD/AGGmoHUPPMjm4J83zRF5e3aBvP3954GNveuxoqQOXsrHxEPGE97qdhpc9oZGS3uV1GTzLaDHAWEw7dxP3jv59cKBRZWPiIeMJ73U7DS57QyMlvcrqMnmW0GOAsJh27ifvHfz64UCr1peXcHiy40q4n+0wvbfa4XZArxfPtKfLgMPQ4yO5PWtqtKlNwaT66iTuZ9jYzx6pfXt4yM8zKkARiQkKjgcjglixP1HpWDaWXipPHlxqtxpujrYzwR2pKapK0qojuwfabcAk7/u7hjH3jXXUVmM5S70HUrzxrb6lFYaXp0UEoaTUre4dru7iCkCF08tQEyc8u4G0EDPIfZWPiIeMJ73U7DS57QyMlvcrqMnmW0GOAsJh27ifvHfz64UCuoooAKyX8N2Mmtf2o0+pi43h9i6tdCHIGP9SJPLx7bcVrUUAcfL4Y1Qyz6VF9h/sS4v/t7ztK/nqTIJGiEe3aQWH394wDjbxk9HB/an9sXf2n7H/ZuxPsvl7vO3c79+flx0xj3zV2igDj5fDGqGWfSovsP9iXF/9vedpX89SZBI0Qj27SCw+/vGAcbeMmXVNA1DUPF9tf2+n6VYiCRC2rxTsb2WJTkwFPLA2MeCDIw77c4x1dFAHGW3gW9sfE1hqFt4l1KW1gmuJpbe4W2+ZpcEgFYAxBPBy2QAMGny+GNUMs+lRfYf7EuL/wC3vO0r+epMgkaIR7dpBYff3jAONvGT2FFAHCXngvUbnxZJqAg00s14lzFrXmst9bxLjNuFEeGQgMv+sAw5JUnrLr3guXXfETM1jaQWEskUs9wNRnZpjGytzabRDvyoHmliwA47Y7aigDndd03V9Z1Ozt0hsYNNt7mK6N4Z2a43Ic7Vi8sKuem7eeCeOaxdS8F6jeeLJb9bfTGMl1HPDrLSut9ZxrtzAiiMhkOGGPMUfvGyp/i7yigAooooA5CXQdZk8XJfWlrY6ZALnzZru01GbfdpjGJbbyxGzFQF3l2ZQBg9qztQ8BXL+KLy9jtl1Gyv7uO6kSbX7yzELKEGPIjVo5fuBhu2+h4Ga9AooA546dq9l4xuNQ0+3srmzv44UuGnu3ikg8vcMoojYPkN3ZelZmqeF9YuP7b0y0Fi2l67KZJ7qW4dZ7bciowWMIRJwmQS64z7c9pRQBxt/wCH9auPFEFzp9tZadDFOjvqFvqcyy3EYAystsIhHKSBsBdztB3DB4ql4q8I+Idc1ieaGeGa3SWCezEmq3FukZjZW8p4I0KOGZT+8YsRu4X5Rnv6KAEQsY1MgCvgbgpyAfY4GfypaKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA//9k=)

install.packages('nnet')

library(nnet)

#relevel - below code indicates that the reference value is the first Species which is Setosa

trg$Species <- relevel(trg$Species, ref = "setosa")

#multinominal Logistic regression

#we are using first two PCs because they have more than 95% of variability capture

model <- multinom(Species ~ PC1+PC2, data = trg)

#now very quickly model converges and we get some solution

summary(model)

![A screenshot of a computer

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM5MQAAkpIAAgAAAAM5MQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDoyNzoyOAAyMDIyOjAxOjA0IDIwOjI3OjI4AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6Mjc6MjguOTA1PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAXsB+QMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APou0/49/wDgb/8AoRp8U0c8QkgkWRG6MjAg/iKZaf8AHv8A8Df/ANCNc/FoN7P4hk1OLZocbNl0s23S3nK/NMD+6Bwu37rvjGJF5FbU4RmnzStb+vX7riOmrEg1nUB4sOkX2n20UMkElxb3EN20jMqsq4ZDGu0/MOjNW3WNPYXL+NrO/WPNrHYTQvJuHDs8ZAx16Kfyp0eR8ymuj++2gO4+DxDa3niSTSbGazuTBCz3JivI2kgcMAEaIHcMgk5PHGO9RWHinTrrUZrC5ubW0vBdS28FtJcL5lwE6sqnBP0GcYqaSznbxdb3oj/0dLKSJn3Dhi6EDHXoDXMnQ9Ta4vbBNIMS3utC/bURJFsWNHRhkBt5chMAbSMHkjpXXTpYea1dtF16319e9l6eZLbR1ja7pCX8Vi+qWS3czskdubhBI7L95QuckjuO1I3iDRk1hdJfVrFdSb7tmblBMeM/czu6c9OlUfD+iCzl1WW8soUkudTkukcqpLjACPkd8DjPIrB1yx8TX3iBXNtfS2lnfRXEMNubRbeWNSO7nzfN5J6qnH5qnh6E6jhzWSW7aWvlp+H4oG2kda2u6Ql/FYvqlkt3M7JHbm4QSOy/eULnJI7jtU/2+z+xNefa4PsqAlp/MGxcHBy3Tgg1k+H9FFnJqst5ZRJJdanJdIxVSzjACMSO4AwM8isprB5PGNxoUW1tMkdNVnQHOxsn93jsGdQ/vh/WpVCjKTUZbK7f52/Qd2dDd6s6arBp1hbfarh1EspMmxIIs43McE5PO1QOcHkDmm3etaCbhNOv9S03zriQxJbTTx7pHBGVCk5JBxx9KpPKmj+Mp575jHb6nDDHFO33FlQsPLJ6AtuG3PU5HWs2fw3d/wBgeIo4LGNbzUNSNwhUoGlUOhVi2ewBxk5FVCjRfLzuydte999/5f0+Yrs6KXxBo0F7FZz6vYRXU0hijge5QO7jgqFJySMjj3qSfWdMtdSh0651G0hvrgZhtZJ1WWQf7KE5PQ9B2rmZ/Dd3/YHiKOCxjW81DUjcIVKBpVDoVYtnsAcZORVHUfDWqf8ACTX7S/21c2F/ew3Q/s5rERpsCACQzASjBTPyE8dMHNaQwuGm/wCJbfdry2+96dbbroc0ux0sHjXwzc6y+kwa/pz36OIzbi5TeX5+UDPLDByBkjvVpNWkTXDpt7amAyqXtZlfek6jG4HgFXHXbyMcgnkCgI77T/Gd3cJpdzd2uoRwL9ogeILAU3A7w7q3cH5Q1NvpI9Y8W6bBZMZBpUzz3UqDKxsY2RYt3Ted+SvUAc4yM5OlSb91act73vZ28rW10swuzo6ZNDFcQtDcRpLE4wyOoZWHuDT6K88sKKKKACiiigAooooAKKKKACiiigApssUc8LxTxrJHIpV0dchgeoIPUU6igBAAqgKAABgAdqr22nWtndXdzbxbJbyQSTtuJ3sFCg4J44UDirNFAFa2061s7q7ubeLZLeSCSdtxO9goUHBPHCgcVZoooAKKKKACkdFkjZJFDowIZWGQR6EUtFACIixxqkahEUAKqjAA9AKWiigAooooAKR0WSNkkUOjAhlYZBHoRS0UAIiLHGqRqERQAqqMAD0ApaKKACq0On2sGoXN9FFtubpUWZ9xO4JnbxnAxk9Ks0UAIyh1KuAysMEEZBFJHGkMSRQoscaKFVFGAoHQAdhTqKACiiigCtDp9rBqFzfRRbbm6VFmfcTuCZ28ZwMZPSrNFFABRRRQAUUUUAFBGRg8iiigBkMMVvCkNvGkUUahURFCqoHQADoKfRRQAUUUUAQ2n/Hv/wADf/0I1HZalZ6gZls7iOV4H8uaMH54m67WU8qcc4IHBzUlp/x7/wDA3/8AQjWM3hyTUNbTVNYuFEsAK28VkDEUTIbDzD94/I5UFUIOCjYzW1ONOSfO7f12/wCCha9Dfrn9N8Z6bqms3GmW9tqqTwS+UzS6XcJHnaG5cphRg/xEZ7ZBBPQVg2thqun+KL6e2t7ObT9QlSWWWS6ZJYiIwmFjEZDD5Qcl16n05ujGlKM+fe2mqWt/PfQHclg8WaNdaktjb3Mks7TPbnbbSlFlTO5GfbtVuCQCRkcjIouvFej2epGxuLiVZVkSJnW1laJZGICoZApQMdw+UnPOcVJ4f0ybSrK5huGjZpbye4UxkkBXkLAcgc4PNcVqd09trE/h6yv9IunudXiujBHdF71cyI7K0IHygAE7y33QBt5zXXRw1CtVlCF7LzXfV7beX4kttI6VvEmoTeOjodjZ2T28MZa5kmu2SYcIdyxhCCvz4GSMkN0282z4ikk1SS0sNF1C+ihmEM13C9uscT8ZBDyq5wCCcKfbNZmraLrGpeN9PvVtLKG2sg2zUEum84KWQlDHsHDBSuNxGDnqACl9oGp3niIXcGmaVYt9oRm1a2vJFupIlOdjxiIBwQNu1pCvfHAFV7PDtR2Xu669b7v3l9y1X8rFdmp/wl2inUjYi6dpluDauVt5THHLx8jybdiE5GAxGcjGc1DDqfhrRNWk02ziitLi5uAZza2TCIzPyPNlRdgduOGYE5HqKwrLTdT1ibU7JBax6b/brTzTmVvOHluj7FTbtOSo+bcMDPBqS58E3P8AwklxdLbrf2d1epdsJdbu7YQsNvHkIGjkwV3DO3PQ9M1f1fCwbhKTWmya12tvZd9N9PMLyOkl8S6bFq39mhrma5VlVxbWU0yRE9A7ohVDjn5iOOelQjXTL4vj0mD5ESCR5hPaTozsCmDHIVEbqNxzgk8j3qvbWOu6TrN5/Z9vp95p99dfaHee6eGaEsAHAAjcP0yOV9PetG406WXxLY6grIIre3midSTuJcoRjjp8h/SuRwoQfdOL1ut7draa6W/ErUjn8T6Tb6sumy3En2gusZK28jRI7cqjyhSiMcjCswJyPUU4eItPbWDpkX2uW4V9jtFZTPEjYzhpQhjU47Fh1Fc1c+Cbn/hJLi6W3W/s7q9S7YS63d2whYbePIQNHJgruGdueh6Zq/LomrSeKUvLW2s9OhFx5kt1bX8u+6TGMSW/liNmIAXeWJUAYPatnQwllaT+G+8d/wA7eVr9rivI6qq17qNnp0aNe3CQ+Y2yNWPzSN/dVerNx0GTVmsKTw9Ja6y2raTOv2mQFZY70GUOpOSqSH54+ccAlB/czzXBSjTk/fdv679PuKd+hu0VmS+H7ObVRqLzaiJwwbYmp3CxZH/TIOEI9tuDWnUyUFblf4f8FjMY+LdG/tQ6ctzJJcrcfZnEdtK6xS4BCu4XamcjG4jPbNSXPibSrPVV06e4cTl1RitvI8cbN91XkClEJ4wGIJyPUUujaZNp02pvO0bC7vWuI9hJwpVRg5HX5TXNX3gm4bxJd3cdut/aXt1HcyJLrd3aiJlCjHkxho5PuAjO30PrXdTp4SU3GTaSXdavTvZLrp+JDcrG1Lf6va+M7SynuLKXTr2OZo40tXSaIoF6uZCGzk/wCrV74l0rTtRWxuriQTEqGKW8jpFuOF8x1UrHntuIzS3mmTXHiTTNQRoxFaRzLIpJ3EuFxjj2Nc5rHgu4ufEV5eRW639rqDxvNDLrd1ZrGVULjy4gySghQfmA9OR0dKOHquPtXb3ellrfzsttfP1B3Wx1X9sWHkXsxuAEsXKXGVIMZABxjGTwQRjrniq154m0qw1BLK6nkWZtu7bbyOkW44XzHVSsee28jNV7rQZ5fES3UDxJYziN7yMk7neIkx4AGDnIySeiAYPbG1jwXcXPiK8vIrdb+11B43mhl1u6s1jKqFx5cQZJQQoPzAenI6KjRwspWnJ7X0tvpprZd36WBuRs3l/q1l4t062aeyk06/aRBELV1mjKxls+Z5hU8jpsFWNR1G8/ta30vSY4TO6edPNPkpBFnAO0YLMx4AyBwTnjBdqGmTXetaReRNGsdjJI0gYnJDRlRjj1PfFVb9JdM8UR6slpNc211braXBgUu8G1iyPsHLKSzA4BI4OMZImPJPl0V+V/fd2+dvvdtx6iL4z01vEk2iC31T7TFt3ONLuDH8xIHzhMAfL944X0JwcTTeLNGh1J7BrmRrmOdIJFjtpXETuAVDsqkKDuGCSATxnINRXFhqtt4sbU9Mt7O5guoIoLgXF08LRBGY7lAjcPkOeCV6deeLOk6XNYalrFxM0bJfXQmjCk5CiNE5465U+tEoYZLmV9l1W+l+mnUPeGaj4q0jSrtre9uJVeML5jJbSyRxlvuh3VSqk5GASCciqWp+JNQh8X2eiaXZ2UxkUSTtdXbRPsIY5RVRs428k4GcDvkc14nuZLDUdX0ezv9Imm1e4hlW2a5LXoY7FKCADlcJneWG0ZJBArd8UaLrGs67pv2azsVtrWUyx6gbp1nt2K4JCBOf8AvsA5wRjr1ww1CnySntJPd+Ss7adW1a9yeZs07rxE8Wpy2Vho2oam0BUTyWzQKsJYZAPmyoTwQeAR+PFLc+LdGtL+SznuZBPDIscwW3kdYSwBXe6qVQHI+ZiB1GeDWXr/AIf1HVNXea10zSoJCFSLWkvJIryFBzjCxfMAc/KZApzyOtZ0unaprGr+KNKsxaLZXd1FHdXEsrCWJfIjzsQIQ5I45ZcdeelZ08Ph5xTk7WV3r5pXe66uysn0Bto6m/8AE2laZfrZ3lxIsx2lvLt5JEiDHCmR1UrGCehcjNF94l03T9RWwma5luioZorSymuDGCcAv5aNsB5xuxnB9K5zW/BVxda9d3cFuuoWt8sYngl1q6slTau37kQZJAQBwwHTHIPGo2n65pniC8vNGg068tb/AMtpY7q6kgeF1UL8rLG4dSAOCFwQeTniPYYXljyybdu6WumnW1td1rbTcd5Fq713y/E1hpUHyGUsZjPaThXUISBHLt8stkZILdM1Lf8AibStMv1s7y4kWY7S3l28kiRBjhTI6qVjBPQuRmn6hp813qulXSMgSzmeSQEnJDRsvHHqfaua1zwXc3niC8vYbdb+11AR+fBLrV1ZKm0bcbIgyyAjHDAdMcg8TRhhajiptrTpbe/d2W2uvpcG5LY6OXxHp8Wsf2WPtct0Cqv5FjNLHGW5AeREKIcc4Yjgg961K5TUtE1e68QRXGn29nYIk0btfwahKssiLjKyQCPZLxlRvc4zkYPFbOoXOpRavpcNhDFJazSOLxnRiY0CEgqRwPmwOeueO+MqlGnaPs3q1d3a6K/T8E9e4031NKsa+8W6Np+oSWNzcyG5hMYljitpZTEH+6zbFO1T/eOB71s1l2GmTWviDVr6RozFe+T5YUncNiEHPFY0lS951Oi0s7a3Xk+lxu/QTU/E2laPdLb39xIshUM4it5JREpOA0hRSI1zn5nwODzwawdb8YXMXiqPRdKMluyReZNNLoV3dq2WAAXy9oxycvkr2pniTwZc6jrl1f20K30N9AkM9tJrV1YKNuR/yxDCQENjDAYx1Oa6CLSZY/E6aiPLWBdPFr5YYlg2/d6cjHfr7V3wWEpRjPVuz7Wvp01891ruifeZqjO0Z5OOcDFLRXH678NtK1/WJtRu5tssuNw/s2wl6DH3pbd3P4sa4aMKc5WqT5V6XKd1sdhWTqc2uxzzjSra2kjWBGhMp5aTfhgfmHGzn6+vStK3hW3tooU5WNAg+UDgDHQAAfgAKkqIyUJXsn6gZd54i0+y1NdPl+1y3LBSVtrKacRhjgb2jRgmf9oj1pNV8S6Xos6w6hPIrld7CK3kl8pM43uUU+Wuf4mwODzway9e0TVr/WBNpltZ2jZjxqkd/LFOApzteJY9syjLYV3x8x4HWqfiXwdc6jrs+o2sQvUu7ZLee2k1m609QFLc5hDBwQxGGHGOvJFd9KhhW488mrrXWO+nyXXd309CW5dDVuvGmmWniAaPJb6o9wY/M8yHS7iWMjIHDKhBHI+YZUdyDxVrUvE2l6Tdi2vZZhJtDuYrWWVYVJwGkZFKxrweXIHBPY1UvNM1O21ix1DRrWym8q0NpJBcXbxBF3KQVYRuWxtxggZ9ag1TRtZ/tDU20lLGWDV4Vjne5uHRrYhShZVVG8wYOdpKcjrzwo0sNJx6afzLe/pppr57ILyNO68Sabaailixupp3Cti1sprhUDH5S7RowQH/AGiOOelGreJNO0ORF1I3UasATLHZTSxICcZeREKp/wACIrD1Dw1qhuLWLSILS3+zxQxLqy38sVxtQdHiWPbMo+bCu+35jwOtM8X+FtZ8Q3U0UNwrWUtt5cYOoz2wgfnJMUa7Zg3y8OcADgHnNU6GFc4KUtHvqr/Lt6PXT0uNysb2pT64k0/9k29rLEIEaFpTy0hf5gfmHGzke/r0o1TUrrSb63mmWF9MmdIJGAKyQOxwrE5wyklRjAIznnto2vnfZIvtSJHNsG9Y3LqDjkBiASPfA+lY3iKOXVmh0a3t5isksU1zcFCscUauGwGPDMSuMDJGcnHGeak4ymoSSst35d/8vPvew3sb1FFFchQUUUUAFFFFABRRRQAUUUUAQ2n/AB7/APA3/wDQjVS01yyutQfTy7W98gJNrcKUdlGMsmeHXkfMpIBOM54q3af8e/8AwN//AEI1m/8ACOQXV4LrWpn1ORHDwxTACCAgggpEONwIyHbcwOcMBxW1NU2n7T5W/r9ULXobFcunj2wkn8safqSr5mzzWgUIR5xhLZ3dA4HuQQQCM46iuY/4Q3/R/K+39858n/p58/8Avf8AAf19q1w31fX23l/wf0E79CyPFtsb0p9ivBZfaPsv9pYj8gy7tuzG/wAz73y52bc96p654pmiZ4NMtLzbFeQW8l+EjMIYyoGjwW35wxG7btB/iyKf/wAIlOZPsjahCdF+1/bBa/ZT5wk8zzMebvxt3842ZxxmkuPCd5JNPDBqyQ6dNepfeR9l3SeYHV2UyF8FCV6BQQT1I4rqh9TjNO/5+W+m/wD5KL3rFq58W2ttqbW32K8kt47hLae/RU8mCVsbUbLBzyyjKqQC3JHOIXfULPx9ZwHVrqeyvba4kNpLHDsiKGPbtKoH/iP3mNUrjwBbHxPJq9rBojme5W5lN/o4uJ1cYz5cwdSn3cjIbB59q6G40rz/ABDZap5237JDLF5WzO/eUOc54xs9O9TKWFhb2bveLvddbab9b9UHvPc0Kz73W7OzvEstz3F7IAVtbdC8mDnDMBwi8EbmIXPGc1oVkP4ehguzd6NM+mTO5eVIADDOT13xngknksu1zgfNjiuKkqbb9p/Xr/wxTv0Neisx/DOgyat/asmiac2o7g/2xrSMzbgMA78ZzjvmtOokoK3K/wAP+CxnLS+PrGK6lhOm6mViZ1MwhXYQkojkbO7opIPOCQfl3EEDSbxJaLHcOY58W98li3yjmRioBHP3fnHv14rOl8G+bbzxfb8ecLgZ8np5swl/vdsY9+vHSln8J3kt9cFNWSOxmv478wC1zIXUqSpcvgqdnGFBB7kcH0XHAu1nb7+68u1yPeJJ21Cz8dWEf9rXU1nfRTs1nJHD5cZQLjaVQP3PVj1pLPxVeXXie70g+GdRjS2KBrozWxQBs4cr5u4L8uRgE+oFal1pf2nXbDUfO2/Y0lTy9ud+8KOueMbfSqz6PfxeJJNT06+tooblY0uoJ7VpGcJnGxxIoThu6tWaqUZRtJK/L2a1v5bu3V38wsyKTVbtvGtrpxgvLW28mVw7xwtDdEbOQwkMild3QqM5PoKgufG1tb3F4q6XqUsFjceRd3aRxiKE/L82WcFh838AYjByBxnXuNN8/W7PUPN2/ZYpY/L253b9vOc8Y2/rWdceF/P0nWbH7Zt/tS4abf5WfKyFGMZ5+77daKcsM+X2i6Jde+r83bX/AIGga9AuPFtvb30sZsL2Syt5hBcaigj8iGQ4+UguHOCyglUIGeTwcVrnx5Y21xPG2nak4gaQNIsK7CI3CyEEt0XcDz1HAy3y0XPhK5nkurRNShTRr24+0XFq1oWmLZBYLLvAVSVBIKE8tg8jC3Hg3z4LmP7dt89bpc+Tnb50iv8A3v4duPfPatYrA6cz/P8AHzvvbS2we8XLq7u77xEul6fc/ZYraNLi7lVFaRgzHZGu4EAHY244JxwME5FW48T3b+KZdE0u20ySeAK0kd7qTW8zqQCXjjET70GcbsjkEe9WrqzvLDxCuqafbfa47mJLa7iVlWRQrHZIu4gEDe24ZBxyMkYNfW/D2pa7I1tdahYHSmlWQQtpxaeMqQcpKZdqtkcNsyP1qKf1e657ctvO9+t7avrZNpW6g79B1z4xtra9u4W0+/eGxnWG7ulRPKg3KpDElwxHzDO0EjuAMGpNQ8WWun30sBs7u4htii3l3CE8q1LY279zBjwQTsDYB5xWKvh3UtU1jXoJbr7JpVzfxvNE1qTJcIsUf+rk3AKCVIJ2t3wQan1TwDbXniOTV7eDRZJJ2Rpv7T0gXbhlAAMb70KcAcHdzz61qqeCjJKb6eb1st/PfbRaX6ivLoa9x4j2au+n6fpN/qbwlRcS23krHAWGQGMkiZODnC7sDHqKju9Uu18Xafp4hvLa2cSEzGOFobkhM7c7/MQjr9zB6Zpsmh6pba1c32h6pa20V4yPc291ZGcF1AXchWRCuVABzuHGfXOjd6d9q1TT7zzdv2MyHZtzv3Lt654x171zXoRa5bP3X3ve33b7W/PUrUoah4rtdPv5YDZ3lxDbMi3l3CqeValsY37mDHggnarYB5xUi+IxNr82l2el3t19mdUuLqNoRHCWXcMhpA54IOVUj0zg1k6r4Btr3xJLq9vBosklwyPN/aekC7cMoABjfehTgDg7ueeOas6p4XvNX161vLu908QWcwlt2j04i7iAwSi3Hm4AYjBwnK8e9bKOCtH3umt099O2+t+qVrdtV7x01FFYdx4N0K4upLo2TQXczl5bq1uJIJpc9nkjYMy/7JJUYHHArz6apt++2vRX/VFO/Q3K5PUvGF9YX2pFdLtZNN0yaOKedr4pMxdVPyR+UVJ+cDBcZrqYYY7eFIYUWOONQqKowFA6AVi23hHTIvEt7rlzaWl1fTyrJDPJbKZbcCMJtVzk9ieMda3w0qEXJ1ldW033uuzVtL9/RilfoNTXNUv76ZdE0q1uLK3mMEtzdXphZmU/P5aLG+4Dp8xXkEdOaV9W1SLxpbaZPb2cdhcQTSRukjPK+zy8E5ChPvnj5s8HI6U2PQdU07UJ30LVbaCyuZzPLa3lk0+12OX8tllTaG64IbBJPtUd/oWvXPii31W21jToYrZHjigk0yR22Pt3bnE4yfk4IUYz0Nbr6tzbpKz/AJr3tpfdXv20/AXvG299HHqkNiVfzZonlUgDaApUHPv84/Wuc1LxhfWF9qRXS7WTTdMmjinna+KTMXVT8kflFSfnAwXGatXXgXw9eeIY9XuNF0uSYK/mb7GNmlclSJCxGcjaeevPWpbbwjpkXiW91y5tLS5vp5VkhnktVMtuFjCbVc5PYnjHWlSeDhrO8tNrW1v5Pt1/B7A+Yamuapf30y6JpVrcWVvMYJbm6vTCzMp+fy0WN9wHT5ivII6c03xHf61pLC+s57B7MPHGLKS2czzszYwsgkAUnPA2HpyfRY9B1TTtQnfQtVtoLK5nM8treWTT7XY5fy2WVNobrghsEk+1LfaLrM3iZNTs9VsUgjjEcdvdae8rRc/OUdZlALDAyVOAB75cXh1UTTXLbqpO/k9HZ+a2+4NbG/RWbqEepvq+lnT5/LtFkc3qlFIdNh2jJ5B3Y6e+T66VcEo2Sd9/w9SzmfFHieTTbPUodNs7ye4tbRpZLqBI2jtWKkpuDMCxOM4VWwOuAas6p4kfRbeKa50m/ubXYjT3lv5Plw5IGWDSK5xnJ2qeKr6v4WvL+fUxY6qllb6rCI7pGtfNfcF2hkYsAoxgEFTnHBU81R8ReABr98ZprmyZDAsaG7sPPltmXo0LlwI8nBb5STjqOMenSWDagptJddHfZfre1tO/nm+boX7jxVeQ+Kzo0XhrUbhBCJhdRTWwUqW27trSg7R/31x93vVvXPEJ0LEk2k39xZqFM13bmHy4QWxlg0gc46nap4qO60bU21S11Kx1Gzhu0t/s1yZrJ5ElXcG+RRKpQ5z1LdazPE3gMeJNUkuprmyZHiVE+12HnyWzLkhoXLgR5OC3yknHUcYimsJKcOdpRtr8T1/ra2nddBvmsdgDkcVkX/i3w3pV41pqniDS7K5QAtDcXscbrnplWINakCypbxrcOkkoUB3RCqse5AJOB7ZP1rLv/DFhqV41zcT6okjAAi31e6gTj0SORVH4CuOj7Hn/AH17eX/BKd+hqxSxzwpLC6yRuoZHQ5DA9CD3Fc9d+Kry28VjRovDWo3SmHzRcxTW4VhuAJCtKDtGec4PHAI5roYo1hhSNCxVFCgu5Y4HqTyT7msjU9Ivp9Zt9T0m+trW4jhaCQXNq06vGWDcBZEwcjrk9elVQdJTftErWdr336bag720I73xUlrq1xp1vpOp389ssbzfZYkKoj5w2WZc4xyoy3oCKTWfFcGjz3EY06/vhZwfaLt7REYW6YJGQzqWJ2nAUMeOccVetdL+za5f6iZt5vEiTy9mNmwMM5zzndXJeMra8ivNSi0e4vBNq9mIZLeLSJZw7gMqlbgfu4uuG35GBnjrXVh6eHq1VC2ll330ve21tfLa+hLbSudBqOo3WnXdlqIuN+m3ckcEtvIgzCXOEdWHP3iAwbPqMYIO7WBe6fe6lNp+nSW4jsLRop552cfvWTlURQc/eAJLY4AAzkkb9ctbl5Y238u3T5/8ApBRRRXMMKKKKACiiigAooooAKKKKACiiigCG0/49/8Agb/+hGvNZfixDd+Pl0PSj5yfa47bEN9YHeRuMhAM+4g5QYxnhh97ivSrT/j3/wCBv/6Eap2mh21nqTXyPK8zeb/rCCB5jhm7Z/hUfRRQBpVyUPj63mt1VbGb7a0HmeTuym/zfK8vfj727n7vTmutrnIvA+lwzJKkl1uTUm1EZkB+duqdPuZ5wO460AY7/FHTh4t/slH00xC+FgynU1F55pONwttpJj3EDduB6nbgZrVe61E/EW1t7yLybQ2k7Wxt9QZlmAMeTLCYgAwz8pDtgZ9asx+GWttYkvNO1rUbKCabz5rCIQNBK5+8TviZ13dwrAdxgk1oy6ZDNrNtqTNIJraGSFFBG0hypOeM5+Qd/WgDnrzxjfQ3U8tpo8NxpdvfR2Ely16Ul81nVGIj8sgopbGd4JIPHes218Uazph1u5l04XemWmsSRS3NxfFXRCyACKMK24Lu5DFPbNM1Xw3qF34le20211q3sJdQivJmluLUWO5WV3dVVjOWO3G04TJJx0NdPN4VsptJ1HT2luBFqNybqVgy7lYsrYXjplR1zQBnaXr3im88YalptzpGkJY2UkQM0eoymUI6kg7TDhjwOMrjplutSweKrufxk+jGz0+2iWRlX7XqDRXc6quTJFB5REiZONwf1zgjFX5PD5/4SI6taape2ZlCC5toVhMVzsyF3b42ccHHystQy+Fzc6xFe3+tajdwQXH2mCwlEAhikGcEMsQkOMnALn3zQBovdXw1yO1XTt1g0DSPfeeo2SBgBH5fU5GTu6cVdqk+m79cj1P7beL5cDQfZBL+4bLA7ymOXGMA56E1doAK5uC81eL4gmwvb6GaylsZJ4oYrby9mJFA3EsxZsE5IIB/uiukrm5fCNxJ4nXWx4o1hJVBjW3VLTyhEWDGPmDdtJA53bvegCLV21Sz8TWJ07Wrq4kurhQ+ktDCYUt+kkhYR+YuOzF8FiBjnFdTWBF4Xlg8SXOrweIdUQXUivLZ7bZomCjATLQmQL1OA45JPc1v0Ac7dSS6x4wbSxdz21pp0EV1MlvIY2uHdm2AuuCEHlkkA/NnByMg4F34pvJfFd40lxq9ppGmXyWcsljb25gDFUOZ2lUyEEuF/dDCjliOo6i+0y9j16HVtHaAyMi293b3BKrNEGyGDAEq6bmI4IbODjhhBd+D7W71WS6+3XsNvcTJPdWETJ5FzImNrPlS4+6vCsoO0ZB5yAdBWCPExEeoI9ntvbS8W0S383iYvgxsGxwCrZPBxhuuK3qzJdAtZfEcWsl5RPHHs8sMBG5G4K5GMlgHcDnGGPHTABh6545OheK7LSbhdIdLuaKJY/7W23v7w7Q4tjH8yg99/QE9sVaj8Satea7fWWm6FHNb6feR29xcSXwjJVkRi6JsOSoblSV4HBJOAy+8C215fXdwmrajax3Vwl21vD5OxZ027ZQWjLEjYPlLFf8AZrZ07SINNur+4hkleS/nE8vmEYDBFTjAGBhR+OaAMnULrUV8daRbzQiKwfzvKlgv2BlYR5Ilh8rBA7EP15xVXxP45/4RnXrOzuE0hobqWGNY5NWEd4/mOE3JbmP51BPXeOh9OekudNhutSsr2RnElkXMYUjB3LtOePSsLVPAttqd7fTjVtStEvnjlmgtzDsM0e3ZKC8bNkbF+Xds45U5OQDLXxLqmk6x4kuHtPtml2eoRiaWW8KtBGYYsiKPa27BJJBKDnjJrQ1W1Fp4+0K7trq+U3skyTwm+maFwsJI/clvLHIByFBqWfwNa3N9PPLqmpGC7uEuLuzDxCK5dFQLu+TcB8gOFZQec5HFbV5pUF7qVhfStIJbB3eIKRtJZSpzx6HtigDktf8Aihp2h+Ip9MZ9NxZvGl0tzqaw3LF8EeTBtJlwGGeV9Bk1sajLNo3iTTrmK5nktNVuPss9tI5dUcoSkiZ5T7mCo4Oc4zkma78MmTV5NQ03WdR0mS4Ktcx2ggZLgqMAsJY3wdoAypXIx6CnzaVd6h4it7vUGgWy09i9pDGSzySFdvmOSBtwGYBRnrknsADZooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCG0/49/8Agb/+hGuciiu0+JitftZTh9OlNq8NvJHLCgkTKMTKyvkkHIVTxXR2n/Hv/wADf/0I1A8ennXYpHeL+0hbssaGX5/KLLuO3PI3BecUAcf/AMJV4k+yzaq40tNOt9XNgbcQyNNNH9oEIffvCxsM9Nrg4zkZwNSKK8T4mBr9rKcPp0ptXht5I5IUEiZRiZWV8kg5CqeK1j4d0ttPksTa/wCjSXP2tk8xuZfM8zdnOfvjOOnbpVtrG3bUkv2jzcpE0KybjwhIJGOnVRQByvh248V3XizWYdR1nTJ7Cxu1j8iPS3RyrQq4Cv55xy3O4NnnGAQBYliu0+J1k981lPE9lc/ZDHbyRzQKGi3KzeaVfJI52KRj61rP4c099eGsD7XHd8bhDfTRxSEDALxK4jc44yyk8D0FXJLG2l1CG+ePNzBG8cb7j8qsVLDHTnav5UAcfrHjG90/xla2NpeWt1aSXsVrNbppNyTEXHObsOYVcEg7CucHHcGprnR9MsfizpV9ZadaW93d2N4bm4igVJJiGhwXYDLfjWpdeCtDvL6a6mhuhJNIJWWO/njjEgIIkWNXCq/A+cAN155NakmnWsupW9/JFuuraN44pNx+VX27hjODnavX0oAtUUUUAc0niG+33lhJFANTjvxbQAK2x43G9ZCM54TdnkZKHpmszWPGN7p/jK1sbS8tbq0kvYrWa3TSbkmIuOc3Ycwq4JB2Fc4OO4NdY2kWL60mrNADepD5Ky7jwmc4xnGeTzjPJHes268FaHeX011NDdCSaQSssd/PHGJAQRIsauFV+B84AbrzyaAMu50fTLH4s6VfWWnWlvd3djeG5uIoFSSYhocF2Ay341YfxRerb37iK3zba1Fp6fK3MbNGCTz975zz06cVoR6h4b1DxUsEOpWNxrmnxSJ9mjvFaaFGK790YbPZeSOPxpJvB2h3GqPfzWkjzvOlwQbmXyxKmMSCPdsV+BlgASODkE0Ac1f+PNTXxXdWWm2U01vY3sdpLbpo13O0+4IWcXCDyotofOGDZ28kZFegVj3fhbS7zVf7RYXkFySrO1pqE9sspXoZEjdVfgY+YHjjpxWxQBy0C3dr8S/Jl1S8uoJ9OkmEEzKI4j5qgBVVVHAJ5OW55JqPVbAt4utG0W81H+0vPjluwb6ZraG25DBoS3lgsBhQF3Z+boCauyeCdHl10aw76p9tDZDrrF2FA3BtuwS7dmQPkxt9qlTwhpUWuy6vEdQiu5pRNKI9UuVikcALlohJ5Z4AGCuOKAORXx1p2qfEzTorfxPZR2yT3FkNOS9jDSuFxvkTOc7xtQH0J53DHpNV5rG3uLy2upo901qWMLbiNu4YPHQ8etQw6LYW+u3WsQ2+2/u4Y4Z5t7HeiFio25wMbm5A70AYkC3dr8S/Jl1S8uoJ9OkmEEzKI4j5qgBVVVHAJ5OW55Jrn7/x3p118RtLtovE1la29tfvZPYi9RXnk8pwWdM5wH2qoPU5POVrqZPBOjy66NYd9U+2hsh11i7Cgbg23YJduzIHyY2+1bFxY213cWs9xHvktJDJC24jYxUqTx14Yjn1oA5XxfEbXWbDUI21a0IngEl/HfP9jjXzApje3EhDFgdu7y8DIJYYqd1vLX4nWaPqt7cW91Y3Mn2aRlEUW1ogAqqozjJ5bc3J5xxWpf8AhbStU1SK/wBQjubiSJldIZL2Y2+5eVYwb/KJB5BK5yAeoBqtdeCdHvNcGrztqn21Sdrx6xdoqgkEqEWUKFO0ZUDBxyKAOT8Tahep4znnQ6k1hZzW0b6jaXzxwacSQXSW3DYmyGB3FWA387Quak8YX19p15qd876yt9avHLpX2UzCzeLC7ll2/uSS28ESfNgjZziuvu/CWjX2qnULm3lMzlTKiXUqQzlfumSJWCSEccsp6D0FSXfhrTb/AFaPUL1bmeWMqyxPeTG3DLyreRv8vcDyDtzkA9RQBqKSVBIwcciloooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAhtP+Pf8A4G//AKEa52K3ntviSPOv5btLjT5ZESeCAG3xIg2o6xq+055DM3QV0Vp/x7/8Df8A9CNV3u9OHiCKzfZ/abWzyR/uzu8oMob5scDcV4z/ACoA5fwzp+rf8JjrzXfinWLm3tLxAlrOtt5Tq0CNjiEMAC38BXpzk5Jo2uveK9S8XXDWNnqTWdpqhs5YR9iW0WFSAzsS/wBo8zB3DAC9BtI5rtJ/D+jXOsRavc6TYy6lCAsV7JbI00YGeFcjcOp6HuaZc+GtCvdXi1W80XT7jUYceXeS2qNMmOmHIyMduaAMTw0dc1e4m1C516QW9tqV1ALJLWIJJEkjKoZtu7cMDDAgYGCCea66ooLaC1RktoY4VZ2kZY0CgsxyzHHck5J71LQAVyVnp8Fj8VJmgMzNPpRkdpp3lOTP0BcnavoowB2FdbXJppvw7l8XPBFZeGH8RJJ5zxrFbm7V/vbyMbweQc/jQBgT29u0N7rk0UI8Rw68LWG4z++VPPUJCG6hDEclOh3Fsd69LrFk/wCEX/4TCLzf7I/4STyP3e7yvtnk89P49vX261tUAcmur6kmoXehy3Ob9r1fs02xci1cb9+MYO0K6ZweQuc5rJ1nxFqUPjG1bSrvV5LEanFY3KtFZixViMMmSBcFhkHK5XPGcZFd4bS2N6Lw28RuljMQn2DeEJzt3dcZ5xVC58L6Be3017eaHptxdzoI5Z5bSNpJFBBCsxGSMqOD6D0oAz9S/wCSlaD/ANeN5/6FDWdP4lvYYb7feoki+IYbCAMqAmMtHuQDHJ2l+ev5VuR63o1x4qXTDDMuqwxSGJ5tOmjUoCu/y5mQIw5TO1j29KtNoGjvqUmovpNi19Lt33JtkMj7SCuWxk4IBHpgUAcVd694svfGWoQaPZ6k8Om30Vv5MP2IWskZVGdpTI/nZwzEFABwOG5r0WszUPDWhatfQ3uq6Lp97d2+PJuLm1SSSPByNrMCRg88Vp0AclDp8Fl8VRJCZma40uWRzLO8vPnJwu4navoowB2FcnrNv5nj281t7GwubCy1O1glvmH/ABMbSQBRshOP9SS8eRuB+aX5W3A13D+FfBsviDzpdB0J9YJ+1b2s4TcZ3f63ON33v4vWl1IeDrPxRZXWsDQ4NelAWzmuvJW6ccriMt856kcetAGyl9aSX0tlHdQvdwosktusgMiK2drFeoBwcE9cGvPL63tnh1XWbiOL/hIbXWlt7W4JxNGpkjCRK3UIyHJUcHcSRzXoaWNpHfS3sdrCl3Mixy3CxgSOq52qW6kDJwD0yazLlvDA8W232s6QPEJiItvN8r7WY+c7M/Pt69OOtAGF4t06ztfFGk6xPpOnw/6ZBGdWhx9uZydqxY2jMZyATvJxn5O4yPHOn3FpcajqUmkC6vmlifSNYMkYNk3yKIVy3mAs2flRSr78MRzXWt/whqeNF3/2Evidk4z5IvSu3/vvG39KgvdR8BWni5JdRvPDkPiJdsSvPLAt2MjCqCTv5BwB70AZvjjTrKDUdN1q80nT0MV1bK+rxlRfRsZVVY0+UZVi2D8+cEgK2az9btrWePxLq97FEdb02+SPTbhziWDKx+UkbdVDliCBw24gg9K7ObSvDknieG8uLDS210Rl4Z3hjN0EHykqxG/A3YyOOcd6kubHQrjxDaz3lrp0uswxs9rJLGhuI06MUJ+YD5sEjjn3oA4fWre2nh8SavfxQ/25pt8kemzscS2+Uj8pI26qHLEEDhtxBB6V6UM7Rnrjmsa/PhYeKNP/ALUOkDXtpFh9p8r7VjnPlbvnx1+771tUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAENp/x7/wDA3/8AQjXPxWgsfiMBBc3pjvLCWaWGa9mljDiSMAqjsVTgn7oHWugtP+Pf/gb/APoRrK/4SQyeIpdJstIv7wW7IlzeRNAIYGZdwDb5FcnBBO1W6igDlNAsNA0f4k6zb3mr3FvqU13HLZWdzrk5a5UwKCwhaXEoyHAypxtwMbRjOGrao/xEkhvdW07T7xNUCQ2954glheW1zgKlj5flyblJw+4nd34wPTWvturx2H2W5O+FpvtIj/crggbC3ZjnIHoDVqgDjPCemyajNcarearqkk1tqt4kUX21xCIxK6iMx52so6jcCR2IHFdnRWKniM/8JUuh3Gk39s0sUksF3IYTDMqFQ23bIXH3x95R3oA2q4i98QaBrvjSDQTrGm28ul3qStbvcotxcXAUkIiE7sDcCWHX7o7mu3ooA80nuLdYb3Q5pYT4jm14XUNvj98yeepSYL1KCIYL9BtK57V6XRRQBxwuL2LXbrw011cM9zdC7hm8xt6Wh+ZwG68OpQdMB1x0rmvEXiSKHx/G9tefYWs9QhjvBP4gmR/KOFZ/sPMXkncB5jFeefTPeJ4jP/CVLodxpN/bNLFJLBdyGEwzKhUNt2yFx98feUd62qAOZ1I5+JWgEcj7Befzhrn7nxJ5F5qWmPqsg1H/AISG3EdsJmMqW7PF1UcrGfmGThTnHevRqKAPJ9a1bVl+IF1Ddatp2lSxX0K6cL7xBLaeZBhN221Efl3G4l1yWJB4G3Ar1is218RaRfaxLpVlfw3F7CpaWKI7/LwQpDEcBgSMqTnnpTLrxJptprCaY7XM1223cltZTTrFu6eY0aFY8/7ZHHNAHIprvhDTPi2ILXVNEtLiazkjnjjuIUd7lpk+VgDkyHHQ8mqNzqF7pPjHWGTWlttWuNTh+x6QYoydRtyka/xAyMqjzPmjKhSGLA816jWNdeLNHs9ZXTLiedbgukZdbSZoUdvuq8wUxoxyMKzA8j1GQC3DrVhca7daPDPuv7SGOaeHYw2I5YKc4wc7W4B7V554oaVNXvtA0y80e4vNQ1G3vURbkvfwOGjzmAD7qqhPmlxtBxtPfvJvEmnw66NIIvZLv5d3k6fPJEm7pulVCi9P4mFR3XizR7PWV0y4nnW4LpGXW0maFHb7qvMFMaMcjCswPI9RkAwfFesWz+KNL00anp968d5A7aLDg3ofORLkMSEUHcRsGQPvgcHduSuseIBp7ANa6eEnuFOCHlPMake2N/12U+XxRpcGtLpc73UVw7iNZJLKZYGcjIUTFPLLH03Zzx1pb/xNpmmarDp9811DLOyokrWU3kbmOFUzhPLBJ4wWByQO4oA5C71vwhpPxdtFj1PRLK7ktblLwLcQxyNOzQhRJyCXIHGeTii71vwhpPxdtFj1PRLK7ktblLwLcQxyNOzQhRJyCXIHGeTiu4utYsLLVLLTrq5WO8vy4tocEtJtG5unQAdzV2gDy/xo7QX2r6Lp95pNxfaxJDPFA1zm/hkGxU2wBTuUbN28suzk4OK9PUEKATk45NLRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQWn/Hv/wN/wD0I1x/hnwVolj4w17UB4a0+3lS9R7O5FgiMoMCbjG23+8WyR3z712Np/x7/wDA3/8AQjVO48R6HaaxFpN1rOnwalNjy7OS6RZnz0whO45x6UAZcWhWlj8RxqOn6XDbfarCX7VcwW4TzpPMjxvYD5mxnGeetcsfCaJot1qg0eR9aTxA00Fw8LPNFGbwZMZOSiFMk7cKQSTnJNegDXtHOtHRxqtidTC7jYi5TzgMZz5ed2Mc9KjbxLoSahDYPrWnreXDskNubpBJIykhgq5ySCCCB0IoA861GCZ/iNBqyaBHZy2mqAXMtt4fna5lhKlBIbxflkVsrlFVio6kbTjt9Qtp3+IOi3KQyNBFZXayShCVQkxYBPQE4OPoa2Vv7N7T7Ul3A1vu2+cJAUzu24z0zu4+vFQza5pNtq8OlXGqWUWo3A3Q2clwizSDnlUJ3Hoeg7GgC9RWc/iHRY9Ri0+TV7Bb2Z2jitjcoJJGX7yquckjuB0on8Q6La6oumXWr2EN+yhhaSXKLKQTgHYTnBPHSgDnxpdzDrt1oSW0p0q9uhqBl2HykQ8yQ56AtIoO3uHaua8RW88/j+PUU0GKCew1CF2uINAnlupoBhTILxPlwQ2PKAZsA5749Im1zSbbV4dKuNUsotRuBuhs5LhFmkHPKoTuPQ9B2NUdb8W6Zo9wtn9rtJtSZ4R9g+0qs2ySRU37OWwN2emOOtAEV/bzyfEDRLlIZGgjsrtXlCHahYxYBPYnBwPY1zbfakurrTBpmovM3iSO7Mi2j+UsJkRg/mEbWHHIUkjuAMkei0UAeTanot+/xCnuNScQzHUopbC9Tw5c3syQDZ8iXUblIVOHVlZQOWJBBzXrNFFAHEz67bp8T4WNlrBiSyezaZdGuzEJTKpA3iPbtwCd2dvvWTeadqFn4o1MwnW11S71OO406S2WX7GYSsav5pT90QAjgiX5umzkivTKKAKMOqedrt1pn2G9j+zQxy/a3hxBLvLDaj55YbeRjjI9a891Sxvv+E+ubmCPV0u2vrdotPS0kfTbyJQP30kgXYsgBfq68xx/KxC59QooA43W0WLxjbS6HDq/9sSSwi4ZFuBZPbg/PvLfuCQucY+fOMVg6pY33/CfXNzBHq6XbX1u0WnpaSPpt5EoH76SQLsWQAv1deY4/lYhc+oUUAcbe6rFq/jGPStQs9UhtbC5jeLGlXDRXUwG5WMwQxiNSR/EMsOcAYLfF9zPLrNjaWCareXCXEDfYBp7mykHmBjI9xsCgqoJA83GQPkY4B7SigDzu903xWnjvT9Ql0nTbqN9SbF0l/LuitxFIqqU8jCYDE/eO5zjIBGPRKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAhtP+Pf8A4G//AKEa5fRV1XQda1Gzl8P3N3Bfag9yuqWs0Gwq+Mearurgpjb8qt8oXB7DqLT/AI9/+Bv/AOhGo7LUrPUDMtncRyvA/lzRg/PE3XaynlTjnBA4OarlbTaWwHF/2JrLQ/2F/Zs6gav/AGh/bHmxeUU8/wA3GN/mb9vyfcx74pR4VvYvCuoQQafGl9da99ubYUDSILtXDls8nywOpzgY9q72su28R6feaq+n2v2uWWN2RpFsZjAGXqPO2eXkdMbuvHXinGnOabir23C5k2+hXkPiSW3EIGitdHUlfcuPOIwYtvX7+ZM8DJFc/eeFdWXxXe+eNeudPvtUhvlOmvp4hXbsx5pmAmG0p/AT8uMc8V3cet6fLGjpcZV7prRTsbmVSQV6eqnnpx1rPk8ceHorx7V78iaNyjL9nkPIfY2DtwQrEbiOFBBOAQa0jh60naMG/kxXQzw5oIsZtYlvbGFJLrVpLtHKqzOMAI5I7gAgZ5FctrkOoab9psbvR2ljvfEFvdRakZo9jhpo9qhcmTzFC4xt27VJ3dq6yTxx4eivHtXvyJo3KMv2eQ8h9jYO3BCsRuI4UEE4BBqvMfCNj4ySebSIYNbuJBGNROkOC7leF+1eXtyQMY3+3tQ8NXW8H9zDmRzl54V1ZfFd7541650++1SG+U6a+niFduzHmmYCYbSn8BPy4xzxVu+0fWWN7pyaIbkTa1FqA1BpoljMYlRsAFt+9VXGCoGBw3QV0y+LdGfVP7OjuZJLkXBtXEdtKyxygZ2O4XahIPG4jPbNWTrunDSpdSNz/osLsjvsbIZW2lduN2d3GMZNJ0KsbXi9fJ9dgujQorJudRu5dcj03TEiBjRZrueYEiNCSFUKCMs2G5zhcZIPSq0njjw9FePavfkTRuUZfs8h5D7GwduCFYjcRwoIJwCDVRw9WXwxb9Nfv9QujforJk8T6VFqh0955RKriNpPs0phVz0QzbfLDcj5S2ckDHNUte8X2elu9rbuXvEmhjbdbyGFS8irtMoGwPhshS2eRxzRDDVpyUVF6+X4+nmHMjo6KyrnxNpVnqq6dPcOJy6oxW3keONm+6ryBSiE8YDEE5HqKqy3+r2vjO0sp7iyl069jmaONLV0miKBermQhs5P8ApRw9R7q2javfVLXQLo36KyTqV1aeIY7HUFhNtebvsc0eVIZRkxuCTk4BYMODgjAxk61Zzg4Wv11GFFFFQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQ2n/Hv/AMDf/wBCNYzeHJNQ1tNU1i4USwArbxWQMRRMhsPMP3j8jlQVQg4KNjNbFqcW5J4G9/8A0I1iaVr2r61NFd2GkWg0SVyEup79lndASN6wiIrtJGRmQEjnA6VrTqzp3cNLitc6KuVg0XWP+EqjvUgs9MtUldpmtNQlcXYIP37cxrGrE4JfJYbcZINXrnxMbLXoNOvNG1GGC5n+zwagfJMEjlSwGBIZB0IyUAyPoapxSajZfEaOyk1i6vLK8sZrkW08cIWBlkjACFI1bGHP3manSrSpp26q39f8EGrle38O63FeRQE6ethBqz6gJfNdpZVcu23btAQgsOdzZx/DTZ/CF/La3MazW2ZRdbcs3Hm3CyL/AA+g59/XrVqKTUbL4jR2UmsXV5ZXljNci2njhCwMskYAQpGrYw5+8zVtvqWzXI9M+xXjeZA0/wBrEX7hcMBsL54c5yBjoDXR9eq3urf1/wAOLlRzU/hC/ltbmNZrbMoutuWbjzbhZF/h9Bz7+vWotW8L69f+IDeiWKeOC7jubYyapPEgVSP3Rt1Qx/3j5h3NnHHp29FOOPrRd9Ov47hyoy9D02bTRqH2ho2N1fSXKbCThWxgHIHPFc9Zx22r+ObyPS7uG60qCRLq8ELb1W8XKiMkcZ4VyvUFVz1rtaKyhiZRcpPdq39foFjCljl0rxXJffZpp7XUYo4ZJIULmGRCQpZRztIbqBxjnAORlT+EL+W1uY1mtsyi625ZuPNuFkX+H0HPv69a7KinHFzhZx30/DRfgHKjkLjw3qsi3ekx/Y/7Ku737W12Z3E6ZkEhQR7MHkYDbxgHpxyXvh7XHe+s7NrD7DdX8d99omlcyjDozR7AuP4Tht3oNveuvoqljaiey/4OmvrovLyDlRw194JuG8SXd3Hbrf2l7dR3MiS63d2oiZQox5MYaOT7gIzt9D610t5pk1x4k0zUEaMRWkcyyKSdxLhcY49jWpRUzxdWduZ7K3XZq3e23awcqRgXUUur+KLLbbTR2mlSNM88iFBLKUKhEB5YAOSWHHQAnnG/RRWE6nOkuiVv1GFFFFZjCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCC1ANsQehd//QjWFpHh/WNBmitNO1i1bRInJS0ubFnnjQ8+WswlUbQemUJA4JNb1p/x7/8AA3/9CNcbH8Qb1piX8P7LfzdolN6pOwXJgLbQvXOGA7jOSpGCAMuPhzLL4n/ttL7TTdRXou7e5n0vzLpR0MTTeaC0e0sFVQuPlzuwc9RLo/meKbbWfPx5FpJbeTs+9vdG3bs9tmMY71Qt/Ff2i2hl+xbfN1aTTcebnG13Xf077M49+tVUtf7P+KEKW11fNFeadPPNBNfTSxbxJEAVR2KpgMfugdaANmXR/M8U22s+fjyLSS28nZ97e6Nu3Z7bMYx3qZ7W+OuR3S6jtsFgaN7HyFO+QsCJPM6jAyNvTmuf0LXvFGo+J9Usb7SNIisrG5WFpodRlaRVMSuCFMIDk7h3XGcc4yZ3utRPxFtbe8i8m0NpO1sbfUGZZgDHkywmIAMM/KQ7YGfWgDpqK4248balEdQuY9Bi/szTb42lzcyX212G5RvjjCHdjdyGKdOCamuPGVzDLcXi6ZC2hWt39kmvDdkTb94QlYfL2lAxxnzAeDx0yAdZRXCz/EK/huLgDw8GtoWlxOb4DKxTiKQldmQcMCo5ycglQAx2ZZJtY8YS6f8AapoLPTIoppI4HMZnlcsVDMOdqhPug4bdg5AwQDoaK88tk8Rax8Sb/wDtC0iW0054FRbbxFdRLGhBbd5KRKkrHjIc4HTJHNa9x4yuYZbi8XTIW0K1u/sk14bsibfvCErD5e0oGOM+YDweOmQDrKK5qx8R6vqer3ENnoMZsbS/ezuLqS+CvhQD5iRhDuHOCCykdt1Zl58QL22nutmgLJBbtPiY3oXcsEqpIduwkcMCo5ycg7R81AHcUVzreLMQXcn2L/j21WPTseb97eyDf04xv6e3Wqt3Zix+JWlTW91fgX0NyZ4Xv5nhYqE24iZyi45+6o60AdZRXIa745/sLxXZaTOukOl3NFEsf9rbb3Eh2hxbGPlQe+/oCe2K6+gAorCn8Yabb37WcltrRlV/LLR6HevHnOOJFiKke4OPet2gAorjbzxDqyeLJLGTULDRbVJkjhGoaVNILwEA/u7nzUj3EkqEwWG0nBqS98aXtreaqyaNG+naRcpDd3LXm1yrIjbo4wh3Eb+QWXgcE9AAddRXC698UdO0TxFNppfTSto8aXK3OprDcsXwR5MG0mXAYE8r6DJrYk1/VbvXbmx0DSrS6gsXSO7uby+aDDMobbGqxPvIVgTnaMkD1wAdFRXNahdaivjrSLeaERWD+d5UsF+wMrCPJEsPlYIHYh+vOKytf+KGnaH4in0xn03Fm8aXS3OprDcsXwR5MG0mXAYZ5X0GTQB3VFcvL4suU8Zpon2TT7eJ3Cxvf6g0E918oZmgi8oiUKDg4cYIOQOM9RQAUVQh13SbnUbnT7fVLKW9tBuuLZLhGkhHq6g5X8auxyJNEksLrJG6hldTkMD0IPcUAOorzrWPHmo2XirU9PttS0XzLOeGO30Z4Ha9vgyIxKESjH3jz5bAbTnvjetdR8Qa7fXE+j3Om2Wm2t09ttubSSeW4MbYchllQRjIKjh+me+KAOnormZbvWLf4iWNnPqEL6ddWtzIltFbBCuwxYLuWYsRubldoweQcZrpqACiuZvPiF4ZsfE0Wi3Ou6THMyP5nmahErRSKyARlSc7juOBwfl6V01ABRXnWsePNRsvFWp6fbalovmWc8MdvozwO17fBkRiUIlGPvHny2A2nPfG+mo6/rWqXg0O402xsbC4Ns5u7SS4kuHUAvjbLGIwM7Rndnk8DqAdNRXK+KjqtncQXWla3dLdyOkdtpCwwNDcHcN5bMZkxgklg4CgA/XqqACiiuM8YeItTSw1210SySRNPsma6u/thhkhdoyy+UoU7iBgklkxkYyeKAOzorjPFPjlvCS2RnGkSRTRoSl1q3kXUuWAbyoTGfMIzn7y5PFTXGveKB46OkWekaRLY/ZRcLLLqMscpXftJIELAHr8v47h0oA62iuR8ZeNz4RuLfzV0hoZQp8u51b7PdSfMFPkwmM+YQCD95c9K64HIBoAKKxdR8V6dpd61rc2+rvIoBLWui3lwnPo8cTKfwNa8MqzQpKgYK6hgHQowB9VIBB9jzQA+iuTvde8UReOl0ex0jSJrJrU3CyzajLHIVDKpJAhYA8n5ec9dw6VNeeJNYPiC90vRtBivTYpDJLLNfCEMsm7IUbGJcbehwpz94dKAOmorltf8WX+m3GoppGjxajHpVr9pvTJeeQwypZUjGxgzYUk7igGRyeztZuptMm07XoLidYbmaC2urNpC8bLIwVWUH7rKzA5XG4ZyDwQAdPRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAENp/x7/wDA3/8AQjWJ/wAIXp3keV511tzn765/1/n/AN3+9x9Pfmtu0/49/wDgb/8AoRqagDmovBFpFqa3X9pak0Md8b+Gz8xBDFK27ceEDMCXJw7Ng9MVryaTBJr8Grs8n2iG3e2VQRsKuysSRjOcoO/rV6igDGXw6YfEUuq2mq31qtwyvc2UawmGdlXaGYtGXBwAPlcD5R75uy6ZDNrNtqTNIJraGSFFBG0hypOeM5+Qd/WrlFAGJN4VsptJ1HT2luBFqNybqVgy7lYsrYXjplR1zUE3g22m1CWQ6hfLYzTi5m0tTH9nklBDbydnmD5gCQHCkjpyc9FRQBz0vgvTpYZommugswnDYdcjzZRK2Pl/vKAPb161Zu9MvIvEEeq6U8JMqLBeW85KiRASVdWAOGXc3GMNnBI4I2KKAKVrpUFpq1/qEbSGW+8vzFYjaNi7Rjj0+tZU3g22m1CWQ6hfLYzTi5m0tTH9nklBDbydnmD5gCQHCkjpyc9FRQBS03SoNK+1/Z2kb7XcvdPvIOGbGQMAccVlz+C9OuIbiN5roC4W5VsOvHnurvj5exUY9uua6GigDm5vBNpNqMtwdS1FYJbyO+NmkiLEJkKnd9zec7RlSxXuADgjXuNKgudYstSkaQTWaSJGqkbSHABzxn+EY5q7RQBy994Ftry+u7hNW1G1jurhLtreHydizpt2ygtGWJGwfKWK/wCzXTgYUAknA6nvS0UAYU/gfwnc37X1z4X0Wa7d/Ma4k0+JpGfOdxYrnOe9btFFAGBeeFpNQvmkvNf1WWxaZZTph8gQEghgu4Rebt3AHG/26cVlR+DJtQ17WptVu72HTrq/jnFlG8Xk3irFGAX+UuAGQ8BlzjkEV2lFAGHdeGTJq8moabrOoaS85U3MdoIGS4KgAFhLG+DtAGVK5GPQU268LeZrUup6brWpaVLcbPtUdp5LR3BUYBZZY3wcDGV2kjGegreooAp3Omw3Wo2V7I0gksi5jCkYO5dpzx6fSs+78MmTV5NQ03WdR0mS4Ktcx2ggZLgqMAsJY3wdoAypXIx6CtyigDn77wodT1JZ7/W9SmsknS4XTWEAgDoQV+YRebgMA33+vHTiugoooAzr7w7oup28UGpaPYXkMMhlijuLVJFRySSwBHBJJ5HPNaIGBgcCiigCjY6TBYahqF5C8jSahKssocjClUVBt46YUdc81mv4TEWqzXuka1qWkrcyia5trUQNFM/diJY3KkgYOwrnr15roKKAObv/AAhPfeJItZHifWLaSAMsMEKWnlxo23co3QFiDsHJYn0IrpKKKAKsmnxSatBqDM/mwQyQqoI2kOVJzx1+QfrVqiigCjY6TBYahqF5C8jSahKssocjClUVBt46YUdc81m3HhMHVp9Q0nWdR0Z7pg91HZiBo7hwMbmWWN8NgAErtzgZzgV0FFAGBeeFprjxGdYt/EOq2UjRJE0EK2zRlFOcDzIWZck87WGePQVb1PTbu81rSbq3vJbeCzlkeeJJiqzgoVCsoGGGTnk8Y6HPGpRQAVzuseDbbWLm9dtR1Czi1CHyry3tZEVJ8AhWJKFgQDj5WAOACCOK6KigDmdU8DWmqXVzL/aWoWsd5AkF1BAYts4QEISWjZgRnOFYAkcg5ObV54aa5vLS9g1rULO8t4fIkuIFgLXCZBw4eJlHIz8oXqa3KKAOb1jwVbaxfXdw2pX9ql9CsN3BbmLZOFB2Elo2YFc5wrAHHIOTnoLeJobeOJ5nnZFCmWQKGcgdTtAGT7AD2qSigDF1HwZ4X1i9a81bw3pF9dOAGnurCKR2xwMsyk1rwwx28KQwRrFFGoVERQFUDoAB0FPooAx9V8P/ANo6lb6ha6pe6ZdwI0RltFhYyRkglGEsbjGVHIAPvVq20qC11i81JHkaa8SNJAxG0BAQMcf7RzV6igDgfG/h+/1C9vI9EtNaD6nafZ7iS1ubaK0c4ZVMu5vOG0NyYgCRgHPSugudFvL++0+C7kt10uwMcwRctJcSp93dkAIqkBuMljjoBg71FABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAENp/x7/wDA3/8AQjU1QWpItSQMnc/Hr8xrk/B1nFrtjb+Ib7UdSm1PzX8+FdQmjht5AxBhNurCP5enzKSepJPNAHZ0VwP9t6ysP9u/2lOwOr/2f/Y/lReUE8/ys52eZv2/P9/HtiobXXfFepeLrhrG01JrO01Q2csI+xC0WEEBnYs/2jzMHcMDb0G0jmgDs7nxFolnq8WlXesWEGozgGKzlukWaQHONqE7jnB6DtRe+IdF07UoNP1DV7C0vbjHk209yiSS5OBtUnJ544rlPC2j3yeN/Ek8niTVJkhvow8Dx2uyYfZ0IDEQhgBnA2legzk5JdoWjXw+I3iCdvEuqOkT2zNC0drslUoSEYiHcFGcDaQfUk80Adq13bpdx2rzxLcSqzxwlwHdVxkhepAyMn3FS1y0lvPb/EuyeW/luormyuGSGaCDFttaLiN1jEgBzyGY5wPSmadLqOu+JNUY6/cWMWmXotxp1rFAQ6BVYNKXjZ/mycbSvHvk0AdO13bpdx2rzxLcSqzxwlwHdVxkhepAyMn3FS1y0lvPb/EuyeW/luormyuGSGaCDFttaLiN1jEgBzyGY5wPSsKXXvFl/wCMb2PSbPUnt9O1KO1aGL7ELVocIXaUu/n7trlhsAHC8HnIB6NRXnd5qfiBLLW9ZGvSpFpeqtDBZR20ISSMOgKyMylj944KlCO+av6Lp2rHx9rfn+KdYmtbZ4HS0kW28pgyE7f9TkAdPlIJxySeaAO1orjZLvVrDxjFJq+o6gum3d2YbRLNbZrTlcLHLuTzw5IblSV4HI6VuTvIPF1og1yGKI2kpOkFEMk53LiYMTuAXoQBj5xntQBrUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQ2n/Hv/AMDf/wBCNUpfDOgza0usTaJp0mpoQVvXtIzMpAwCJMbuB71dtP8Aj3/4G/8A6EamoAoDQdHGtHWBpViNTK7TfC2TziMYx5mN2McdajufDWhXurxareaLp9xqMOPLvJbVGmTHTDkZGO3NadFAEUVtBDLLLDDHHJOwaV0QAyEAAFj3OABz2FKltBFPLPHDGks2PMkVAGfAwMnvgVJRQBG1vC1wlw0UbTRqVSQqNyg4yAeoBwPyFUL7w1oWqajDqGpaLp15ewY8m5uLRJJI8HI2sRkYPIxWnRQBG1vC1wlw0UbTRqVSQqNyg4yAeoBwPyFUL7w1oWqajDqGpaLp15ewY8m5uLRJJI8HI2sRkYPIxWnRQBWbTrJ4JoGs7dop38yWMxLtkbIO5hjk5A5PpUN1oOj32qQale6VY3F/bf6i6mtkeWLv8rkZX8DV+igDAn07wrouvRai2ladBrF7IUS4hslNzMx+8cqpcjH3j0A5JArYaxtHv4757WFruKNokuDGDIiEglQ3UAkDI9hWJaf8lF1L7Vt8z7BB9kz18vc/mY/4Ftz/AMBz2rldR/4QP/hddl9p/wCEd/tP7LL5vmeR532nzIvLzn5vMxnbn5sZxQB6ZRXmWpxXTaf4p1ptX1X7Rpuot9jjS+kjhhAEZ2+WpAdT6PuAycYyasWlhoOk/FO/bUtWubO7u1t5bKG51ydBcsd+4LG0uJADxswQM4AFAHotFeT61q2rL8QLqG61bTtKlivoV04X3iCW08yDCbttqI/LuNxLrksSDwNuBXS6Hpb6rr2r3t5q2qlrHV2FvDHeukSIEQlDGCFdT6MGxk7cZoA7OiuAk1DR28b38Xi7xBNpt5FdRjTLN9Wkso5YtqlSqK6LNufcDkNyNvTg42tatqy/EC6hutW07SpYr6FdOF94gltPMgwm7baiPy7jcS65LEg8DbgUAesUV5VdaoP7d1NYtdvpNej1xY9O00XzgGL91vAgBCvHtLklgwXnBWr89joGlfFq5n1nV7iwkvLe3azW41yeFbiXzJAUVDKA4BK/u8FRu6c8gHdQ6rZz6nPpyTYvIFDPC6MjFT/EuQNy843LkZ4znirlc54kz/wkPhr7N/x9/bX6Yz5PlP5mf9n7n47a6OgAooooAKKKKACiiigAoryy68LS+IfHXiM2+laOJEvbcDWp2P2yzxDG2IVEf6+YuCx4Pe5A3hE+Ir4ePxpSa6t+32M6wYw3k7v3JtjJ/DjH3P492eaAPQHvbVL6Oye5hW6lRpI4DIA7qpAZgvUgFhk9sj1qevO9S1vwhpHxasManoljePb3K33+kQxyNK3khBJyCWIHG7nA4r0SgAooooAKKKKACiivLta8KyeJvHviGOHSNGkk2Wqrq92x+1WB2EhoVEZJI6g+YmDQB6jWdc+ItEs9Xi0q71iwg1GcAxWct0izSA5xtQncc4PQdq4hj4SXxPqKfEb+yxqKXI/s59b8vBt9q7DbmTj72d23nd17VoeLfEGgXWqf8IlfaxpunvMIpbprq5SN2UsCiRhiCztt6j7owepAoA7iiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAhtP+Pf/gb/APoRqaobT/j3/wCBv/6Ea5S10y5h1qXQPs8v9lC8OorKUPl+WTu8nd0yJstt/u0AdjRXlA0a/HxEkuNUcQXn9qCW3vI/DlzcTNb5+WMXqOY44yuVKMoxySOdx6Twn4UsBNcapqOl41OLVbyW3uJ0YSIrSuBsJ5CFTnA+U5zjPNAHZ1Ulv/K1a3sfsl0/nxPJ9oSPMMe0qNrN2Y7uB3wfSuE06ys7X4kC40rRjdz3FxK15eX+hSxXFvkH5kvWUI8YwqhBk4PDYGK330K0tfiRZ6rY6VDDJcWdwLy8htwpkbdFtEjgcnAOMnsaAOnorgEtNJg8a30virw/cX2oveq+nag2kyXiRxYUIElVHEO1s5yV5+bvmqF7pe7Vb0HSLh/Fb6kJLTVRp7kJbeYpAF1t2qojBBj3gnkYO7kA7RPEZ/4SpdDuNJv7ZpYpJYLuQwmGZUKhtu2QuPvj7yjvW1XPahbTv8QdFuUhkaCKyu1klCEqhJiwCegJwcfQ1yV7pe7Vb0HSLh/Fb6kJLTVRp7kJbeYpAF1t2qojBBj3gnkYO7kA9OorjPD3hPT5dX1PVNU0oNfRazNPaXFwrb41woBjJ+6p77eG75rs6AKd7pVnqM1vLdw7prV98MqOyPGe+GUg4PQjOCOCCKuUUUAZV14k0201hNMdrma7bbuS2spp1i3dPMaNCsef9sjjmtWvM7zTtQs/FGpmE62uqXepx3GnSWyy/YzCVjV/NKfuiAEcES/N02ckV30Oqedrt1pn2G9j+zQxy/a3hxBLvLDaj55YbeRjjI9aAK1x4p0e11hdMmuXFwzrFuFvIYkkblUaULsVzkYVmBORxyKiu/GGlWOqrp90upRzNMsCyHSrowl2ICgTCPy+SQM7sVyniXTb+61W80PR7m78nULuG5mi/smULEwdGdxeN+62bU+4AXycAjt2KJLf+JJJJ4pEttOAWDepAllZcs47EBSFB9S9AElr4i0i+1iXSrK/huL2FS0sUR3+XghSGI4DAkZUnPPSoLrxZo9nrK6ZcTzrcF0jLraTNCjt91XmCmNGORhWYHkeozhT67bp8T4WNlrBiSyezaZdGuzEJTKpA3iPbtwCd2dvvWLqljff8J9c3MEerpdtfW7RaelpI+m3kSgfvpJAuxZAC/V15jj+ViFyAdNDrWh+HtZu7J/7WWe/vwzSSaXcmDzXCqFWYReXjgfxHnvWne+KtH07VI9Pu7l0nd1QstvI0UbN91ZJQpSMtkYDEE5GOopUSW/8SSSTxSJbacAsG9SBLKy5Zx2ICkKD6l64/wAX6fez3up6Los14f7ZKPPCNJmKq+FUuLs4iRQqAlSGY4IXBIoA3rvW/Duh+I5pbu31Jb+4aOBro6ZdzRjcQFRZthjVSSOFYDJyec11FZBilvvESpLHItppyK6MykCaZgRkHoQq/q3qK16ACsi98VaPp2qR6fd3LpO7qhZbeRoo2b7qyShSkZbIwGIJyMdRWvXnPi/T72e91PRdFmvD/bJR54RpMxVXwqlxdnESKFQEqQzHBC4JFAHo1Yeo+MNK0rUBZ3y6lG5kSMSrpV08O5yAo81YynJIH3qvRajnWn0v7HeDyrdZvtbRfuGySNgfPLjGSMdCKrvHLf8AiQCWJ0tNPQOhZSBLMwPIPQhV/VvUUALdeJNPs9aTSpBeyXbhWxb6fPMiBiQC8iIUTOD94jpRqHiXTdM1COwna5lupAG8q0s5rlkUnAZ/KRtikg4LYHB9DWF4mVY/EttLosGrnXmaFd8CXAtHhDncJWI8g4Uv1+cZGOSKyNfsL+28TazLD/bQv71oZNIksVm+z71QKRMY/kwCORN8uD8vOaAOxvfFOladqyafevdRSu6oJTZTfZwzfdUz7PLBOQMFgckDuKL3xTpWnasmn3r3UUruqCU2U32cM33VM+zywTkDBYHJA7isTW9Vjv8AxHFoWp2mqJYwvDI8kGlXMsd3LuDKvmohRY1IBbJGT3AByuvarFf+Jo9D1G01SOwhkhkZ4dKuZUupNwZV81EKLGpALZIyfQA5ANq98U6Vp2rJp9691FK7qglNlN9nDN91TPs8sE5AwWByQO4rYrjde1WK/wDE0eh6jaapHYQyQyM8OlXMqXUm4Mq+aiFFjUgFskZPoAc9lQBk6h4n0zStThsdQa6hkmZFSY2Mxg3McKDOE8tSTxgsDyPUVrVxnjO5mm1Kzs7AapdXKywuLBdPdrKb94G3ST7AFKgE480DIGVboemGpZ1w6b9iu+LcT/avK/cH5sbN+fv98Y6UAUNT8X6Vo999l1BdSRtyJ5qaVdSQ5YgKPNWMp1IH3qsap4j07SLqK1umuZLiUblhtLOa5cLnG5liViq543HA96bLHLqHiRI5YpFs7BFmBZSFmmbIGD0IUAn6sO4rjfFGnXkXijV7of25595awDSX0sShBOgcYlMfGNzA4m/dkE+9AHWav4v0rQ7gxakupJtCs0sWlXUsSg9MyJGUH58d6s/8JHpB1xNGW/hfUXDH7Mh3MmFDHdj7hwcgNjPaoHjur/WLS1u428iziS5mfYQk03IVQehCkFiOx2VieItbgtvHWibrLV5UsjOJ5bfR7qaNd8YC4dIyrc+hOO+KANrV/F+laFctDqS6im0AtLFpV1NCoPTMqRlB+fHeptT8SabpN1DbXTXMlxMu5YbSzmuXC5xuZYkYqueNzYHvTblZdS1+C3eKRbK0Rbl2ZGCyyEkIueh24LEdjsrjvFGnXkXijV7of25595awDSX0sShBOgcYlMfGNzA4m/dkE+9AHpAORmio4BKLeMXBBl2DeVHBbHOPxqSgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAhtP+Pf/gb/APoRpq39m9p9qS7ga33bfOEgKZ3bcZ6Z3cfXinWn/Hv/AMDf/wBCNc3b6FeQ+JJbcQgaK10dSV9y484jBi29fv5kzwMkUAaNv4ltL3xTLo1hPZXRt4We6aG+jaW3cMAEaIHcMgk5PAxjvVkeINGbUYrBdXsTezFxHbC5TzHKkhgFzk4IIPpioJbG4bxpbX6x5tksJYWk3DhzIhAx16Kap+FNB/s20vDfWMMdxLqlzdq21WY7pG2Pkd9hA9QOKANKTxDosOrf2VLq9gmo4B+xtcoJsEgA7M55JAHHcVWTxNaXHiwaHYz2V1LHC73YjvozNbMCu1Whzu+YMTnoMe4rjr2HUNMltdMvtJZhN4kS6j1FpoysweUuNigmTeFypBVQFUkMeldnd2NzL4y02+SPNtBaXEcj7h8rM0RUY687W/KgCWbxLoVvfRWVxrWnxXc8hiit3ukWSRwQCqqTkkZHA55qBPE1pceLBodjPZXUscLvdiO+jM1swK7VaHO75gxOegx7iufuPC15/wAI54mjt9PjW+1LVDcRlSgaZA6FWLZ7BTjJyK6K7sbmXxlpt8kebaC0uI5H3D5WZoiox152t+VAE154j0TTtTh07UNY0+1vrjHk2s90iSyZOBtQnJyeOBQ/iTQ49bXRn1nT11Rvu2JukE54zxHnd056dKxLBdU0DxFqif8ACP3WoQalei4XULSaABFKqu2VZJEb5NvG0Nx78VkeINP8V6h4kVza6hNZWWoQ3UEFs1mttNEhHdz53nck9VTAxz3APRKKByPSigAooooAwbjxba2+qNbNZXr2sc6202oIiGCGZsYRvm39WUbgpUE8kc43q4e60bVgl/oMGnPJaahqH2v+0vPjEcUZdXdWXdv35DAYUjkZYc11UN3qD67dWs2m+VYRQxvBfeerec5Lbk8vqu3C8nru9qAKN54m/s/V47W90jUIbSWZIE1I+SYDI3CrgSeYMnjJTGe9T3HiOxtvE9noLea97dxPKNiZSNVGfnbsTg4HU4PpWPNJql940VNS8OahJptpMpsp4prbyN23mdwZRISMkBdhxjOCSMUYvCvie08YWN//AGppt3a/bJ7i4f8As10lVWTaqlvtBBwuEBCjGMkHmgDpLbxJaXfiKTRooLxZ44mlMk1s0UbBWCkKWwW5I5AKnsadceI7G28T2egt5r3t3E8o2JlI1UZ+duxODgdTg+lYU1zrA+IsV6nhXVHso7VrM3KzWm0lpFPmYM+7ZgE/d3f7NVovCvie08YWN/8A2ppt3a/bJ7i4f+zXSVVZNqqW+0EHC4QEKMYyQeaANy+8TXNhq8VnL4a1Z4ZrhYI72NrYxMW/i2+d5mByT8nABPSpbvxJ5WtHTNP0m/1SWPb9pktfJWO13fd3mSRMnGThNxA6jkZmhtbi48RT3l5FthtkEVmCQd24AvJx0JOF5/un1rjdc8IXU/iDVJItGa9n1GeKex1YSxj+ymVERj8zB1PyZ/dq27gNgCgDptR8YWunahJC9jezW1vIsV3fxIhhtGbBAfLBzwyklVYDPJHNdBXA+K/Dd9q2o3en6bbarFbakE+2TCe2WycjALsMmfeFUDChVYgbuMmu9UBVAHQDFAGRH4ms5fE/9hpb3ouPLkk82S2aOI7CoIVmxv8AvjlQV6854oufEEkXiAaVa6NqF6VRHmuYGgEUAckAtvlVj90n5VNYmo3Gsf8ACw7K8g8LapPZWtvNbNcxzWgVy7RkOA04baNhzkA+gNSeJ9Kl1DXrN9M8O/8AExjeJl18tCggjD5ePcH845UEbQu07uT1wAdfXP6j4wtdO1CSF7G9mtreRYru/iRDDaM2CA+WDnhlJKqwGeSOa00ur465Jatp22wWBZEvvPU75CxBj8vqMDB3dOa4/wAWeG77V9Su9P0y11WG11LZ9smE9utk54Bdhkz7wqgYUKrEDdxk0AdLF4ms5vEw0NIL0XHlSSebJbNHEdhUEKzY3/fHKgr15zxUGp+LoNM1KS1/s6+uo7fy/td1biIx2u8/LuDOHPr8itxWXfz6wvxBsbu38LapPY2ltNatcpNaBWLtGQ4DThtoCHOQD7Gs3xR4Z1LUfF0t/DpdzNer5P8AZepwXKJBaBcErPGzgyDfk/cfhuNpFAHWXniCS315dKtdF1C/fZHJNPbtAscCuzKC3mSqx+6x+UNwPwpR4mtG8UJoS216Lho5JPOe2aOH5NmQGbG/745TcOCCQeKx/FulT6jqlkdM8OeZqiPEY9eLQxraIHy67t3nHIBGwKVbdgkAkhurXGsf8LA0+8t/C2qXNnZQTwPcxzWgVzIYyGUNOGwNhzkA+gNAG7qHiOx03XNN0mbzXu9RdljWNchAFLbnOeAdpA9T9DjVrg7/AMK+J/8AhK7TUrXVNOngbUxcS+Zpz+bDEInVV3/aAGADYACjltxzznvKAMrUPEdjpuuabpM3mvd6i7LGsa5CAKW3Oc8A7SB6n6HGrXB6h4V8T/8ACV2mpWmqabPA2pi4l8zTn82GIROqrv8AtADABsABRy2455z14ur7+3DanT8WAtxIL7z15k3Y8vy+vTnd07UAZur+JrnSL1Ym8N6td27SRxrd2zWxjLOQBhWmEhwTz8nY1Yk8SWkfiS30QwXn2icPiVrZkhG1QxAdsBuD/Bux0OKe1rcXXiQT3MWLSziBtskHfK2Qz46jauFHT7zVha/cav8A8JnpNxZ+F9TvbXTzN5lxDNaKr+YgA2h51bg9cge2aANPXPE1xokxB8N6tfW4KD7VaNbFCWOAArzK5OSOAv0zU7+JLRPElvopt737ROHxI1syRAqoYje2A3B/g3Ad8U+W2uL3xDBJcQlbKzi82LcVO+dsjOAcjYufY7/asLX7jV/+Ez0m4s/C+p3trp5m8y4hmtFV/MQAbQ86tweuQPbNAGxqPiCSy1qLTbXRdQ1KV4hLI9q0CpChYqC3mSoT0P3QelOk8SWkfiS30QwXn2icPiVrZkhG1QxAdsBuD/Bux0OKx/GelSarNbDT/Dhn1UKPsutMYU/s47sk79/m+vyopDdDwTTdeuNYHjLSLi08ManfW2n+d5lxDNaKr+YgA2h51bg9cge2aAOxopAcqCQRx0PaloAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIbT/AI9/+Bv/AOhGpqhtP+Pf/gb/APoRqagAooooAzYfDmh22syavb6Np8Wpy58y9S1RZnz1y4G45+taVFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQ2n/Hv/wN/wD0I1zdl4svdV8T3emaXa6S8djN5d0k2qMl5EoP3/s4hb5T1UlxuBHSuktP+Pf/AIG//oRrnr3wzqmraxazavqenT2Vldi6tkj0wpcxkHKjzjKwHoSEBIyOMmgBNG8YX2reIr7TH8K6naR2c4he7kntWRcxhwWCylhnIxtDdRnHIEOreLZjdQwaXZ3iwjUobR9Q2RmBz5gWSMZYv6jdtC5GA2a0YdE1Gy8UXWoWGoWiWN9Ikt1bTWbPKzqgT5JRKAowq8FG6HnnjP8A+ENvVmEEWsRx6XHqI1CO2FnmTf5nmMjSF+VLEkYVSOMkjggHW0VStbW+i1O9nutQ+0WsxQ21t5Cr9nAXDDcOXyeeelXaAOa07Xtd1TWLuO20fT1020vXtXuZNScTHbjLCIQFe/Tf+NSW/i5LzV5LKz0bVZ0hvGs7i7WFBDC4AOSS4ZlOeqq2O+KyrPwFPp/jC51y2k8Ps9xdtcGafQy94isACi3AmGOBgHb36Guk0bSP7J+3/v8Azvtl7Jdfc27N+Pl6nOMdaAKFv4uS81eSys9G1WdIbxrO4u1hQQwuADkkuGZTnqqtjvikm8ZW0OoSxnT75rGGcW02qKI/s8cpIXYRv8w/MQCQhUE9eDjQ0bSP7J+3/v8Azvtl7Jdfc27N+Pl6nOMdaxbjwbczS3FmupwroV1d/a5rM2hM2/eHIWbzNoQsM48snk89MAFu38XJeavJZWejarOkN41ncXawoIYXABySXDMpz1VWx3xUlp4n+369cadY6Rfzw2s5guL9XgEMThQxBUyiTuOQhBzxxzVvRtI/sn7f+/8AO+2Xsl19zbs34+Xqc4x1rJuPCt9f+LLXVr++04pZyl7drfTTHdhOf3TT+aQUOeVCDPHSgDbfUtmuR6Z9ivG8yBp/tYi/cLhgNhfPDnOQMdAau1Se1vjrkd0uo7bBYGjex8hTvkLAiTzOowMjb05q7QAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQ2n/AB7/APA3/wDQjU1Q2n/Hv/wN/wD0I1NQAUUUUAFFFFABRRRQAUUUUAFFFFAHPSyTax4wl0/7VNBZ6ZFFNJHA5jM8rlioZhztUJ90HDbsHIGDVur7xKnxAttLhv8ASl06e3kutr6dI0yqjIpTf54BJ3k7tvGOhrTu9MvIvEEeq6U8JMqLBeW85KiRASVdWAOGXc3GMNnBI4IrT+FJZ/Fceu/8JFqsckSmNLVEtvJEZKlk5hL4JUc7s+hFAGdeeNtTgfVJ4dBibTtJu/s91cy3+x3XCHdFGI23EbjkMU6cE54l0/XvFF3401DS5tI0hbC0MTecmoy+aEfdhtphwxwv3cqB/ebrWnP4Wsp9M1WxeW4EWqzmechl3KxCjC8cD5R1zTpvD27xANWtNUvbJ3VEuIIFhMdyEzt3742YdSPlZaAOc1X4padpviiXSt+mFLa6jtbhZtTWO6LvtwYrfaTIo3rkllP3sA451rTxJq+oa1dW1joMbWVlfm0uLmS+CsRtU70jCHdjdyGZTxxuzxYl8MEaxLf6brWo6Z9okWW5t7YQNFcOABlvMicrlVAO0r09ea0NO0qDTJL14GkY3ty1zJvIOGIAwMDp8ooAy117Vr7XLm00TSbSezsp1gurq7vmhbfgM3losT79oYdSuTx71i6r8UtO03xRLpW/TCltdR2tws2prHdF324MVvtJkUb1ySyn72Acc7svhYjW5tS03WtS0w3LrJdW1t5LRTsoA3ESxuVJUAHYVyAO/NLL4YI1iW/03WtR0z7RIstzb2wgaK4cADLeZE5XKqAdpXp680AZs3jW+hu71/7Fj/szT9QFjc3TXuJDu2AOkYQ7gC4yCykY43U6HXvFEvjy80ddJ0g2FvFFL5x1GUS7HZxu2+SQThPu5AH9454hsvBkt1q2pz6vdXiWUuqm7SwV4zBcYCbHb5S4wy52hgDjkGtq98Om415NWtNVvtOm2JHOlssLJcorFlV/MjYj7zDKlTz16YAK2pSzaL4l0+5iuZ5LXVLj7LPbSOXVHKEpImeU+5gqODnOM5J6KsafSrvUPEVvd6g0C2WnsXtIYyWaSQrt8xyQNuAzAKM9ck9hs0AFFFFABRRRQAV51rHjzUbLxVqen22paL5lnPDHb6M8Dte3wZEYlCJRj7x58tgNpz3x6LVGx0mCw1DULyF5Gk1CVZZQ5GFKoqDbx0wo655oAxrXUfEGu31xPo9zptlptrdPbbbm0knluDG2HIZZUEYyCo4fpnvillu9Yt/iJY2c+oQvp11a3MiW0VsEK7DFgu5ZixG5uV2jB5Bxmpn8JiLVZr3SNa1LSVuZRNc21qIGimfuxEsblSQMHYVz1681Hf8AhCe+8SRayPE+sW0kAZYYIUtPLjRtu5RugLEHYOSxPoRQB0lFFFABRRRQAUUUUAed+JPHOo6X4n1PT7PVNEjks0he20m4t3e81AuuSsZWYEE9ARG2OpzW5DqXiDXNQu/7Fn07T7Kxn+zSfbLSS4kncAF8bZYwgGdvIbJBPA67drpUFpq1/qEbSGW+8vzFYjaNi7Rjj0+tZlx4TB1afUNJ1nUdGe6YPdR2YgaO4cDG5lljfDYABK7c4Gc4FAFXxUdVs7iC60rW7pbuR0jttIWGBobg7hvLZjMmMEksHAUAH69VWBeeFprjxGdYt/EOq2UjRJE0EK2zRlFOcDzIWZck87WGePQVv0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBDaf8e//A3/APQjWBbeIb6XfYyRQLqiakbQqFbZ5f8ArBJjOeYsHr97it+0/wCPf/gb/wDoRqEaRYjWm1YQD7c0IgMu4/cznGM4/HGaAOMj8d6nc+LHtrOyllsYtQ+wvAmj3bsQDtab7UP3KgHnYQeB97JxWroOqeI9au5LktpcWnW+oXFrJF5UhmkSN2VXD7tqtkAFdpB65HSrsmgaGfEouVmnt9Rk/wBIa3t9SmhWbbgGRoEcI/YElTngHtWpY6da6ZDJFZReUkkzzuNxOXdizHk9yScUAc3a67rCeMfsGtT2lhbzSyLZ2radKzTqAdpF2JPK3EAt5ZQMADxxuL5YrtPidZPfNZTxPZXP2Qx28kc0Chotys3mlXySOdikY+taMHhTSoNXGpAXktwrtJGtxqFxNFExzlkidyiHBIBVRgEgdauTR6cdctZJniGorDIIFMuHMZK7yFzyMhMnHHHrQBj2moa9rOuXv9n3GnWem2F39leOe0eaacqAWIYSoI/vYGVbpnvis+58U6xGt5rEZsv7Hs777E1m1u5uJMSCNnEu/aOTkL5ZyB15yNu48J6TcaydV2XdvdsyNI1pfz26zFfumRI3VZPT5geOOnFRz+HvD7+IknnyL6Y/aBam9kEcrJj959n3+WzA7fm2kg7ec4oAy7nR9MsfizpV9ZadaW93d2N4bm4igVJJiGhwXYDLfjTLnxTrEa3msRmy/sezvvsTWbW7m4kxII2cS79o5OQvlnIHXnI6yXTrWbUrfUJIs3VvG8cUm4/Kr7dwxnBztXr6Vny+E9Hm1c6lJBMZmkErRC6lEDuMYdoN3llhgHcVzkA54FAGdpWp+JdX1e7aJtKh06x1KS1eNopGmmiUD5g24BGBPTawP+zXVVWs9PtdP8/7JF5f2iZp5fmJ3O3U8njp0HFWaACiiigArjfEiGz8VabexnVrMPcxLLffb3NmQTt8k2/mEbmyBu8sAZzvzweyrJufDOmXmsx6ndpczzxsrpHLezNAjAcMIC/lhh2O3OeetAHDaxf36+PprgnUv7Ot762h/tS3v3W2tDgb4JLUNiQklR5hUgebyRsFen1iz+ENFuNYOpy20vnu6ySRrdSrBK6jCu8Iby3YYGGZSflX0GLkOi2Fvrt1rENvtv7uGOGebex3ohYqNucDG5uQO9AGJAt3a/EvyZdUvLqCfTpJhBMyiOI+aoAVVVRwCeTlueSa5+81S+m8Ualqd7a3k2maRqMdp+41aW18pSsZ3iCP5Z8tJlvMI4GFB6HqZPBOjy66NYd9U+2hsh11i7Cgbg23YJduzIHyY2+1WLrwro95rC6nPbObkMrsFuJFilZfus8QYJIw4wWUkYGOgoA4681S+m8Ualqd7a3k2maRqMdp+41aW18pSsZ3iCP5Z8tJlvMI4GFB6Hedby1+J1mj6re3FvdWNzJ9mkZRFFtaIAKqqM4yeW3NyeccVp3XhXR7zWF1Oe2c3IZXYLcSLFKy/dZ4gwSRhxgspIwMdBVe68E6Pea4NXnbVPtqk7Xj1i7RVBIJUIsoUKdoyoGDjkUActf+O9OuviNpdtF4msrW3tr97J7EXqK88nlOCzpnOA+1VB6nJ5ytek1XuLG2u7i1nuI98lpIZIW3EbGKlSeOvDEc+tWKAON8XxG11mw1CNtWtCJ4BJfx3z/Y418wKY3txIQxYHbu8vAyCWGKTxHbXNl4pg1q+FzLpC+RF/o+sXFuYJC5G5rdcRyqSyZ3NkAdDW5f+FtK1TVIr/UI7m4kiZXSGS9mNvuXlWMG/wAokHkErnIB6gGn3vhvTdS1WHUL6O4nlgKmOJ7uUwBlOVbyd3llgTkMVz054FAGpXm/jG+v9NvNTvpH1lb60eOXSvsxmFm8WF3LLj9ySW3giT5sEbOcV3aaPYprkmsLBi/lgW2ebe3MYYsFxnHUnnGar3fhrTb/AFaPUL1bmeWMqyxPeTG3DLyreRv8vcDyDtzkA9RQBg+LY2ttX0/UEOrWbCeAS38d9J9jjXzADG9uJCGLA7d3l4GQSwxR4ptrmz8RQ63ei5l0eFYUcW2s3Fs0D+YRvMCEJKp3Jnc2cKeD0rcv/C2lapqkV/qEdzcSRMrpDJezG33LyrGDf5RIPIJXOQD1ANO1Hw1pmrajb3uoxz3D27K8cLXcvkblOVYw7vLZgeQSpIIB7CgDJ13QrbUvEltHb3mrQXjlZ52t9Wuoo44kI/5ZK/l5YjbgryNx7Ua7oVtqXiS2jt7zVoLxys87W+rXUUccSEf8slfy8sRtwV5G49q6SOygivZ7uNMT3Cqsjlichc7RjoOp6etEdlBFez3caYnuFVZHLE5C52jHQdT09aAJ64zxTbXNn4ih1u9FzLo8Kwo4ttZuLZoH8wjeYEISVTuTO5s4U8HpXZ1laj4a0zVtRt73UY57h7dleOFruXyNynKsYd3lswPIJUkEA9hQBjeJNPM2v2p0e91JdaaSKTbHfTC3hgVgHaSHd5RBG4DK7mJ4+7leurEn8I6Vca4+rk6hFeSMjSG31S5hjkKfd3RpIEYexGD3q8NIsRrh1gQf6e1uLYzb2/1YbdtxnHXvjNAHA+LdQvY/FtzNE2pNYWX2cSX9nfvFDpjEhn82AMBOCpDZKsADg4HNJ46vb4eJJ3tTqUtnZWsTy3dhfvAmlsXJMksSsPtAK/Nt2vgJggBia7O+8J6PqOqG/ureUzMFEqJdSxxT7enmxKwSTH+2po1Lwno+rah9tvbeYylBHIIrqWJJ1HRZURgsoGTw4IwSKAOS8bX11ZzajfPLrQe3shcaO+nmYWxZVLP5xT93yQOJvl2kbeSa15Wvl8Z+HZ5dRvDHfRTNJZFlEMZESnACqC3PPzlsdsVtah4a0zVL2G5vkuZfJACwfbJlt2wcjdCGEb4P95T0HpVXUvBekatqyaneNqf2qM5jaHV7uFY8jB2okoVcgc4Az3oAwtbe5vbnxNfG/vrOXQYwbFYLl448+SJC7oCFlBJ24cMAF4wSa7e1laezhlddrSRqzL6EjOKzdQ8LaRqt9Hd31tJJKihWC3EiJMAcqJUVgsoB6Bw2MnHU1r0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBDaf8AHv8A8Df/ANCNc1a6vqRvJNDmuM6il+QJvLXJtP8AWB9uMfdPl5x96ultP+Pf/gb/APoRoFpbC9N4LeIXTRiIz7BvKA527uuM84oA52K3ntviUDNfy3cdxp8siJPBADbgSINqOsavtOeQzN0FQ+Gjrmr3E2oXOvSC3ttSuoBZJaxBJIkkZVDNt3bhgYYEDAwQTzXVG3hNytwYkM6oUEu0bgpIJGeuMgce1JBbQWqMltDHCrO0jLGgUFmOWY47knJPegDg31zVZZ4tT/t17ZZdc/s1dKMUPllFm2Hkp5nmFQWPzYweAODWxJbz2/xLsnlv5bqK5srhkhmggxbbWi4jdYxIAc8hmOcD0pk/gt7zxb/a1zJpMcImSY/ZdK8q7m2costwZDvUEA4CDOB079Q1vC1wlw0UbTRqVSQqNyg4yAeoBwPyFAHn95qfiBLLW9ZGvSpFpeqtDBZR20ISSMOgKyMylj944KlCO+a25Lee3+Jdk8t/LdRXNlcMkM0EGLba0XEbrGJADnkMxzgeldA2nWTwTQNZ27RTv5ksZiXbI2QdzDHJyByfSpWt4WuEuGijaaNSqSFRuUHGQD1AOB+QoA5fTpdR13xJqjHX7ixi0y9FuNOtYoCHQKrBpS8bP82TjaV498msnWfEWpQ+MbVtKu9XksRqcVjcq0VmLFWIwyZIFwWGQcrlc8ZxkV1994a0LVNRh1DUtF068vYMeTc3FokkkeDkbWIyMHkYptz4X0C9vpr280PTbi7nQRyzy2kbSSKCCFZiMkZUcH0HpQBq0UAYGBwKKACiiigAriPFunWdr4o0nWJ9J0+H/TIIzq0OPtzOTtWLG0ZjOQCd5OM/J3Hb1n/8I/o39tf2x/ZNj/amNv277Mnn4xjHmY3dOOtAHm2s2/mePbzW3sbC5sLLU7WCW+Yf8TG0kAUbITj/AFJLx5G4H5pflbcDXqSX1pJfS2Ud1C93CiyS26yAyIrZ2sV6gHBwT1warS+H9Gn1qPWJtJsZNTiG2O9e2QzIMEYEmNw4J79zVlLG0jvpb2O1hS7mRY5bhYwJHVc7VLdSBk4B6ZNAHKahoel6r4yhm0fT7WHU7O5jmv8AV44lEqqBnyN4G5iwwCp4CnJ5Kg499b2zw6rrNxHF/wAJDa60tva3BOJo1MkYSJW6hGQ5Kjg7iSOa7NvCfhx9Z/td9A0ttT3iT7abKMzbhwG343Z981bk0fTJdWj1WXTrR9RiQpHeNApmRf7ofGQOTxmgDmdQ0PS9V8ZQzaPp9rDqdncxzX+rxxKJVUDPkbwNzFhgFTwFOTyVB5/Xo5LjxTrusahp+kaguhT24gttSt/PkMZRGHkEsBCxcn5trFiAONoru28J+HH1n+130DS21PeJPtpsozNuHAbfjdn3zVq60XSr3UrbUL3TLO4vbT/j3uZbdXkh/wBxiMr+FAHnOupJc+KNd1jUNP0m/XQ57cQW2pW3nS+WyIw8glgIXLk/NtYsQBxtFepg5AOMexqldaLpV7qVtqF7plncXtp/x73MturyQ/7jEZX8Ku0AcN4606wg1TTtautJ09PKurZW1dCBfRsZQqxp8oyrbsH584LAK2aPFmkWth4mtvFN7aaRfxh7e1EN5Yh7iNjIQGgmLHacvnbt529RXUSeHtFm1qPWJtIsJNUjGEvmtkM6jGOJMbhwSOvenyaHpM2sx6vLpdk+pRJsjvWt0MyLzwHxuA5PGe5oAsC9tWvmsluYTdpGJWgEg8xUJwGK9cZGM15v450+4tLjUdSk0gXV80sT6RrBkjBsm+RRCuW8wFmz8qKVffhiOa9IFlarfNerbQi7eMRNOIx5jIDkKW64yc4qq+gaPJrS6xJpNi2pou1b1rZDMoxjAkxuxg+tAHnmuRy3HifXNY1LT9I1AaFNbiG21K38+QoURv3BLAQsXJw21ixAHG0U7xGkl14m17VL+x0m+i0P7O8Nrqlv57GMoG/c5YCFy2RvwxYgDA216JdaLpV7qVtqF7plncXtp/x73MturyQ/7jEZX8KLvRdKv9Qtr6+0yzuby0Obe4mt1eSH/cYjK/hQByXjvTrJbiw1y60ewUwT2/maqCBfwfvV2pH8oyDkg/vBwWwrdDautNt7X4r6Tdx+c01xZXhcyzvIF5g4QMSEHHRQBnnGa35vD2i3GsxavcaRYS6nCAI717ZGmQDOAHI3Dqe/eqt14K8LX2pNqF74a0e4vXYO1zNYRPIzDoSxXOeBzQBt1wvjTSLSy1238V6haaPfwwm3txBf2QeZGMuFaCUn5XzIDt2ncVAyOtd1VGbQ9JudXh1W40uyl1G3G2G8kt0aaMc8K5G4dT0Pc0Ac14g0LS9b8TRLp2nWo1uCSGe41cRKJrSNWBCCT725lBAUcYLE8EBut+22pvjZC5h+1iPzTB5g8wJnG7b1xnjNZ114T8OX2qrql9oGl3OoKyst3NZRvKCv3TvIzkYGOeK0fsVqL43otoftZj8oz+WPMKZzt3dcZ5xQB5h4xg+0+LdR1P7BY3lnpX2YXdxOP9NseQ+60OOhUjPzKc5xu6Vb+IVhJEdV1W40UaiwtA2l6iZY1/syVQem470LPtIMasWOARgCu7utB0e+1SDUr3SrG4v7b/UXU1sjyxd/lcjK/gaS40DR7vVoNUu9JsZ9QtxiG7ltkaWL/dcjI6noaAOR8c6dE2k2WsalpGnPJaxxNc6qSBe2mGU/uBs5JOR99cZ4DfdM3xE060a2h1i40jT5EtSjS6qxAvbRQ6keQCnJPI/1i4zwG+6eoufD+jXuqwaneaTY3GoW+PJu5bZGlix02uRkdexoufD+jXuqwaneaTY3GoW+PJu5bZGlix02uRkdexoA4X4hWEkR1XVbjRRqLC0DaXqJljX+zJVB6bjvQs+0gxqxY4BGAK9EszMbGA3X+uMa+Zx/Fjn9aq3GgaPd6tBql3pNjPqFuMQ3ctsjSxf7rkZHU9DWhQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAENp/wAe/wDwN/8A0I1NUNp/x7/8Df8A9CNUbfxPoF3rD6Ta65ps+pRkh7OO7jaZSOuUB3DHfigDUooooAKKqtfbdXjsPstyd8LTfaRH+5XBA2FuzHOQPQGm6pqcOk2YublZGQzRw4jAJy7hB1I4ywz7UAXKKKKACisVPEZ/4SpdDuNJv7ZpYpJYLuQwmGZUKhtu2QuPvj7yjvW1QAUVlp4n0CXWm0eLXNNfU1Yq1it3GZgQMkeXndnHPStSgAooqrNfeTqltZfZbl/tCO3npHmKPbjh27E549cGgC1RRRQAUUUUAFFFFABRWVc+JdNs9Zi0u7a6hnmYJHI9lMIGYjIUTbPL3H03Z7Ul/wCJtM0zVYdPvmuoZZ2VElaym8jcxwqmcJ5YJPGCwOSB3FAGtRRWHqPjDStK1AWd8upRuZEjEq6VdPDucgKPNWMpySB96gDcorMh8SaPc66+jW2oQz6hGrNJBEd5j27dwYjhWG5flJB5zimX/ibTNO1SLTpmupbuQBvKtLKa48sE4BkMaMIwTnBbAOD6GgDWoqldaxYWWqWWnXVysd5flxbQ4JaTaNzdOgA7mqGo+MNK0rUBZ3y6lG5kSMSrpV08O5yAo81YynJIH3qANyiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIbT/j3/AOBv/wChGvN9N0zWbbVra41e3kk0aLXLqeKG2sn+0QytK6xyScsXiO9jlFXblScrkj0i0/49/wDgb/8AoRquNa08682ii5X+0VgFwYMHPl5xnOMde2c0AebDRr8fESS41RxBef2oJbe8j8OXNxM1vn5Yxeo5jjjK5UoyjHJI53HR06ys7X4kC40rRjdz3FxK15eX+hSxXFvkH5kvWUI8YwqhBk4PDYGK6pPGGkyeIjoajUft4PKnSroIBkjd5hj2bcgjdux70+LxZpNxq39nWz3dxKJDEZYLCeS3Vx1UzqhjBB4ILcHg80AUotCtLH4jjUdP0uG2+1WEv2q5gtwnnSeZHjewHzNjOM89a5XVNMSbVbxrnQbu517+14JI7+OychbQTRlQJ8bdgUcxhsg5JXqa9K+22pvjZC5h+1iPzTB5g8wJnG7b1xnjNTUAedN9qS6utMGmai8zeJI7syLaP5SwmRGD+YRtYcchSSO4AyRneIreefx/HqKaDFBPYahC7XEGgTy3U0AwpkF4ny4IbHlAM2Ac98egzeI7GHxTbeHz5r3txA8+UTKRquPvN2JycDvg1GfEEjeIpNKttF1C4SFkWe+RoBDEWXcMhpRIeCPuoetAFe/t55PiBolykMjQR2V2ryhDtQsYsAnsTg4Hsa6GisC78TXNnrUNjL4b1YxT3AgjvUa2aJiRndt87zNoAJPycAHigDkrtZL2x17w8mlahJqF1rLT20j6fKsEY3oyzeeyiP5dueGLZGACapalot+/xBnuNTcQz/2lFLYXqeHLm9mWAbPkS6jcpCpw6srKB8zEgg5r0Kz8SWl94gm0iGC8SaGEzNJPbNEjAPtIXfgtz3A2nsTTW8R79cfTtP0u+vxDIsd1dQGJYrZiAcMXkVmOCCQgbGR34oAxxpdzDrt1oSW0p0q9uhqBl2HykQ8yQ56AtIoO3uHarU+gWdv8RtP1ey0mCKea2uFu72K2AaQ/utokcDJ6cZPatKbxHYw+Kbbw+fNe9uIHnyiZSNVx95uxOTgd8Gqt94mubDV4rOXw1qzwzXCwR3sbWxiYt/Ft87zMDkn5OACelAHD+K7a4ufHK30egwwz6ffW8n2mHQZ57qaBWXe63ifKBhivlAMxAPrxa1HwnFc6b4o1RtGkn1Yai02nzSQM8seBFhoQeUzjkpjOOc4r02igDz9rPSY/Gt9N4u8P3Go3kl1G+mXzaTJexxRbVChHRHEJVwxOdvJ3fTH1rRdQl+IF1cak6xO19DLp16nhy5vpooQEyiXMT7YAWDhgyj7xJyDXrFFAGFcw2B8eWE0mk3smoLYzLFqKI32eGMum6NjuxuYhSAQThTyK3aKKAON8RzzXHinT7exGqXcsNzEz2T6e4sQuctMZ/LA3qDkDzCMgfITyG+L7meXWbG0sE1W8uEuIG+wDT3NlIPMDGR7jYFBVQSB5uMgfIxwD2lFAFJNS365Jpn2K8Xy4Fn+1mL9w2WI2B88uMZIx0Iqs8ct/4kAlidLTT0DoWUgSzMDyD0IVf1b1Fa1FAHEanrkEXxN09zY6w8VtaT20s0WjXbxiR3iKgOsZUj5T8wJAxyazNZ0/ULXxPrLw/wBsjUb24hm0iSyWb7NxGiETFP3eAVORNxj7vJr0qigDzu80zxYnjrTtQm0nTbpG1Fv9Kjv5cxW4ikVVKeRhMBifvHc5xkAjHXPHLf8AiQCWJ0tNPQOhZSBLMwPIPQhV/VvUVrUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAQWn/Hv/AMDf/wBCNcM/h/xWNWg18TWTut+bltOW2K3HlMPKMZnMxQ4TDY2Yyo5713Vp/wAe/wDwN/8A0I1NQByEcmrH4kTXLeG9SSxks1sxe+da7AQ7Nv2ibftwR/Dn2p3hc6xoFra+H73QbqeK3YxrqltNB5DpkkOytIJA3PzAIec4JrraKAMwJJ/wlTP/AGNCI/sYH9q708wnf/qduN2P4s5xzWnRRQBwlr4V8T2XjGwvn1TTbu18+5muZBpzpLhwoCljcHJwAoIXAC9Kua1pMl54xsrnTPDv2e9imjabXyYUDQD70OVfzXyPl2soXvngV19FAFKC6vpNYu7afTvJsokQwXnnq3nsc7l2DlduByeuagt7W4n8QXN7exbI4FEFmCQcqQGeTjpk4XB7J71qUUAcd9p1j/hY323/AIRbVPsP2T7F9q8602583d5mPP3bMf7O7/ZrJuvB11/wkl06aKZrq41Rb6113zo/9Cj+TzIxubzFJCsNqKVYMNx5Nej0UAcJa+FfE9l4xsL59U027tfPuZrmQac6S4cKApY3BycAKCFwAvSunhtbi48RT3l5FthtkEVmCQd24AvJx0JOF5/un1rUooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP//Z)

### **confusion matrix & misclassification error**

#confusion matrix & misclassification error - train

p.trg <- predict(model, trg)

tab <- table(p.trg, trg$Species)

tab

#calculate misclassification error with train

1-sum(diag(tab))/sum(tab)

#confusion matrix & misclassification error - test

p.tst <- predict(model,tst)

tab.tst <- table(p.tst, tst$Species)

tab.tst

#calculate misclassification error with test

1-sum(diag(tab.tst))/sum(tab.tst)

![A screenshot of a computer

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMyMAAAkpIAAgAAAAMyMAAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMDozMDo0NwAyMDIyOjAxOjA0IDIwOjMwOjQ3AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjA6MzA6NDcuMjAwPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAPkBnAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APoy0/484f8Armv8qlqCBtunxsOoiB/SuP8AD/irW7s+HrnV/wCzjba7GwjgtYXWSFxGX3F2chlIU8bRtJHLdaAO3opkwkaFxA6pKVOxnUsoPYkAjI9sj61yPgq78UXsF7c67q2nXkEN1dQLHBprQvlJSoO/zmG3A6bc9MscZIB2NFcv4R1PxFren2Gr6m2lpY3dr5ht7eKQSo/GDvLEEEZyu0EdMt1qlp/iXXru50e+c6d/ZWsXbwxW4gcTwoEkZWMm8qxOwHGxcZxz1oA7WiiigAooooAKKKKACiiigAorktG13WJvFD2OvS21iXMpt7A6dKHdVbCst15pikJUbioUMAeQuDWXpXjzVdX8RxxW1nI1hLeTWnlf2Nd5gCFlEzXRxCwLJygAxuxuJFAHoNFcf4RuPFV3qmqf23rGm3draXslv5UGlvC5wikbW85gBz0Ksf8Aa9IrLxRrMg03Vro2LaTql59lhtIrdxcQ7mYI7S+YVb7vK7Fxu6/LyAdrRXJaNrusTeKHsdeltrEuZTb2B06UO6q2FZbrzTFISo3FQoYA8hcGqcPjK8bx9a6XHeWt9YXU80H7nSbiIQsiFuLpnMUpBUqVUAg56bTQB3NFFc1Z+Ib64UWMsUC6omoNayqqtsEa/P5mM5GYipHP3mAoA6WiuAtPHep33ir7Pa2cslguoPYvAuj3ZZQrFTMbr/UgZH3McD+LPFavh7VPEetTfbJG0uLTo725tpIVikMzpG7qrh92AcqAV2nPJ3D7tAHVUVyVhr2r/wDCYHT9cntbCKZ5BaWZ02UtMi52lbvzDEzEAt5e0OBnjjJltYrxPiVMdQeyn3acxtpILeSKSKPzR8jkysr8nOQqmgDqKK5nSNR13XNRnvLe40610iC8ltvs0lo8lxKI2KM3mCVVTLA4GxsDuc8UI/FWr+XDrMv2I6PPqP2BbNLd/tCZmMIkMu/afmGSnljAOM8cgHa0Vx9tpGm6Z8VvN03T7W0ku9LkkuHt4FjaZvOX5nIHzHk8mov+Er1dY/7Zb7EdHOo/YBZi3f7QP33k+Z5u/b97nb5fT+LvQB2tFcroOqeI9au5LktpcWnW+oXFrJF5UhmkSN2VXD7tqtkAFdpB65HSuqoAKK5q28Q30u+xkigXVE1I2hUK2zy/9YJMZzzFg9fvcVHFFdp8TFa/aynD6dKbV4beSOWFBImUYmVlfJIOQqnigDqaK5XQdU8R61dyXJbS4tOt9QuLWSLypDNIkbsquH3bVbIAK7SD1yOlVD4m1yaZNRtTp66S2qjThbyW7mfAm8ppPMEm3kg4XZxwcnoQDtaK5aKK7T4mK1+1lOH06U2rw28kcsKCRMoxMrK+SQchVPFZt14o8SRw6rqSf2XHp2l6kbUwmGR5rmMMik7t6rGw3Hs4P+zQB3dFcrLFdp8TrJ75rKeJ7K5+yGO3kjmgUNFuVm80q+SRzsUjH1qW01DXtZ1y9/s+406z02wu/srxz2jzTTlQCxDCVBH97AyrdM98UAdLRXD6x4xvdP8AGVrY2l5a3VpJexWs1umk3JMRcc5uw5hVwSDsK5wcdwa7igAooooAKKKKACiiigAooooAKKKKAIIF3afGo6mID9K57wh4KtPDlhYyXCtLqcFsIXk+1SyxIeN3lI52x5wM7VXPeujtP+POH/rmv8qloApabpFjpC3K6dB5Iurh7mb52bdI33m5Jxn0HFV7Xw3p1nq0+o232uOa4LGSMX0xgJb7xEJfywTjOQoOcnua1GOFJyBgdT0Fcd4dvNWs/ER0/wAS6hqM97cQPNChS2NlIFYbvJaNBKNoZRiX14LYzQB1On6fbaVp0FjYR+VbW6COJNxbao6DJyT+NcdYeCrlfGEGoyafZ6daWlzLcReRqk90ZGYMuFikRUtwd5ZgmckAc4zVTwlrfizXdRtr2a31NNPuzMlwZfsIt7XGQvk7GMxYMoBEgPU8LjFaPgqx1WO81afUPE2r6klvqE8K212tvsYALg5WJWHXoCF9qAO0orgtM1rV9mh6vPqk1yus3ht5dMaKERWww5Owqgk3Js53Mw+9x0xc0S71e08VLa+I9R1CSS8WV7VEW2NhIAc4jKoJgypjhzjk4LcUAdjRXnun+ItSn8e6ettd6vcaPqElyitexWa2z7FJ/c7AJ+CpGZBgj14NehUAFFFFABRRRQBjWHhTStO1EX0AvJZ1z5f2rULi4WLPXYkjsqccfKBxx0pY/C2lwawdStxeQTGQytHDqE8cDOerGBXEZJ6kleTyea2KKAMyPw9p8OuPq0P2qO6kOZFS9mWFzjbuMIfyy2AOSueBUFt4S0e01b+0YLeYTB2kSNruVoI3b7zpCWMaMcn5lUH5m9Tnapsr+VE8hVmCqWwi5Jx6DuaAMiw8KaVp2oi+gF5LOufL+1ahcXCxZ67EkdlTjj5QOOOlQp4K0OK+W7jgulkSf7RGBfzhIX5yUTftQHcchQA2eQa5PwrrS6l8SWvLqHVor6+01v3F1pt1DHbqsgKRgyIFGBnLdCxIyeBTtJt7aOPw7rEUcS+IL7UXhvZ1OJZ1HmeZG56sqbRhTkLtXGKAPSapJpFimtSassAF7JEIWl3H7gOcYzgduQMnAz0FXaKAMc+FtLGsnVIheQXDSeY6W9/PFDI/95oVcRsT3JU571fsNOtdMt2gsYvKjaV5Su4tl3Ysx5PckmrNFAGLa+EtKtNWGooL2W4VmeMXOo3E8cTN1KRyOUQ4JA2gYBIGAcVpfYbc6kL/AMv/AEkRGESbj9wnOMdOoqxRQBjDwnpK62+rQJd291JIJZBbX88UUrgY3PEjiNzjGSynOOaI/CejxaudRSCbzvMMwiN1KYFkPWQQFvLD5ydwXOSTnJrZooArHT7VtUXUTF/pawmASbjwhIYjGcdQOcZqgPCmkDVzqQgm84yeb5RupfI8z/np5G7y9+ed23Oec5rYooArWOnWumQyRWUXlJJM87jcTl3Ysx5PcknFWa80jt7fyYNceGEeJG182huM4mMf2gqYd3UoIRnZ0wN2O9el0AUxpFiNabVhAPtzQiAy7j9zOcYzj8cZqRrG3bUkv2jzcpE0KybjwhIJGOnVRViigCtY6da6ZDJFZReUkkzzuNxOXdizHk9yScVx9z4Mubzxcl2NPsrOyS+W8M6anPM8jLzkWzIIomY/edWJxkc5ruaKAK7WNu2pJftHm5SJoVk3HhCQSMdOqiqsnh/TJbG7s3ts297MZ508xvnckEnOcjlRwOK0qKAK8ljbS6hDfPHm5gjeON9x+VWKlhjpztX8qzbjwnpNxrJ1XZd292zI0jWl/PbrMV+6ZEjdVk9PmB446cVtUUAYN14K0O8vprqaG6Ek0glZY7+eOMSAgiRY1cKr8D5wA3Xnk1vAYGK80nt7dob3XJooR4jh14WsNxn98qeeoSEN1CGI5KdDuLY716XQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/9c1/lUtRWn/HnD/1zX+VS0AIQGUhgCCMEHvWbpXhrQtCmml0TRdO02ScASvZ2iRGTHPzFQM9e9aMiCSNkJYBgQSrEEfQjpXI+H7u/vLqDSLm5mkuNELreylyDM3Kw7j33Id556gZoA3Y/DWhRa02sRaLp6ao5Ja+W1QTnIwcyY3dOOtSDQdHGtHWBpViNTK7TfC2TziMYx5mN2Mcda838F6tql34wt11HV9Oh1BnmGoafL4glluHHO1VsWjVIduFOUPK85bOa6TwJpj3GkWOuXurardXbLMrLNeu0TKZGwDFnZ8uOGxu9SaAOjt9A0e01afVLXSbGDULgYmu47ZFllH+04GT0HU1R0nTfC2leIry10TStOsdU8lZrk2tksTsjs2Czqo3ZKtxk9K5jwlqVkfGj21vrS+IZ5klZ7u01uacQ/NnbLZ7jHDjhQy9SDwucVvaPajTvHerWsFzeyQPZwXHl3N7NcKjtJKGKiRm2DgcLgcdKANJPC3h+O9kvE0LTVupZVnknFnGHeRc7XLYyWGTg9Rk1q15/4X1HSLjWj/bPiCYeKftMyNpc+qyRbcFtqra7wjLswQ2w565J5qloeqeZqekm21i4ufEc12V1nTm1B5Bbx4fdm3LFYVUhcMFXPHJ3cgHcaZ4l03V9SurC0N2l1aKHljubGe3O0kgMvmIoYEqeVyOK1a5m2z/wtDU8df7Itsf9/Zq5jQ9U8zU9JNtrFxc+I5rsrrOnNqDyC3jw+7NuWKwqpC4YKueOTu5APTaK4zwJpb3Ok2GuXmrardXbCZWWa9domUyMADFnZ8uOGxu9Sa7OgAooooAKKKKAI/Ih+0/aPKTzwmzzdo3bc52564zzisq0/wCEZ/4Sq8+w/wBk/wDCQeWPtfk+V9r2cY34+fHTrx0rZOcHHWvNtJuLaSPw7o8UkTeILHUXmvYFGZYFPmeZI46qr7hhjgNuXGaAPSaKKKACiiigAooooAKKKKACs6PxDos2tSaPDq9hJqkYy9ityhnUYzzHncOCD071o1w+s6xaXXxA0iwTU9O1KS2uwf7Mtebu0fymBmkIZvkAboVT7w+Y8KQDeH/CMf8ACYtt/sj/AISXyPmx5X2zyf8A0PZ09q2q80juLfyYNDeaE+JF183Zt8ZmEf2gsZtvUIYTjf0wdue1el0AFFFFABRRRQAUUUUAFFFFAGbLYaGPEUF7PaaeNZeJkhuHjT7Q0Y+8FY/NtG7kDjn3rSrzSCfVG+KGmXureGtRhupmuoI52ltWjjtwF2hdsxbH8TZUEluhwMel0AFFFFABRRRQAUUUUAFFFFABRRRQBFaf8ecP/XNf5VLUVp/x5w/9c1/lUtABRTZI0ljaORQ6OCrKRkEHqK5Hw9p94t3BpV9BN9k0FnEM0qHbPniEqx+9tjJB/wBo+1AHTQ33napc2X2W5T7OiN57x4ik3Z4Ru5GOfTIq1XM+H9CtdF8Xa3/Zmlw6faXEVu4+z24ijkk/ebjwAC3TJ69KpeBPCen2GkWOp3GlCHWUWZTcTqwmCtIx2Etzt6EL0HYCgDs6qR3/AJmrzWH2S6XyoUl+0tHiF9xYbVbuw25I7Aj1rzPS7azt/EPh/wC06Lc2/iD+05f7R1CWzaLzz5cxH74gCZcY27SwUAA7eBXYaPoVppHjvVptM0qGxt7qzgd3t7cRpNL5kpYkgAM2CMnryKAOnqpHf+Zq81h9kul8qFJftLR4hfcWG1W7sNuSOwI9a890fwnHp+j+G9Sh0d01ldTH2i5eFmuI4WeTcpY/MseD93hRnpXTaPoVppHjvVptM0qGxt7qzgd3t7cRpNL5kpYkgAM2CMnryKAOnorgPC1ppNprhGteH7j/AISg3M27VJdJkl3glirLdhCipswApcY+7gdKx9Mt5x8SrTV/7Ai01vtM8N59k0CeOUBwQhluvuzqSoYlV2qSMt0JAPV6KKKACiiigAooooAKybfxRpF1rB0yG5Y3G5lUmCRYpGX7ypKV2OwwcqrEjByODWseQe1cBpcF2YdC8PtZXyXel3xnurl7Zlh2L5nzLKRscvuHCksNxyBg0Ad/RRRQAUUUUAFFFFABRRRQAUUUHpx1oApNrOnprkejNcr/AGhJA1wsABJ8sEAsew5OOevOOhq7Xnmk6Z4qtPiBY3Wq6VpziaO6N1fW9/LJwTHtG0wKFwFAVN3IDHOQc+h0AFFFFABRRRQAUUUUAFZU/iXTbbW4tKuWuobmZgkbyWUywuxGQomKeWWwOm7PatWuM16ee58Y6dDY/wBq3bwXMZkspdPdLFF53TCfy1BdQeB5jDOPkzyADefxJp6a9/Y+L2S7BUMYtPnkiQsMjdKqGNeOeWFatcbq6LF42tpNCg1carLPF9sYLcCxe3Awxct+4LBem358gDpmuyoAKKKKACiiigAooooAKKKKACiiigCC3dY9PieRgqrECzMcADHWpkdZEV42DKwyrKcgj1qG3Yrp8TKpciIEKuMnjpzxWDo3h+8tdUkv90ekwSNuOmWDb43OWy0m4bQx3bj5aoc9XcVtCEZRk5Stb8f1/TvYR0jsERnbJCjJ2gk/kOTWZouv22uveLawXUP2SVY2+1QGJmyiuCFb5gMN0YA8dO9absVRmVS5AyFXGT7c8VyvhubVR4i1eS+8O6hYwX86zRzTy2zKgWJEwwSZmySp6Aj6VdKnGdObe6WmqXVdOugm9UdXWfbeINGvNUl0201axnv4c+ZaxXKNKmDg5QHIxkdqjstKvbS/e4n1/Ub6NgcWs8dsI1z0wUiVuPdvrmsbQLfVbXWlhttO1DTdHVX8y3vpbeSMMTkGFo3aTliSQ5wB0A6VUKNNxk3JOy01t+au35JfPuXZesdG0CDVI9WguZbm4naT7O9zqc1ygJyX8pZJGVeAfuAYAI6Vfh1/R7mZIrfVrGWSSTy0RLlGLPt37QAeTt+bHpz0rl9H0zWYm0azuNKeCHTZrgy3DzxkSblcKyKrElTu/i2kencQaX4TvbNdOc6dHFNCtgsrKUyBG0jSDIPOCwPvnjNdP1XDx5r1PTVd2vySfzFzPsdaNVefXG0+ytvNS3AN3cNJtWIkZVV4JZ+hI4ABznoDBceKNOj1q30u1urW6u3uBBPDHcKZLbKM4LKMkZ24wcdar6ZKmleIdSsLxjG+oXP2m0kf7swKKCinpuXYfl64wfXGRp2laskuh2c+jlF0u9kkmvnlixKGST50AJbksN24KcnoeSFGhR1ctktNbX0bvrvrpZfo7l2dDpviG11bWr2z06azuoLRF3z295HKRISwaNkU5UjaOT1z7VPbeINGvNUl0201axnv4c+ZaxXKNKmDg5QHIxkdqigsrhPF15etHi3ks4YkfcOWV5CRjr0YfnXLwWPiafxdYX+p2188dpcSq0YNoLZEdWVXiwfNIAwW3nPPCnoJjQo1HJppJRTWvW346+lgu0ddHr2kS6m+mxarZPfRtte1W4QyqcZwUzkHAz0qOTV3bWzYWdsJUgUPe3LybEgBBIUcHc/Q44AU5J6A8faRX1jqPhrSb/SWiktdQmYXjSxsLjMcpLoFJbncC24LgkD5q6HT5o9I8UajZ3zmNtUuBcWcj8JKfLVWjU/3x5ZO3qRyOhxVTC06bfL73u3Wt762vp5a26ddgUmyfSvGfhrXLxrTR9e0+8uVYjyYblWdsDJKjOWHPUZFW4Nf0e61WTTLbVrGbUIs+ZaR3KNKmOuUByMZ9KztHjvtN17UraXS7l7e8u2uUvkeLylBRRtIL+ZnKkcIR05rCWx8TXHi6xvtRtr6WGyvZD5Sm0W2WN1ZFeLB804BBbeR1OFPAD+rUJSlyyskrq8lvb076W0sF2dHofirTtZ2Q/abWHUHEjfYftCtKEVyu7bwcHHXFWbDVpLjULjT761NpdwjzFAfek0ZOA6NgZ9CCAQfUYJ5bRdE1SI6VYS6ObKOxv5r6a8EkRSTcZMKoVi247xnIAxnk1sWskes+NBqFixe0sLWS2adR8ksjupKq38W3ZyRwCcdQcFahRjKfJtZu9721dtu/Z6gm+po2GrSXGoXGn31qbS7hHmKA+9JoycB0bAz6EEAg+owTPd332e7tLaNPMmuXIC7sbUAyzng9OB7kgcZrHtZI9Y8aDULFi9pp9rJbNOB8ksjupKq38W3ZyRwCcdQcXNH/wBPvLjWH5SX9za+0Kn73/AmyfcBawqUoxfM1bTVeb2X6/gNMng1/R7rVZNMttWsZtQiz5lpHco0qY65QHIxn0qwt/ZuqMl1AweQxIRIDucZyo9SMHjrwa5nQ7fVbXXVis9O1HTdJBkaaC+lt5YtzEtuhKO0gJYk4chQOgHSqthpmtRXllZPpLrb2msTXcl488ex4380qUUMWON4BDBcZ4zWssLSu+Wa0V915/jotFffdi5mdSuu6Q8vlJqlk0hdY9guEJ3tnC4z1ODgd8Go5tXf+3E0yytTOyIJbqZn2R26HoM4JZzgkKBjAJJHGeSh8JX0dvEV06NZl8rLBkyMXplfnP8Adwx9frW9bTR6P4uv4b1mjXVnjltZnH7tnVAhi3dA3yggHkgnGcHDnh6MW/Zvmsnp92unk2/l2C76k+neM/DOrak+n6br2n3N4jlDBHcqXYgZO0Z+bA7jI6+hq3Hr+jy6u+lRatYvqKZ3Wa3KGZcDPKZ3Dj2rM06O/wBM8U6nG2l3U1rqNys63sbw+VEPKVcMDIHzlOykcj3xiXlj4nu/FVnd3VpfS2+n6kZVhia0Fs0RV0DJk+aXAcFtxUfewDwC1hqE5vllZct9ZLe223fS2ne4czOj0fxVp+qym2e4tre/MsyJZm4UyuscjJvC8HB256cVZtNVeTVptNvrb7NcIpliKyb0nizjcpwDkcblI4JHJHNcrp+i6qklvpz6O1tGmsS6jLf+bFsKeY7KAA28uwKjlcBSee1bSyJrHjS3ubFvMt9LgmilnUfI0rlR5YboSuw7sdDgdaK1CipS5NrN73t2277WeoJs6KiiivLLCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAitP8Ajzh/65r/ACrC07UNavfEWrZmsv7N0+fyFtUtG8+Q+Uj580yhRy+MbO3Wt20/484f+ua/yrmtFvTa+KNfsHtL1bi4vPPgd7KYQSL5EY/1+wxjlSMZzx0oAveHvEFxrdxqcN1pcmmyWE6ReVNMkjndGr5bYSoPzYwGYcZzzgJo93q41/UNO1m5sblYYYp4XtLR4MB2kG1g0j7iNg5GOvSqHhux8T2fiHVbrWNO0mG11KZZmNrqUszxFYlQLta3QNnbnORjPQ1Y0S9XU/F2q3dvb30UC2sEAe7sZrfc6vKSF8xV3AbhyMjnrQB0hOBk8CuY07xbcXl5ZyTaYkWk6lI0Vhdrdb5HIBIMke0BAwVipDN2yFziumIDKQehGDXIaZ4Z1W3l0vTrv7CNI0WUy2s0cjtNPhWVFdCoCbQ3UM27aDhc4oA7AnAyeBXMad4tuLy8s5JtMSLSdSkaKwu1ut8jkAkGSPaAgYKxUhm7ZC5xWzYDU2kvRq32PyjORafZt27ycDHmbv4856cYxXO6Z4Z1W3l0vTrv7CNI0WUy2s0cjtNPhWVFdCoCbQ3UM27aDhc4oAvW+s+IP+Elj07UNH02O2dHkae21R5XiQcKzRtAgG48cMe/XBqLTvFtxeXlnJNpiRaTqUjRWF2t1vkcgEgyR7QEDBWKkM3bIXOK1tMsJoGvZ79ke5u5mJKMSFjHEajIHReT/tM1YGmeGdVt5dL067+wjSNFlMtrNHI7TT4VlRXQqAm0N1DNu2g4XOKAL1trHiA+JotNv9G01LeRHkae11R5ZI0HCs0bQIBuPGAx79cGoLLxhcT6hZNc6ZHBpWpTNBY3Yut0ruASPMi2AIG2Ngh27ZCk4GxpVjPbSXlzfMj3N1OWJRiQsY4jUZA6LyR/eZq5q38Fyy+MItRubG0srOzunuoVh1Ge58yQhlyInRY7fO8s3l5LHqe5AI/Dmp6NceNLmPQtH8O2byeYZZkuUi1CdQ2GkMCx5MZcfeZxnrjpW7ZeJ47/AMX3WiW9q5itrfzDeFhsdw+1o1HU7cjJ6ZyOoOMPTfBV/Zy2WnFbGHS9OvJryC8t3YXLtJ5nylCm1SPMOW3tu2/dGeLGheB7zQfEltdp4i1C9sbeya3EF0tvkkuG5KQqSO+c7ieueaqU5Td5O4E+m+Mxq/ip9Lsl0sQIXBE2pbbxwhKs62wQ5j3AgMXGcE46Z6quI03wbf2N7aWIi09dJstSl1KK6jkYXLu5c7DHs2j/AFhBfecgY2jPHb1IBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEFuxXT4mVS5EQIVcZPHTniq+na3Y6pJLDbSlbmDHnWsyGOaLJIBZGwcHBw3Q4yCRVi3DHT4hGQreUNpYZAOPTvWfa+HbaO9S/wBRkk1O/Qlo7i6wfJPP+qQALHwSMqNxGNxbrW0FT5Zc+/T+u3z+8WprMdqknoBmsDSfGFtq01kFsL61h1BC1rcXKIqTEDJQAOWBABPIAIBwTW9IMxMB12muN8H+HdRGm6Fc61dDy9Pt821l9lMUkTsu0mRix3EAkABVxnnJ5rahCi6U5VN1tv2f6pb6WE730OzdiqMyqXIGQq4yfbniue8PeKLvXbu5hm8Oahp6W87wtPNNbugK44ISQtnnsCPetfT7a8tluBf3/wBtMk7PEfJEflRn7sfHXHqeTVHT9Hv9O1e7kgvrY6ddTPcNbtaN5wkYDOJfMxjIzjZ+NTD2SjOMrN9H734f8FBqN0nxJ/bMkrWek332RPMCXjPB5crI20qFEhcHIP3lXpzioPD3ii7127uYZvDmoaelvO8LTzTW7oCuOCEkLZ57Aj3pLDw1eR+J/wC2tSvLCSdY2j3WWnm2kmU8ATOZH8wDHAwMHn2q1p+kX+m6xdSQX1sdOupmuGt2tW84OwGcS+ZjGRnGz8a3n9VSkoW2Vvi0fVeb82kvJC942az21uz/ALUGnW7PdXYP71IELiAccyN91ODkAkEjoDWgQGUhhkHgg96yLbw/Fpl0kmjTyWNvn95YoA1uw/2UP+rPX7hUZJLBq5KaptPn36dvn/XzRTua9FZlr4Z0Gx1JtRstE063vnLFrqG0jSVi33iXAzz39a06iagn7jv8rfqxnO6b4ytdSuLRU07ULe3vXeO3u50RY3kXdlMby+cIxB27SBwal0nxSms3Ma2mk6mttI0ifbJIkWJXRiCp+bd/Dw23acjnPFY/hXw7qD2Okzavc7bewklmgsvspjkWQlwC7lvmADHA2r1GSa6XQ9L/ALG0lLLzvO2PI+/btzuct0yemcV6GJjhablGnq9uv97X128uxEeZ7lGHxZaz6pHapZ3gtpZ3totQZU8iSZc5QfNvzlWGSoUkcHpVO48VS3GrabBYWd5FaT6gbf7Y8aGK4ASTcFwxdQGXqyqDjgnPMOm+ALbSPEX9oWUGiGL7Q8++bSA14pckkLcBxjknGUJA4561YtPCV7bXFlGdXQ6dp921zbWy2mHIYP8AJJIXO7G/gqq9Od1aNYGLbg76dU/P1128txe8WtO1W7vPFt9aXEF5ZxQWyFILiOErJl3Hmq6SM2DtxtYLjj1NSWviQ3+oPDYaPqFxaJI8TagphWHcuQwAaQOcMNuQhGe+OauJpuzX5dT83PmWyQeXt6bWZs5z/tdMdqztM0TVNIvDFZapatpBmeUWs1kzTJvJYqsokAA3EkZQkDjJrmcqErvROytvbbXbr66b3K1I9A8U3mt391bzeG9QsEtp2haeaa3ZAQAcMEkLZ57Bh71YhvLvU/ENylvc/Z7DTHEcqIil7iUpuKkkHagDL0wSe4AwXWOj3+n63dz299bf2fdzGeS2e1YyhyoBxL5mAPlBxsPfmmw2d5pniG5e3tvPsNTcSSujKHt5Qm0sQSNyEKvTJB7EHIqTouUnTSXu6b76X+Lra/6ai16lK08eWN5PBGmn6lGs7RBZJIVChZCVVid3TcpXA5742/NVqPxbbSXoT7DeLZNcG1TUmEfkNLu27AN/mfeBXJQLnv0qtb+Dfs8NtH9v3eQtqufJxu8mRn/vcZ3Y9sd6E8JXAkS0k1CF9Giu/tkdr9lImD+Z5gUy78FAx6bAcADPrrJYFt8r/Pby8+19O4e8Jf8AiiWS9tYdOtbtLdtRjtWvikZhl+Yh0HzFxjBG4qBkcGrY8WWp1UWq2d2bY3BtP7QwnkecOPL+9vzkYzt254zVSPwlexXEUS6ui6bb6h9uhtltP3hJYuyPIXO5dzEjCqRxktzmvb+Abax8TtqlnBojI9yblmudIEl2rMctsuA4wM9MqSPenbBWab2Tto/x8/vQveL1s9/aeO2s5tVuby0uLJ7hYJ44QIWEigBSiK2MH+ImuiPT1rPbS93iSPVvO+5atbeVt65cNuzn2xjFNjj1P/hJ5pHmP9lfZUEcRRP9duOWBHzH5ccHA6YzzjjqONSzTSstemvyW5S0M7RfFV5q2s3tjJ4a1CzS0n8lrmSa3ZF+QN8wWQsM7v4Q3bJHIFnTfEf9q6jPBZ6VfNbQSvC18WhEW9Dhl2+Z5g545QevTmi30e/svEV1eWd/arY3somuLaS0ZpS4QJ8sgkAUfKpwUPfnninH4XvJfFkOtaje6e72+5Y3tNOMFw6HIEckplbegznbtALAHjGK6JfVZNtWXuq3xb21+d/Oy7MXvD9F8VXmraze2MnhrULNLSfyWuZJrdkX5A3zBZCwzu/hDdskcgWY7y7sPEyafe3H2m3vkkltXZArxMuC0ZwACuDlTjPByT1ot9Hv7LxFdXlnf2q2N7KJri2ktGaUuECfLIJAFHyqcFD3554I7O7v/Eyahe2/2a3sUkitUZwzys2A0hwSAuBhRnPJyB0qZOi5NxSUeXz3t5679tLBqbVFFFeeWFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEFuWGnxGMBm8obQxwCcevas+18RW0l6lhqMcmmX7krHb3WB5x5/wBU4JWTgE4U7gMbgvStC3Utp8SqxQmIAMuMjjrzxVfTtFsdLklmtoi1zPjzrqZzJNLgkgM7ZOBk4XoM4AAraDp8suffp/Xb5fcLUuymQQuYVV5Ap2K7bQT2BODge+DXN+E9a8Qaz9ofV9N022t4riaESWt7JI25JCoGxogMcH5t3P8AdGcDpqybDQf7O1K4nt9TvPss7vIbBli8lXc5ZgRH5mc5PLkcn2q6Uqfs5xklfo3f8LfroDvczNP8ZG58ZN4fuF0sy7ZWX7Dqf2iWPYRxLH5amMkH1bnj3ql4V8R6kthpEeqWe62vpZYI7x7svM0gZyNybcBCqHB3k9MqO2lp/gyHTbqymh1bUWSxd/s0L+Tsjjb70fEYJU8ckl+PvcnMmm+ELXTbq1kF9fXMNmWa2tp2Qxwu2dzjCBifmI5JAycAV3TnglGUYrou+65tvvWm2+/WPeN9ywRjGAzY+UMcAn69q5rwxrXiLVbu8XVtM0y3t7a6kgMltfSSOCuMDa0Shuv3tw/3a2rHT/sMt2/2u6uPtU5m23Eu8RZAGxBj5V46e5qta6F9i1e4vLbUrxILh2lkscRGEuQAWzs8zPGfv49q4oOkoTi7N9G7/p+uhWpQ0bxNeatqtzaNZ2FsYVdhbyX7fa1w2FMkBiGxWxncGYYxjOab4Y1rxFqt3eLq2maZb29tdSQGS2vpJHBXGBtaJQ3X724f7tXLPw4YNWi1C+1e/wBSktw4t1uhCFh3cHHlxqTwMfMT+fNS2mhfYdYnvLbUrxILiRpZLHbEYS5ABbOzzM8Z+/j2recsNaSglqlb4t/L/gq36r3jVJCqSxwBySe1ZFt4gi1O6SPRoJL63z+8vkIW3Uf7Ln/WHr9wMMghita9Z7aJZ/2oNSt1e1uyf3rwOUE444kX7r8DAJBIHQiuSm6dnz79O3z/AK+TKdxlr4m0G+1JtOstb064vkLBrWG7jeVSv3gUBzx39K0mztO0AtjgE4zS0VEnBv3Vb1d/0QzmPDeteI9U1C+i1XTNLt7e1uXgMltfySOCFUgbWiUN1+9lfp6tXxlt8bx+H510tmmd0UW2p+bcx4TeDLB5Y2Agddx6j1rUttC+ya1Pf22pXkcNw5llsQsRhdyoUtkpvB4HR8e1UIPBcFteQzQ6pqCx29011bwfudkLPu3gfu9zBt7Z3FjzwRXo82ElKTkkk46Jc2jt89n8rfc494zfDPiLU47TT01Kz32l3dzWyXkl2XmMgkk25j2kbMLgHfkcfKKv6bajT/H97bwXN68Etgk5iuL2adVcysCVEjELx2XAqew8H2thd20ov764gtZHlt7WZ0MccjltzjCBifnYAFiBngVqLpkK62+qBpPPe3FuVyNu0MWzjGc5PrSrV6LnP2eikn3te91v5fLsCT6nLWPxJsL/AMTRabC+ntFNdSWiBNRVroSJuyWtwvyoSpw24noSBmtezeTWPEt7K9zNHbaVMIIraJyivJ5YZnfH3hhwAp+XjOCcYltPDpsNRM1hq9/b2hlaVtOUQtCWYkty0ZkAJJOA4GemBxT1068svEEl3YNC1nekG7hlJVkcLgSIQDkkBVKnA4zkYwSpPDXfsFb3e7et/NaO2mmnZgr9TL07xfe3ktjLc6Qltp97cyWkc32vfIJFZwCYwmNh2HndkZ5XvXVHpx1rkvDfhKS2htJ9Xubp3tZ5pobF3jaGF2d8ONq7idrdCxAzwAa6G00/7JfXtz9rupvtbq3lTS7o4cLjEYx8oPU+9ZYtYdTapdO17PXz8vl2HG9tTD0HW/Eeo67qNrqGl6XDaWdz5Jlgv5GkUeWrD5TEA33uuVx6HGTJpvie5v8AxNPpclrYWoiLlYpr9lvHRTtEn2cx/cJ6MHIx78Vej0HyNel1K11O8gS4cPPZIsRhmYLt3EmMuDgD7rAcD3zDH4ZJ1iG/vtY1C/FtI0ttb3AhEcLMCMgpGrnCkgbmPXnJ5rSUsNJt2S91WtzaO3+fna3mL3inoOt+I9R13UbXUNL0uG0s7nyTLBfyNIo8tWHymIBvvdcrj0OMnqKyY9B8jXpdStdTvIEuHDz2SLEYZmC7dxJjLg4A+6wHA98yR6fdL4nm1BruU2r2qQpbeaSgcMSX2YwDjAzk59sc4VvZTlzQslZaK+/Xf/hhq63NI9OOtcvoOt+I9R13UbXUNL0uG0s7nyTLBfyNIo8tWHymIBvvdcrj0OMnqKyY9B8jXpdStdTvIEuHDz2SLEYZmC7dxJjLg4A+6wHA98zRlTUZqaV2tL30fy/UbuUtN8T3N/4mn0uS1sLURFysU1+wvHRTtEn2cx/cJ6MHIx78VFout+JL/wARajZ3ul6VFZ2dwImliv5GkUGNXGFMIDH5h3XGe+Mm5H4ZJ1iG/vtY1C/FtI0ttb3AhEcLMCMgpGrnCkgbmPXnJ5qZdBMWvyana6neWyzsrXFnGsJinYLtDMWjLg4AHysOg989MpYZcyilrH+9o7/5eVr+RPvGCb6+X4oLaajqt7ZW7xM1naqkX2a6A28bipbfneSNynjjjObCa/qUnih7K5vrLS4lufKitbzTZt10Oo8q4MixuzDnaqsV7g4q9J4XM/iVNUutXvZ4I/mjsXEQjRgwYEMEDkAjOCx/Linv4befUFmvdb1K6tknE6WMvkiJWB3LysYkIB5ALnoM5rR1cO0tvhtt1+cd+9/lIVmUYfF928wml0qOLTv7QbT2uPteZN/mGNWEYTBUnAOWBHPBHJqN8SLAeKP7LV9PMYvBZMDqKi78wnGRb7clM4G7cD1OMc1NovhGUTvPq9zd+WmpT3cWnl4zAWMrFJThd+cEHbuwDztzWqnh02+qvd2Gr39nBLN501lEIWhkc/eJ3xs4z3CsB34JNOX1GMpK19HbV2/XX8A94jtNb1PU9UmXTtMtW0yC4a3kup71kkZlOHKRiNgQDxy65IP1McVzft488i9i8mH7HI1v5N8zpIodAWeIxqFfkYIZuM1NF4a+y6xLe6frGo2cM83nzWMZieGR/wCI/PGzLnHIVlGeepJrRbT4m1ePUSz+dHA0AXI27WZWJ6ZzlR3rmlOhFvkSs153v59L+mhWpyrfEiwHij+y1fTzGLwWTA6iou/MJxkW+3JTOBu3A9TjHNaMPiW6m8WPpBtbG3jV2VftV80dzMqrkyRw+Vh0ycbg/rnBGKtJ4dNvqr3dhq9/ZwSzedNZRCFoZHP3id8bOM9wrAd+CTSSeGzcatFd3ur391BDP9ohspBCIo3GcEFYxIcZPBc++a2lLBv4Y293u73+61/K9he8RTSTaR4stFF1PLaaszoYJW3iGZVLhkJ5AKqQV+6MAgDnO/WQum3d14iXUNReAQWisllBFljluGkdiByRwFAwOeTnjXrjrOL5bb21/r0sUgooornGFFFFABRRRQAUUUUAFFFFABRRRQBBbhjp8QjIVvKG0sMgHHp3rIsfEjNrTaNqdsI79ADm0Y3EZU5KlsDdFkL/AMtFVc8Kz1r26h9PiRsgNEAdpIPT1HIpLHT7TTLb7Pp9tFbRbixSJQoLE5LH1JPJJ5J61tCVNRkpK76eX9drfcLUmlEhhcQsqSFTsZ13AHsSMjI9siuX8G3PiO9S6n1vVLC6gjuriAJDp7QuCkhUHd5rDbgdNuemWPU9VWbbaBYWeqTahb/aUlmLF4/tkxhJPU+SW8sE9chc5ye5q6VSMac4SWr20T/PVfIGtTn9K8V3l14yj0xrq3vrO4SZ45YNMuLdU2EYAmdmjm4OCUxyM+1U/Ceparp+m6ClwbNtPv55rZIY4385GBkcSGQtgjCYK7BjP3jjnorXwfo1ldQ3FtFcpJbyF4Qb6crFngqql8Kh/uAbeBxwMSWHhXR9MvEurO2kWSJWESvcSOkW77xRGYqpPcgAnua7p4nCcsowi9Ut0t1zdnputUuhHLI13DFGEZCtj5SwyAfp3rlvCc/iS7u9QbWdV0+6t7e8ltxHDpzQv8uMYbzWAHPQqT/tVvWOlWWmy3cllD5T3k5uJzvY75CACeTxwBwOKii0Gxg1eTUoftKTykl0W8lELEjBYxbvLzgddua4oVKcITh32dlf/geqZVmY+k6xrE+uy2WsT2tlK6SNBYnTpQ2AflYXHmmOXjBKqARnnbSeE5/El3d6g2s6rp91b295LbiOHTmhf5cYw3msAOehUn/arUsPDWm6dffbIBdyTAEIbq+nuBGD12LI7BPT5QOOOlSxaFYwaxJqUP2mO4lJLot5KIWJGCxi3eXngc7c1vOvQakoLdL7Md/LsvO7fe4rM0aKKK84sKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yqWorT/jzh/65r/KpaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKqnUrQauNMMv+mGA3Ai2n/V7tuc4x17ZzQBaooooAKKyrPxJp19rU+kwm6S8gQuyXFlNCrKDtLIzoFcZPVSa1aACiiigAooqq2p2iavHpbS4vJIWnWLaeUUhSc4x1I4zmgC1RRRQAUVVbU7RNXj0tpcXkkLTrFtPKKQpOcY6kcZzVqgAoqpLqlnDq1vpkk2Ly5ieWKPafmRCoY5xgY3L1PerdABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAFeE402Mjg+SP5V5p4I1Zby78N/2frl3qmpS27HWYZb55hBH5ZKl4y22Nt2wKcBmBJJbk16bbLusIlPQxAfpUGj6XBomi2mmWjSPDaxCJGlILED1wAM/hQAyy1PT9et7xLG4aVIJpLScpvjZJF4YA8HIz1H4GuK+H9voOk6jqdiusTDWYby7LWFxrM0zrEZSyuYHkI5Uqd5XJznPPPotFAHnPgrULGXxLcadb6x/wkDy2zvLqVnrs1yqncMiS3LlLZjn5dh52tjbjFP8D2WhaR4n1aw/ta4XVxfztHYXOtzyu8RCkOYXlO7I53lSfevQ6jhuYLnzPs80cvluY32MG2MOqnHQj0oAkooooAKKKKACiiigAooooA858L6nZf8ACctbw60niGefzma4tNaml+z/ADEhJbLeY4gBhA46sPurmszRtV1W68eJFqerafZX51CeKayn8QzLNLb5cIqWJjCD5QjB1OSBncckV6zRQB534NsdB0bxhrFi2rXCat9ukaCxutbnkeWIxoQ/kvKd/f5ypPHXiqmk6oH1bTjb6zcT+KJb9k1TS21CRxDBubdm2LFYlUBMOFXPy8nec+n0E4GTwKAPOfC+p2X/AAnLW8OtJ4hnn85muLTWppfs/wAxISWy3mOIAYQOOrD7q5rNtfEsb/Ey0ltrz7JbvfTWt3DP4gmmkBKMEElm37u33Oo2YOTxxyQPRtL8Q6Trc9xFpF/Dem22+a0B3IN2cYYfK3Q9CcEYNR2/ijSLrWDpkNyxuNzKpMEixSMv3lSUrsdhg5VWJGDkcGgDWrjbC5vf7YfwxLd3Dy212bppzId5tM70Bbry58vk5IRq7KigDyi11bVZPiGYr/VtOsL5dTaNbW68QSxyS2uSFVLEx+W25cEOGJJ5z2rpPB2myagravearqktxBqN4iRtev5PliV1CGPO1gOoJBYYABwMV2dFAHnGjatYp8Rvs0OtJr89zLNuNrrkrPZ4z8ktiGMaIoAXzODuIyoJzXQ2loLD4izLBc3rR3WntPJFPezTRh/NAyiOxVODjCgCumooA4DR9Q0ifxZcr4k1+a28QJfyJb6ZLqstupiBIi2W4dUlUpg7irZJPPGBQt9UJ1SJotXnk8VtqpiuNKbUHIS184gn7Lu2qgiwwk2Ang5559OooA5uX/kqFt/2CJP/AEclcqNUb+1CyatO3iz+1vKbSjqD4Fr5+3P2Xdt2eT83mbM991enUUAcZ4T02TUZrjVbzVdUkmttVvEii+2uIRGJXURmPO1lHUbgSOxA4rs6yP8AhKNI/tsaV9pf7SXMYYwSeSZAMmMTbfLL4/g3bvategDjrW4vV1qXwxJdXDyJeG7Exkbf9jJ3gbuv3/3fXO0GrcVqLH4jgQXN60d5YSzSwzXsssQcSRgFUdiqcE/dA6101FAHGeE9Nk1Ga41W81XVJJrbVbxIovtriERiV1EZjztZR1G4EjsQOKwJNXhk1oNca3ex+IBri28mnRXsoWO284BA0AOwKU2nzCo3E43HOK9SrDn8NG81qO+v9Z1C6t4ZhPDp0ghWCNwPlPyxiRsdQGcjPPYUAVYrUWPxHAgub1o7ywlmlhmvZZYg4kjAKo7FU4J+6B1rmL6O6/svxDrjavqhutP1hltIxfSJDEokjBXy1IV1OTw4bGeMV6bRQBzD2osviRZvBc3u2+s7h5oZL2aSEsrRBSsTMUTGT90DrWOmo6O3jW+j8V+IJtP1KK9VNOsZNVks45IiF2FI1dVm3NnOQ3Py9sV39FAHlPiLxJFD4/je2vPsLWeoQx3gn8QTI/lHCs/2HmLyTuA8xivPPpn1YHIyORWRJ4o0iLWhpT3Li5LiPd5EhhEhGRGZtvlhyOdhbdyOORWvQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/9c1/lUtRWn/HnD/1zX+VS0ANc4jY4Y4B4Xr+FeeeCLG10/xPPHouj5tnt3Mup3ehS2N4H3A4lmkVftG4knKgEbfmznNeiO6xxs8jBEUEszHAA9SaiF5bNFBKtxEY7ggQuHGJcjI2nvkc8UAeW+DtDu4fFkDazti1INOt8U8N3KtehgeJb4u0Uq42kDjGAAFwRWz4P0DQPD3ibU7a38NxWOpNdzPbXUGjMsYgYAhRcLHsA6/Lu9sV2Nvrmk3eqz6Za6pZz6hbDM9pHcI0sQ9WQHI6jqO9Mt/EOi3eorYWur2E940ZlW2juUaQoDjcFBzjPGelAHB6JpnlalpX2bR7i28Rw3ZfWdRbT3jFxHh92bgqFmViV2qGbHHA28WPCVjZ2XjR20nRzKkqSm51G+0KW0vImLbsNcuqidSeAFGQFBJbrXZ2viTQ77VpdLstZ0+41GHPm2cN0jzR4ODuQHIwSOoqvpfia01nXr6x0yeyu4LKNN9xbX0crLKWYNG0aklCNo5PXOOxoA4LTLecfEq01f8AsCLTW+0zw3n2TQJ45QHBCGW6+7OpKhiVXapIy3Qn1es3/hI9E/tr+x/7Y0/+1P8Anx+1J5/TP+rzu6c9Kdb6/o93q0+l2mq2M+oW4zNaRXKNLF/vIDkdR1FAGhRWBpOuanc+Jr7R9W020tGt7eO4iltr1pxIju6jcGiTafkzgbuvWr9vr+j3erT6XaarYz6hbjM1pFco0sX+8gOR1HUUAaFFZ1v4h0W71FbC11ewnvGjMq20dyjSFAcbgoOcZ4z0rRoAKKKKACgnAzRRQBxOh65BcfEDV9tlrESXscEcE0+j3cUbMivuy7xhVAyOSQD2zVbS4Lsw6F4fayvku9LvjPdXL2zLDsXzPmWUjY5fcOFJYbjkDBrv6wbXxba3WqR2wsr2O2uJWhtr90TyLiRc7kXDFx91sFlUHHBPGQDeooooAKKKKACiiigAooooAKKKx9N8TWmq65d6Xb217HLaRLK0lzbNCrhmZflD4Y8oedu0gggmgDlo7e8W3i8NGzvjeprJvWuvsz+R5P2kzb/OI2ZK/Ls3F89sc16DWG/if7PrsWnX2j6jaQ3Exgt7+UQmCaQAkABZC4yFOCyAcdeRncoAKKKKACiiigAooooAKKKKAPPpre7S3u/Df2O+kvbnV/tkdyLZzB5JnEu8zY2AqAV2k7sgYXBBr0Gsiz8SWl94gm0iGC8SaGEzNJPbNEjAPtIXfgtz3A2nsTWvQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/9c1/lUtRWn/HnD/1zX+VS0ABGRg8iuV0DQr2xv8A7LcxbNO0syLpz7lO8SHIOOSPLUlBnGcmuokcRRtI+dqgscAk4HsOTVOHWdPuLWxuYLgSRahj7MyqT5mVLdMZHAJ56UAcL4T8L6tpetafBq416ZNNknaGcPYCyJfdlvlC3ByG5DA/N1zgGum8GaCNG8L2dvdWEMF3C80jBVUkM7sScjuQRk/nUuieIDrOuanBEdttaLEEjms7i3nDHduLCVVDKcDaVyODS6Z4y0PWb6K00y6kuHlDlHW1lETFDh18wrs3Ajlc7h6UAZPhy21i015YLTTNS0vRESTzLbUJbaWMOTkGBo3eTliSRIdoHQDpW1b2NynjS+v2jxbS2MESPuHLq8hIx16MPzqOHxjok+rppsVzMbiSZoImNpMIpXUEsqSldjkbWztY4IweabpPiE6t4m1CyhO22tIYyI57K4gm3lnBb94qq0Z2jBXPIPtQBn+F01TQ86JdeH7oobmaQ6tBNAYZA7M4dgZBJuOcEBDz3I5qhpejawE0PSJ9Lmtl0a8NxJqbSwmK5GHB2BXMm59/O5VH3uemd2x8c+H9SvILaxvJZjcO0Ucq2k3kmQZzGZdmwONp+Qtu9qdpPiE6t4m1CyhO22tIYyI57K4gm3lnBb94qq0Z2jBXPIPtQAsOnXS+PL7UWj22s2nQQJLuHLrJISMZzwGHbHNc/pejawE0PSJ9Lmtl0a8NxJqbSwmK5GHB2BXMm59/O5VH3uemeltvFOl3urtp1m11cTI7RtLFYztbqy/eUzhPLBHQjdweOtEHinS59d/scNdxXh37BPYTxRy7PvbJHQI+M5+VjxzQBV8GaCNG8MWVvd2MNvdxPK7bVUlWd2JbI7kEZPfvXRUUUAFFFFABRRRQAEZBFcRpujatGuj6FNpzxWmkXf2g6iZ0Mc6Lv2Kiht+47l3blUDBwTxXb1zNl4tuLq8tJJNMSPSL+Zre0vFud0jON2C8e0BVbYdpDsemQM8AHTUUUUAFFFFABRRRQAUUUUAFcZZ3Gsf8LGur2XwtqkVlPaxWi3LzWhVSkkhLkCcttIYYwN3sK7OigDkreTVL3xoX1jw5qItraZlsLgTWxt4l2kGYgS+YXbJH3DtBAAGWJ62sJfE8cvjUaBBatIq27yS3e/CpIpT92B3OJASe2R1zxu0AFFFFABRRRQAUUUUAFFFYln4gnufFc2jT6VNZrHbG4SaaVCZQH2ZCoWwp6gkg+qigDJ+06x/wsb7b/wAItqn2H7J9i+1edabc+bu8zHn7tmP9nd/s12NcxJ4tuEvpJY9Njk0WG7FlLei6/eiXcEJEW3BjDEKW3g5z8uBk9PQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/8AXNf5VLUFuxXT4mVS5EQIVcZPHTniq+na3Y6pJLDbSlbmDHnWsyGOaLJIBZGwcHBw3Q4yCRVqEmnJLRCL9c7onh240zVZmlkiaxgMn9nxITujErb33DAAweFxn5a6FywRjGAzY+UMcAn69qxPDuq6lqF5q1vq8NrDLZXCRqlq7OoBiR8F2A3HLHnav07lxpylGUl0/wCGC5ZtNNmg8TajqLshhuoYI0UE7gU35zx/tCmeGNKn0Xw1a6ddPG0sO/c0RJXl2bjIHY1rVjaN4j/ty4f7Jpd6lmpdVvpGh8qQq20gKJDIDkH7yDpziiNOUouS2QXOF0a8kPiLQ/DlnqGi6jFpF/M7nTrwzzhAko3ToABCQXCnltzH+HGK7+HTJo/Fl3qbNH5E9nDAqgncGR5CSeMY+cd/WmWviSzu7fTpo45wuoPIkQZRlSgYndz/ALB6Z7VnWHj2x1C5t4o9N1OIXDRBJZYVVAsgOxid3QspXA5zzjaQ1arC13e0dt/y/QOZEdt4VvofDehae0tuZdO1BbqVgzbWUO7YXjrhh1xWxDpk0fiy71Nmj8iezhgVQTuDI8hJPGMfOO/rUVrd3eqa/dCC4EFhp8nksiKC1xLtBbcTnCjcOBgkg844OdL4pmu9Y0uGwtLyGzuL1oftciR+VdKI5CQuGLAblHLKuccZFOOFqSdl0V35aXt626L9GHMh/h/T/EGgyLpZttMudISaRkvPtckdwqMxYAw+UVYgnGfMGRzgdKx7Pwl4ij8W2mr30sN09rcyFpZNXuGWaJwy5W3KeVCyjbgLndzlh1PQ6Xql3e+KtRtrmG8s44IIzHa3EcODlnHmq8bsSGxja2MY6c1KviIjX4tLu9Jv7Tzy4t7qUwmKYoMkDbIXHGSNyjpUyw81JxVnZX38r/P5BdGzRXP2/i+3udQt4E06/FvdztBbXxWPyZmUMTjD7wPkPLKM9sjmpYry81LxBcrbXHk2OmOI5I41UvcylNxUlvuoAy9MEt3AGCPDVI35tNL/AKfffTye4XRt0VzmgeKbzW7+6t5vDeoWCW07QtPNNbsgIAOGCSFs89gw96tf8JEY9fh0y70m/tRcu6W93J5JimZVLEDbIXHAJG5R0pyw1WMnF2ulfdPT5MOZGzRXI+G/F0t1BaRapa3mbm4mgS/eNEheRXfEeAQ2dq8Ns2nH3ia61iQpIBYgdB3qa1CdCfJME00KRkYNchYeGdVgl07Tbg2X9j6Vcm5gmSR2nmxu2IyFQqbd33gzbto4GeLmgeKbzW7+6t5vDeoWCW07QtPNNbsgIAOGCSFs89gw96saT4lGs3EwstKvTaRvJGL5ng8p3RirKFEnmA5BHzIOnOKqeFqwb5raea67dd/LcOZM26K5zQPFN5rd/dW83hvULBLadoWnmmt2QEAHDBJC2eewYe9WYLy7sfEo0y+uPtMN5G89rIyBXQqRujbaACAGBU4zgHOepJYacJOMrXSvun+V1tqF0bVFYsF5d2PiUaZfXH2mG8jee1kZAroVI3RttABADAqcZwDnPU2b+7mOpWdhZuVkkJmmcAHZEvXqD94kL9NxHSodGSaXdXv5Bc0aKxtN8R/2rqU9vaaXem2gleFr9mhEW9Dhl2+Z5nXjlB69OadB4ks7iG3kSOcC4vZLJMqOHQuCTz0+Q+/TinLD1YuzX9f0gujXormIfHlhNMqCw1FFZ1USvCoTDSmLdnd03jHqc5AIyRdF3eaj4lmtrS4WCy03aLgIgaSeVhuCZPCoFIJwMksMEYOalhasL86tbv8A15oOZG1QeR6Vzmi+KrzVtZvbGTw1qFmlpP5LXMk1uyL8gb5gshYZ3fwhu2SOQLVx4iNprcFhd6Tfww3E3kQ3x8kwu+0sBgSGQdCMlAMiiWGqxlyO17X3W33/AIbhzIxdO8CXmleKNPv4PEmo3Flapcb4LlbbLNIytjKwBiCQSSW3ZA5612dcjo3i2UvJFqltdvG2pz2i33lxrDGfNZY4zyGPGBuCkZ4Jzmuuqa1CdGXLME0worm9J8VXmp69e6c/hrUbZLScRPdPNbsi5QOCwEu4ZyMbQ3UZxyBbsPEf9p6rcWtppV89vbzPBJfFoREHXqNvmeZ14+579OaqWGqwve2ivuuu3X8Nw5kbNFc3pPiq81PXr3Tn8NajbJaTiJ7p5rdkXKBwWAl3DORjaG6jOOQLUd5d2HiZNPvbj7Tb3ySS2rsgV4mXBaM4ABXBypxng5J60Sw04vldr2vunpv0v01DmRtUUUVzDCuS+x+Kf+E8/tX+zdH+w/Z/smf7Ul83Z5m7ft+z4zj+Hdj/AGq62igDj5fDGqGWfSovsP8AYlxf/b3naV/PUmQSNEI9u0gsPv7xgHG3jJ7CiigAooooAKKKKACiiigAooooAKKKKAILcMdPiEZCt5Q2lhkA49O9Z9r4dto71L/UZJNTv0JaO4usHyTz/qkACx8EjKjcRjcW61pWn/HnD/1zX+Vc1otkbrxRr9+93etcW955ECPezGCNfIjP+o3iM8sTnGeetaRqSgmou1xWOpcMUYRkK2PlLDIB+neud0PQ9c03Wb281DV9Puor6QSzRQaa8LBgioNrGd8DCjgg/UU3wreatPqevWmt30d7JZ3cccbQ24hRQYI2IVcsQMsT8zMeeuMCl0SyXTPF2q2lvcX0sDWsE4S7vprja7PKCV8xm2g7RwMDjpThWnCMox2lvov6XyC1zQsvDOhabfvfabounWd44Ia4gtI0kOeTlgMnNULDw1eR+J/7a1K8sJJ1jaPdZaebaSZTwBM5kfzAMcDAwefauiZtqlj0AzXEaRrOrSLoet3GpST2uuzeWdPaCMR2ysjMhjZV35G0btzMDkkbeKtYmsr+9ura66drsLI0NO8JXllPYibVkltNPlla3gS02ErIGHzsXO5hu6gKP9nuHWng77LFZp9u3/ZRajPk43eSWP8Ae4zu/DHeulOdp2kA44JGa5zw5eatJ4h1yx1i+iu/spgMZht/JRN6EkAZZu3dj+HSrljK8r3e/ku7fbuxcqLVrZ3ema9deTbifT9Rk85nRwGt5doDbgSMqdo5GSCTxjkUrLwneWs+no+rI9hplw0ttbrabWKlXXa7lzuI38EBenIPUQW99eRfEIWCaxf3FvIsjTWt/ZpDEnAKi3kESGXGecNIAOpBxlNNutVi8aXNvrV7q0CTySjT4ZYrQ2UyDkbWRfODBecOy55xkDifrVRJ26qz08rdettNLD5UdDHpvl6/can5ufOt44PL2/d2M5znPff0x2rmbHwA9l4ii1dbuwa4ind/tB04/aZkfIZZZvMy5wQFIAAx908Y0PDl5q0niHXLHWL6K7+ymAxmG38lE3oSQBlm7d2P4dKq299eRfEIWCaxf3FvIsjTWt/ZpDEnAKi3kESGXGecNIAOpBxkp4qtTTUXurPRbbC5UzL0y0vf+Ei0zTbO4u59O0u7kkCzaRNaiJNrrhppPlmOXAXYBxknPWuogtLzS/EVw9vbfaLDUpBLK6Ooe3lCbSxBI3IQq9MkHsQcjK0261WHxrcW+t3mrQxzyyiwhkjtDZzoORtZFMwYLzh2XPOMgcW/D95qzeJ9ZsNXvobsW0du8XkW3kom8PkAFmbsOrHnpjpWlbFyqPbpb11vfS2t/wDg31BRsW7HR7/T9bu57e+tv7Pu5jPJbPasZQ5UA4l8zAHyg42HvzWJbeAHtfEkesJeWDXMV00y3DacTcyq4YMks3mZcANhcBQu0cHGK7SipjjK8L8r3VnotV9wcqOX07wldWk9kl1qqXFhYzyXMMC2uxzKxb7z7yCo3nACg5wSTW3Y2t9b3N697qH2uKabfbR+QqfZk2gbMj7/ACCcnnnHartFRUxFSq25/ku9+3fqNJIxrHR7/T9bu57e+tv7Pu5jPJbPasZQ5UA4l8zAHyg42HvzVSz8M3i+KF1rUr2wkmjRow1lp5t5ZVIwFlcyN5gHUDA55GOldJRT+tVddd1bZbfcHKjGsdHv9P1u7nt762/s+7mM8ls9qxlDlQDiXzMAfKDjYe/NJBZ3d94lGp31v9mhs43gtY2cM7liN0jbSQAQoCjOcE5x0G1RU/WJttve1r+X/DaahZGLBZ3d94lGp31v9mhs43gtY2cM7liN0jbSQAQoCjOcE5x0FjSrSZZru+vU2XN1JgJkHy4lyEXI/Fj7sa0qKUq0pK3y+W/56hY5mPwveS+LIda1G9093t9yxvaacYLh0OQI5JTK29BnO3aAWAPGMUy18JXtvfwMdXQ2NrqEl9DbpaYdi+/cruXOcF8gqq4xzmuporX65XatfpbZba+XmxcqOYXwbttki+352+Xz5PXZcGb+93zt/X2q6tpead4mmubS2W4stR2m42uFkglUbQ+DgMhUAHByCowDk42qKl4qrK/Pre/427eiDlRi2+j39l4iuryzv7VbG9lE1xbSWjNKXCBPlkEgCj5VOCh7888Ys/gGWXxH/bC3mnm5jvBdQXE2m+ZcqOhiaXzASm0kKoC4464Oe0oqoYyvB3i+ltlt9wcqZy0HhG7S6WOfVY5dMW/fUPswtNshlMhdQZN5GwEg425JHXHFb1tbXkWoXk1xf+fbTFPs9v5IX7OAMN8w5bJ556VborOpiKlT4/yXr2389+mw0kjFh0e/tPEdzfWV9apZXrrJc28tozyFlQJ8kgkAUYVeCjd/Xip/wjN5ceKrfWL+9sG+ylvKa208w3DIQQI5JjK25OcldoyQDxiuloqliqq2fS2y227dvmHKjFh0e/tPEdzfWV9apZXrrJc28tozyFlQJ8kgkAUYVeCjd/Xgjs7u/wDEyahe2/2a3sUkitUZwzys2A0hwSAuBhRnPJyB0raoqfrE3q97W+W35aa3CyCiiisBhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBFaf8ecP/XNf5Vhadp+tWXiLVsw2X9m6hP563SXbefGfKRMeUYip5TOd/fpW7af8ecP/XNf5VLQBzmieEptF1e61A+JNWv2u2D3EN0lqEkYIEDfu4FYYCjoQPUGptHtNXOv6hqOs21jbLNDFBClpdvPkI0h3MWjTaTvHAz061u0UAFYFl4RtbLU47kXt7Nb27tJaWErp5Nq7AhimFDn7zYDswG47QK36KAKNhpn2CS9cX15cfa5zNi4l3iDIA2RjHyqMZxzyTWVpXhKfS9euNUbxNq949yV8+G4S1Ecm0ELnZArDAPYj3zXR0UAYkfhrOvR6pf6tf6g0DO9rbz+UsVsWGCVEcaljtJHzlsAn604eHA+vjVb3VL68aEsbS3m8oRWhYYJQIiljjIy5bAJx1NbNFAHOaV4Sn0vXrjVG8TavePclfPhuEtRHJtBC52QKwwD2I981Yj8NZ16PVL/AFa/1BoGd7W3n8pYrYsMEqI41LHaSPnLYBP1rbooAxl8OK/iBdVvdTvr1oSxtLebyhFalhglAiKScZGXLEAnHU1U03wjPp3iGbVj4n1i6e42ieCdLQRyhQQoOyBWAG49GB9Sa6SvB/gR/wAlK8cf9dj/AOjnr0cNgvrGHrV+a3s0na293b5fiRKVml3PeKKKK84sKKKKACiiigAooooAKKKKACivC/hH/wAlx8b/AO9J/wCja90r0MxwX1Kt7Lm5tE9rbq/mRCXMrhRRXNv/AMlSj/7A7f8Ao4VyU6ftL67Jspux0lFFFZDCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA//2Q==)

### **Conclusion**

value 4 below virginica - actual value 4 belongs to virginica, but model predicted to versicolor, so this is a misclassification error. value 4 below versicolor - actual value 4 belongs to versicolor, but model predicted to virginica. Misclassification error with train data is about 7.07%. Misclassification error for testing data is about 13.5%.

## Experimental Result of KNN:

install.packages('class')

install.packages('ggplot2')

install.packages('GGally')

library(class)

library(ggplot2)

library(GGally)

#summary

summary(iris)

apply(iris[,1:4], 2, sd)

![A screenshot of a computer

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMxMAAAkpIAAgAAAAMxMAAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjowMzoxOAAyMDIyOjAxOjA0IDIyOjAzOjE4AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MDM6MTguMDk3PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAKkCoAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APoY/wDHxB/vn/0E1YaaNJUjeRVeTOxSwBbHXA71XP8Ax8Qf75/9BNVfEFnJqGni0j021vzI4P8Apb7Y4SDkPwC24dV2gHI+8vWtIRUppMRq1W1DUrHSbNrvVLy3srZCA01zKsaLk4GWYgdar6HptzpWnLb3mpT6g4A+eUcJgAYUnLkcZ+d3bnljVbxNA01nA0Wm319NDN5kLWEsSSwPtIDjzXVD1Iwcg55Bq4U4OsoN3Xfb89v63C7sX7fVtOu7a3uLTULWeC6bbBLFMrLMeeFIOGPB6ehqtq13pEmmy/2lqcdrbK5V5UvjblWX5iPMVlIIAJIz0BzWDNbeIX0XRLy+s5r+9sb8zyQI0CzvFtkRd3zLFvAZS21gvXHpTU0PVLmG3a90+NHGsz3bRearhI2SQI2eMnJXjsfpmuv6rR3lNW16rz/4GtuolOSd1uaOfC9rotxbLqsNvapKTcTLqjJIJNu875g4fdt55bO32qzY3fh7RtLuWttRtIrW2kzdTy3gfY7AHMkjMTuIK/eOcEe1cxZ+Eb63k09Bp0aQW/2bKAptQpbSocDPZ2Xp65qa10XXNF0aaPSLLyH+z2UQS28nzFVFIk8oOfL3jPG75e/NW8HhU7Rnrp1S3fztb5lOtVkmpNnWwa5pN1p8d9bapZTWcrbI7iO4Ro3bngMDgng8e1LZa1pepQwzafqVndxXDMsLwTq6yFfvBSDyR3x0rirDw5qs1mLfU9PuJw2uRag8l81sWePAJ3CM7dykcgDGcYLda6TxVaQxeHbm9h8q2nsW+3RynCASJycn/aGVPs1RUw9CNRU4yu2+jTXl/Wnp2hN2uXtUk0+ezuoL27aJLeMTT+RdPDJGnJDEowYA7T35waxYTpdl4Rmm1VG0LT5ZPMWS41R4ZpM4IaWbcGV2PGN7cYBPYINGutS8F6k7p5epaxGZ3UnG0kDZGT7KFU++T3rb0zVLfWNOMlqSJFGyaBxtkhfHKOp5B5/kehrGVGlFN25rOz8tvzd/uNI1aiVk7LczNJg0geGdNubyKGzWSRLtRJf+d++IyD52796evOTkCtA+JNE/sY6sus6edOB2/bPtaeTuzjG/O3OeOvWsNvD11P4S8N6fc2aSvZXNtJcxOVYIEByeTg4OOma6tYY4lfyY1TeSzbVA3MepPv70VIYeD93XV7PSyfz36fqJznP4ncz7LXbeXwzBrOpS2thbyRCV3N2jxID0Pmg7SOnI4pTrUd7o51Hw41trUYbj7NdKQ4B+YKwypYdgSBngkdax/wCy5oPAenWV5pV3eXFt5TGGynjSWKRTlXVmdVOCBwWwfQjg2tL1G80rw6914rlkjKykRfaBGbh1J+RWWH5GkJ4ATrx3rSVGnrKGr5rJX3XSy3frdfMi76mzp99Dqenw3lqSYpl3LuGCPUEdiDwR6irFY3hSymsfD8a3SNFLNLLcNE3WPzJGcKfcBsH3zWzXJWjGNSUYu6TZS2CiiishhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAVD/x8Qf75/wDQTVuqh/4+IP8AfP8A6Cat0CCs/WdYj0a1ika3nu5p5RDBbW+wPM5BO0F2VRwCfmYDj1xWhWP4nsJtT0n7LFo+lazG7gy2erSFIWA5Bz5cnIODyv5UDAeIo7bRn1HW7C80dVfYILkRyyuTwAqwPJuJJwFGWPpTG8YaGmkR6nLeNDbSXAtR51vIjiYnAjaNlDqxPGCAeR6iueufBGpXvhVbWacR3UOoC+t7SPU7kRwgDHkLcjEqrgkghRtzgLgYqpe6PeaJoemJHp9tbX02vwTFG1a4vllbBALzSoHGQAOhxgdelAHYW/ijTLrR5tStzePDA5jliFhP56Nx8pg2eZnkHG3oQenNRJrD+IdDkufCl9DbzRymNm1DT5j5bL95GhZonU/Uj1wax5PDfiB9H1SZLi3g1TVLxLie3t7ySOMRqqp5K3Cp5ikqozIEByTgDrVvwb4f1DQLPUba+WEJdTm4jIv5rp1LKAyM8qhmwRwxJJHZelAGl4U1S41rwjpmpXwiFzdWySyiFSqbiOcAkkD6k0eIG0lf7O/tnT4r3ffRx23mQJJ5Uxztcbvu4weRzVXTNL1nRPh/a6ZprWL6ta2qxRtcFzAXHXOAGx17U/xTpup6jp9g2lR2kt5Z3sV0Y7mdoY325yN6o5HX+6acZOLunYDU1HUrTSbF7zUJhDAmAWwWJJOAoAyWYkgAAEknArLPjXQE0kalPetbW32kWp+028sLpKeiNG6hlJ4xkDORjqKpa7oer+KvC32bU4bXT76G6juIks9RmZH2MCAZlSN0zyMqDjg89Kpad4OvYrSDfZW9jOurQ305Os3OomZUXbnzJkDBsYAXpgdaQG5F4x0WXS7m/wDOuI4rWRYpY57KeKYO2NqiFkEhLZGAFOc8ZqnffEPQrLQ7nVcajcQ2sohmig02cyxvtDbXQoCnBHLYHOM54rN8UaVJp11qHiCfUdLs40vLS5gOo3PkQsY1KFJHIOzO7ggNzjjtVfRba68X+GfFD+bZn+1Ln/R57WQyW77Yo1+STGXUMpXeAM4JAHSgDa1fxpb2eg2mrW4kt7aS/htpW1K0mtiqswBO2QI3fg4wfetbR9fsNdSY6e1wGgYLLFc2kttIhIyMpKqtgjocYNZt5p2ta1pliupW1hZXNtqENwyW9286GNGBOGMSHcfTbj3q9Y6VPbeKNV1KRozDeRwJGqk7gUDA54x/EMc0Aa1FFFABVDWdWh0XTjdTRSzkusUcMO3fLIxCqgLEKCSQMsQPUir9ZfiK0nvtGktrbTNO1TzCBJZ6m5SGVO4JCP7H7p6fjQBHD4hCaVcahremXmhxQEAretC7PnptEMkmck4A6k8AVGvjLQzo8mpyXclvawzrby/abaWGSKRiAqtG6h1zuXqBwQenNc9J4H1G/wDCd5YXLxWDyXkV1aWNpfzvDbCIqRGkuEdFYr/AqhM/KDjmhqeh3ejeEZ2k0+C0vLnVrJ8nWbnUfNImjALSTorL0xgZGKAO2tfE+mXmn3V5bm7ZLNts8TWM6zqcZA8koJDkEYwpz2zUdtra+I9LuW8M3i291DJ5T/2hp8wMLYBw8LmJ+VII5HUHmsdtA8SXFlrV809nZavqRiVIbW5cxRxR8bPPMYYMwLfOEyu4YBIyZfBXhzUvD11qjXyRCG/kS4X/AImc97JG4QIyF5lDMvyghie+NoxkgGp4S1S71nw1b3mpeT9qZpEkMCFEJSRlyFLMRnbnGTV691GKwltEmRz9rn8hWUDCttZstk9PlI4zzisvSdK1TRfB0ljZtZvqSee8BlLGHezsy7sANj5hnHvR4j0nU9a8LLbW01tb6opikEp3eWrgjdjvjG7H4UAWJPE2mpvaJpruJLZbnzbKFrkMjMVG1YwzMcg9AeBUOkeIY5fCEWt6tcQLGVZmkhhlRcbyAAjgPu6DaRndwBVTwh4WuPDd1qayPAbN3SPT0izmKAZba2RgHfI+McY2980yXwzfjwTBpsEtub+1uVuotzsIpGWfzQjMFyAehIBx1wccgEEvxFsbSHWb+5gvXsNOSJgkOnT/AGgFlZiHjKhk6DlgoAIyeRVjV/GsFt4Qk12yWWCGK4hjkbU7Oa1CI0iKzESBDgKxO7px3qI+G9Y1Oy8SDWHsbeXWbZIYktXeRYMRspDMyjfyc7gq8dhjJmvNL17W/C4sdStdOsbqO6t3QW9686MkciOSWMSEE7SAMEdOfQA1dJ8Rabrc1xDYPP5tvtMkdxaS27YbOGAkVSynBwwyDjrWpWRDpM8fjO71dnj+zzWMNsqgneGR5GJIxjGHHf1rXoAKKKKACs7Xtai8P6PJqE9vPchXSNYbfbvdncIoG5lXqw6kCtGsTxdocviLw6+mwSCMyTwuzGVoyFSVWbDL8wOFOCMHOOR1oAbY+K7WeC/fU7W50aTTlV7mG/MeY0YZVt0buhBwejZ46VG/jfR10O81RBqEkVl/r4BplwLhcjIzCyBwCP4iAvfOAag1PwNYT+E9Q0jTWmt5bwq7XU1zNLK7qQV3ys5kIGAPvZA6YqvoHhW4t9P1eLULGOyuNQg8hp11y61NnXawGWuEUqBuOAM9TQBsaR4osNa0d9StYdRjgSMSMtzp08LkFd3yqyAvx/c3A9s02y8QQeIrO9j8PXDW97b4VhqOnTxmJiMqWhk8typHQggH14qla2PiY+DptLcWGnX0NssFpcWt28wbaoG5t0S7Ccdg+M55xzW8HeGtU0LVr+5vo4livoo9ynV7i/kjdNwx5kyBmUg57YPAB60AafhHVL/VdGlk1drZ7qC8uLZntYWiRxHIyAhWZiMgf3jWhrGqwaJpM2oXSyPFDt3LGAWOWC8ZI7mqGiaTfaPo1/Cr273U13dXMBJYoPMkZ0DcA9xnHviotc0vWNa8ByWEv2H+15YY9+13S3MgZWIBwWC5BwcE0Abl1dQWVpLdXkyQQQoXklkbaqKOSST0FYsfjbQH0y91CS7ltrewCtcm7tJrdo1b7r7ZEVip7MBjg88GoNQ0zWvFHhbVNJ162sdLa6i8uKSxv5LnB65OYoiMEDoefUVh2/gfUX0nVoZrK3tby8ihiW5k1+81EyKkm7B89AYwOSAuck89M0AdPa+MNEvEvHS6kiWyi86Zrm2lgHl8/vFMijehwcMuQfWq/wDwnmiGxvLmP+0XNlGss1uNLuROqsSFPlGMPg7TzjGBk4HNUfGPh972XUNSlv7OytV0wRGW6k2ojpMJQXPQR/LgnPrVLwtfT+LNb1y8ebTZbeawhtBPpVybq3VsykqJiq72AcE4UY3Ac9SAaF148tp/Ad94h0mG5iFtbrMBqdjNbrg4OfnChhg9VJHvWxpHifS9bupbawlmM0SCQia1lhDoTgOhdQJEz/EuR055rFGha9eeAbjw9fQadbyR20dtbTQ3kkolC4G5wYl2dOg3detbJ0mc+MIdW3x+RHYNbFcnduLq2cYxjA9aANeiiigAqhrerRaFod1qdxFLNHax72jhCl39huIGfqRV+sjxXpEuv+FNQ0q3dUkuovLVmdkA5HdeR9RQBBpviuC7mvYdSsLvRJ7KFbiWPUGh4iOcSb45HTGVYcsCMdKIPGej3VjeXVub5xZqryxf2bcCYq33WWIoHdTg4ZQRweeDVe78C6ZL4Z1XSrNriKXU7cwy3k9zLcTdMLmSRy5UZ4XdgZOMZqt4U8MXWmXV5LqVjHDNNbrALka9d6izqCeNtwo8sc5wpPWgDT8PeLtO8TaT/aFhBqMMPlCUi70+aA4Iz8pZQH/4AWFO0/xJZ6+t3baNNNb30EYYpqGnTwMm7O1zHII2Zcg9COhGaoaHpniOw8JyaJINPs5LW0FvY30Fy07OwBAd42iUJ2OAz9/Tmj4S8L6zo3iSbUr9Idl3aJBOG1m5vnR0ZiGVpkHDbzlRtC44BzwAbPhXUtSv4dRi1mS1mubG+e2820gaFHAVSDsZ3IPzf3jWpqWoR6XZ/aZ0kdPMjjIjAyN7hQeSOAWGfaqOi6Vc6ZJq7yNExvb57mHaScAqoAbjrle1R3Nhq+qeCprLVGsk1ea3ZWa23+Qsv8JGfmwDj3oAsy+ILCO4SKKQ3JYTFjajzthixvBC5O4EgbQCc8YqtoHiBdV02/1C4lijtbe5kRS9vNbtFGoB/erMqsrDknjGMVk+FfB9/oPiCW7up7aS2e0GFi3bvtTkG4fBGNrFEI75LZ7Vem8Mz3Xh/wAQ6bJcJE2qzTPFImTsDqAMjjuOQPzoAhh8c2dxq0qQJdPZQ2JuXH9nXAnJ8wKCsZTeykE4IUg44PBqOPx9a6r4J1HXNDtr5HtrFrqNdQ0+aBCdpIG5gFfpzsY/XmrGk6Zr0viAanryadbr/Z5tBb2U0kxVt4YtvZEyCAONox6tnilZ+H9eXwHfeF7qDTo41sHs7O6jvHkMuVKhpEMS+Xxg4DP3oA1tD8XaVrs0dvZzyPcPbidSbaVIpl4y0UjKFkUFhyhbqK3awjolyfEWjX++LyrCymt5Rk7iz+Xgjjp8h647Vu0AFFFFABRRRQAUUUUAFFFFADJpkt7eSaZtscal3OM4AGTWHp3il76J7qfQtSsNOWA3C39w9u0boBkELHK0nI5GVHvg8Vt3Hm/Zpfs4jM2w+WJCdpbHGcds1wSeHdR06z1a7fS9K0GzGm3CtZaTeySxXEjLnzGQxRIjDH3gpZt3JwBkA6jSfFui65OYtNunkJgFwjyW8kSTRHHzxu6hZF5GSpOMjOM0aX4s0bWbuS20+5kd0j81WktpYkljzgvG7qFkXp8yFhyOeRXP6DoOqavb6beaybW2t4NHNnbLaTM7SiVE3SPuRdhAQYUFup+aoPDXgO60uYQajbI6Q2MllFqH9v3ly5VgoJW2lBSLIUH5XOMADIoA6jS/FWl6zNImmm8mVFLif+z51gkAOMpKUCP7bWOe1ReHfEP9vXOqMh221tMscSS2dxbTIDGrHzFmVT1OQQMYx3qPwzB4i063t9M1a00s2dpAIo7y1u5PMl24CkwmIBMjriRsH17WbXR5I7/XJJ3XytSkUpsJ3KBEqHPHByD0oAbp/i7RdUu5bezu3LRxtKHkt5I45UU4Z45GULIo4yUJAyPWpdH8R6frzSf2ct6VRQ3mT6fPBG4PQo8iKrj/AHSeOa5Twt4HvvD9xCs1lBdfYrR7e2vJ9evJ9+QAM2simOMNgZ2scds1q+FdC1XS9Snmube10uwaFY49MstRlu4VYHhkEkaCEAcbEG09eMUAdXRRRQAUUUUAVD/x8Qf75/8AQTVuqh/4+IP98/8AoJq3QIwtZ8SjR/EGk6dJaF4NQ8zzLrzAot9u0LlcchmcDrxmqkPiu7v/AArdana6NeNIkskccNs8TSBMZWX960a9CG25z25q9rnhex8RTqNXRbizNrLbS2rA4kDsjZ3AgjHl/rVq20lba0vYEkG26kdxhMeWCoXHXnGKBmUPFMWleGdCur4XupTakIoY2gtl8yWRoywJRThc4OcHC55IAJGhoeupraXQNldafc2k3kz2t35ZeNtoYcxuykFWB4Y1W/4Rn/QfD1v9r/5AsiPu8r/XbYmjxjPy/ez36Yofw9exf27LperfYrvVZUlin+zLJ9mKxon3WOH+53x19qAN6ikQEIoZtzActjGT60tABUdzN9mtZZ/Lkl8tC/lxLud8DOFHcnsKkqO5SWW1ljt5vIlZCqS7Q2xiOGweuDzigDMn19YvDkOp/Y7mOa5RPIsZ02TNI/3Y2Xna2evpgnoKPCup3eseFbDUNSjhju54t0yQZ2K2SCFzzjjvUVz4Xh1bTNOh8QXd1eXliM/bLW5lsneTbtZ/3LrjIJ4zjmoNM8K3Gh+CjoeiavPb3QU+XfzhrkxsWzkLKzcY4xnFAGrrNxJaaPc3EV/Z6cYkLm7vo98MQHJZxvTjH+0K5y08U6lL4YtpybG4vL2++x2V3DG621wpJ2zhNxOzaCcb/mxw2CDXT3sd++nsmm3VvBeYAWa5tzMgPclFdCf++hWDB4Olj0iWOXUVbU5L7+0RdR222KOfj7sW44TAwRuyct82TmgCBvE+qWsc+l3X2KTWUvYrOOaON1gfzV3rKYyxYAKGym85K/eGeNXQNSvrme/07VzbPfafIqvLaoyRyq6hlYIzMU6kY3N0681SHhK4ls5pbzU0k1iW6S8F5HbbY45EAVAsRYnZtGCC5J3N8wzxpaHpE+m/arjUbxb2/vZBJPNHD5UfChVVE3MVUAd2Y5J5oA1aKKKAMLxD4kbQdQ0iD7EbiHULnyZphKF+zLjhyMfMNxUY4xnPaobLxTcahpmpXdpo11cG0ujBDDbSxGSdMAiQeYyKAQ2cFunrnFXdb8PWniBoo9SVZbQRTRTW7KcTJIu0jIIxxU2maRFpX2lLYhYZmUxxhcCJVjVAvXnhP1oAxbLxUmn+BdJ1bVWvr57zyYyyWiiZnkOBmONiByedpNamia+NYlu7ebTrzTLu0K+bbXhiLgMMqwMbupBwe+eOaqL4V2+HdI0r7Z/yDZ4ZvN8r/WeW2cYzxn6nFTTaFci+1m9sNS+y3Wo28cUUnkB/szIGAfBOH+9nBx0oA26KjtklitYo7ibz5VQK8u0LvYDlsDpk84qSgApHbYjNgtgZwo5NLSOCUYK21iOGxnB9aAMyC+vdZ8OR3mlwvpd1cJmOPVLVi0POPniV1Ocdtw7c1V8LapqOox6hDqrWs8ljdtbi7s4miiuMAElUZmKlSSh+ZuVP0C3Oj61ceDjpZ19f7UaPZJqbWYG/nk+WjrjI44YEdQc06y0rWLbwzLpx1KwguhGY7S4sNOMUduMYX908jhsfUA+lAE/iHVZNJ01JLZEe5uJ47aASZ2h5GCgtjsM5x3xjIrDfxRqelwX9jqv2K61W3mt4oJbeN4opvtD7I2KFmKYO7I3HO3IIzgbmpaM+qaJFZ3N2ftUJjlS7EY4mQhg+3pgkcr6EjIrMXwlPdWN62s6klzqd3LFL9qt7byo4WiO6IJGWY4B5OWJJLcgYAAKsvijVNJS+0/VfsN1qkL2y28tvG8MUv2hyiFkLOV2sDn5jkDqM4GroWpai+p32ka5JaTXtokcwns4miSWOTdj92zOVIKEfeOeDxnAqDwjcXlreya1qUdxqd08Lrc21r5McBhbdFsjZnPDZJyxzk9BgC/omj3djc3d9q99FfahdhFkkgtzBEqJnaqoWcj7xJJY5J7DAABsUUUUAYfifxGfDcNhKbNrpLm7WCUiQL5KbWZpORyFCk44pll4mlvm1f7NpM9wNPlEcKQSpvuxyCV3lFX5gw5bnGc84q7q+jRay1oLlgYYJWeSIrkSq0TxlevHD5z7U3RtBtNC3Raaqw2ghight1BxEkYIAyTzwaAMix8VLp/gNdc1k31yBO0bqLVPPUmcxhPLjZgxUkD5SScZGScVp6P4iXVdQurCbTb3Tbq2RJfKvPLzJGxYK6+W7DGVIwcEdxVWXwn5nhddH+24xeC687yvS487bjP8AwHOff2q3Jokv9v32q2975Mt1YpaIPKDeUys7B+Tzy/THb3oA16KradBc22m28N/d/bbqONVlufKEfmsBy20cLnrgVZoAKKKKAMq21W81PRDeabpcsNwZGRbbVCbY/K20scK5AIGRxyMdM0zwpqtzrfhez1C+WJbiYN5ghUhMhyvAJJ7etOgstct9Ca3/ALZt7nUt7Fby5scoFLEhTEjrnC8Z3DpmqPhnQNZ0Pw/Jpd3rNnc7UYW09vp7QtEzFjuYNK4fBPA46d6ANLxDqx0TRJr1IxLIGSOKNmwGkdwignBwNzDJrCl8T6poUWpW2u/Yr29tbeKeCS0je3jm8xzGqlGZyuHABO45BzgdK2LjRJNR8LrpWrXzXNx5aB71IljZpVIIkCcgHcAcdKoL4SnvrbUD4i1JLu9voUg860tvs6QqhLIURmc7gxLEljk44A4oArXHifVNBXULbXfsV7dw2yXFs9pG8CS738sIyszkYbb82TkN0GK0dH1HVE1ufR9eksp7hbdbqKeziaFWQsVKlGdyCpA53c56Cq3/AAiVxqEN+3iLU0u7q7hW3WW0tvIWBEYspVWZzu3HJJODgcCr2j6Ne2uoz6lrWoRX97LEsCtb2xgjjjUkgBS7ncSxJO7njAFAGzRRRQBieLPEMnhnRkv4rBr7NxHG8SyBCqE/M4JBztUFsd8YqO08Tte6jq9vaabLcpp6I0LQypuuyQcqoYqowVK5LYJz0xWjqumLqiWyO4VYLhJiCud4Gfl6989araL4bsfDzCPSI1trNLaO3itlBxGFZ2zkkk53/pQBl6b4pNr4N1HXdZW+ZbW5n32728QmhVZCvlhYnZXx0BDEn61oaV4lXU9Vk0+bS7/TphD58P2xYx58W7bvUI7Ec4+VwrDIyKhuPCvn+GNT0j7Zt+3zyzeb5WfL3yb8Yzzjp1FXZNGLeJE1ZbnayWTWoj8vPJYNuzntjpigDUoqnpNte2elW8GqX/8AaN3GuJbryVi80567F4H4VcoAKKKKAMK58Trb+G9T1Z9OvIBYNKghuo/KaYocBl6/IxxhvTmo9J1PV4teOk+IJLGaSa2N3by2cTxAKGCtGys7ZILL84Izn7oxzZOhz3uh6hpuu6i1+l48u2RYViMMbH5UGMglf7x5NRaXoWowajLqGsarFfXfkfZrcwWnkJFHnJJUu5ZyQMnIHAwo5yAa941ylnK1hDFNchSYo5pTEjN6FgrED3Cn6VzeneKrpfBeqa1rUMHm6fNdI0druCsInZVAJyc4AGePXA6VsWtpq1v4eS1l1WK61RYyv26a0wjv2YxIy8ewYfWsTRvCOpW+kanpWv6rZahY6g07strp727q0rFm+ZppAQNxwMcccmgCOXxRqnh/7V/wk32G5xp8moQGyjeLATAaJgzPuPzLhxjPPyjHN/SdU1iLXU0vxA9jK91bNdW72cTxbArKGjYM7biN64cEZ5+Ud4o/CNxe/av+Em1KPUfNs3sYhb2vkCOFsbics+6Q4XLcDgYUc1a0jQr+21T+0Na1OPUJ4oDbW3k2vkLHGSCSwLtuclVywIHHCjmgDdooooAgv72HTtPuL26LCG3iaWQqpYhVGTgDr0rM0rxH/aGlS6le6VeaTaRxCZZbySBxJHjduHkyycY9cVq3STyWkq2cyQzlSI5JI96q3YlcjI9sj61zGk+Cfs39stq09lKdYj8q4i0yxNnC2QwMhQySZkO7BfPICjHFAFmx8YLftLGmiapFcfZvtVrbzeQr3sWQN0f73A6rxIUI3DIFM8M+MJdd0V9U1HQr3RrWOJpTNczQSRsFJBx5cjNxjPKj2zVfwh4HTwpdu8UOgLH5XlLJYaILS4YAjHmSiQh+nOFUE88dKtaZ4XurXSrzRb6+tbrRpo5IoYY7Ro5kVySQ0hkYNwxHCLQA+x8Y29y+L3TdQ0wSQPc27Xaxn7TEoBZlEbuRgEHawVuenBxY8P8AiF/EFr9qTR76ytXjWWCe4kt2W4VuQV8qVyOMH5gvX61RsvDGqJdwXWp6xbXU9hbvBp7RWJi8vcAN8mZG8xsKOmwdeORhNG8JXVjqGp397fWa3WoReXI2k2Js1Lc/vWBkk3y88Nnpxg0AXNL8TG/1qTS7zRtR0q5WHz4xeGFlmTdtJUxSPjBxw2DyK3K4nwv8Pn8Na5HqUdxpYkMLW9wbTSjA9ypIIeR/NYtLuBJc5znoDzXbUAFFFFABVHT9U/tC6v4PsN7a/Yp/J8y5h2JP8obfGc/MvzYzxyCO1Xqo6faahbXV/Jf6l9tinn32sXkLH9lj2geXkff5BO48/NjtQBzWheKb+VNVn127t0+wxSStp40me0mjRScNvlkIlXAxuRQue/armka1rH9qWEOt/YWi1a3ae2FrG6NblQrGNizMJOG++An3T8vNSxeG7u71W4vfEWoQXoa2ktIYLW0MCJFIQW3bpHLsdqjOQOPu80ukeG72z1C2uNT1Vb6OwgNvYolt5RRDgFpDube+FAyAg6/LzQB0NFFFABRRRQBUP/HxB/vn/wBBNW6qH/j4g/3z/wCgmrdAjn/G9xq1n4S1C80S/hspbW2llZ3tvNY7UJGzLBVOcHLK49qXW9futG8O2t7BZx3cspRXeeYwwwgrlpJZFRyiDHXaRkjOByLPiTQW8R6TJpx1W906GZWSY2YhLSowIKnzI3wOeowfeoV8O3qaPFYx+KNXSWJsi8Edr5pXGNhHkbMf8Az70DMrXPFWuWvg2x1nRrPRLyS4mhRyupvJBtkkVAY5Fi+cHd1wuOuGxg9Pp0l/LYo2r21ta3RJ3RWtw06AZ4w7IhPH+yPxrLXwhZL4Xk0QXFztkkM7XWU80zF/M83G3Zu3/Njbt/2ccVp6bZz2NksF1qNzqUgJJuLpYlds9iI0ReP92gDP8QarfWt1p2maOIFvtRkdUnuULxwKi7mYoGUt2AAYdc54rOtfFl5bs1lqsEE97DqsWnSy2+Yo38xA6yBSWI4IG0see9bOtaHDrUcBa4ns7q1k822u7Yr5kLYKkjcrKcgkEMpHPTpWJb+DLlrO6s9Q1J2kN6t9BqtuFW6aUcAyIyNHkAAcLtI6IuOQDe0zVP7RuNRi8ny/sV0bfO7O/CK27px97GOelXLl5YrWWS3h8+VULJFuC72A4XJ6ZPGaxY/CkMOi6jp8Op6nE2oSmaW8S4xOrkKCVfHy/d6YwM4GBgDYmt/OsZLbzpY98Zj81Gw65GNwPY98+tAGRqk+uXPgtprK0mstYkhRjbW8sMkkTEjeqtJ+7ZgNwBb5c07wpdtdaMfOvNQuriKVo5xqccKTwuOqMIVVOMjBXIIIIJ61bTS5YdAj0yDVL5JI4liW/ZkkuDj+Il1ZWY9yVNUovCsMPh+70yLUtRSW9cyXGopMEunkOMvuVQqnAAwqgADAAoAm8TvqUPh+7n0i8htJoYZJGeS380kBCcL8wAbOOSGHsazr3WL4eF9C8m48q91ZreA3IjUmMum53Cn5c4BxkEZIyCOK1db0aTWdIbT01W909XUpJLaiJnkUjBU+YjjnPUAH3qnb+FFj8OppN1q+oXohZGtrqbyVmtymNhUxxqpxj+JTnocjigDGk1nVrF59BfUXnu/7QgtItSkgjEgjlTeWZQoQuArAYXH3cqec7fh26vVvdU0rUbx7+TT5UCXUkao8iOgYb9gC7gcj5QBjHFInhK1GlzW017ez3U863L6hI6CfzlxscbVCDaFAChduByDk5u6No0ejwzD7TcXtxcSebcXV0VMkzYABIVVUYAAAVQOOnWgDRooooAzPEJ1FNFuJdJu4bSaJGdpJbcy/KFJwo3ABumCdw9jWY3iG9svAGn6v9lOoXc0FuXGSiBnC5kcojFEGSWYKcDnGBWtrWlyaxpr2cWp3emiTh5bRYi7KQQV/eI4wc+mfes6y8LXVh4fj0q38T6wPJKiG6KWvmxIq7RGB5Gwrj+8pPvQBm6r4s1qL4fN4g0e00K9mGWJh1V5rbZnG5JFhBc57YUDnnjnp9Kl1KayD6zaWtpc5P7u0umnTHY7mjQ59tv41nQeE7KPw/faVPPc3Q1Bne6uZSglldsZf5VCA8DooHHTrWhpVhcadZ+Tdapd6o+7Inu1iVwPT90iLj8M+9AFLxJq13p0dja6YkRvtRuRbQPOpaOI7WZnZQQWAVT8oIycDI61kr4r1HShe2mtxWt5e2d3aw+daK0EcqXDhVbYxcqVycjcc4zkZwN/WtFg1uzSGaSW3lhkE1vcwECSCQdHXcCM8kYIIIJBBFYMPgu6kj1O01XUnukvJYriPU1CpeLJGQUDLtMR27QQQqryQU6sQDfsNU+26nqdn5Oz7BKke/dnfujV84xx97HfpV9yQjFV3MBwucZPpWFa+FIrTT9UgXVdUefVOZ71pwJlfywm9CqgIcKDhQAD0A6VsQ2/k2Mdt50smyMR+a7ZdsDG4nue+fWgChE2par4bRr0S+H76VMyCGSKd7Y55wzKUPA6lSOelUvB9zqFzZXhvb2XUrRLkrY388aJJcxbQdxEaqpG4sFYKAVAPPUy3Hhdbnwf/AMI/Jq+plCgRr15UkuHG7J3M6lWz0OVwRxU0WhzroNzptzrup3LToyC8PkxTwgjHyGKNFBHUHaTQAniy/udM8K313YNtuI48oQAWJJAwgPBc5woPBbArk9L8VX7eGb2SLULy4mOowWMDaraJDd25lKKTLEqoBjcSuVGRgnINdjqGhW+p6Cul3U9wVVY9twH/AHquhBWTcRgsCoPIIJ6jHFU4fCNqLG8hv7281G4vShlvbgxrLlDmMjy0RF2nkYXr1zQBi3Wt6roTX+kS6jJqFwJLNLa+uYIxIguJDGd4jVUYqVJGFHYEHBJ2dBuL621vUdE1HUJtT+yxRXEV1PEiSFZC4Kt5aqhwUOCFHB5zjJdD4RtRp95Bf3t7qNxeMjTXtw6LNlDmPb5aqi7TyMKOeTnJza0bQ10g3Esl9dajeXJBmu7wp5jheFXCKqKACeFUdSTkkmgDUooooAqaml89i40u5gtZ8g+ZPAZlC9xtDrzjoc4Hoelc9pXiDUY/hdYa1LBLq2oPaRuyqu0yu2BubYp2jnJKqcAHCnpXQ6nZTahYPb22o3OmuxH+kWqxM4HoBIjrz9Kx9K8JTaP4d/si08S6uY4wq287ra+ZbqvZcQhSD33q1AFG68W6s3w9v9f0q30G8uLZJHUW2rPcW+1AST5iwglgR9zA/wB4VvaDdateaas2uWVlZzOAUWzu3uFZSAcktGhBznjB+tVrHwpaWumalaXdzc6i+qFje3FzsWSbKBORGqqMKAOFHTnJ5q3oulT6RZm3uNYvdU5Gx7xIVaMAY2jyo0GPqCfegCHxJq0+k6dCbGJJbu7uY7W3Eh+RXc43NjkgDJwMZxjIzmsWXxVqehLqltrqWl/dWEEFyktnG1skqSyFMFGaQqVKn+I546V0esaRba3pzWl3vUb1kjkjbDxSKcq6n1BAPOR6gjiufj8GXMkmqW2rak+pW+pQohv5Asd5GUOVXCIIioJLAhVweofOaAN621T7Rr19pvk7fskUUnmbs79+7jGOMbPXvWhWJYeGUsWv5W1TUbq61CFYprqaRQ42hgGUKqqh+b+EAZGcZznS06z/ALP023s/tFxdeRGsfn3L75ZMDG5m7k9zQBTtp9a1DRC720Oi6gZGAjn/ANLVVDYB+RkzuUZ68Z5zioPBl/d6n4QsbvUZ/tFzIHEkpRV3YdhnCgAcDtU0GhzWuhNp1vreqLIXZxfSPHNOuWLYBkRlwM4AKnAqtoPhVtB0abTE13VLy3dGSM3HkK8G7JJRo4kOctnJzjjFAFjxVrLeHvCmoaqiB3tYSyKyswLdBkLyRkjgc1y8HiTUNK0jVhe3Wqy6tCsTRRatBbKgEj7FkjFuBmPcT8rsXGOcZ5606FbTeGhol9LcX1ubcQSS3EpMsoxjczjB3d8jHNUrbwjarbXsep317q0l7EIJJ7t0VxGuSqL5aoBgknON2epOBQBjX+s6t4XOo2U+ovqsgtYp7W4uoI1ZHeXyireWqKVBKkcA9ck1raPLqFh4kuNG1DU5tUQ2q3cVxPFGki5cqyHy1VSOARxnrkmpLfwlai3vk1O9vdVlvohDLcXboHEYztRfLVFXBJOQM5OSTxVjR9BXSrie6n1C81K8nVUa5vCm4IudqARqqgAknpk55JoA1qKKKAIL1LuSzddOnht7k42STwmVF55yoZSeP9oVzmi69fr8PH1e8jm1W8gE5McEXzzlJGUAKg64A6An2Jror+2lvLKSC3vZ7GRx8txbrGXT6CRWX81NYej+EJtF0e40+38TaxLHJkxSSra77dixYsm2EAkk8hww9qAILXxPq2oeE9Q1KwttBubq2LBI7XWHmh+UZYO4gBVx/c2/UjPF/wAJ6nrOr6Fb32u2NjaPPDHLH9ju3mDhlBJIaNNnXplvrT9K8Nw6d9te6vbrU7m/AW4ubsRq7qAQq4iRFwAT/DnnknipNB0R9CtPsv8Aa19fwKqpBHdrCPIRRgKpjjUkYx94seOtAB4k1h9D0OS7ggE87SRwwxs21WkkcIuT2GWGfasKfxNrHh3+0ofEP2HUZbbTm1CCSyhe1V1U4aNlZ5CDnB3Z5z0GOem1XS7XWtMmsL9C8EwGdrbWUg5DAjoQQCD6iudj8G3bX19Hq2pvrNlqFkbSS4ugsd1CvPyqY1WNlO4n7ikEcl+AADcttX+0a6+neRt22cd15m/Od7MNuMdtvXPetKsLSPC6aVeTXkmqajqF3PbJbPNdSJ9xSxXCoiqpG4jgDOBnJ5rR0nT/AOytKt7H7XdXvkrt+0XkvmSyc9WbAyaAMrUde1LT/Ceq6neaWtncWjSi3iaYSiVQcJISuMBsg7eoqPSZdT03xP8A2TqWqzarHdWjXcck8EaNCysqsgMaqCh3AjILDByx7aMGgwJpd7p95c3eoQXskryC8mLlVk6opGMKOgHaotK8NpptzPcz6nf6jdSxiFZ7t03QxDkIgRFGM85ILHjJOBgA2GBZSAxUkYBHUVwFt4jvtItvEc7areavDp1mJol1W0S2uBJ84PyLHETEdq4Yryd2GPbs9M006Zo0OnrfXl0YkKC6upBJM3+0zEYJ59KzbLwjBFJeS6tqN9rc95b/AGWSW+Ma4h5zGqxIigEknOM+/AoAxb7W9V8Jfa/t+oyawH0ua/j8+CNDFJGVBQeWqjyzvGA2WGD8xzxpaVNqem+JYdM1LVZdUS9s3uleaCNGgdGQMq+WqjYd4wGywxyxzxZsvCNrB9p/tG9vdWM9ubUG9dP3UB6xrsVePVjljgZY4FS6R4bTSrx7ubUb7Urjy/JikvGQ+RFnOxQiqMZAyzZY4GWOBQBs0UUUAVNVu5rDSbq7tbU3csETSLAH2mTAztBweT2rPk8U2awi5jHmWaaedQmmDcxx4ynHcthvT7prbrI03wzp+m2F5ZIJJ4LwtvSZgQqEYEa4AwgBIA9+tAHN6D8T7XWjeqi6ZLJBYPfxJp+qrdnYv8Eu1B5T8jj5h1wTitrRtd1jULM399oAtLOSzW6t/KvBNM5K5MbIFAVvTDMD6jpTrLwvJa2dxZTa/ql7ZTW7W6W1wIMQIRgbWWIOSBxl2b3yea1YbBbfR49Pt5pY1jgECSqRvUBcBumM9+mPagDF8LeJb3xDFdNNbaXC8Cr/AKPb6k800TkZ2To0KGFunHzHr6cxeHNRulfxFca4ht5rW5DTRJfNdQxKIUb90WjjKrg5Ix1yc81f0jw5/ZupS6jearfateyRCAT3iwqUjB3bQIo0HXnJBPvVy30i2t59RkG+T+0ZBJMjkFfuKmBx0wo9e9AGTp/iPU5dKl1rV9KtdP0hbU3Ubi+aW42Y3DfH5QVTt54kbHSm6f4hvry+ttP17TItP/tOB5LNra+aViqgFg/yIY3wwPylhwfm4GZtM8JDTYXs21nUr3S2haBNNuzC8UaHjAcRiU4HA3OePXin6T4Vj0y9iuZ9Tv8AUntozDaC8MWLZDjKrsRSeFUZfc3HXk5AMnw7NF4fl8Wie7vprDTbhZF+13kt08afZ0dgGlZmxkk4z3qdPGF/bAf23pEFobizlu7JYL0zGRY1DFJMxrsbBHTeOvPAztRaDZxzaq7h5l1Zw1zHIRt/1YjwMAEAqvvWbbeC4Ildb3VdR1EC2ktbf7SYv9FicYYJsjXJwANz7jx15OQCx4e1jV9YSO5v9Fj0+yuLaOeBxeiWTLDJR0CgKRnqGYEeh4q9p93qFzdX8d/pv2KKCfZay+esn2qPaD5mB9zkkbTz8ue9T2VqlhYW9pCWaO3iWJSx5IUYGffioNP0v+z7q/n+3Xt19tn87y7mbekHyhdkYx8q/LnHPJJ70AcnpOsanpf9rSeJLrVze29tNdR2d5HaCCSNGPzQtCu4j7ow7bhkZHerukXmr2mr6Umpao+oR6xbPM0bwIgtpFVWxGUUHZhiMOWbgfNWlZ+GIodTnv8AUdQvNWuJImgQ3nlBYImOWRFjRBg4GSQW4HNJpPhaDSr1Lk399emCIwWkd06FbWI4yibVBP3V+ZyzcdetAG5RRRQAUUUUAVD/AMfEH++f/QTVuqh/4+IP98/+gmrdAjj/ABl4jvPDus6ZdCcppUMM0+owrB5jPGDGoIwCwKl93HUA1Ql8W6xo/hTz9QPn6lc6l9ljIs3nFuHG8AxQjfJsGRgYJxyR1ruHs4HvorxkzcRRtGj5PCsVLDHTqq/lVW80HTb+yntLq3LRTy+c+2RkYScYdXBDIwwMFSCO1AzmbPxbrN3pFtD5CQand6g1lBdXemz20TqEMnnfZ5GEmMAjaWGSPvYqTRYdYlsPEcUN3YQ6h/aTB5pLR5YWHlR5xGJFYZHbecZ6mtk+E9LfSP7NlN/NCJRMsk2p3Mk0b+qzNIZF/Bh1Pqat6Xomn6NbzQabb+THPIZZRvZi7kAFiSScnHJ7nJ6k0Ac7pmorpXwp0u5tprTTD9khWENbS3KKxAwixB/MkJ6BQxY+9Z9l421y68PRywxWc1+daGm757SezR0PO8xOTJGwB6HOceh462fw5pdxocOkPA62duE8kRTyRvFt+6VkVg6keoOagtfCGjWePJgnJE8dz+9vJpMyoMCQ7nOWx1J5bqc0AM8O6lqc+o6ppmty2lxc2Dx4ntLdoEdXTcPkZ3IIwf4ufatq58/7LL9k8v7RsPlebnZuxxuxzjPXFRQafa219dXkMW24u9nnPuJ37RheM4GB6VLc28V3ay21wu+KZDG65IypGCMj2oAxtUstb1HwW1o0lvHrEkKCRra5lt4i4ILhZFBkQHBAYDIzTfB8sf8AZM1oIriC5s7hobmK41CW9KSYDfLNISzKQwIzjg9B0q+mh2MOgR6LbrNb2MUSwxrBcyROiDgASKwcdOuc1XPhPRT4bm0FrMtp9xnzo2mcvKSclmkLb2YnqxOT60AVPHlxcweFZF09pTdTTRRRQQzGGS5JcZiWQEGMsMjfkbeuRiua02+u/wCwF00y6nZPPra2dxb3N481zYxMN2zzyWZiwAIYMceZhW4Fd3qWj2Orab9gv4S8GVK7JGR0KnKsrqQysCOGBBHrVWLwvpEWky6aLeSSCZg8jy3EkkzuMYcysxkLDAw27IwMEYFAHLTT3djcXPh6C9vmszqltarcyXLPNFFJHvZPNJL5yMBidw3jB4Fb/hnzLTUtY0n7Rc3NrYzR/Z3uZmmdQ8YYoXYlmwecsScMBmrcXhfSIdHk0xbVmt5X8yRpJ5Hld+MOZWYuXGBht24YGDwKs6Vo9lotobfT4nVWcu7yyvLJIx/ieRyWc8AZYk4AHagC7RRRQByfjfW9Q0OfSbuzuTFZwyyT6hEIRIZrdE+YDgkEA7vl5O3Hesw+MtS0zwtqWqXoa5lk1CKKziFsz+RHMI/LBSNd77Q+SB8xPGeldzLZwTXUFzIm6a33eU2T8u4YPHfj1qvdaLp97bXcF1bCSO8YPMCx+ZgAAwOcqRtXBGCCARzzQBydl4w1mbRZllgUX738djaXdzpVzZQy+YARJ5Ep8zC/MCA2GK8MM8WdAi1tr7xPE13p6amLqELci1doW/cR/MYvMDDuMeYfXPatZfCWlDSZtNkN/cW8zrITc6nczSIykEMkjyF0IIBG0jB5q1pGgaboSzjS7dojcuJJ3eV5HlcKF3MzklmwoyScnGTk0AYGg3o0z4Yx3ImstOeMSDzTDJJCr+awyIzIXbJ6IHyScA1lWnjvWpfD+pzLFa3N9Zapb2UbTWFxYJKspj5aKUtIhHmEZ5HAOO1dnL4e0yfQzpD25+xE7giyurK27fuVwdysG5BBBB6VTg8FaHb+ZtguXMrxSSGa+nlMjxMGR23OcsCB8x5IABJAAoAZoep6s3iHUdH1yWyuJLeGG4ims7d4V2yFxtKtI+SCn3gRnPQV0D7tjeXjdj5d3TNV49OtYtUm1FIsXU8SRSSbj8yKSVGM44LH86sOodGRxlWGCPagDLig1C58LmHxAivfPCRcLpM8kIZueInLKynpzuHPcVl+BmdINTtZJb9TBd/LZajcNcT2isikI0rM2/JJYEO4GcA8YGtbeH9OsvDqaHZRzW1hHH5aJBcyRui5zxIGDg+4bNQ2/hLRbbRb3SktXe11Dd9rM1xJLLcbhtJeVmLscAAEtkAADAAoAj8XXdxbaTBHayPCbu9gtXmjOGjR5ArEHsccA9s5HNc5eXN5oX9qaNYXl89sLixSKe4uWnlt1uJNkgEjlnOAMgsSRu4OAAO0l0qym0gaZLbh7NY1jEZJ4VcbcHqCMDBzkEZzmqtp4X0iz0q406O1aWC6YtcG5nknkmb1aR2LsRgYJORgYxgUAcpf3F5oE2paLp95fPamWxWOa4uXnlthPMY5AJJCzngZG4nBbgjgVu+Ho30zxHqmixXF3cWUEMFxCbu5e4eMuXDL5jkuR8gPzE4yccYFXbTwvpFnplzYJbPLDdHNw1zPJPJKexaSRmckYGCTxgYxip9I0Ow0OCSPT45cyvvllnuJJ5ZDjALSSMztgcDJOBwKANCiiigDmPG+qanpVrps2kTeW32zdOnlh/OhSN5HQZ6EhOCOc1kReNry38Pa34gk3XdqfJm0638hlKxSnamQq7znhyMFucD0rt57OC5mt5Z03PbSGSI5I2ttK5468MRz61Fc6TY3iXaXVskyXiCOdXyRIoBAGPx7UAcfY+NNWGkag97bGWeKW3htbqTSbnTopXmYIAYpiX+QnJIOCCOhq5o8WtDxL4giuLywOpfZLUR3Mdo4hz+9wTEZN3tjzOcZyM4GtB4S0qDTbmwb7fc210AJFvNSubgjHQq0kjFCDzlSDkA9qn0nw9puiSTS6dDIstwEE00s8k0ku3IUs7sSxAOMk5xj0FAGJ4ZuP7N8EX9xcS2NlJBd3hluBHIIPMEz5kKNIzAE87d/fAIrHtvHmtf2F4hmK213d6Z5DW7y6Xc6csnmEDDRTMzjBz8wODnpxz2zaFpr6Vc6a9sDaXTu8sZdvmZ2LMc5yDuORgjHbFUIvBGhxRzoYbuYXEaxzG41C4maUK25dxdyWIPQnkDgHHFADNJ1LWU8UTaRrkljPutBdwtZwPF5Y3lSjbnbfjj5gFzz8oroqrf2fa/2p/aPlf6X5PkeZuP3N27GM4698ZqzQBzWpeIrrwv4Rk1HxVNpsV35piQxymO3LM5EQLyfd4xuJ6YOKp/DbWIdV0e/VPEEOvTQahMHuI7hZeC2VxtJCr12j0FdJpOj2OhaeLHSoPItw7yBN7N8zMWY5Yk8kk0q6TZJaXdqsOIbxpHnXe3zl/vc5yM+1AE9zEs9rLE/mFXQqRFIUfkdmBBB9wRj1rkPCq3DR67p8cmpWUoCmCx1S8a5ntdyEBzLvkyGYEgK7AY7HKjp7fSLOz0OPSLRJILKKEQRpFM6siAYADg7gcd8596g0zw5puj29xFYpODdf66ea7lmmk4wMyuxfgdPm47YoA4y2u73w74X1exkF1b61bxwGWV9Xn1FNsjbBMjT8rjDErtABHcc10OjQNo/i250i3ur25s2skugLy6e4aKQuynDyEthgAcZwNpxitCw8L6Rp1ndWsVs80d4MXLXk8lzJMMYw7yszMAOACcDtUmkaBp+hiU6fHLvmI8yW4uJJ5GA6AvIzNtGThc4GTgUAaVFFFAHOeOLvVrPQ4G8P3AgvWu4lBMauJFzuaPB6bgNueozkViWvjmc6Zr3iQ+Zc6VFYpeWFr5JR9nzqc/LuyzJnkHAxxXcXNnBd+V9oTf5Molj5Iww6HimTadZ3Elw1xbpL9phEEyuNyugz8pU8Y+ZvzoA4nT/ABzqqadq1xqVo1wtrbxzQTnSLvTo2d22+URPktg7TuXseg73dJj1xfGuox6pd6fLe/2TD5dxb2rpGCZJesTSMcDj+Pn/AGa17TwjpNnaXVqovZ7a7i8qWC71G4uU2eirI7BOv8OO3pUukeGNK0O5kudPgl+0zRrFLcXFzLPLIiklQzyMzHG44yeBx04oAyvC0kljpOuy6hLYRXEN/O1xdRRvFCzBVJkKvI5UeoDY47Vh2nj7VvsfiPzXtr2TTNNW9tpzpFzp6OTvG0xzMS6/IDvVsHNd1/Y9gbS9tmtlaC+Z3uY2JYSFhhuvqB2rKi8CaDGsqmG8l863a1lM+pXMrSRN/CxeQlgOcZ+7k4xk0AQ6Zq+up4ntdP1xtPkjv7J7qJbOF1NuUZAUZ2c+YDv+8FTp0546iqh0yzOoW98Yf9JtoWgifcflRipIxnB+6vJ9Kt0AZcEGsXWm3cOp3cNncPM4t7jTQC0cWfkJEqsu/HXgj0rP8CSzy+HJPtV1PdPHf3UYlnkLuQs7gZJ9h06DtWhB4c0y0027sLOKa2gvJnnm8i5ljcu5yzB1YMpJ/uke1Q6J4S0rw8s66YL4JPu8xLjUri4UliSxCySMASSSSME5oA2WUMpU5wRg4OD+decpe3XhyHxO1l/a1s9vp32i2sdVvHvH3KXBnV2eQbT8vy7+2Sq557rTNHsdH0aHStNhNvZwoY441kYlQfRid3frnNVdM8LaTpJuWt4Zp5LpBHNLfXUt3I6f3N8zM23k/LnHJ45oA5XVLi88H/bP7KvL68EujT3pF5cvc7JoygDrvJKg7z8g+T5RgDmtbSbeTRfFlvYW97fXdtfWElzKLu6efbKjINylySoYOflXC8DAHNamm+F9I0n7R9ktnc3KeXIbmeS4Pl9owZGbagycIMKM9KfpHhvTNDlll0+GUSSgK0k9zJOyqOiKZGYqg7IuFHYUAalFFFAFTVZL2LSLqTSkjkvEiZoElBKuwGQpwR16Vm2GuS628B0rykiexW4eSWNm2PJ/q1wCM4wxYZz06ZzW7VPTdIsdIWddPgEIuJmnl+Ytudup5Jx9BwO1AHNaDPdaZo3ii4uFs5L+2u5pJZbeGSOOdxCjBijSOV4wCA2OO1WdL1bXo9Dk1zxA2mmyOnrdrb2UUgkibZuZS7MQ4I6HauOmD1rcGk2QhvohD8l+zNcje37wsoU9+OABxipUtIYNOWzhiUwxxCJInJIKgYCknPGOO9AHMaTrHiOTWNPttVk0xotSsZbuP7PbSK1uR5eEYmQiTHmcsNucdBUOiTXml2/i65uxYzajbTGWSe2gkijnYWyMpKNK+OMDhhnHrTPCng660vX11K7srXT0t7ZreCCDVJ78kMVON8yKY0XYAsajaMk8V1f9k2RW/XyeNRObr52/efIE9ePlAHGKAOa0nXfEcl9oy6u2liPWrR5IorWCTNtIsavzIz/vFOTwFQj1PWneG5J9NfxRPqgtZru3uhJcTWUEkSz4t42B2PJJg4wODg46V0S6PYpJYSLBhtOQx2p3t+7UqFI688ADnNSQafa2011LDEA944knJJO9goXOD04UDigDH8PXevXljHq2s3mlpZXNuJ47aC1dWgDDcN0zSkPgdSEX8KyvCvi6/wBW8Uzabc3NvfWxtPtMNzDpFzYjh9uAZWYTKQQQ6HH5itvTvB+jaTJIbGK6SKRGjNo19O9sqsckLAzmNR9FGMnHWk03wfo+k3kN3ZJeCeFWSN5tQuJdqEAbMO5GwYGE+6DyADQBuVR0/wDtb7Vf/wBq/Yvs/n/6D9m37/J2j/WbuN27d93jGKvVR0/RbDSrq/ubC38qXUZ/tF029m8yTaF3YJOOFAwMDigDjdOa+8MTarHqcdzLqjWdxeW0n9sXF5FcIjZx5UmBEw3J8qqRg8N2q7oyT6brOiGPUL68Gr2ckt2tzctKpkVUYSIrEiMZYjamF5HHFb2n+G9M0y8uLu3jnlubgbXmu7qW5YLnOxTIzbVzztXA9qTS/DGk6Ndvc6fbOkrLsUyTySiJM52Rh2IjTp8qYHA44FAGtRRRQAUUUUAVD/x8Qf75/wDQTVuqh/4+IP8AfP8A6Cat0COM8Z3up6f4g0q80sX1yLO3nuJdOtDk3iholK7OjEByR7isu51bXdC8JeUk15d39zq4tZJo2jeWHzAGIj89hGME7VDHaMjg9K7rU73StJh/tPWbmzsYoRs+13UixqgYjje2MZIHGeSBTYo9H1zR3MKWOo6bfqWcoElhuAeCT1Vgce9AzlF1PXbfwm0WttrVlqE179nsGiWxe+uVxuAIG63VuHBJwMLng1SsfEPiG68JWWL6W2v2146e815bwySeUHYYdYj5e7AxlCBkfUV2CeE/DkejvpCaBpa6bI/mPZCyjELNwdxTG0ngc47Umm6d4eMlyml6bYxtb3KrN5VqqbZUQbT0GSqlQCOg4FAFTw1PfxaxrOk6hqU+pixeForm5jiWQiRMlT5aIpwRx8uea6Oo0toIp5Z44Y0lmx5kioAz4GBk98CpKACoL0kWFwVuVtWETYuGAIi4+8QeMDrz6VPTZI0mieKZFkjdSrIwyGB6gjuKAMC70h/EfgFdNl1S11F7m3j3X72yyQ3JBDbjGrAMrY5UMBg9aq+Eb3TdL8O30Tw6RpNvpd3JBcS2Ma21ozDBLgZwmdwBBJwQRk4zW5d6dpI0N7G+s7L+yo4tr280SeQsa9ipG0KMfQYqrpP/AAjGteHfsmh/2Tf6Mo8nybPypbcY52bVyv4UAZ/xC/0jwibWHyXmvLiGGCO4GbeZ2cYSb1ibGG9QcDOcVzOmahJ4e8N3ukw6ZNp902qNb3MeiWMtzb2CsgctCkSEgFMYyo/eMSQK9HvLGzv7CSzv7WC5tJF2yQTxh42X0KngiqunnQ9K8PpJpX9n2WkRIZFe22R26J1LArhQOpzQBzPgiKy1b4VxWMOnC+t0EsItdWgkjSXEjEB/NQkjpltrc56kGrnw/it7XTdSsbe3is2tdQkSWztSDb2zEK2yEgDKAEHovJb5V6VqMfDWqeFXdjpN5oDozux8uS1ZQckn+AjOST61Y0L+xv7Ft/8AhGfsP9l4Pkf2fs8jGeduz5euelAGhRRRQBx/jqbUba80a50qS9Z7SWW6eztG5vFROYivRsgnAP8AFtrIn1vXNE8J6teE3U9/NqcKhGZGa0WcRfKgkYINgfABIXPJ713moXGn2FudR1Wa2tobUEm5uWVFiB4J3N93PSo7OXSNb02Sewey1GxvQRJJCUlinGNpyRkNwMfhigDk7bVNdsfC+o/8JCdatZDcpDp0zpYvfTl8YULHugzvyoLADHJxjNZ9t4j8Rf8ACI6iGvLmHULXW4bGOXUYLd5lR3iyJFgPlscSEfKRxjkGu0t/Cfhyz0u40200DS4LC6OZ7WKyjWKU/wC0gGG6DqKZp+leG1mubTTdK0+JrVoo5o4rNUClQHjH3QDtBBGOntQBT0GbUbXxXqmj3+q3GqRRW0FzFLcxxI6FzIGUeWigr8gIyCeTya6aoltoFunuVhjE8ihHlCDcyjOAT1IGTx7mpaACmyf6psOE+U/Mf4fenUhAZSGAIIwQe9AGLp9uNS8Gpb315ZeJxNAyvO8aLBedeqqGUL2OAenSsbwO2n6La6/btFZ6Sljebrq1tpFFnZ5iRsRthQFwdxyqcknaOp6G9stCsfDk1rqNtp9vosUREsM8aJbJH1O5T8oX68VDokHhm88N/ZvDcWk3GiSb08qwWJrZsk7xhPlPOcigCr4xnEnh22MUoayuby2S4kR/laB5FDcj+EggH2JrLsNDs3m8VeGtFWCx0t4I41igQGK2mkRt4WMYC8bGKjGS2e+a6y9bTrHR5f7RNrbadFEVl88qkKR4wQ2flC4454rP0hPCs3hZo9BXR5NAKuGWyERtSOd4IX5Mdc/jmgDn/D9noVnoviDRNT0fQPsumyL9uGn2Cx21xmNXBaE7sOBgFSWPCnPIA2/CHhuw0DT5pbHS7XTJL+Tz5re1gWJI+MKu1eMhcAnucnvUujr4Wl8MbfD40d9CXccWQiNqMHLfd+Trkn3rQ03VdP1myW80e/tr+1YkLPazLKhI4IDKSOKALdFFFAHK+O21FYNJ/si4uIrgXvmBIHK+fsikfymHdWKgYrDbxBrOl+GvEOttHd/apVguYbO6xmzWQ7Qu1mCqVXBYZA3A5Peu9vpLG1tze6m9vDDaAym4uCqrDgEFtx4Xgnn0JqHTr7R9cs5L3SLqx1G2n/dvPayJKkmONpZcg4z096AOU0/VNdsNC1d/Ej6zaWyiMWV5drYveM7/AClVWDdEfmK7dy9W5yBms2DxH4jg8LeKRLc3sN9ps8KW0uqxWrzR7wh+cW58th8xxjBweeea7Wz8J+HNOsbqz0/QNLtbW8XbcwQWUaJOMYw6gYYYJ61FZaL4Xgu7jT7DR9NhlhgjSaKKyRAIizMi8LgruDEDseaAKmkyanYeMptK1DV59TilsRdqZ4Yk8l/MKlU8tV+XkYDFiMfeNdPUf2aD7V9p8mP7Rs8vzdg37c52564zzipKACiiigDH0aP7b4deK81S18RLI0qPOI0EUi7iPLKrleB8p69DmsLwRDa6Nfa9ZtY2OivA0U81lp7g2dupQ4ZW2p8xCktlE7cH7x6g6dpdrpM1o1nZw6cVczQmJVhKnJcsuMYOSTn3zWd4afwjdaTNaeDm0WbTlYrNDpRiaEFhyGWPjJHr1oAv3jaTqegyyXv2S+0qaHzJDIFlhljxnJzkMuOaxPDXhTTbHRb+XTdLtdHbWEJaG1tliESbSEBRcDcAcn3J9q6IWFkmm/YBaQLZLH5f2fy1EYTGNu3pjHakinstR07zYJbe6spkI3oyvG69DyOCOooA8+sYLHwr4Z8TaK9vp1nJY2KyT32hWQtPMDowUsm5sSDbnJY8EHirPw406XRNU1DTtQ0vStLvmtbeZodDXbZyLhl8wAgESFg2cj7oUZbBNdP4eXwudFki8JjSDpgdlkTTBF5Ib+IEJ8ufWjwvF4Xi06U+Co9ISyaU+Z/ZKxCMyAAHPl8bsY9+lAG1RRRQBzPjyK+n0O2g0q9nsrqS+h8uSCQoSQSwU46qSoBHcEisGPxDrNppfiTxFNbXkc501Ly20u74+zY8xQpTdgE7NzYI69eK766FsIfOvfKEUB83fNjbHj+LJ6Y9aq6Vqmja5HJfaJfWOoof3T3FnMko452llJ6bjx7+9AHJ6JrGu2en6reeJG1aDS0s1nivb5LJplc53CNbYsGXG0ruBOeMtWba+JPENrpHi5LqfU0n07T0urRtWjszPGzK/UW37srlAQCM9c8YrubHwr4e0v7T/ZmhaZZ/a12XH2ezjj85eeHwBuHJ6+tVrTQvCtpePpdjoumW8qWp3QRWKIBDIxyOFxtZlOV/MUAZ+mT6vY+L7Ky1HWZdSi1DT5Lh45IIo0gkRox+72KGCneeHZzwOfXrqi+y25uI7gwRedEhjjk2DcinGVB6gHA49hUtABRRRQBiadb/ANpaTf215rn9qpJcyoZrOT7O0C7uId8TBgydCchvWqPw+jjtvC00afJHHqF4Bk5wBcP1J/nW4+i6XJp9xYvptm1ndMzz25gUxzMxyxZcYYk8nPWqOgaF4WsElufC+laPbLNmKWXTreJA+0kFSUHOCCMHoaAL5Nlrukn7PdefZ3SELPZ3LLuHqkkZBH1U1y3hOwl/4QfWbDSZfsszX2oRwS7iSjmZwGJ65zznr3rqTpGmf2QdLOn2n9nFDGbMwL5JU9V2Y249sVi+GbHwL5t5/wAIda+HvMUeTd/2VHBkD+4/l/Q8GgDltK0+6i8SXemaBpA8Myz6NL9qQSRkvcbgsU58pmGSfMw7EO2DkcCrfhS3On+PFtNP0EaDE2ms+oWweJjNKHUJMRGzDJ/eYdiHbByOBXT+G4PCS2V3beEItFFqspS6i0tYtgkxghxHxuxxg84pfDCeFYbW5h8GLo8cEcxW5TSREFWXGCHEfAbAHXmgDcooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAqH/j4g/3z/wCgmrdVD/x8Qf75/wDQTVugRna/qUOk6LPdT6rYaTgBUu9Rx5KMTxuBdM/TcK4Kxna70PQY7C6uLWG91+ZZbqxlMa3qMszmRDgYjc8jGcdmJAevSJL21hu4bWa5hjuJwxhhaQB5NvJ2jqcd8dKLa8tr2Nns7iK4RHaNmicMFZThlOOhB4I7UDOS8RxQ+HdC06yn1S+g0iS+2319c6hIJIYSHYA3Bbeq79i7t2QOM81P4Ca3aHWjZTzXFv8A2mwilmZmZ18qPB3Nyw9GOcjByc5PWUUAcj46+yedo/8Ab/l/8I99of8AtHz8eR/qz5fnZ48vd68btua5+G/g0fTGvdMvI7HwwmvwG2nilEdstsUAfawIUQ+Zn/Z9K9OqnZaRY6ddXVxY26273b+ZOIyQrv8A3tv3Qx7sBk8ZzgUAc9pHiiyg03xFrOoX0h0y1v22zOrsEj8uP7owTtycjAwc5HBzXR38kJ0e5lmnkgg8hmaaIkPGu05ZeM5A5HFWqKAOC8SGO4+GukSabqM11pvn2ck1/eK0rtbBgTLICBnsxLDA5LDAIq5oHieK00HVtS1XXP7U0axm/cawY1YzxlVJ/wBSoV9rMV3IoHGOoJrptT1ODSbM3V1HdSRhgu21tJbl+f8AYiVmx74qLRtcsdftZLjTTcbIpTDItxay27q4wSCkiq3cdqAMzxdLqM2l21vpel3mpW13JtvPsUsKSLDjJA82RB83Ckg5AJ74rltJkP8AwrHw5NPp8mn6fY30TXMUwjKrAjth/kZgEVtp5IwFJPAr0LUtStNJsXvL+UxwpgfKjOzEnAVVUFmYngKASTwBVOLxRpE2iyaotyy20b+W4kgkSVXzjyzEyhw5JAC7dxyMDkUAcXPcW15Ne61YyRS+HjrVrcS3EY3QyKkYDyhhwyBwhLDgbCc8Guj8J3Ftf6pruo6VJHNpl1cxtBPDzHM4iUO6sOGGQBkcZU1oxeKNIm0eTU1uWW3ify5FkgkSVH4whiZQ4c5GF27jkYHIqzpWsWWtWhuNPkd1VyjpLE8UkbD+F43AZDyDhgDgg96ALtFFFAFPV76HTdJuLq4v7TTkjT/j6vSBDEegLZZeM443D6155b3kt34bL6fqDo114jhWTVNNbZFehmXc8QOQEP3MZb7p+ZjzXpE99aWs9vDdXUMMt05jgjkkCtKwBJVQfvHAJwOwpYLu2umlW1uIpjBIYpRG4by3HVWx0PI4NAHKeIbRPDPhQQR6lqMeny30YvLu51CR5LW3ZgHIndi6r/tbsruJBGMhPAT2L3/iE6Tez31l9rh8meaVpt6/Z48FZWyZF7hiWznqa7KigDlPH3l/2fp39pY/sT7av9q78eX5G1v9Znjy9+zdnjHXjNcw11Z6Vo+rXnhW4hs/DUeoWLwzWUgS1QeYv2goV+UR4+8R8ud+e9epVSttHsLLUrq/tLZYLi8wbhoyVEpHRmUcFscbsZwAM4AoA57RvFNjLJ4n1Z9QabSbOVHWcb3jEYgRi0eAdynJOVyD2zXTpcw3WnrcwyHyJohIsigg7SMg+o4qeigDntG1HTLbwFBf2mvNNp6W5ZNV1aQkkZPzyFth6+u2sjwhrthFpfiLWbm7t7m2iujNcavZI32a62xJueJRu4UDaQGflT8xOQO3JCqSxAAGST2qppOr2Ou6bHf6TcLc2shYJKoIDbWKnGe2Qee9ADbnVLSLQn1M31vaWpg81bu6+WJFIyGbJXjkcEj8K88t7kap4Z1q6tpINRh/ti2mvNRsUP2a+jUxeY0a/N8qqu0gM/3WyxOQPUCQqksQABkk9qzbXxHpF5oJ1q2vo304bv8ASMEKdrFTjIyeRgY69s5oA4fUri31qXWtV0KaG90ZptPa5ntR5kU/ly5mIZch8JtDEZ+7jtiuh8NXlnq3inWtU0S4gutMnit0FzbENFNMu/eVccNhSikjPTHbFadp4o0i80y5v0uXihtTi4W5gkgkiPYNHIquCcjAI5yMZzU+ka5Ya5BJJp8kuYn2SxT28kEsZxkBo5FV1yORkDI5FAGhRRRQBX1C7hsNOuLq5uoLOKKMs1xcsBHFx95iSOB9R9a8zGpyXXhnXbvTdTjlmn1azVta0k7Ibks8KHyhlgNoG0jdICc5J5UenXN7a2ZiF3cwwGaQRRebIF8xz0Vc9ScdBRDeW1xNPDb3EUstuwWZEcM0RIyAwHQ4IPNAHMa9Zv4Z8J376ff6iUmuI2nmubx5mtomdVlZHckqAu5uuF5Ixiq/gp9NfxNrR0S/m1Cx+z2vlXEty9yGH7w/LK5JkX33NzkZ4wO1ooA5rx5u/wCEdj3+Z9h+1w/2h5f/AD7bv3mf9nGN3+zu7VyMs1jZaV4juvAstvBoEdtbNHLpTqtss4kPmmMx/KPk27iv4969TqnHpFjDq8upw26xXk6BJpIyV80DpvA4YjoCQSBkA4NAGBo/iSzv/EGu3ltqP2rS7a0t5FljYvDjEhZkI4YYA5XOSMdRXRadqFtqum2+oWEvm2tzGssUm0ruUjIOCAR+NWaKAOb0U6TfeCbhbfWbu+06T7Qkt9eynzFG5g+WdRgLyBkYAA61T8Ia7G1rqiprR1zR9ORGh1fbGQ42kum6JQj7MDlV/iwckGutmmjt4HmnkWKKNSzu5wqgckk9hVDSNestcSR9PW82R4+e4sZrdXB6FDIihx7rkUAQXmpeHNS8KpqWrTWD6JcRpMJdQCrCVOCpYSYA5xjPeuI0XU7DW/gzLZ6FfWuoTW6H7Tb2kqzOsfnEspVcn5kDYHevS7q6gsbSW6vJkhghUvJI5wqgdSTWbYeKNI1GyurqG5kgjsxm4F5byWrwjGQzJKqsARyDjB7UAcZrNxbeIX1288LyRX9j/Z0ENzJZjzEmKyktGCuQzCPcCo5G4Dit7Qr/AE/WPGt7qHh+4gu7AWEUE1xbENG8odiF3DgsqnkdRuGcVrWPijSNQtbq4iuWhSzXdcC7gktniXGQxSRVYKQDhsYODg1JpGv6frglGnyS74SPMiuLeSCRQehKSKrbTg4bGDg4NAGlRRRQBHcTx21rLPPNHBFGhZ5ZSAqADkknoBXmEurvd6D4wvtO1aC9uDBDjW9HOyEnkBE+ZwHQck73zuGcDCj0y7vrTT4llv7qG1jeRYleaQIGdjhVBPckgAdzSx3dtLdS2sVxE9xAFMsSuC8Yb7pYdRnBxnrQBzWq6fP4b8J6zeaTe6ncXMsQkJubp7gxH+N4w+dvBLbVG3gYUdKzfBsmkSeNb7/hHtWuNVsf7Mg2zyXj3ak+bLnbM5Ytz1AYhSMYHSu9ooA57xz9q/4RC6+yefjfH9o+z58zyPMXzduOc7N3TmuNkOk29n4huPhq1rFpY0V2kfRSogF0CdpXy/l8wLnJHONue1ep1S/sewGtf2stsqX5i8lp0JUyJ2V8cOB23Zxk4xk0Ac74f8SWms+KbltO1MX1jFpUD+ZDIZIS++QMVYfKx+XBwSRjBro9J1Wy1zSrfUtLm8+0uF3RSbGXcM46MAR07irlFAHL2E3hybw1q5vtU/tLSVvJ1vX1lg0URDfNGfMAHlqeAOR7ms/4Z69od5oN3baVqlhctb3l1I0NrOjmOMzuVbap4UjGD0Pau0nnS2t5J5twjjUu21SxwBngDk/QVn6P4j03XXnjsHuFmt8ebBd2kttKoPRtkqq204OGxg4IzwaAIpNYstY8GXGq6WkmpWk9pI8SRKyNONpG0AgEE4x0zXnGjve6ho+r2un6xaeJJ/7CMNvd6eiqbQD/AJdpApOZDngkgnaflHU+vkhVJPQDJrJ0nxRpmtQzT2Ru0ghQSNPdWE9tGVOfmV5UVWGBnKk8c96AOL1O4t/EJvj4KmhuTDoE1pO1oN2yQlfLhJHRwBJ8nVc9BmtjRL/TNX8Z21x4cnt7i2tdLa3u3t8FY23oY4mI4DKA/wAh5XPIGa3NN8UaRq32j7Jcuht08yQXMElufL7SASKu5Dg4cZU460/SPEmma5LLFp80pkiAZo57aSBmU9HUSKpZD2dcqexoA1KKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAKh/4+IP8AfP8A6Cat1UP/AB8Qf75/9BNWGmjSVI3kVXkzsUsAWx1wO9PcRyXjDRNR1XXdOn0YRRX9nbTyWlzcRs0UUu+LAYjnDLvGByRmszUtL/snwXc6a2ix6jbNqIVxdadJfIq4U+cbdBvm+YdF7nOQATXodVtQ1Kx0mza71S8t7K2QgNNcyrGi5OBlmIHWiMXJ2S1GeaaRpM7+BZdH/s66i1KDVXfTZLfT5bKK1LNvjlQPuEcYUnK5PBKEZO2un0G+k0Xwbc3F7pOpS6hayOb6KG3LzXc2fmkj4AkDcEEcAccbcDfXXNJfT4r9NUsms5s+XcC4QxvgEnDZwcBSfwPpSx61pcunx38WpWb2cxxHcLOpjc89Gzg9D+VX7KovsvtsK6LiNvRWwVyM4YcilrLfVzf6L9v8LPp+rhjhG+27YWAOGxIiPyMdMflRomuR6tommX04jtJtQhEiW5lDHOMlVJALY+lU6NRRcmtnbzv6b9AujUqtqKxPpd0txBJcRGFw8MQJeRdpyq4xyRwKJ9Qs7ZbgzXMS/ZY/NmXeMxpz8xHUDg/kaoJ4gjg0V9V1sQaPakgxG8uVQlT93eThUYn+HJ7c54CjSnJXS/phdEFtN/Z/gaz/ALB0y6tv9HiitLO4jYyQbsKokGSRtzlsk4APNW5nj8M+G2kitby/Fqm4xWsfmzzsTyQM/MxJJP406w1iKfQ7LUNQa3svtSK237SkiBmGdqyD5W+o601vE2hjRTq66xpzaeDtF39rjEJbONvmZ25zx1o9jUva3W3zC6K3iqJZtBW6EtxbTWsqXMDxWMl2ySA8Zhj+ZxyQQMHBPI61yNjpmrtb3HiC9W6uPM1iC+aFbNoXkhjiEZZbc5decsEYs+FHfAruLXXLc+G4NY1aW106GSFZZWe6Roo8/wDTUfKRz1HBp39uWNxoM+raXc2+o20cTyLJbTK6PsByAy5HUYodGona3W3lftfYLo5CaC7vri58QwWV8tmNUtrpbaS2ZJpYo49jP5RAfOTkKRuOwYHIrf8ADPmXepaxq32e5trW+mj+zpcwtC7BIwpcowDLk8YYA4UHFaGh3mpX+nLc6tZWtm8gDxpbXTTgqQDklo0weemD9ak1XVIdIsWuriK5lUdFt4GlYnBP8I4HHVsAdyKTpTU/Z2u/LX8gvpcu0VWs7+G90uDUEzHBNCswMmAVUjPPYcUn9p2R0v8AtJLqGSy8rzhcI4ZGTGdwYcEY9KXJK9reXzGc7410W71m70r+zkjF3atLPazzRlo4J1UGMsRyATwcckEisu40y40fwjrVrJpMWptPdxmdZrN7mKQukfmTGFRulUNuOxeTjGR1HU2utT6x4ah1TQLNZHnGY4L+Vrbjdg7iEcqeDxtP4VZ0XUJNU0a3vJ4Ft5JVO+JJN6qQSCAxAyOOuB9KqVGcE3JbOz9fTcV0ecaDpRTwhrOlS6TPvkv1n01LLSptPjiLopjkjV93k7XDFsklecj5gp6bwxPd6N4b1KXWbC8udYtXeS+eC3Ja/cDh4eAGBUABQflxtPTJ6+oL25ktLN5obSe8dfuwQbd7nPQb2VfzIFZpNuyGPtpvtNrFP5ckXmIH8uVdrpkZww7EdxUlZuja1HrEdwPstxZXFrL5U9tchN8bYDDJRmUgqQchj19citKqnCUJcstw3CmSgGFw6ll2nKr1Ix0pt1d29jayXV7PFbW8S7pJpnCIg9STwBVa01vSr/TX1Cx1OzubKPO+5huFeNcdcsDgY70KE2uZLQLnMnTbm6+HunWHhHSPsNoxCy6dq08ltIsGTujLBZWUk8HIPyk8js/whNquj+Cb2bWtGMMltc3UsdnYO08kq+a7YVWROTnCjuMHjOBqW/iUap9uOgR22ppbLE8ckV2Nk4bOdrAEZG045wT1I61p6bqEOqafFeW24JIDlXGGRgcFWHYgggj1FXOjUpq8lb/gq4rpmR4kg1bWfDsEei20B+0sjXVtf3D2xaEjLRllRypPAPHTcMjrXN6fpuuyfD9or7So7We11c3S2ttM0hliS68xgAyJ2B2jB3AKe+B6LRWIzz6/t7zX5tS1rT7O+S1Eti0cNxbPBLciCYySERyBXHBwNwGSvAPBrd8PSPqfiPVNait7u3sp4YLeEXds9u8hQuWby3AcD5wPmAzg44wa6SigAooooA5jxto0uuRaVbQxkst40iy7CwhcQybHPph9vPrisgabf6P4d106hpcOr3d1DE95Glu8kNxI2fNITBZ0XP3BliqheprvqKAPKPD2lwxaJ4l0y90WaS0u2ins7fTdEn02NiVCgxo5PkuJFySWBGA5AGDXT+EFv9KstUXX7a7udYgO+4u1iLi9QLmPymCqpwPl2DBDZJHzZPYUUAVtOvP7Q023vPs9xa+fGsnkXKbJY8jO1l7EdxVmiigAooooA4e50lb/AOFOpad4Y0u+0szCYRWl0m2Ut5hLcSEj5jkjJxhh2qXwxLLBeard2Sa7JpK26uIdTSczNcDcXESz/OBjaMDCZ+73rs6KAMTUfJ1/wZJJcxX1jHc24m8trcm4gIwwzEASWBA+UA5xiuKTStd8Qx63qsrzXLyWdvbwq2nvp4uDFK0jBYJiXXIO3LtgknAAr1CigDz/AFWC78VPqt9pVlfRQrZQwIl1bNbPcuk3mMgSQK2MfLkjadxwTzW1o07ax4tudXt7W9trNbJLUG8tXt2lkDsxwkgDYUEDOMHccZrpqKACiiigDnfGujjXtItbB4WljkvIy+1N3lgZw/ttODnsQKxrLTNX0ey1u61Kxh1fVLnT45LlIEYQ3UoMgKLkE4C7Rjk47HNd3RQB5P4U023tB4hgvtD36XqFnE6WuneHbjTopWUsrgQuSVkyU+YlSQARwua6XwRa6lpk1/B4khuZ9VVEZb0qZFltwPkjEgUAshyGHVmJfo3HZ0UAU9J1D+1dKt777JdWXnLu+z3kXlyx89GXJwauUUUAFFFFAHO6NLYaXoeq3Om6LqVokV3cTSW0kLGW4kzlnjUklg5+7jg+gqt4Ru4tSmvtYuIb9dTnjRZo7jTbi1WFF3FYo/NRd+MtlhnJOeBgDq6KAKWmagNV0eG+azu7MTIWNvdxeXMnbDLzg+1cLb6bPqGl+IdI8Mw6xDpEmneVbjVRPHi5O4FIhcYkCbdoP8A42/xV6PRQB59qlveeMPtn9lWd9ZiLRp7Im8tntt80hQhF3gFgNh+cfJ8wwTzWtpNxJrXiy3v7eyvrS2sbCS2lN3avBuldkO1Q4BYKEPzLleRgnmurooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAKh/4+IP98/8AoJqr4gs5NQ08Wkem2t+ZHB/0t9scJByH4BbcOq7QDkfeXrVo/wDHxB/vn/0E1FrOsR6NaxSNbz3c08ohgtrfYHmcgnaC7Ko4BPzMBx64q4TcJKS6C3E0PTbnStOW3vNSn1BwB88o4TAAwpOXI4z87u3PLGq/idtWXS0/sOOZ5TKol+zeV56x85MfnER7s4+9xjPBOBSjxFHbaM+o63YXmjqr7BBciOWVyeAFWB5NxJOAoyx9KjbxloaabBfSXckcNxObaNXtZVl84AnyzGV3q3B+UgE8AdRm1WftfaSSb81p9wW0scaLLUdKtNLh1LTLu7mXxA91Gsz22+5DRyOMbSEDg8chRuHBx81W9SsbuHTILrUNNzJfeIortNOZkZoxjAUnJTedm7g4yeveuobxBo13o6auYri5ht5sKq6dNJPDL90jyQhkVhk5+UEA+lMkvV8TaAt54bubRZI5iUk1HT5JPKdCQwMRaN1cHI5II9K9B5k3JScV52v3vprp+fyI5BPD1leodWvr62azbUbnzo7R2VniURqnzFSV3Hbngkcjmsx9Mm034YWX2zZa32j26XKs7jEckYyQWGRgjKnHZjW34U1S41rwjpmpXwiFzdWySyiFSqbiOcAkkD6k0eIG0lf7O/tnT4r3ffRx23mQJJ5Uxztcbvu4weRzXNHFPnvLa6enkrJb9tNSuXQyxo11qXgvUndPL1LWIzO6k42kgbIyfZQqn3ye9bemapb6xpxktSRIo2TQONskL45R1PIPP8j0NTajqVppNi95qEwhgTALYLEknAUAZLMSQAACSTgVlnxroCaSNSnvWtrb7SLU/abeWF0lPRGjdQyk8YyBnIx1FZVK/tE011uvLy+5Kw7WM5vD11P4S8N6fc2aSvZXNtJcxOVYIEByeTg4OOma6ryI445RDGqGQlm2qBuY9z7+9ZEXjHRZdLub/wA64jitZFiljnsp4pg7Y2qIWQSEtkYAU5zxmqV98RNBsdFn1PGpXEVvMIJY4NMuDLE5AO10KApww+9jrjrxSqV51N+7f36glYb/AGZPb+BdKtLrSry8urRYj5VlPEksMijh1LuqHB7EkH0I4qaL+1f+ED1H+3PMNx5E+zzxH53l7Tt8zyv3e/12cdKZq/jO3stH0/U4fMt7S41CO1mbUbSa2ZVYkEhJArZzjHGD2zWvo+vWGuxTPp7TgwPsliubWW3kQ4yMpIqsMg5Bxg1o8VJ7xW9/P0XZC5SroOuadqHheO50i+tNQW2t1V/s9yjKrhAdrMCQp+vSoZNVv9R8Dw3seh3Ml3f2oLWVvNEWhLp3aRkUgZ6j8q6GqGs6tDounG6milnJdYo4Ydu+WRiFVAWIUEkgZYgepFT7WCk5KPW+r/DSw7MoeHGvf+EShtb/AEa4tJ7W2WA291JC3nFUA4KO42k8c4PtVabR9T1PwzpENnFZeHngMcsunSW/2mFNo4i/dvGMK2DwcHaOKvw+IQmlXGoa3pl5ocUBAK3rQuz56bRDJJnJOAOpPAFRDxpoP9lHUZbyS3t1uFtWFzaywyJKxAVGjdQ6k5GMgZyPWn9ZkpucUk279/wd11669mLl0sV/DzTeF/B6HxfqFha+VI+6ZsQRoGc7QS0jDJJ9e4GM1P4Zuk/4Qm3u7dkmj8p5UYSAK43MQd3TB9elT23ijTLvSbjUbc3bxWz7JovsE4uEbjgwFPMzgg428g56VHFrLeItFmn8K3sVvcRSmJm1HT5sxMMFleFmicHBGMkdQeaKldVOZyWsnd9uulvn3BKxc0PUJtV0Gx1C5tDZzXUCSvbl9/lEjO3dgZ+uKNcuNQtdGuJdGsje3oAEUIZVyScZ+ZlBx1wSM4xkVX8Kapc614U0/UL8RC5uIt0vkoVTdkjgEkgcdCTVy91GKwltEmRz9rn8hWUDCttZstk9PlI4zziseeKqc6jpfbp6dx9Ch4dja30mZ5dNvLK4aRpJjfyQmSd8DLkxOyjOMYyMAYAAAq1oOpS6xoNpqFxa/ZJLiPeYfMEm3nj5gACMc596gk8Taam9ommu4ktlufNsoWuQyMxUbVjDMxyD0B4FQ6R4hjl8IRa3q1xAsZVmaSGGVFxvIACOA+7oNpGd3AFVUqKd21q35/d/XYErFnxFAtzo7xvptzqQEiMILWVI5MhgQys7oMggHlh079K582XiO+8JTJqEVxcTRXsc8Nvdm3W5mhR1YpIYiIdxwwGCBjbnByadL8RbG0h1m/uYL17DTkiYJDp0/wBoBZWYh4yoZOg5YKACMnkVY1bxtBb+FhrVkksEK3cEMjanZzWu1HkVWbEgQ8KxO7pn1rSliZUoqKinZ31/4fTzsJxuO02eTTr/AFrW9bsl0i2uvIMYllR5GIUrhghI35IUAFs8YJ6C94VtJrbR5JLmNoXu7qa6ELjDRrI5YKR2OCMj1zU+keItO1yS4jsHuBLbFfNjubSW3cBs7WCyKpKnBwwyDg80uv63H4f0k30trcXf72OJILbZvd3cIoG9lXqR1IpVMRzxata9vuSsv6uNKxpUVhWPiy0ntb+XUra50eTTtv2qG+8vdGGGVOY3dTkdAGJ7YzUF1480a28O3msbdRlhssieBdNnE6Hbu5iZAygjncwC984rmGdJRWRY+JrHUNGm1OGHUUt4Rl1n0y4ilPAPyxsgZ+v8IOTwM0y11xPEWm3f/CN3Yt7uBxG39o6fMphbAPzwuY35B45HWgDaorE8I6reax4dS61PyDdCeaGRreMxo3lysmQpZiM7c4yau6vq0Gi6f9sukkePzY4sRgE5kdUHUjjLDPtQBeoqG8vLfT7KW7vpkgt4VLySOcBQO9Y48baANIudTnvJLS1tHRLhr21lt2hLEBSySKrBTkfMRjqc8GgDeorEtvGGi3UF7MtxNCtioecXVpNAwU52sqyKC4JBAKggngZqu/jvRV0u+vkGoyCwUNcW40y4E6ZzjMRQMM7SckAAckgHNAHR0VyV946tm8DXfiDS4riFbdI3P9p2M1soDFcn94F3AAn5lJHvWxpPiXTNbuprfT5ZzLCodlntZYdyEkB08xV3qcHDLke9AGrRRWfrusRaDolzqdxDNPHbqCYoAu9ySAANxAzkjqRQBoUVg6f4st7lr+PVLK60SbT4lnnj1BovlibOJN8bumPlYfeyMcjpmJvHWijSb7UEGoSJYqGmhGmXAnAIJVhEyBipwfnxt4PPBoA6OisfSPFFhrWjvqVrDqMcCRiRludOnhcgru+VWQF+P7m4Htmm2PiC38RWl7HoFw9ve2+EI1HTp4jExGVLQyeW7KR6EA888UAbVFYXhPU9Q1PTLk6w9tJdW17NbNJawtEjhGwCFZ3I/wC+jWnqOoRabBHLOjssk8cI2AcF2CgnJHGSKALVFZUviTTo5QsUj3a+VNKXs0M+BEwV12pli2WxtAJyCKr6D4iTUNAutWvp4Y7aGecbzBLb+XGjEfvElVWVgBzxjPSgDdorj1+IVi19fuIrxrGzsY7lkGmXAuss7r/qSgfaQvB2gdTnA4ddePLafwHfeIdJhuYhbW6zAanYzW64ODn5woYYPVSR70AddRWTpHifS9bupbawlmM0SCQia1lhDoTgOhdQJEz/ABLkdOea1qACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAKh/4+IP8AfP8A6CapeJ7CbU9J+yxaPpWsxu4Mtnq0hSFgOQc+XJyDg8r+VXT/AMfEH++f/QTVugRwdz4I1K98KrazTiO6h1AX1vaR6nciOEAY8hbkYlVcEkEKNucBcDFUbvSL/Q7fQVt9NtYNQm1wzeVJrFxeLM32eQZeeWPeMgY+62MDg9K9KooGcTL4Z8Q/2DdmG4t11HUNQ+2XltDey28bJtC+SlwieYuAqneFBJBGFzxoeDdAv/D+k3thfCEpJcyTwut5LcuRJ8xDtIoYlSSMkncBnjoL3iDVLqxNhZab5K32pTmCGS4QvHFhGdnZQVLYCn5dy5J6ijw7ql1fxXltqfkG+0+4NtO9uCsch2qwdVJJXKsPlJODkZPWgCtpml6zonw/tdM01rF9WtbVYo2uC5gLjrnADY69qf4p03U9R0+wbSo7SW8s72K6MdzO0Mb7c5G9Ucjr/dNP8X61L4e8L3WpwmJPI2l5pkLpAhYBpGRSCwUEnaCCcdaz/D+r614j8LSXWn6jpMkxuGS21JLORre4jB5cQ+aGHO5f9Zg43dDigA13Q9X8VeFvs2pw2un30N1HcRJZ6jMyPsYEAzKkbpnkZUHHB56VS07wdexWkG+yt7GddWhvpydZudRMyou3PmTIGDYwAvTA60+fxdqNn4D1DV7r7H5tjctA98kL/ZzGrhWuBFv3FV5ygck7Thu9N07xfqN74bt5re5029udQ1A2VhfwQOltMMEmXyi5bC7XG3f823hgG4AGeKNKk0661DxBPqOl2caXlpcwHUbnyIWMalCkjkHZndwQG5xx2qro1td+L/DXiaRZbMnUrtXtpraRntpCkcQ+STGXTchXeFGcEhe1aN54yvNH0e+j1T7G+qWl7FYrJGGjhlaUKUfYSzDhvuAsSVwCcio/+E2ktPB8l/Pf2d9em8SyQf2fNYCKRyAqyQyu0gIzuxwWGMDkGgDVu9P1nWrPTG1G3sbK5tNRjuZI4Lt50MaZ6MYkO7nptx71c07Sp7TxJrGoSNGYr7yPLVSdw2IVOePX61iW3iTV5/B95qFjcadqd5amTzvNs7jTvICpuw0EheTd0OCUyCCCOCem0m6e/wBFsruYKslxbxysFHALKCce3NAFusvxFaT32jSW1tpmnap5hAks9TcpDKncEhH9j909PxrUooA4KTwPqN/4TvLC5eKweS8iurSxtL+d4bYRFSI0lwjorFf4FUJn5Qcc0L3RL7RdEgb+zre2vrjW7Nxv1q51ATEMAN8syBl6YwAQOvtXplZPiHVZ9MtLdLJYjeXtylrAZgSis2fmYDBIABOMjOMZGc0AYUvhzxDNpOr3AuLa11XVLiOSSC2u5EjWJAq+UtwIw6llBzIEBGeAMZq14L8Paj4fj1KK+WIR3k4uUxqE126MUVWRpJVDMBt4YnJz0XFX9A1K+uZ7/TtXNs99p8iq8tqjJHKrqGVgjMxTqRjc3TrzV3V9TTSdOe5ZGlfISGFPvTSMcKg9yfy69qAMrTtL1nRPAEenaW1g+sW9uVga4Lm3MmSRu2gNt57DNTeKNJ1DWvDZtrCaC31BXjkjlfdsVgRu6c9N2Kg0rWdR1HwEmqXtxp2l3xjdpppEaS2gKuQSQXQlQF67l9eOlV9P8QavdeCNQ1OMWl/dQeb9juLK3cw3qqPlkSMMzEE8YDHOMg4IoAf4Q8LXHhu61NZHgNm7pHp6RZzFAMttbIwDvkfGOMbe+aZL4Zvx4Jg02CW3N/a3K3UW52EUjLP5oRmC5APQkA464OOY4vE19F4F1DWHvbTUbm0DFvL06az+zgY3eZBJI0gKgliuVJGMDkGqen+PZD4L1DXJLzTdWhhnWC0vbNGtoLhmKrgqzOVCu2CcnocDtQBcPhvWNTsvEg1h7G3l1m2SGJLV3kWDEbKQzMo38nO4KvHYYyZrvS9e1rw5Daana6dY3MN5bSqLe9knRo45EcksYkIY7SAMEdOfSlB4znsvCeo6jqN9Z393aypCIhp0+m+W7kKokSZ2cAls7sAEdAau6HrV9qOhajJPrenG9tsgySaRPZra/LnMkM0u8jqQdygjp60AaVtpM8PjG/1ZnjMFzZwQIoJ3BkaQkkYxj5x39ai8XaFJ4j0EafFJ5e65gkdvNeI7ElVm2snzK2AcEY57jrTPCGr3us6dcTXs9jexxzlLe/09GSC7j2g71Uu+ACSuQzA7cg9q36AOV1XwLY3HhO80jSzLbyXEiTtcS3U0kssiMGXfMWMh+6Fzuyo6dBVXTPCFz/wj+uWV7Zx2FzqkBgM41q51NmGwqCWnRSuN3QZFdpRQBzL23ii78IXFm8dhpmpKipA1rfySq6jGcuYVMZIBGQrFc5GSMVB4M8OanoGoanJexxLBfmOUD+1Li9kjkVdhTfMoZlwAQ2R1xt4yei1OW/hsWfSoLee4BGFuZmiQDucqrEkDtjnpkdap+FNUuNa8I6ZqV8Ihc3VsksohUqm4jnAJJA+pNAEGjaTqWi+Fbizt3tX1DzbmWAuWMW6SV3TdgA4+YZx74pviPStV1jwglrF9jOph7eZlaR44WeORHYBtrMAdpAOCa2L9LySykXTJ4Le6I/dy3EBmRfqgdCf++hXLJ4k1fSPCuq6xrs+nXqQSiOykt7d7RJeQmW3ySYXefvA/dGcc0AWtU0nWfFXhO/0zW7ez0ueXaYGsb+WcZVgwLN5cTLyAPl5xzkGse28Fag+k3kctjb2d5cXFpI0z67d6kZEhlD4LToCuBuwBkZPOK0dM8Q6nc+HdYuBd22o6lZxs0dtFpFxaMjbCVVopXLuCejDaG7VY0DUtV1nw/cvFq2nT6gsmxWOkz2otjgHbLbySmTdg5wWTII7ckAz/ABfoEklzqeszX9jZW62lqUkvJfLjWSCdpf3jYwqHKjPJ68esHhi4l8W3PiW6aewkt7y2itEuNNmNxbghH3BZSF8wjeMkKoycYyCTch8Uara6Jq8moCyu7jT7xLSO7t43ht5S5QbirM5UIXw3zH7p5HQOg8Tarar4g0++FnqOq6PbLdK1lG0McqurFVKM7lWBQ5G45BB4zigBX0XXtR8Cy6Hf2+nWs0ccMMEkF5JMsioVyzZiUqfl6Dd161sf2VP/AMJn/a+6P7P/AGf9l25O/d5m7OMYxj3rB8H+JtR8V6TqE2n6tpGpKgQWmpW1lLFCJGXJR4mlLErlScOM7tvBBrW8N6lqd1eanY6vJaXUlhKsYvLKBoY5CV3FNjO5DLkZ+Y9R06UAb1Y/i3RpfEHhW90u3dY5LlVUMzsmAGBPzLyDgHkVsUUAczf+BtOm8L6ppNg08EuoxbJLye5luJiR93dI7mQgdhu45xiqOgeEbq2h1ZdRsY7Wa+tBa/ahr13qTuuG4xcKNgG4nCk5yfSu0rN8Q6sdE0Sa9SMSyBkjijZsBpHcIoJwcDcwyaAMq1sfEx8HTaW4sNOvobZYLS4tbt5g21QNzbol2E47B8Zzzjmt4O8NapoWrX9zfRxLFfRR7lOr3F/JG6bhjzJkDMpBz2weAD1rS0XUdUGsXOj69JZ3F1DAlylxZwtCkiMWXHls7kEFeu45yOnSti8W5ezlWwmihuSpEUk0RlRW9SoZSR7Bh9aAMvRNKvNJsdSTdA09xeXFzDySo3tlQ3AP1xUOoadreq+BWtLp7CPXmt1bfFv+zLcqQwIz82zcB74qhD4g1fSNG13VvEd1p17ZaajGKS0tXtPMZAd4O+WQYzhd2RyG445f4b13Utah1CJ9T097+NFMcP8AZNxbCDdnDHzZMzpkcOgVWwcH0AG+EvCFx4b1a6keaB7NoEW3SPO5ZG+adjkY+ZwG+pOanm8MXU/hPVtLM8Uc95czzwuCSq7pC6BuAfQHHvTtH1HXLubWNNup9Pnu7EosV/BavHAXZc7GiMjHK8E4fkMOlO0PU9XuLnWNP1K4sJ57DYFv7a2eKHcy7tjRtIxyvBOH5DDpQBFZaPrd5q2oX2vDT7UXmnrZrBZSvN5ZDSEkuypuBDg/dGORz1quNC1688A3Hh6+g063kjto7a2mhvJJRKFwNzgxLs6dBu69am8Oaxq+t2eppDqej33kkJaatZWrm2kYj5lMfnMW2ng7ZMc44INS6NN4mu4tUW61HSZTG3lWd1DpssaeYM7y0ZnYsoOBwy5Ib0yQC8dJnPjCHVt8fkR2DWxXJ3bi6tnGMYwPWtesDw3ca7cT3/8AbN3p95bxSCKCazspLbcwzvyGlkyAcAEEchvTnfoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAqH/j4g/3z/6Cat1UP/HxB/vn/wBBNW6BBRRRQMy9c0h9UjtpbS4S1vrKbz7WeSLzUVtpUhkypZSrEEBlPuKqQaBqNroF9BbayIdYvpDNJqK2ilVkOBlYiSNoVQACxPqSea36KAMnXtHm1jS4oYLwW11bzR3EMzReYnmIcjemRuU9wCPYjFY8vg/UzoOo29vrNtBqGp3S3F3OlgwgcYVWRYhKGUMqgE+YSck55466igDnbnw/qd94dgs7nUrKO+tZ457ee1sGjgUxkFFaEysSvGCA47Yxiq0fg2dbKeV9RhGry3w1BbqK02QRzhAmRCXJ2lRhhvycn5hxjq6KAOXfwfLcaXN9s1JX1aa8jvvtiW22NJo8BAIixOwBQCpYkgn5gTkI3g6e50+4a+1KN9Wnu4r37ZDa7IkliACARFmOzC4ILknLcjjHU0UAcrL4Y1htH1KKLWLEalqrH7XdPprtFs8vywscQmBXAA5Ltzn1wNbw7p+o6Xo0Nlqt9a3rwIsccltaNbjYqgDKtI+Tx1yPpWpRQAUUUUAFZ2t6T/a9nGkU/wBnubeZbi2nKbxHIvQlcjIPIIyCQTyOtaNFAHPReH9Vi0fVPK1xYtc1H5jqMdmPLhYKFXZCzN8oA6MxySeauat4cstdt7RNVa6aS1bzI5bW8mtXD7SpbdE6nkE8ZxzWrRQBz+i+Gp/DfhU6XouoE3AdnS5v/NulBZs8q0obGDjAcc89zT9I0K+0nTdQ26jBLql/M9y85tCsCSkADEIfO3CjI35Jyd3NbtFAHKnwfdXGkahHf6uJNSv7iO5e5htvLiR4yvlgRFidnyDILknnkcYaPBT3djqf9r38Ml/qMsMzz2dr5ESSQkGNxGzuScqMksc4xxXWUUAcq/g2bULG/OuajFcaletC32q1tfJSLyW3RbY2dzw2Scsc5PSrdhoeq2i6hezanZza1eKiC5FgywRqmdg8rzSx+8xP7zknsOK36KAMTw5oVxpDahc6jfR3t7qNwJ53gt/IiUhQgCJuYjhRklmJOecYA26KKACiiigCnqkOoT6e8ekXVta3LYxLdWzToB3+RXQn/vr86xvD3h/WtF8JHRptbtJZYbfybO7t9PMRhwuAzK0rhyDg/wAIrpaKAM+4sby48PtYtqBF28HlPeCIAlsYZwoIwTycA8VHq2gWuqeHX0cE28OxBE0YH7ooQUIB44Kjj2rUooAwdM0TUrSS+v73UrS51i7iSITx2TRwxqm7YPK8wseWJPz854xVRfC+sDSdYzr8a6zqrKXvYrMpFCqgKFSLzNw+UHkyFsknI4A6migDCsNH1S28NTaZc3OjyP5ZitxDpbx28aYxteEzMXHXo65B/Gsyw8AQ23h3UtPkuLaGbUIxGW02yFrBAq5KLHDubAySSCx3Fm5AIA7CigDlY/C+sCLVruTW7aLWtQtkt1vLTTzFFEE3bW8oysWf5jzvHGMAY50/DmmahpGmiz1G60+dI8CEWNk9sqr3yGlkLEnnORWvRQAUUUUAFUdZ0qLWtJmsZ3aMSYKyIBujdSGVhnjIYA/hV6igDB07Q9Sgkvr3UtVhuNVuoBAlxb2fkxQqu4rtjZ3JO5iTljn2FX4rS/Xw+LObUvN1D7P5bX/kBd0m3HmeWDgc84Bq/RQBlXXh6zu/CsmgSbktJLb7OSh+YDGMjOee/OeazIvDWteXf3Nzr1udWmtPsdreQaf5aWyAkhjGZGLtk5J3AcDAHfqKKAOb0/QtcsvC9zpQ1fT4bgxFLS5s9NeMQEjl2V5n3tk5zuGT1zVjQdJ1bSNFexuL7TZXRcWz22nyQqh9XVp3LknkncpPPc5rcooA53TvDupW8mq317q0Emq6jCsQntbMwwwhAQjCMyMSwLEkl+cAcAVqLpxtdB/s7TZRbMlv5MMuzd5Z24DYzzzz15q9RQBXsLOLT9Pgs7cYjgjCL9AKsUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAf/Z)

### **Scatter plot**

#Scatter plot

ggplot(data = iris, aes(x = Sepal.Length, y = Sepal.Width, col = Species)) +

geom\_point()

![Chart, scatter chart

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMzNQAAkpIAAgAAAAMzNQAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjowNTowNQAyMDIyOjAxOjA0IDIyOjA1OjA1AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MDU6MDUuMzQ2PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAY0CpwMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKa0iKcMyg+5p1Ub3/XD/d/rQBc82PGd64+tJ50f/PRf++hWcP9S3+8P5GmUAannR/89F/76FHnR/8APRf++hWXRQBqedH/AM9F/wC+hR50f/PRf++hWXRQBqedH/z0X/voUvmxjq689Oayqe/3I/8Ad/qaANHzo/8Anov/AH0KPOj/AOei/wDfQrLooA1POj/56L/30KPOj/56L/30Ky6KANTzo/8Anov/AH0KPOj/AOei/wDfQrLooA1TLGOrr+dJ50f/AD0X/voVnS/fH+6v8hTKANTzo/8Anov/AH0KPOj/AOei/wDfQrLooA1POj/56L/30KPOj/56L/30Ky6KANUSxk4DqT9aTzo/+ei/99Cs6H/XJ/vD+dMoA1POj/56L/30KPOj/wCei/8AfQrLooA1POj/AOei/wDfQo86P/nov/fQrLooA1POj/56L/30KXzYz0deOvNZVPT7kn+7/UUAaPnR/wDPRf8AvoUedH/z0X/voVl0UAannR/89F/76FHnR/8APRf++hWXRQBqedH/AM9F/wC+hR50f/PRf++hWXRQBq+bHjO9cfWk86P/AJ6L/wB9Cs4/6lf94/yFMoA1POj/AOei/wDfQo86P/nov/fQrLooA1POj/56L/30KPOj/wCei/8AfQrLooA1POj/AOei/wDfQpfNjHV156c1lU9/uR/7v9TQBo+dH/z0X/voUedH/wA9F/76FZdFAGp50f8Az0X/AL6FHnR/89F/76FZdFAGp50f/PRf++hR50f/AD0X/voVl0UAapljBwXUH60nnR/89F/76FZ03+uf/eP86ZQBqedH/wA9F/76FHnR/wDPRf8AvoVl0UAannR/89F/76FHnR/89F/76FZdFAGqJYz0dfzpPOj/AOei/wDfQrOi++f91v5GmUAannR/89F/76FHnR/89F/76FZdFAGp50f/AD0X/voUedH/AM9F/wC+hWXRQBqedH/z0X/voUvmxno68deayqen3JP93+ooA0fOj/56L/30KPOj/wCei/8AfQrLooA1lZWGVII9jS1Xsv8AUn/e/pVigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiqmqQWVzYm31PyzbyuqFJJNqyEkYQ+oJwNvIOcYOcUAW6o3v8Arh/u/wBax/DEE1ra6xp8CW1jcQ3JMUEQ8y2ti8asoUDYSuTuI+TljjAwTfiS+iUrrNxb3c+cq9rbtAoX0Ks7knOec9xxxyAPH+pb/eH8jTKmBj8lvlbG4fxfX2pmY/7jf99D/CgBlFPzH/cb/vof4UZj/uN/30P8KAGUU/Mf9xv++h/hRmP+43/fQ/woAZT3+5H/ALv9TRmP+43/AH0P8Ke5j2plW+7x83ufagCGin5j/uN/30P8KMx/3G/76H+FADKKfmP+43/fQ/wozH/cb/vof4UAMop+Y/7jf99D/CjMf9xv++h/hQAS/fH+6v8AIUyppDHuGVb7o/i9h7UzMf8Acb/vof4UAMop+Y/7jf8AfQ/wozH/AHG/76H+FADKKfmP+43/AH0P8KMx/wBxv++h/hQAQ/65P94fzplTRGPzkwrZ3D+L/wCtTMx/3G/76H+FADKKfmP+43/fQ/wozH/cb/vof4UAMrN03XrPVLqWC18zdGN2WXAYZxkfp1x1rVzH/cb/AL6H+FVLTS9NsZpJbS08p5PvEP75wOOB7CpfNdW2NqbpckudO/T/AIJYp6fck/3f6ijMf9xv++h/hT0Me18K33efm9x7VRiQ0U/Mf9xv++h/hRmP+43/AH0P8KAGUU/Mf9xv++h/hRmP+43/AH0P8KAGUU/Mf9xv++h/hRmP+43/AH0P8KAA/wCpX/eP8hTKmJj8lflbG4/xfT2pmY/7jf8AfQ/woAZRT8x/3G/76H+FGY/7jf8AfQ/woAZRT8x/3G/76H+FGY/7jf8AfQ/woAZT3+5H/u/1NGY/7jf99D/CnuY9qZVvu8fN7n2oAhop+Y/7jf8AfQ/wozH/AHG/76H+FADKKfmP+43/AH0P8KMx/wBxv++h/hQAyin5j/uN/wB9D/CjMf8Acb/vof4UAE3+uf8A3j/OmVNKY/OfKtncf4v/AK1MzH/cb/vof4UAMop+Y/7jf99D/CjMf9xv++h/hQAyin5j/uN/30P8KMx/3G/76H+FABF98/7rfyNMqaMx7jhW+6f4vY+1MzH/AHG/76H+FADKKfmP+43/AH0P8KMx/wBxv++h/hQAyin5j/uN/wB9D/CjMf8Acb/vof4UAMp6fck/3f6ijMf9xv8Avof4U9DHtfCt93n5vce1AENFPzH/AHG/76H+FGY/7jf99D/CgC5Zf6k/739KsVBZ7fJO0EDd3OanoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqO4toLy3e3u4Y54ZBteOVAysPQg8GpKKAILOxtNOtVttPtYbWBSSsUEYRRnk4A4qC9/1w/3f61eqje/64f7v9aAIR/qW/3h/I0ynj/Ut/vD+RplABRRRQAUUUUAFPf7kf8Au/1NMp7/AHI/93+poAZRRRQAUUUUAFFFFAD5fvj/AHV/kKZT5fvj/dX+QplABRRRQAUUUUAPh/1yf7w/nTKfD/rk/wB4fzqN3WNGeRgqqMszHAA9aAFopkU0c8YkgkWRG6MjAg/iKfQNpp2YUUUUCCnp9yT/AHf6imU9PuSf7v8AUUAMooooAKKKKACiiigB5/1K/wC8f5CmU8/6lf8AeP8AIUygAooooAKKKKACnv8Acj/3f6mmU9/uR/7v9TQAyiiigAooooAKKKKAHzf65/8AeP8AOmU+b/XP/vH+dMoAKKKKACiiigB8X3z/ALrfyNMp8X3z/ut/I0ygAooooAKKKKACnp9yT/d/qKZT0+5J/u/1FADKKKKAL9l/qT/vf0qxVey/1J/3v6VYoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKo3v8Arh/u/wBavVTvJHWYBWYDb2NAFcf6lv8AeH8jTKmEsnksd7Z3Dv8AWmedJ/z0b/vo0AMop/nSf89G/wC+jR50n/PRv++jQAyin+dJ/wA9G/76NHnSf89G/wC+jQAynv8Acj/3f6mjzpP+ejf99GnvLIFTDtyvPPuaAIaKf50n/PRv++jR50n/AD0b/vo0AMop/nSf89G/76NHnSf89G/76NADKKf50n/PRv8Avo0edJ/z0b/vo0AEv3x/ur/IUyppJZAww7fdHf2FM86T/no3/fRoAZRSXF41tayzyPIViQuwU8kAZrO0PxE2tJMQkkLREZHmbgQc4549DUuSUlHqaxo1JU3US0W5pUU/zpP+ejf99GjzpP8Ano3/AH0aoyCH/XJ/vD+dUtSsV1LTpbR3KCQD5gM4IOR+orQilkMyAuxG4d6Z50n/AD0b/vo0mk1ZlRk4SUo7ozdG0pdHsTbrKZSzl2YjHPA4H0Aq/T/Ok/56N/30aPOk/wCejf8AfRoilFWQ6lSVSbnN3bGUU/zpP+ejf99GjzpP+ejf99GmQMp6fck/3f6ijzpP+ejf99GnpLIVfLtwvHPuKAIaKf50n/PRv++jR50n/PRv++jQAyin+dJ/z0b/AL6NHnSf89G/76NADKKf50n/AD0b/vo0edJ/z0b/AL6NAAf9Sv8AvH+QplTGWTyVO9s7j3+lM86T/no3/fRoAZRT/Ok/56N/30aPOk/56N/30aAGUU/zpP8Ano3/AH0aPOk/56N/30aAGU9/uR/7v9TR50n/AD0b/vo095ZAqYduV559zQBDRT/Ok/56N/30aPOk/wCejf8AfRoAZRT/ADpP+ejf99GjzpP+ejf99GgBlFP86T/no3/fRo86T/no3/fRoAJv9c/+8f50yppZZBM4DsBuPemedJ/z0b/vo0AMop/nSf8APRv++jR50n/PRv8Avo0AMop/nSf89G/76NHnSf8APRv++jQARffP+638jTKmjlkLHLt909/Y0zzpP+ejf99GgBlFP86T/no3/fRo86T/AJ6N/wB9GgBlFP8AOk/56N/30aPOk/56N/30aAGU9PuSf7v9RR50n/PRv++jT0lkKvl24Xjn3FAENFP86T/no3/fRo86T/no3/fRoAuWX+pP+9/SrFQWbM0JLEk7u5qegAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqje/64f7v9avVRvf8AXD/d/rQBCP8AUt/vD+RplPH+pb/eH8jTKACiiigAooooAKe/3I/93+pplPf7kf8Au/1NADKKKKACiiigAooooAfL98f7q/yFMp8v3x/ur/IUygAqOC3htkKW0McKk5KxqFBPrxUlFA7u1gooooEPh/1yf7w/nTKfD/rk/wB4fzplABRRRQAUUUUAFPT7kn+7/UVla9DqE+mbNKcpNvBba+1ivoD25x3HQ1a0eO6i0hE1B99wsfznOf4hgE9zjH/16nm97lsbOklSVTmV72t19SxRRRVGIUUUUAFFFFADz/qV/wB4/wAhTKef9Sv+8f5CmUAFFFFABRRRQAU9/uR/7v8AU0ynv9yP/d/qaAGUUUUAFFFFABRRRQA+b/XP/vH+dMp83+uf/eP86ZQAUUUUAFFFFAD4vvn/AHW/kaZT4vvn/db+RplABRRRQAUUUUAFPT7kn+7/AFFMp6fck/3f6igBlFFFAF+y/wBSf97+lWKr2X+pP+9/SrFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFVdRjvJbJo9OmS3mdlBmYZ8tcjcQCCC2M4zxnGeKtVn63pCa5pMlhNc3FtHKRva3KhmAOdp3Agg9CCORxSYFHQb+7lsdQl86bV7eGQ/Y59saSXQCgkAjah+bKhvlB9e5niupr9TLdWFxpjg7RDdNGzMP7w8pnGOcdc8Hjpm3ptjLYQGKXULi9GRtM6RLsGOgEaKMfhTb3/XD/AHf61TAYEXyW/eL94c4Pv7UzYv8Az1X8j/hQP9S3+8P5GmUgH7F/56r+R/wo2L/z1X8j/hTKKAH7F/56r+R/wo2L/wA9V/I/4UyigB+xf+eq/kf8Ke6LtT94v3fQ+p9qhp7/AHI/93+poANi/wDPVfyP+FGxf+eq/kf8KZRQA/Yv/PVfyP8AhRsX/nqv5H/CmUUAP2L/AM9V/I/4UbF/56r+R/wplFAE0iLuH7xR8o7H0HtTNi/89V/I/wCFEv3x/ur/ACFMoAfsX/nqv5H/AAo2L/z1X8j/AIUyigB+xf8Anqv5H/CjYv8Az1X8j/hTKKAIbbUrCTVRZR3kTXCNzGA3UdQDjBPt9fSrOxf+eq/kf8KzbPQbODXhqKeZ5zOW2lvlBPUjv69+9X6mPN9o2rKkmvZN2trfuP2L/wA9V/I/4UbF/wCeq/kf8KZRVGI/Yv8Az1X8j/hRsX/nqv5H/CmUUAP2L/z1X8j/AIU9EXa/7xfu+h9R7VDT0+5J/u/1FABsX/nqv5H/AAo2L/z1X8j/AIUyigB+xf8Anqv5H/CjYv8Az1X8j/hTKKAH7F/56r+R/wAKNi/89V/I/wCFMooAmKL5K/vF+8ecH29qZsX/AJ6r+R/woP8AqV/3j/IUygB+xf8Anqv5H/CjYv8Az1X8j/hTKKAH7F/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wp7ou1P3i/d9D6n2qGnv9yP8A3f6mgA2L/wA9V/I/4UbF/wCeq/kf8KZRQA/Yv/PVfyP+FGxf+eq/kf8ACmUUAP2L/wA9V/I/4UbF/wCeq/kf8KZRQBNKimZ/3ij5jxg/4UzYv/PVfyP+FE3+uf8A3j/OmUAP2L/z1X8j/hRsX/nqv5H/AAplFAD9i/8APVfyP+FGxf8Anqv5H/CmUUATRou4/vFPynsfQ+1M2L/z1X8j/hRF98/7rfyNMoAfsX/nqv5H/CjYv/PVfyP+FMooAfsX/nqv5H/CjYv/AD1X8j/hTKKAH7F/56r+R/wp6Iu1/wB4v3fQ+o9qhp6fck/3f6igA2L/AM9V/I/4UbF/56r+R/wplFAGhZgCE4YN83UVPVey/wBSf97+lWKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACqN7/rh/u/1q9VG9/wBcP93+tAEI/wBS3+8P5GmU8f6lv94fyNMoAKKKKACiiigAp7/cj/3f6mmU9/uR/wC7/U0AMooooAKKKKACiiigB8v3x/ur/IVz91rt3B4ni05LUNC5UbsHcwI5YdsD6fwnn06CX74/3V/kKZUyTezsbUakINucebT+mFFFFUYhRRRQA+H/AFyf7w/nTKfD/rk/3h/OmUAFFFFABWFoWu3eqahcwXNqIliGQQDlDnG1s9/y6Hj03aKlptppm1OpCMJRlG7ez7BT0+5J/u/1FMp6fck/3f6iqMRlFFFABRRRQAUUUUAPP+pX/eP8hTKef9Sv+8f5CmUAFFFFABRRRQAU9/uR/wC7/U0ynv8Acj/3f6mgBlFFFABRRRQAUUUUAPm/1z/7x/nTKfN/rn/3j/OmUAFFFFABRRRQA+L75/3W/kaZT4vvn/db+RplABUdzK0FrLLHGZXjQssa9XIGcfjUlFNaPUHsYnhrWrnWYJ2uoETy2AV4wQrZHTnPI+vcVt0UVpVnGc3KEbLsRCLjFKTuwrBsvEF5P4ouNMezAgXcu4A7kAwQ57YPHYfeHPrvU9PuSf7v9RTpzhFSUo3utPLzFOMpNWdhlFFFYmhfsv8AUn/e/pViq9l/qT/vf0qxQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVTvHKzADb93uoNXKo3v+uH+7/WgBgkbyWOF+8P4R70zzW9F/74H+FA/wBS3+8P5GmUAP8ANb0X/vgf4Uea3ov/AHwP8KZRQA/zW9F/74H+FHmt6L/3wP8ACmUUAP8ANb0X/vgf4U95G2pwv3f7o9TUNVrbVrG/kMNncrLJCvzgZ9TyPUe4pXSdmUoSkm0tFuXPNb0X/vgf4Uea3ov/AHwP8KZRTJH+a3ov/fA/wo81vRf++B/hTKR3WNGeRgqqMszHAA9aAJPNb0X/AL4H+FHmt6L/AN8D/CqVjqVpqSM1lMJQhw3BBH4Hmi+1K001Fa9mEQc4Xgkn8BzU80bXvoaeyqc/s+V83a2v3GhJIwYcL90fwj0Fc7dQa2/imG4glxZKVyAwChcfMCvcnnnB6jkY43mdZNrxsGVkUqynIIwOabSlFSRdKq6LbSTuraj/ADW9F/74H+FHmt6L/wB8D/CmUVZgZHiSHVrqCAaS5XaxMgjYRseOOeOOvGe4/DWt3nW1iW5MbzBAJGVBgtjk9PWloqVG0nLubSrOVONOy0v669zGsLfW18XPPPLmxZzgbgVK/wAIC9iOOcDoeeedzzW9F/74H+FEP+uT/eH86ZRGPKFas6rTaSsraD/Nb0X/AL4H+FHmt6L/AN8D/CmUVRiP81vRf++B/hR5rei/98D/AAplFAD/ADW9F/74H+FPSRtr8L93+6PUVDT0+5J/u/1FAB5rei/98D/CjzW9F/74H+FMooAf5rei/wDfA/wo81vRf++B/hTKKAH+a3ov/fA/wo81vRf++B/hTKKAJjI3kqcL94/wj2pnmt6L/wB8D/Cg/wCpX/eP8hTKAH+a3ov/AHwP8KPNb0X/AL4H+FMooAf5rei/98D/AAo81vRf++B/hTKKAH+a3ov/AHwP8Ke8jbU4X7v90epqGnv9yP8A3f6mgA81vRf++B/hR5rei/8AfA/wplFAD/Nb0X/vgf4Uea3ov/fA/wAKZRQA/wA1vRf++B/hR5rei/8AfA/wplFAE0sjCZxhfvH+EUzzW9F/74H+FE3+uf8A3j/Oqt7fW2n25nvJRFHkDJBOT6ADk04xcnZK7E2krstea3ov/fA/wo81vRf++B/hUFvcRXduk9tIJIpBlWHepKGmnZgmmrof5rei/wDfA/wo81vRf++B/hTKKQyaORix4X7p/hHoaZ5rei/98D/CiL75/wB1v5GmUAP81vRf++B/hR5rei/98D/CmUUAP81vRf8Avgf4Uea3ov8A3wP8KZRQA/zW9F/74H+FPSRtr8L93+6PUVDT0+5J/u/1FAB5rei/98D/AAo81vRf++B/hTKKANCzYtCScfe7DFT1Xsv9Sf8Ae/pVigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKy9a8R6boBtl1KSfzbp2SCC2tZbmWQqMtiOJWYgDqcYHHrQBqUVm6Rr1nrfm/Y4dQi8nG77bptxaZzn7vnIu7p2zjjPUVcu5pLe0klgtpLqRRlYY2UM59AWIA/E0PQNyaqN7/rh/u/1qpoOs3F94dk1DVIFililnWSK1VpcCORlwoA3OcL2GSeg7U6K/h1ZTPapcRop2EXVtJbNnrwsqqSOeuMdfQ0APH+pb/eH8jTKmEbeSwyv3h/EPemeU3qv/fY/wAaAGUU/wApvVf++x/jR5Teq/8AfY/xoAZRT/Kb1X/vsf40eU3qv/fY/wAaAGVn6f4fstJuGuLXzN8qkYdshBu6D8h1yeK0/Kb1X/vsf409422pyv3f7w9TUuKbuzSNScIuMXZPchop/lN6r/32P8aPKb1X/vsf41RmMpksSTwvFKNySKVYZxkEYNTeU3qv/fY/xo8pvVf++x/jQNNp3Rm6Vo1to6SLamRjIQWaRsnjoOMDufzo1XRrbWEjW6MimMkq0bYPPUc5HYflWl5Teq/99j/GsTxLq1zo0MDW8McnmsQzsdyrgdOD1P17GspKEYWa0OujKvWxCcJe++vy/wAjYESQRxxRDakcaKoznACgCiliL3FvDM6CJpIkYxswBUlRwc+lYV3rd3b+KYtMS1VonKjdzlgRywPTA/8AZTz6VKcYpNmdOhUrSko7q7fyNyikufMgtZZUQStGhYRq4yxAzgfWsjw1q1zrMM7XEMcflMArqdqtkdOT1H17im5JSUe5MaM5U5VVst/mbFFP8pvVf++x/jR5Teq/99j/ABqjEIf9cn+8P50ypoo2EyHK/eH8Qqhq1xNp+lT3UMayvGuQu7PfGeOw6/hSbsrsqEXOSit2WaKz/D9/catpf2m4iSJt5UYOA4HcZ/LvyDWn5Teq/wDfY/xojJSV0VUpypTcJboZRT/Kb1X/AL7H+NHlN6r/AN9j/GmZjKen3JP93+oo8pvVf++x/jT0jba/K/d/vD1FAENFP8pvVf8Avsf40eU3qv8A32P8aAGUU/ym9V/77H+NHlN6r/32P8aAGUU/ym9V/wC+x/jR5Teq/wDfY/xoAD/qV/3j/IUypjG3kqMr94/xD2pnlN6r/wB9j/GgBlFP8pvVf++x/jR5Teq/99j/ABoAZRT/ACm9V/77H+NHlN6r/wB9j/GgBlPf7kf+7/U0eU3qv/fY/wAae8bbU5X7v94epoAhop/lN6r/AN9j/Gjym9V/77H+NADKKf5Teq/99j/Gjym9V/77H+NADKKf5Teq/wDfY/xo8pvVf++x/jQATf65/wDeP86oappdvq9n9nut4UMGVkOCpH/1ifzrSljYzOcr94/xCmeU3qv/AH2P8aqMpQkpRdmhSipKzKtjZRafZRWtuCI4xgbjknnJP5mp6f5Teq/99j/Gjym9V/77H+NKUnJtvdgkkrIZRT/Kb1X/AL7H+NHlN6r/AN9j/GkMIvvn/db+RplTRxsGPK/dP8Q9DTPKb1X/AL7H+NADKKf5Teq/99j/ABo8pvVf++x/jQAyin+U3qv/AH2P8aPKb1X/AL7H+NADKen3JP8Ad/qKPKb1X/vsf409I22vyv3f7w9RQBDRT/Kb1X/vsf40eU3qv/fY/wAaALll/qT/AL39KsVBZqVhIOPvdjmp6ACiivPvEfiJ7Xxfc2Ot+K7nwjYiNP7PnFtCsF0xUly888bpuB4EYKtgE85GFcZ6DRXH/wDCZ3OlRaJp2qWMmta1qdvJNH/YYRoZljK5cNK6hQVdW5OOoBJ25sL49sLiz099Lsb/AFG9vxIU06BI1nj8o7ZfM8x1RNjYU5bqQBnNMR1FFcv/AMJ7YzWtidO0/UL++vGlVdNgWNZ4mhO2YPvdUXY2FPz8kjbuzRdeMdOtLvT7jUJdQ06GbTLi/eG5gWNY0j8vd5oI8xXXfgBeDls5+Wj+v6+4NzqKK5WPx9YxLM2t6bqWhqlm99Gb+OMmeFMF2URu5BUFcqwVvmHHXF/SvEU+o3y2t54e1fSjJGZIpLtInjcDGRuhkcKeRw+0ntnBwAbdFFFABRRRQAUUUUAFeT+KfEcdr8SNNjuPHvhjT7u0+1GNZrEEW8ZCAw3DG7XBbKEYVSTGegyD6xXm/jG2vtK8XaRqF34uvtM0uVrkT381tYlLEEKUhWV7cmMOf4nYg7ApyzA0uqH0Zs+DPFLa9qup2f8Abula6lnHC4utJtfLgBcv8m/7RLuYbMkfLjI6546+uK8DaleX+t62q+IZ/EmjRiD7FqLpbiMuQ3mxq0MaLIQQpLDIG4LgFWz2tUySjo+m/wBlWL2/m+buuJpt23bjzJGfGMnpux+FF7/rh/u/1q9VG9/1w/3f60hkI/1Lf7w/kaZTx/qW/wB4fyNMoAKKKKACiiigAp7/AHI/93+pplYeh6Dd6Vfz3FzdrMkynABOXO77zZ78e/U81LbTSSNqdOEoSlKVmtl3NyiiiqMQorCutCu5/E8WopdBYUKnbk7lAHKjtg/X+I8eu7Uxbd7o2q04QUXGV7rXy8goorG8R6Pc6vDAttMqeWxLI5IVsjrx3H07miTaV0riowjOoozlyrubkv3x/ur/ACFMpI42hghikkMrJEitI3ViFHP41h3WhXc/ieLUUugsKFTtydygDlR2wfr/ABHj1UpNJWRVKnCcmpTskn8/+HN2io7iNprWWKOQxM6FVkXqpI6/hWV4c0e50iGdbmZX8xgVRCSq4HXnufp2FNt8yVhRpwdOU3KzWy7mzRRRVGI+H/XJ/vD+dMrF0/QruDxc2ovdBoXcnbk7mB6Ke2B9f4Rx6bVTFt7qxtWpwg0oS5tP6QUUUVRiFFFFABT0+5J/u/1FMp6fck/3f6igBlFFFABRXJ+FPCmoaDrF9d3uoLcRzqVAUsTKd2d756N19fvHn16yohKUo3krHPh6lSrT5qkOV9twoorn7vQLyfxVFqaXYWFCp25O5QByo7YP1H3jx69NKEJtqcraf0jScpRS5Vc6M/6lf94/yFMpLqJp9OeKOQxPIHVZF6oSAM/hWL4a0W50aCdbqdJPMYFUjJKrgdeccn6dhRGEHTcnKzXTuDlJTSS07m3RRRWJoFFFFABT3+5H/u/1NMp7/cj/AN3+poAZRRRQAUUUUAFFFFAD5v8AXP8A7x/nTKfN/rn/AN4/zplABRRRQAUUUUAPi++f91v5GmU+L75/3W/kaZQAUUUUAFFFFABT0+5J/u/1FMp6fck/3f6igBlFFFAF+y/1J/3v6VYqvZf6k/739KsUAFc7er4us9YuZNKXS9V0+cK0cF9cvaPasAAQGSKTzFPXkAgk8kYx0VRG4VWIIPBoA8sh0DV/Cvi/wrYaINPubqOy1OeS3lZre3xJNC5jjZVcxqpcbflbIXGBnIt3Hwvl3adqM1hoevX8b3T31lqkZFtI1xJ5rNGxSQoUbAB2ncuc4NekfaU9Go+0p6NR2/re43qcTbeENU0ebSdV0PTvD9tfWkVxBNptqGtLQxzMjfK6ox3KY0y2wb+eF4AXxD4H1Lxb9l/tq7s4y2kXdjdPaowCyTNEVKI2dyr5ZzkjPoM4HdUUb/13v/mJaO6OA0LwTd2BlceGPBWkXAs2gW4sbIytcSMMEsNkWyPrlMvnd94Y5n8K+EL/AEjxIdQWw0/w9Y+S6yaZpOoTT21xI2zEnlNHHHEVCdUUltxyeOe4op31uK2lgooopDCiiigAooooAK8511PiJYLeXDXkc2nQ3kk0cum3ttb3C2jMCFdLm2aImNdxz5iZHU55r0avNvFHhSLTdTufEeuSaRrunrIXW38SXkkUdoXI5jZy8AxgKo8lDyMyZzuXUa2Nf4e64NdtbydNV1jUUVlVW1AWTxjrzHLZr5behG8suBkLkZ7Kuf8ACfjPS/GNrPLpO/NswSZdySohIyAJYmeJjjBIVyRkZxnFdBVMlBVG9/1w/wB3+tXqp3jATDKK3y9TmkMrj/Ut/vD+RplTB18lv3a/eHGT7+9M3r/zyX8z/jQAyin71/55L+Z/xo3r/wA8l/M/40AMop+9f+eS/mf8aN6/88l/M/40AMp7/cj/AN3+po3r/wA8l/M/4093Xan7tfu+p9T70AQ0U/ev/PJfzP8AjRvX/nkv5n/GgBlFP3r/AM8l/M/40b1/55L+Z/xoAZVDVdZttHSNroSMZCQqxrk8dTzgdx+daW9f+eS/mf8AGqt9YWWpIq3tpHKEOV+ZgR+IOamXNb3dzWi6aqL2t+XrbcnEqTxxyxHckkaMpxjIKgis2bXrODV005/M85iF3BflBPQHv6du9ax8uMKiQoqqihQMgAYHHWqcmm2EuoLeyWUTXC4w+W7dDjOCff6elKXNZcpVJ0VJ+0TtZ2t36Fiin71/55L+Z/xo3r/zyX8z/jVmAyin71/55L+Z/wAaN6/88l/M/wCNABD/AK5P94fzplTROpmT92o+Yc5P+NM3r/zyX8z/AI0AMop+9f8Ankv5n/Gjev8AzyX8z/jQAyin71/55L+Z/wAaN6/88l/M/wCNADKen3JP93+oo3r/AM8l/M/409HXa/7tfu+p9R70AQ0U/ev/ADyX8z/jRvX/AJ5L+Z/xoAZRT96/88l/M/40b1/55L+Z/wAaAGUU/ev/ADyX8z/jRvX/AJ5L+Z/xoAZPKlvYmaU7Y49zMcZwAATWfpGt2usxytaiRTEQGWRcHnoeCR2P5VqSeXJbbJIY3RiysrZIIwM96qWGn2OmRuljaRxBzlvmYk/iTmtoul7N8yfN07Gb5+dW26k9FP3r/wA8l/M/40b1/wCeS/mf8axNBlFP3r/zyX8z/jRvX/nkv5n/ABoAZVHWtbtdGhtmuhIxlBCrGuTwTk8kDuPzrR3r/wA8l/M/41X1LTrHU4YVvrSOUICVyzArye4INa0nTU17W/L5EVOflfJuOhlS4gjmiO6ORQynGMgjIp9OTy441SOCNUUYVVyAB6daXev/ADyX8z/jWbtfQpXtqMop+9f+eS/mf8aN6/8APJfzP+NIYyin71/55L+Z/wAaN6/88l/M/wCNABN/rn/3j/OmVNK6iZ/3an5jzk/40zev/PJfzP8AjQAyin71/wCeS/mf8aN6/wDPJfzP+NADKKfvX/nkv5n/ABo3r/zyX8z/AI0AEX3z/ut/I0ypo3Xcf3aj5T3Pofemb1/55L+Z/wAaAGUU/ev/ADyX8z/jRvX/AJ5L+Z/xoAZRT96/88l/M/40b1/55L+Z/wAaAGU9PuSf7v8AUUb1/wCeS/mf8aejrtf92v3fU+o96AIaKfvX/nkv5n/Gjev/ADyX8z/jQBcsv9Sf97+lWKgsyDCcKF+boKnoAKpSf6xvqau1Sk/1jfU0AUZNXsItRSxkuUW5fGE579BnoD7fT1q5WXP4esbjWk1OQSecpVtob5WYdCe/Yd8cfWtSpjza8xtVVJKPs2721v38i/VDT9d0jVri6g0rVbK9ms22XMdtcJI0DZIw4Ukqcg8H0NXnzsbaATjgE4B/GvNNJ8Ma9Pp2paZ9ku9LtX0aXT7b+0ZLWVrZ2GES3lgHmNCBnJl+Y4Q4zup33/r+v6+eVl+R1GofEHwvp+iLq/8AbVjc2JvI7Iz213E6LK7AYLbsDaDubnIUE4rWi1vSp9Yl0mDU7OTUoUEklmlwpmRDj5igO4D5hzjuPWvN7fwtr7aPdXUlhq8l2s2mFbW+ubHfKltOJGEYgVIxhSQpd8t0IUAZ2LPQtYXXLW1fTGWKy1i61Q6pJNHsuElWXbGArGQOPOVDuXbiM4J+UVVkv69P+D+Qul/66/8ADfidfYa9o+qz3UOl6rY3stm225jt7lJGgOSMOATtOVPX0PpRpWu6Rr0Mk2h6pZalFE2yR7O4SZUbrglScH2rhdE0PxBb2t9BHorJbxaTJaWtnrrWk8aufuQxyQ/O9vgEN5xDH5O+6tDwVp2uw+KtU1HWrbUY4bmytoYm1E2YdWjeUlFW2JGz94MbiT1yelCB6Xt/W3+f4Hc0UUUgCiiigArz3y/hFo/iG8urm68KJrDXrXM8t7eQSXEVxnkgyMWjII+6MAHoBXoVcZ48vtbhvNLsNF1CXS1vEucXcUUblrhYwYYf3isoDncemTswCM1LfLqNK+ht6L4i0zX7y6bRde0rVbaJEzHYyrK8LHdkuyuRg4GBtGNp5OeNivPvhlr99rd1qRn1251u1S3tJI5ZooE+zSujGWBvKjT51IBIPIDKMAgk+g1pJWdiU76hVG9/1w/3f61eqje/64f7v9akZCP9S3+8P5GmU8f6lv8AeH8jTKACqmqyXUWlzvp6b7gL8gxnvyQO5xn/AOvVuik1dWKhLlkpWvYzdBm1CfTN+qoUm3kLuTaxX1I7c57DoK0qKKIqysVUmpzckrX6IKw9Du9bnv501aFkhVTszGFCnd0U/wAQ6889Bz67lPf7kf8Au/1NJxu077FU6qhCUXFO/Xt6GVr02oQaZv0pC828BtqbmC+oHfnHY9TU+lSXUulwPqCbLgr84xjvwSOxxj/61W6KOX3ua4OqnSVPlV73v19AoooqjEKxvEdzqtvDAdIjZtzHzGSPew44GOeOvbsK2aKmUeZWvY1o1FSqKbinbo9hI2laCFrlQkxiQyKvQNtGR+dLT5fvj/dX+QplUZt3dwooooEFFFFAD4f9cn+8P50ynw/65P8AeH86ZQAUUUUAFFFFABT0+5J/u/1FMp6fck/3f6igDkPFd/4ntdYsY9AtmltmUFisQcO+7lXP8K4xz8vU88cdZRRURi1Ju+5z06LhUnNyb5uj2XoFFFFWdAUUUUAPP+pX/eP8hTKef9Sv+8f5CmUAYniW51a2ggOjxu25j5jRx72HHAxzx15x2H469s0zWsTXKhJigMir0DY5H51JRW0qidOMOVaderM1Bqblffoc/aXeuP4qlhuISLAFsHywFC4+Uhu5PHGT1PAxx0FFFFWoqjTUUrK2n5hCDgnd3Cnv9yP/AHf6mmU9/uR/7v8AU1iaDK5+0u9cfxVLDcQkWALYPlgKFx8pDdyeOMnqeBjjoKK2p1FBSTindW16eaM5wcmtbWKerSXcWk3D6cm+5VfkGM9+SB3OMnH86g8Pz6jcaWH1ZCk28hdybWZfUjtzkdBwB9a06KFUSpOnyre9+voHI+fmv8jk/Fd/4ntdYsY9AtmltmUFisQcO+7lXP8ACuMc/L1PPHHWUUVzRi1Ju+5nTouFSc3Jvm6PZeg+b/XP/vH+dZPiCfUbfSy+koXm3gNtTcyr6gd+cDoeCfrWtN/rn/3j/OmVtTmoTUmr26M2nHmi1exT0mS7l0m3fUU2XLL84xjvwSOxxg4/lVyiilKXNJyta44qySCiiipGPi++f91v5GmU+L75/wB1v5GmUAFFFFABRRRQAU9PuSf7v9RTKen3JP8Ad/qKAGUUUUAX7L/Un/e/pViq9l/qT/vf0qxQAVSk/wBY31NXapSf6xvqaAG0VmzeIdKt9Zj0qa9jS9kxtiOep6AnoCewJycj1FaVJST2IjUhNtRd7b+RfoqOe4htbeS4upY4YY1LPJIwVUA6kk8AVWvtZ0vS4ppdT1K0s44EWSV7idYxGrNtVmJIwCeAT1PFMsu0VnSeIdFiSyeXV7BFv9psy1ygFzuwF8vn587lxjOcj1qBvFeiPaanNY6nZX7aWjNdxW15CWhIz8rkuFQ/KR85UcHJGKANiiqEuu6TBqtvpdxqdnDqNym+GzkuEE0q88qmckcHkehqne+MNEtNN1i8h1C3vjosTyX1vZzJJLDtBJVl3fK3ykYbHINALXY26KovrmlRarb6XNqVpFqNynmQ2bzqs0i88qmckfKeQOx9KdZ6xpuo3VxbafqNpdT2pAnignV2hJJGGAOV5Vhz6H0oAuUUUUAFcV498TromraFp11r8Ph2z1J5vO1Fmi8xSigqi+aGRQxJy7KQMBeCymu1rgvir4j1fw7oom029/su3+y3Usmo+Uj7JkjBhi+cFV8xsjJBzjaMMwNTJ2Vyoq7sQ+FPiHo8vibUdBuPGWmavFCYBY3kt1bpNcSSA7ogI9qyFTtwyKPv7TllJrttW1D+zNOa4WIzSF0jii3bd7uwVQT2GWGTg4GTg1zfgbxHdeIL7U2S9j1TSkjtnt76NV2+ayHzoVZflcKQpyOhcqTlcDoNc0+XUtLMVq0a3Ecsc8JlB2743DgHHIB24JHTNaSVnZkRd9UM0/Wlmtb59TWKxl05yl3mbdHGAgfcHIX5drA5IGOfSmRalY60puNGvLfUIFPltLayrKoYc7SVJGcEHHuKfoun3Nq19d6h5S3V9P50kcLl0jARUVQxALcIDnA5NTXv+uH+7/WpGMEUnksNjZ3Dt9aZ5Mn/ADzb/vk0D/Ut/vD+RplAD/Jk/wCebf8AfJo8mT/nm3/fJrKh16zn1d9OTzPOUldxX5SR1A7+vbtVu9vIrCzkubgkRxjJ2jJPYD86lSi1dM1lRqRkouOr2+Za8mT/AJ5t/wB8mjyZP+ebf98mqOm6lBqtp9ottwUMVKuMEEf/AKxVummmroicJQk4yVmh/kyf882/75NYWh+HL/S9QuLi5nMyzKQAoYlzu+82e/5/ePPrtU9/uR/7v9TScE2m+hpTrTpwlCO0tw8mT/nm3/fJo8mT/nm3/fJplFUYmLdeHb+fxPFqKTFYUKnbhtygDlR2wfr/ABHj12bi1mmtZYo/MiZ0KrIqnKkjr+FZ02vWcGrppz+Z5zELuC/KCegPf07d6vyypBC8sp2pGpZjjOABk1nFQV7fM7K0q79nzrZK2nT9TM8OaDe6RDOty2/zGBVEDFVwOvPc/TsK2fJk/wCebf8AfJrN0rWbbWEka1EimMgMsi4PPQ8ZHY/lRqus22jpG10JGMhIVY1yeOp5wO4/OlFwhC6egVo162IanH330+X+RqyRSFhhG+6O3sKZ5Mn/ADzb/vk0wSpPHHLEdySRoynGMgqCKK1ORpp2Y/yZP+ebf98mjyZP+ebf98mmUUCH+TJ/zzb/AL5NHkyf882/75NMooAmiikEyEowG4dqZ5Mn/PNv++TWJYeLdMu/FR0WIzfaUkK7ynyMy/eUHrkYPUAcHnpnYqYyjL4WZU61Oqm6bvZ2+Y/yZP8Anm3/AHyaPJk/55t/3yaZWJrfi3TNAvoLS/M3mTKGJjTIjXONx9uD0yeOnTJKUYq8mFWtTox56jsje8mT/nm3/fJo8mT/AJ5t/wB8mmViaJ4t0zX76e0sDN5kKlgZEwJFzjcPbkdcHnp1wOUU0m9wnWpwlGEnZy28ze8mT/nm3/fJp6RSBXyjcrxx7ioaen3JP93+oqjUPJk/55t/3yaPJk/55t/3yaydT8QWWk3UVvdmTfINxKLkIM4yf16ZPFadXKnOMVKS0exKnFtpPYf5Mn/PNv8Avk0eTJ/zzb/vk1k6Z4gstWupbe0Mm+MbgXXAcZxkfp1wean1TVLfSbP7RdbypYKqoMlif/rA/lVujUU/ZuOvYlVIOPOnoX/Jk/55t/3yaPJk/wCebf8AfJqrY3sWoWUV1bkmOQZG4YI5wR+YqespRcW090WmmromMUnkqNjZ3Ht9KZ5Mn/PNv++TQf8AUr/vH+QplIZj+JfD99rMEC2r+X5bEskgYK2R14B5H07mte2tZ4LWKKTzJXjQK0jKcuQMZ/GloraVacqcab2X6mapxU3Nbsf5Mn/PNv8Avk0eTJ/zzb/vk1kweILK41l9MjMnnKWXcV+ViOoHfse2OPpVnU9St9I02a+vCwhhXLbRknJwAPckgVFSEqXxq2l/kHtYcrlfRb/Iu+TJ/wA82/75NY3ijQL3Wra0S0fZ5WSyPuCtk8HgHkfTual0PXLTxBp/2yx8wIHKMsi4ZWHY9uhB4Pen61rdro0Ns10JGMoIVY1yeCcnkgdx+dXhZ1PaRlR1fQzlKlVo8zfuvqXba1ngtYopPMleNArSMpy5Axn8ak8mT/nm3/fJqGGVLiCOaI7o5FDKcYyCMis+DxBZXGsvpkZk85Sy7ivysR1A79j2xx9KSp1JuTS21Zq5RjZN77FrVtOub/Sbi1gLRSSLgNg+vQ47Hp+NV/D+jXek6WLa5YyvvLAKCVQHsM/n25JrRopqtNUnS6XuL2cefn6j/Jk/55t/3yaPJk/55t/3yaZRWJoTSxSGZyEYjce1M8mT/nm3/fJrLsPEVjrF/cQ2Zk3JlgXTAdc4yPzHXB5qXVNUt9Js/tF1vKlgqqgyWJ/+sD+VbOjUU/ZuOvYzVSDjzp6F/wAmT/nm3/fJo8mT/nm3/fJqrY3sWoWUV1bkmOQZG4YI5wR+YqespRcW090Wmmrof5Mn/PNv++TR5Mn/ADzb/vk0yikMmjikDHKN909vY0zyZP8Anm3/AHyaIvvn/db+RplAD/Jk/wCebf8AfJo8mT/nm3/fJrJn8QWVvrKaZIZPOYqu4L8qk9Ae/cdsc/WtCaVLeCSaU7Y41LMcZwAMmtJUpxtdb7EKcXez2JvJk/55t/3yaPJk/wCebf8AfJrM0jW7XWY5WtRIpiIDLIuDz0PBI7H8q0KU4Spy5ZqzHGSkuaOw/wAmT/nm3/fJp6RSBXyjcrxx7ioaen3JP93+oqCg8mT/AJ5t/wB8mjyZP+ebf98mmUUAaFmrLCQwIO7uKnqvZf6k/wC9/SrFABVKT/WN9TV2qUn+sb6mgDAuvB+l3fiWPXJhN9pjZX2B8IzKPlYjrkYHQgcDjrndooqYxjG9luZU6NOm24K13d+bLV3axXtnNa3KB4Z42jkU/wASkYI/I15lJ4S8Ty6HDe3v2oatZ6lCdthLbmeW2gjeGNkMwMW4l2mw/TcRwwBr1Kiq6/10Nr6f11OB8NeFtR07WNEu57SbZb2OoeYbyeF5IpZ54pFUmJVUEgP9xSq8gEjBOOvhjxFP4a1rTYdJvIIW0OaxtLfUZbORo3IwkVvNFhjEACCZiGOEP96vVqKd/wCvv/zBNr8PwOMi07UbHxDqEL+HxqcGpXsF2l800QitQkcafMGJfehjLLsQgll5Xkjmp/CXiC88LPpY0drefTfD93pazPPFjUpZNgV02vwpMZYmQKQXHua9YooWn9eVvy/4IRfLa39f1/wxwGpaBq8usX1nFprzRalqFlfLqZljCWqweVujYbhJu/csV2qRmXkj5q6DwZpVzpGhzwXsAgmk1G8nwCp3LJcSOjZHqpU+vY1v0UX0t/XT/Inol/XX/MKKKKQwrzi/8U64dJ1e8tLsRXF1rS6JplsYk225E3lNNyMu5G98E7cKox1z6PWL/wAIjoh8QDWTZt9sEnnD9/J5Ql27PM8rd5fmbeN+3djvR9ry/wCCv0uvmD203/4f9bfcUPDV/qEfirW/D2oajJqi6fFbXEN3NHGkuJQ+Y38tVQkGPIwo4YZz1PU1n6Toen6JHOumwFGuJDLPLJI0skz9Mu7ks2BgDJOAABgACtCgOoVRvf8AXD/d/rV6qN7/AK4f7v8AWgCEf6lv94fyNMp4/wBS3+8P5GmUAVI9KsotQa9jt1W4bOX579TjoD7/AF9anuLeK6t3guEEkbjDKe9SVU1WS6i0ud9PTfcBfkGM9+SB3OM//XqWlFPQ2jKdScU5a6JNvb/KxJZ2VvYW4htIhFHknA5yfUk8mp6zdBm1CfTN+qoUm3kLuTaxX1I7c57DoK0qItOKaFWjKNSSk7vvuFPf7kf+7/U0ynv9yP8A3f6mqMhlFFFAFSTSrKXUFvZLdWuFxh+e3Q46E+/09KtOiyIySKGVhhlYZBHpS0Ukkti3OcrXe2xVsdNtNNRlsoREHOW5JJ/E80X2m2mpIq3sIlCHK8kEfiOatUUuWNrW0H7Wpz+05nzd76/eOZFj2pGoVVRQqqMADA4ptPl++P8AdX+QplUZhRRRQAUUUUAUbTQNLt9e/tSGzjW8kb5pRnqepA6AnuQMnJ9TV6nw/wCuT/eH86ZSUUtiIU4QVoK1+wVnajoGl6tdQ3Go2cc8sH3GbPTOcED7wz2ORyfU1o1yfiu/8T2usWMegWzS2zKCxWIOHfdyrn+FcY5+XqeeOIqyjGN5K5z4upTp0uapHmWmlr/gdZWdp2gaXpN1NcadZxwSz/fZc9M5wAfujPYYHA9BWjXJ+FL/AMT3WsX0ev2zRWyqSpaIIEfdwqH+JcZ5+boOeeSUoqUU0FapTjVpxlC7d7O17fPodZT0+5J/u/1FMp6fck/3f6itDrKF5pNjfzxzXlskskX3Sc+ucH1Hsff1q5RRVOcmkm9EJRSd0inZ6TY2E8k1nbJFJL94jPrnA9B7D29KlvbG21C3MF5EJY8g4ORg+oI5Fc14Uv8AxPdaxfR6/bNFbKpKloggR93Cof4lxnn5ug5550fFtzq9poZk0CJpLnzVDbI97KnOSF7nOB0PBP1Gf1mUl7bW6+/Q4YYmnLDOqoOyvpbX7jXt7eK0t0gtoxHFGMKo7VJWdoE2oXGg2kusR+XeMmZF27T1OCR2JGCR2J6DpWJf3/iePx3b21pbM2lFkBIiBQoR87M/Zh82BkdBwc8zKropO+v6mk8TGnThPldpWVktVfuuh15/1K/7x/kKZSXTTLpztbKHmAcxq3QtgYH51i+GrnVrmCc6xG67WHltJHsY8cjHHHTnHc/h1RpOVN1LrT7zdzSmo23NuiuZ8aXuv2dranw7FI+52EzRQiVl4+UYweDzzjsOR36Cza4exga9RY7lolMyL0V8fMByeM57muZTTk422M4V1KtKlZ3jbW2mvZkMek2MWovfR2yLcvnL89+px0B9/r61NeWdvf2clreRLNBKu10bv/gfftU1Z2vzahb6Ddy6PH5l4qZjXbuPUZIHcgZIHcjoelXUm5K89bIupyQpybjda3Vt/l1J9N0yz0izFrp0CwQhi20EnJPck8k/X0FP1LTLPU4YEvoBKEBK8kEcnuOay/CVzq93oYk1+Jo7nzWC749jMnGCV7HOR0HAH1O8/wByP/d/qaVKbilKGn4EUXTqUYuMbRa2at+BGiLHGqRqFRRhVUYAHpVSPSbGLUXvo7ZFuXzl+e/U46A+/wBfWrlFWpyjez3NnFPdBRRRUlBRRRQBWg0iw0+9nlsrZIXkYhiuemc4HoPYe3pTr2xttQtzBeRCWPIODkYPqCORVqb/AFz/AO8f50yrdSblztu/cnkily20I7e3itLdILaMRxRjCqO1SUVz93d64niqKG3hJsCVyfLBUrj5iW7Ec8ZHQcHPN06cq0nqtr6/1uTOappaeWh0FFFFYmg+L75/3W/kaZT4vvn/AHW/kaZQBTk0mxl1FL6S2RrlMYfnt0OOhPv9PSrboskbJIoZGGGVhkEelLRVOcpWu9hKKWyKthplnpkbpYwCIOctyST+J5q1RRRKUpvmk7sElFWQU9PuSf7v9RTKen3JP93+oqRjKKKKAL9l/qT/AL39KsVXsv8AUn/e/pVigAqlJ/rG+pq7VKT/AFjfU0AZE/iOxt9bTS5DJ57lV3BPlVm6Anrzkdsc/WtWqUuj6fNqSX8tqjXSYxJz1HQkdCR6n0HoKu1tUdJqPs09tb9/Izhz3fN8ixfXsGnWE97eOY7e3jaWVwpbaqjJOACTx6VmXviewtNbstLE8TXF0wJVt+QhjldSpVCpJ8luCV4BOc4B2JY0mheKVQyOpVlPQg9RXA6X4C1WzOmSXl7bXE9nqLytJlgTbLayW8CjjlgGVm6DJcjtnB3s/wCv6/4c10/P/gf16G4nj7w9LpdvqMNxdy2105S3MenXDNNhdxZEEe5kA6uBtHQnNNHj7QhFLdvfQjTltra5S4VZSzLO7JH8mzoSuBgk8nIXgnn7q11HwVovhSSGD7ff6bpx02aGK2upo2UrHudWhhkZSGiXAZVDAnkYqDSvAetPpNk9y1tBMbXRxJE7EMjWtw00oIAI6NgYJ5zkgc1dlfTvb+vzDp/Xc6638X6dfSWAsZCRdXj2bJdQzW8scixNIV8t49wbCg4fYMHIJ4BYnjzw64uSL6RVt037ntZlEy7wmYSUxMCxVR5e7JZQPvDOa3g2+fxQ2otNb/Z21ttQKhm3+UbD7Pj7uN2/nGcY754qO10PxlZ+FU0Kzn0u1isLeO3triKaTzbtUZR8x8vFvujVlJUSkF8gjbzP/A/LX7mFlf8Aru/0Oo0fW7HXbaSbTnlIikMUsc9vJBJE+AdrRyKrKcEHkDIIPQ1oVyvgbw7qPh9NWOp+Wv268FzGi6hNetGPKSMq00yh25jyM9jjtXVU3YQUUUUgCiiigAooooAKp3gTzhuZgdvZc/1q5VG9/wBcP93+tADAI/Jb5mxuH8P196ZiP++3/fI/xoH+pb/eH8jTKAH4j/vt/wB8j/GjEf8Afb/vkf40yigB+I/77f8AfI/xoxH/AH2/75H+NMooAfiP++3/AHyP8ae4j2plm+7x8vufeoae/wByP/d/qaADEf8Afb/vkf40Yj/vt/3yP8aZRQA/Ef8Afb/vkf40Yj/vt/3yP8aZRQA/Ef8Afb/vkf40Yj/vt/3yP8aZRQBNII9wyzfdH8PsPemYj/vt/wB8j/GiX74/3V/kKZQA/Ef99v8Avkf40Yj/AL7f98j/ABplFAD8R/32/wC+R/jRiP8Avt/3yP8AGmUUATRCPzkwzZ3D+H/69MxH/fb/AL5H+NEP+uT/AHh/OmUAPxH/AH2/75H+NRy3FpBJGk1ysbyHCK+AXPoOeeopaxNa8NRazfQ3D3DxbFCOoUHcuc8HseT69q2oxpynapKy+8zqOajeCuzexH/fb/vkf41DBd2NzLLHbXaTSQttlSMqxjPPBAPB4PX0p9cz4a8Fw+HNUuLyO8kn8xDHGjIF2KWB5Pc8DnjvxzxzSclJJLTqZ1J1o1IKEbxe7vt/mdNLLbW8Rknn8qNeruAAPxJqSFoZIWeOQujICGABBGRyOeay9b0ldZsBbNKYSrh1YLnkZHI+hNWdJsF0zSls0cyCNPvEYyS2T+prpcafslK/vX28jS8+e1tO5axH/fb/AL5H+NGI/wC+3/fI/wAaZRWJoPxH/fb/AL5H+NR3E9paQNNdXAhiXG6STCqOcckn1payPE3h9PEekizedrdklEqOF3YIBHI4yME9x2qZNqLcVqZVpTjTbpq8uiNiN4JolkilLxuoZXUAhgehBzyKa1xaLcLbtcqJmGVjONxHqBnPY/lVHRNKTRNFt9PikaVYVOXYY3EkknHYZJ4/nVO58NRXPiJNUNw67WV2i2jll6c9hwO3r+G1CMJfxXbT117C5qvJF8uul1fbudCRH5K/M2Nx/h+nvUEFxaXUZe2uVmQHBaPDAH04NF1At1pz28hISUOjFeoBAFZWg6CuhxzgXBneYjJ27QAM44yfU1UY03Tbcve6LuU3PnSS0NWe4tLWMPc3KwoTgNJhQT6cmpMR/wB9v++R/jWNr2grrkcANwYHhJwdu4EHGeMj0FaVtAtraxW8ZJSJAilupAGKJRpqnFp+91XYE587TWgq3di949ol2jXMa7nhBUuo45K5yByPzFTYj/vt/wB8j/GuWsvBcNn4vl1xbyR9zvIsBQDazg5y3cctgYHbnjnpq5oOTT5lYzoTrST9rHld3bW+nRj8R/32/wC+R/jT3Ee1Ms33ePl9z71DT3+5H/u/1NWdAYj/AL7f98j/ABqFbuxe8e0S7RrmNdzwgqXUcclc5A5H5in1zNl4Lhs/F8uuLeSPud5FgKAbWcHOW7jlsDA7c8cxJyTXKrnPWnWi4+zjdN662su51OI/77f98j/GjEf99v8Avkf40yirOgfiP++3/fI/xoxH/fb/AL5H+NMooAmlEfnPlmzuP8P/ANemYj/vt/3yP8aJv9c/+8f50ygB+I/77f8AfI/xoxH/AH2/75H+NMooAfiP++3/AHyP8ajguLS6jL21ysyA4LR4YA+nBplzAt1ay28hISVCjFeoBGKzdB0FdDjnAuDO8xGTt2gAZxxk+praMabptuXvdF3M2586SWhuRiPccM33T/D7H3pmI/77f98j/GiL75/3W/kaZWJoPxH/AH2/75H+NGI/77f98j/GmVHcwLdWstvISElQoxXqARimrX1B7D4Li0uoy9tcrMgOC0eGAPpwakxH/fb/AL5H+NY2g6CuhxzgXBneYjJ27QAM44yfU1rVpVjCM2qbuu5EHJxTmrMfiP8Avt/3yP8AGnoI9r4Zvu8/L7j3qGnp9yT/AHf6isiwxH/fb/vkf40Yj/vt/wB8j/GmUUAaFnt8k7SSN3cYqeq9l/qT/vf0qxQAUwwoSSV5PvT6KAI/Ij/u/rR5Ef8Ad/WpKKACiiigAooooAKKKKACiiigAooooAKKKKACiiobu7t7G0kur2aOCCIbnkkYKqj3JoAmqje/64f7v9aNG1e31zTVvrJZVhZ3QCZNjfI5U/KeRyvfn1Aovf8AXD/d/rQBCP8AUt/vD+RplPH+pb/eH8jTKACiiigAooooAKe/3I/93+pplPf7kf8Au/1NADKKKKACiiigAooooAfL98f7q/yFMp8v3x/ur/IUygCG8uksbGe7lDGOCJpWCjkhRk49+KxfCvipPE8VyRaNbSW7LuXfvBDZwc4HPB4x6V0FQ2tna2MRjsraG3jLbikMYQE+uB34FQ1LmTT0OecKzqxlGVoq91bftqTUUUVZ0D4f9cn+8P50ynw/65P94fzplABXM+JfGkPhzVLezks5J/MQSSOrhdiliOB3PB447c88dNUM9na3MsUlzbQzSQtuieSMMYzxyCeh4HT0qJqTjaLsznxEK06dqMuWXe1yaiiirOgz9b1ddGsBctEZizhFUNjk5PJ+gNWdJv11PSlvEQxiRPuk5wQ2D+oqSWGK4iMc8aSxt1R1BB/A1LCixwskahUVAFVRgAZHFbOVP2Sjy+9ffyM7T57307DaKKKxNDmfDXjSHxHqlxZx2ckHloZI3Zw29QwHI7Hkcc9+eOemqGCztbaWWS2toYZJm3SvHGFMh55JHU8nr61NUQUlG0ndnPh4VoU7Vpc0u9rBRRRVnQJdTra6c9xICUiDuwXqQADWVoOvLrkc5FuYHhIyN24EHOOcD0NbJ/1K/wC8f5CoILaC1jKW0McKE5KxoFBPrxW0ZU1Tacfe6PsZtT5009DN17Xl0OOAm3M7zE4G7aABjPOD6itK2nW6tYriMEJKgdQ3UAjNE9tBdRhLmGOZAchZEDAH15qSiUqbpxSj73V9wSnztt6BRRRWJoFPf7kf+7/U0ynv9yP/AHf6mgBlFFFABRRRQAUUUUAPm/1z/wC8f50ynzf65/8AeP8AOmUAFFFFABRRRQA+L75/3W/kaZT4vvn/AHW/kaZQAUUUUAFFFFABT0+5J/u/1FMp6fck/wB3+ooAZRRRQBfsv9Sf97+lWKr2X+pP+9/SrFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFVYLSeK+mnk1G5njk+7byLEEi/3SqBvzY1aooAxtD0totCuLHVLZGSe5ui8MgV1eOSZyARyCCrDg+uDTotNsdFU2+jWdvp8DHzGitYliUseNxCgDOABn2Fa9Ub3/XD/d/rQAwSyeSx3tncO/1pnnSf89G/76NA/wBS3+8P5GmUAP8AOk/56N/30aPOk/56N/30aZRQA/zpP+ejf99GjzpP+ejf99GmUUAP86T/AJ6N/wB9GnvLIFTDtyvPPuahp7/cj/3f6mgA86T/AJ6N/wB9GjzpP+ejf99GmUUAP86T/no3/fRo86T/AJ6N/wB9GmUjuscbPIwVFGWZjgAetAEnnSf89G/76NHnSf8APRv++jVKw1Oz1ON3sZxKEOG4II/A81aqpRlB8slZiUlJXRNJLIGGHb7o7+wpnnSf89G/76NEv3x/ur/IVlza/pdvrEelzXka3kmNsRz1PQE9AT2BOTkeoqHJLcmdSEFebtfuannSf89G/wC+jR50n/PRv++jTKKZY/zpP+ejf99GjzpP+ejf99GmUUATRSyGZAXYjcO9Zev/ANqXGg3cWj3DR3jJiNt+09RkA9iRkA9ieo61ow/65P8AeH86rXl5b2FnJdXkqwwRLud27f4n271MrOLTM6qUqclJ2VnrtYzfCUeuWmhiPX7mSS581iu+XeypxgFu5zk9TwR9Bt+dJ/z0b/vo1S03U7PV7MXWnTrPCWK7gCMEdiDyD9fUVBqOv6XpN1Db6jeRwSz/AHFbPTOMkj7oz3OBwfQ1MeWEFroZUnSo0I+/7qtq3v8AM1POk/56N/30a5Pwpa+K7XWL6TX72SW2ZSFDT7w77uGQfwrjPHy9Rxxx1NU7PVrG/nkhs7lJZIvvAZ9cZHqPce3rVui5vnV/d/rUKtGE6kJuTTjeyvv69yn4tj1y70Mx6BcyR3PmqW2S7GZOcgN2OcHqOAfobvh0anB4egj1mdpb1Iv3jF9x+9wCe5AwCe5zyetW6en3JP8Ad/qKnkXPz3GqCVd1ru7VrX0+7uHnSf8APRv++jR50n/PRv8Avo0yirOgf50n/PRv++jWX4gGq3GllNJnkSbeC22TazL6A9ucHqOAfpWjRV05unNTSvbuTOPNFxK2km/i0m3TUZ2e5VfnO/PfgE9zjAz/ADq550n/AD0b/vo0yilKXNJy7jiuVJExlk8lTvbO49/pTPOk/wCejf8AfRpJHWO13yMFRSxZmOABgc1TsNTs9Tjd7GcShDhuCCPwPNCjJxcktEHMk7X1LvnSf89G/wC+jR50n/PRv++jTKKkY/zpP+ejf99GjzpP+ejf99GmUUAP86T/AJ6N/wB9GnvLIFTDtyvPPuahqDUtTs9Mhge+nEQcELwSTyew5qoxlN8sVdiclFXZa86T/no3/fRo86T/AJ6N/wB9Go0dZI1eNgyMMqynII9aWpGP86T/AJ6N/wB9GjzpP+ejf99GmUUAP86T/no3/fRo86T/AJ6N/wB9GmUUATSyyCZwHYDce9M86T/no3/fRom/1z/7x/nTKAH+dJ/z0b/vo0edJ/z0b/vo0yigB/nSf89G/wC+jR50n/PRv++jTKKAJo5ZCxy7fdPf2NM86T/no3/fRoi++f8Adb+RplAD/Ok/56N/30ajuZLprWVbaYpMUIjZjwGxwfzpaKadncHqjH8NR63bQTjWLiVtzDy1km3sOOTnJ46cZ7H8dvzpP+ejf99GmUVpVqOrNzaSv2IhBQioof50n/PRv++jT0lkKvl24Xjn3FQ09PuSf7v9RWRYedJ/z0b/AL6NHnSf89G/76NMooA0LNmaEliSd3c1PVey/wBSf97+lWKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACqN7/rh/u/1q9VO8UGYZdV+Xoc0AVx/qW/3h/I0ypgi+S37xfvDnB9/ambF/56r+R/woAZRT9i/89V/I/wCFGxf+eq/kf8KAGUU/Yv8Az1X8j/hRsX/nqv5H/CgBlPf7kf8Au/1NGxf+eq/kf8Ke6LtT94v3fQ+p9qAIaKfsX/nqv5H/AAo2L/z1X8j/AIUAMpk0SXEEkMq7o5FKsM4yCMGpti/89V/I/wCFQXs8Vjp9xdyvuS3iaVlQHJCjJAz34ovbUUmkm3sU9I0S10aOVbUyMZSCzSNk8dBwAO5/OtCsHwn4pj8URXR+zm0kt2XKl94YNnBBAHPynjHp+HQ7F/56r+R/wpus6/7xu9+pjh6lKrSU6PwvYJfvj/dX+QrBufCWmXfiOPWpRN9pRlbYH+RmX7rEdcjA6EDgcdc9DIi7h+8UfKOx9B7UzYv/AD1X8j/hUSjGXxIqpRp1UlUV7O/zGUU/Yv8Az1X8j/hRsX/nqv5H/CqNRlFP2L/z1X8j/hRsX/nqv5H/AAoAIf8AXJ/vD+dUtT0231fTZrG8DGGZcNtOCMHII9wQDWhEiiZP3in5hxg/4Vm65qUWh6Jc6jIPOEKjEaZBYkgAZI4GSOf51Mrcr5tjOq4KnJ1Phs7+nUi0PQ7Tw/p/2Ox8woXLs0jZZmPc9ugA4Haqut+EtM1++gu78TeZCoUiN8CRc52n25PTB569MTeGNej8S6SbxYvszJKYnjZt3IAOQQORgjsO/wBa2Ni/89V/I/4VCjTnBJLQ54U8NXw8YxScOgyszTPD9lpN1LcWgk3yDaA7ZCDOcD9OuTxWtsX/AJ6r+R/wo2L/AM9V/I/4V0RqTjFxi9HudThGTTa2GU9PuSf7v9RRsX/nqv5H/Cnoi7X/AHi/d9D6j2qCiGin7F/56r+R/wAKNi/89V/I/wCFADKKfsX/AJ6r+R/wo2L/AM9V/I/4UAMop+xf+eq/kf8ACjYv/PVfyP8AhQAyeJLixMMq7o5NysM4yCADWfpGiWujRyramRjKQWaRsnjoOAB3P51rFF8lf3i/ePOD7e1M2L/z1X8j/hVqpNRcE9GS4xclJrVDKKfsX/nqv5H/AAo2L/z1X8j/AIVBQyin7F/56r+R/wAKNi/89V/I/wCFADKo61olrrMNst0ZFMQJVo2weScjkEdh+VaOxf8Anqv5H/Cnui7U/eL930PqfarhOVOSlB2ZMoqa5ZbFaGJLeCOGJdscahVGc4AGBT6fsX/nqv5H/CjYv/PVfyP+FS227srYZRT9i/8APVfyP+FGxf8Anqv5H/CkAyin7F/56r+R/wAKNi/89V/I/wCFABN/rn/3j/OmVNKimZ/3ij5jxg/4UzYv/PVfyP8AhQAyin7F/wCeq/kf8KNi/wDPVfyP+FADKKfsX/nqv5H/AAo2L/z1X8j/AIUAEX3z/ut/I0ypo0Xcf3in5T2PofambF/56r+R/wAKAGUU/Yv/AD1X8j/hRsX/AJ6r+R/woAZRT9i/89V/I/4UbF/56r+R/wAKAGU9PuSf7v8AUUbF/wCeq/kf8KeiLtf94v3fQ+o9qAIaKfsX/nqv5H/CjYv/AD1X8j/hQBcsv9Sf97+lWKgswBCcMG+bqKnoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKo3v+uH+7/Wr1Ub3/XD/d/rQBCP9S3+8P5GmU8f6lv94fyNMoAKKKKACiisLXbXWp9Qtm0qYpCo+bEgUK2erDuMY456Hj1mUuVXtc2o0lVnyuSj5s3ae/3I/wDd/qaZT3+5H/u/1NUYjKKKKACiiigCG1s7WxiMdlbQ28ZbcUhjCAn1wO/AqaiuZ8aWWv3lrajw7LIm12MyxTCJm4+U5yOBzxnuOD2icuSN0rnPWqewpOUIt26I6mX74/3V/kKZTLdbhLO3W9dZLlYIxM69GfaNxHA4znsKfVo3TurhRRRQMKKKKAHw/wCuT/eH86ikjSaJo5UV43UqyMMhgeoI7ipYf9cn+8P51l6/DqFxoN3Fo8nl3jJiNt209RkA9iRkA9ieo60pOybIqS5YOVr2W3cu29vDaQLDawxwxLnbHGoVRzngD3qSsTwlbavaaGI9flaS581iu+TeypxgFu5zk9TwR9Bt0oO8U7WJoz56cZcvLdbPoFFFFUahT0+5J/u/1FMp6fck/wB3+ooAZRRRQAUUUUAFFFFADz/qV/3j/IUymXq3D6VKtk6x3LI4hduivtG0ng8Zx2Nc54Lstfs7W6HiKWR9zqYVlmErLx8xzk8HjjPY8DvDk1JRtuc86zjVjT5W0769FbudNRRRVnQFFFFABT3+5H/u/wBTTKe/3I/93+poAZRRRQAUUUUAFFFFAD5v9c/+8f50ynzf65/94/zplABRRRQAUUUUAPi++f8Adb+RplPi++f91v5GmUAFFFFABRRRQAU9PuSf7v8AUUynp9yT/d/qKAGUUUUAX7L/AFJ/3v6VYqvZf6k/739KsUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUyeeK2gee5lSGKNSzySMFVQOpJPQU+ue1/Uo9Psbi58S2tsulwSI8LR3TNJLIHBQFCqqvzAHlyOOeMmkBtWV/aalbC4066gu4GJAlgkDqSOvI4qC9/1w/3f61leHDDqVnqV5banavdX8m6VtNmSZbVtgVQGwQzAAHLDBPbHFXIrWawUxXV/cam5O4TXSxqyj+6PKVBjjPTPJ56YpgPH+pb/eH8jTKmDr5Lfu1+8OMn396ZvX/nkv5n/GkAyin71/55L+Z/xo3r/wA8l/M/40AMop+9f+eS/mf8aN6/88l/M/40AMp7/cj/AN3+po3r/wA8l/M/4093Xan7tfu+p9T70AQ0U/ev/PJfzP8AjRvX/nkv5n/GgBlFP3r/AM8l/M/40b1/55L+Z/xoAZRT96/88l/M/wCNG9f+eS/mf8aACX74/wB1f5CmVNI67h+7U/KO59B70zev/PJfzP8AjQAyin71/wCeS/mf8aN6/wDPJfzP+NADKKfvX/nkv5n/ABo3r/zyX8z/AI0AEP8Ark/3h/OmVNE6mZP3aj5hzk/40zev/PJfzP8AjQAyin71/wCeS/mf8aN6/wDPJfzP+NADKKfvX/nkv5n/ABo3r/zyX8z/AI0AMp6fck/3f6ijev8AzyX8z/jT0ddr/u1+76n1HvQBDRT96/8APJfzP+NG9f8Ankv5n/GgChZ6tY388kNncpLJF94DPrjI9R7j29auVm6XoNhpF3NcWqMWlG0B3JCLnOB+nXJ4+tau9f8Ankv5n/GtqypKf7pu3mZ0+fl9/cZWdNr+l2+sR6XNeRreSY2xHPU9AT0BPYE5OR6itTev/PJfzP8AjWFdeFNLu/EsWtyxyfaIyrGNZDsdlHysR1yMDoQOBx1zzT57LkM67rJL2KTd1e/br8zdP+pX/eP8hTKmLr5K/u1+8eMn296ZvX/nkv5n/GrOgZRT96/88l/M/wCNG9f+eS/mf8aAGUU/ev8AzyX8z/jRvX/nkv5n/GgBlPf7kf8Au/1NG9f+eS/mf8ae7rtT92v3fU+p96AIaKfvX/nkv5n/ABo3r/zyX8z/AI0AMop+9f8Ankv5n/Gjev8AzyX8z/jQAyin71/55L+Z/wAaN6/88l/M/wCNABN/rn/3j/OmVNK6iZ/3an5jzk/40zev/PJfzP8AjQAyin71/wCeS/mf8aN6/wDPJfzP+NADKKfvX/nkv5n/ABo3r/zyX8z/AI0AEX3z/ut/I0ypo3Xcf3aj5T3Pofemb1/55L+Z/wAaAGUU/ev/ADyX8z/jRvX/AJ5L+Z/xoAZRT96/88l/M/40b1/55L+Z/wAaAGU9PuSf7v8AUUb1/wCeS/mf8aejrtf92v3fU+o96AIaKfvX/nkv5n/Gjev/ADyX8z/jQBcsv9Sf97+lWKgsyDCcKF+boKnoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKo3v+uH+7/Wr1Ub3/XD/d/rQBCP9S3+8P5GmU8f6lv94fyNMoAKKKKACiiigAp7/cj/AN3+pplPf7kf+7/U0AMooooAKKKKACiiigB8v3x/ur/IUyny/fH+6v8AIUygAooooAKKKKAHw/65P94fzplPh/1yf7w/nTKACiiigAooooAKen3JP93+oplPT7kn+7/UUAMooooAKKKKACiiigB5/wBSv+8f5CmU8/6lf94/yFMoAKKKKACiiigAp7/cj/3f6mmU9/uR/wC7/U0AMooooAKKKKACiiigB83+uf8A3j/OmU+b/XP/ALx/nTKACiiigAooooAfF98/7rfyNMp8X3z/ALrfyNMoAKKKKACiiigAp6fck/3f6imU9PuSf7v9RQAyiiigC/Zf6k/739KsVXsv9Sf97+lWKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACqd4haYEbfu92Aq5VG9/1w/wB3+tADBG3ksMr94fxD3pnlN6r/AN9j/Ggf6lv94fyNMoAf5Teq/wDfY/xo8pvVf++x/jTKKAH+U3qv/fY/xo8pvVf++x/jTKKAH+U3qv8A32P8ae8bbU5X7v8AeHqahp7/AHI/93+poAPKb1X/AL7H+NHlN6r/AN9j/GmUUAP8pvVf++x/jR5Teq/99j/GmUUAP8pvVf8Avsf41zPjTwtf+I7W1jsbuGLyXZnjlkwr5HB4zyMHt/EefXo6KicFOPKzDEUIYik6VTZiW9pLbWdvBLP58kUKI0rsMyEKAWOT3xmpPKb1X/vsf40S/fH+6v8AIUyrWhskkrIf5Teq/wDfY/xo8pvVf++x/jTKKBj/ACm9V/77H+NHlN6r/wB9j/GmUUATRRsJkOV+8P4hTPKb1X/vsf40Q/65P94fzplAD/Kb1X/vsf40eU3qv/fY/wAaZRQA/wApvVf++x/jR5Teq/8AfY/xplFAD/Kb1X/vsf409I22vyv3f7w9RUNPT7kn+7/UUAHlN6r/AN9j/Gjym9V/77H+NMooAf5Teq/99j/Gjym9V/77H+NMooAf5Teq/wDfY/xo8pvVf++x/jTKKAJjG3kqMr94/wAQ9qZ5Teq/99j/ABoP+pX/AHj/ACFMoAf5Teq/99j/ABo8pvVf++x/jTKKAH+U3qv/AH2P8aPKb1X/AL7H+NMooAf5Teq/99j/ABp7xttTlfu/3h6moae/3I/93+poAPKb1X/vsf40eU3qv/fY/wAaZRQA/wApvVf++x/jR5Teq/8AfY/xplFAD/Kb1X/vsf40eU3qv/fY/wAaZRQBNLGxmc5X7x/iFM8pvVf++x/jRN/rn/3j/OmUAP8AKb1X/vsf40eU3qv/AH2P8aZRQA/ym9V/77H+NHlN6r/32P8AGmUUATRxsGPK/dP8Q9DTPKb1X/vsf40RffP+638jTKAH+U3qv/fY/wAaPKb1X/vsf40yigB/lN6r/wB9j/Gjym9V/wC+x/jTKKAH+U3qv/fY/wAaekbbX5X7v94eoqGnp9yT/d/qKADym9V/77H+NHlN6r/32P8AGmUUAaFmpWEg4+92OanqvZf6k/739KsUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFMeGORsuuTjHWn0UAZkttdf8JBaCJP+JabWc3HI/wBdui8r/a+753Tj17Vd+yw/3P1NY/iDUdW0+K5urT7HBZ2kAkLXSM5uXyf3a7WGw8AZIbJcYHHO5E5khR2QozKCVPVfagCP7LD/AHP1NH2WH+5+pqaigCH7LD/c/U0fZYf7n6mpqKAIfssP9z9TSm2iIGU6DA5NS0UAQ/ZYf7n6mj7LD/c/U1NRQBD9lh/ufqaPssP9z9TU1FAEP2WH+5+po+yw/wBz9TU1FAGZpFtdNZSf2un+kfargJyP9T5z+T93j/V7Pf15zV37LD/c/U1laVrN/feItRsb2wFnFbQxSQqzhpGDNICW2kqPucAE8dTzgbdAdbEP2WH+5+po+yw/3P1NTUUAQ/ZYf7n6mj7LD/c/U1NRQBELaJWBCcg5HJpPssP9z9TU1FAEP2WH+5+po+yw/wBz9TU1FAEP2WH+5+po+yw/3P1NTUUAQ/ZYf7n6mqV/bXQvdM/s9P8ARzdML7kf6nyZMdef9Z5X3efwzWnXN3niC9g1C4mjFsdOs7yGymQoxldpNnzht2AFMq/LtOcHkZo3dgN77LD/AHP1NH2WH+5+pqaigCH7LD/c/U0fZYf7n6mpqKAIfssP9z9TR9lh/ufqamooAi+zRbQNnAOeppPssP8Ac/U1NRQBD9lh/ufqaPssP9z9TU1FAEP2WH+5+po+yw/3P1NTUUAQ/ZYf7n6mqVhbXRvdT/tBP9HF0oseR/qfJjz05/1nm/e5/DFaMjFI2ZUaQqCQi4y3sM4H51keHdXvtVfUl1GzSze1u/JSFX3sqmNHG4jgt8/OOB0ycZJuBp/ZYf7n6mj7LD/c/U1NRQBD9lh/ufqaPssP9z9TU1FAEP2WH+5+po+yw/3P1NTUUARG2iZiSnJOTyaT7LD/AHP1NTUUAQ/ZYf7n6mj7LD/c/U1NRQBD9lh/ufqaPssP9z9TU1FAGZq9tdLZR/2Qn+kfarcPyP8AU+cnnfe4/wBXv9/TnFXfssP9z9TWP4g1HVtPiubq0+xwWdpAJC10jObl8n92u1hsPAGSGyXGBxzuROZIUdkKMyglT1X2oAj+yw/3P1NH2WH+5+pqaigCH7LD/c/U0fZYf7n6mpqKAIfssP8Ac/U0otogDhOoweTUtFAEP2WH+5+po+yw/wBz9TU1FADUjWNcIMDOadRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVFc2tve2z295BHcQSDDxSoGVh6EHg1LRQBzd34Yu/7UtptKu9PtbKzTFtYy6eXihfJzIoSRBu5xkjjnGMnPRruCDeQWxyQMAn6UtFABRRRQAUUUUAFFFFABRRRQAUUUUAFVbjS9Pu7yG7urG2muYP9TNJCrPHzn5WIyPwq1RQBRh03yteu9S83P2i3ih8vb93YznOc853+nar1FFABRRRQAUUUUAFFFFABRRRQAUUUUAFYN14bkudUlk+3BbC4uIrqe1MOWaWPbt2vu4U7EyCpzg8jNReONT1DStBjn05riFGuY0urq1tTcy2sBzvkWMBtxGAPusBnJBAIrK8O+JIEh1DUx41sfEXh21tRcTXbvEbm0fqVYQIq7CoyAVDggjnPAn17f8P/AF5g+3c7iiuRl+IlnZ2d1PrGj6rpfk2EmoRR3SQ77qGMAvsCSNhhlcq+0/MOOuJ9O8dWd9K8dzpmqac5szfWyXUClruEdWjWNmYsMr8jAP8AMvy80f1/X3P7mH9f196OnorgfEPxAubfw/rESaTqmg6rHo9xqFk98luwcRgZI2SSDKllyrAdenWtfxfq99pfgF9SsJ/Kux9nxJsVvvSorcEEchj2o/r+vuD+vy/zOnoqhres2mgaTJf35cxoVRY4l3PK7MFRFXuzMQAPU1gXXxFsNMs7yTWdL1PT7mzeASWMqRSTMk0gjSRfLkZWXdkcNuG08dMgHXUVyZ+INjbx6guq6ZqWm3liIT9inSJ5Z/OYpEI/LkZWLOCvLDB64HNY/iD4nXNna3Vvp3h7U4tVs7ixjuba5WD92lxKUGGE2xiQpAIYgFlz0baAeiUV55H8Q7rTNY8U/wBq6Xql3YaVcxs8lvFBtsITbxOd+XUvglydm8gD0259CR1dFdDlWGQR3FHS4dbC0UUUAFUdP037BeajP5vmfbrkT7duNmI0THXn7mc8davUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAYGq6Hqd9rsN/b6laLDbqPItbqyaZY5OcyDbKmWwcAkHAzjGTneXcEG8gtjkgYBP0paKOlg8wooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAy9eg1mWzik8O3dvDdwyiQw3S5iuUwQY2YAsmc5DKCQQOCMg8rqvgfUfGN1fXPiSOw0p5tKl0xF0+ZrouJGVt8jvHHkKV4Tbj5mOecV31FK39fK35Dv/X4nketeEJdH8BeIrq58MeEtIeHQ7mM3GkW+Zp3MZy27y4/KXg/L8+c/eGOds+GPE+u2i3eoXlhp17a6PNZadPYyyMTJMEzO2Qpj4jXCKWxknccCvQaKe/9ev8An/WgtrW6f8D/ACPIpvhZq1xJdzW2meHdHa40W705ltZ5ZpJ5ZQhE0s7RK0nKnO4Ejk7mLYHa+J9E1bWvB15o9qlmk2Lf7M8lw4WQoyM2/EZ2cqQMbvXjpXUUUPVW/rv+of1+X+RxXiHQNf8AGfh2403W9N0WzKSRXNttvHvYpZI3DBJUeCP5DjBxk4PSs7/hALqbTZ47bw/4W8Pyvd2cqppUZyyQzrK5eURJnIXCps4IyWOePRqKFo7r1Dc868daA8Wo6j4lub+2soI4tPa3klWRlSa3uHk/e7VOyI7wpfnaCWIwOca2t9W8faj4lvrKbR5fl0v7JJZ3bzWjSW87zNH9oEY3nBGSqfLvAwcZPr1FC0Vvn8xt3/rscRc+D9VvNB8a20j2cdz4iBMCrKzJExtUiIZtgONynkDpg4zxXZW0ZhtIYmwWRFU46ZAqWin/AMD8Bb/13CiiikAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH//2Q==)

Figure Scatter plot of Sepal in PCA

ggplot(data = iris, aes(x = Petal.Length, y = Petal.Width, col = Species)) +

geom\_point()

![Chart, scatter chart

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMyMgAAkpIAAgAAAAMyMgAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjowNzowMwAyMDIyOjAxOjA0IDIyOjA3OjAzAAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MDc6MDMuMjE2PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAWgCcgMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APoy0/484f8Armv8qlqK0/484f8Armv8qloAKKKKACo5Z1hxuBOfSpKqX3/LP8f6UAP+2x/3W/IUfbY/7rfkKoUUAX/tsf8Adb8hSteRqcEN0B6Vn0+X74/3V/kKALn22P8Aut+Qo+2x/wB1vyFUKKAL/wBtj/ut+Qo+2x/3W/IVQooAv/bY/wC635Cj7bH/AHW/IVQooAv/AG2P+635Cla8jVipDZBx0rPp83+uf/eP86ALn22P+635Cj7bH/db8hVCigC/9tj/ALrfkKPtsf8Adb8hVCigC/8AbY/7rfkKPtsf91vyFUKKANBbyNmCgNknHSk+2x/3W/IVTh/1yf7w/nTKAL/22P8Aut+Qo+2x/wB1vyFUKKAL/wBtj/ut+Qo+2x/3W/IVQooAv/bY/wC635Cj7bH/AHW/IVQooA0FvI2YKA2ScdKT7bH/AHW/IVTh/wBcn+8P50ygC/8AbY/7rfkKPtsf91vyFUKKAL/22P8Aut+Qo+2x/wB1vyFUKKAL/wBtj/ut+Qo+2x/3W/IVQooA0FvI2OAG6E9KT7bH/db8hVOL75/3W/kaZQBf+2x/3W/IUfbY/wC635CqFFAF/wC2x/3W/IUfbY/7rfkKoUUAX/tsf91vyFH22P8Aut+QqhRQBoC8jIJAb5Rk8Un22P8Aut+Qqmn3JP8Ad/qKZQBf+2x/3W/IUfbY/wC635CqFFAF/wC2x/3W/IUfbY/7rfkKoUUAX/tsf91vyFH22P8Aut+QqhRQBofbI9pbDYBA6f59KT7bH/db8hVMf6lv94fyNMoAv/bY/wC635Cj7bH/AHW/IVQooAv/AG2P+635Cj7bH/db8hVCigC/9tj/ALrfkKfFcJMxVQwOM81m1Zsv9cf93+tAF6iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAitP+POH/AK5r/KpaitP+POH/AK5r/KpaACiiigAqpff8s/x/pVuql9/yz/H+lAFOiiigAp8v3x/ur/IUyny/fH+6v8hQAyiiigAooooAKKKKACnzf65/94/zplPm/wBc/wDvH+dADKKKKACiiigAooooAfD/AK5P94fzplPh/wBcn+8P50ygAooooAKKKKACiiigB8P+uT/eH86ZT4f9cn+8P50ygAooooAKKKKACiiigB8X3z/ut/I0ynxffP8Aut/I0ygAooooAKKp6pqlvpNn9out5UsFVUGSxP8A9YH8qlsb2LULKK6tyTHIMjcMEc4I/MVfs5qHPbTa5PPHm5b6k9FFFQUPT7kn+7/UUynp9yT/AHf6isnTPEFlq11Lb2hk3xjcC64DjOMj9OuDzVxpzlFyitFuS5xTSb3KWgWmuQajdPq0xeFgduZAwZs9VH8IxnjjqOOOOgooq61V1Z87SXoTTgqceVO5meIINRuNLKaS5SbeC219rMvoD25weo4B+lZd/ZeIX0Owjgnc3KZ8/ZKFY/3fm4zgcHnk+vWunorSlipU0kop2d9UROipttt6kdssy2sS3LB5ggEjL0LY5P51JRRXM3d3Nloh4/1Lf7w/kaZTx/qW/wB4fyNMpDCiiigAooooAKs2X+uP+7/Wq1WbL/XH/d/rQBeooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIrT/jzh/wCua/yqWorT/jzh/wCua/yqWgAooooAKq3qg7MsF69c1aqpff8ALP8AH+lAFbYv/PVfyP8AhRsX/nqv5H/CmUUAP2L/AM9V/I/4U+RF3D94o+Udj6D2qGny/fH+6v8AIUAGxf8Anqv5H/CjYv8Az1X8j/hTKKAH7F/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wo2L/AM9V/I/4UyigB+xf+eq/kf8ACnyopmf94o+Y8YP+FQ0+b/XP/vH+dABsX/nqv5H/AAo2L/z1X8j/AIUyigB+xf8Anqv5H/CjYv8Az1X8j/hTKKAH7F/56r+R/wAKNi/89V/I/wCFMooAmiRRMn7xT8w4wf8ACmbF/wCeq/kf8KIf9cn+8P50ygB+xf8Anqv5H/CjYv8Az1X8j/hTKKAH7F/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wo2L/AM9V/I/4UyigCaJFEyfvFPzDjB/wpmxf+eq/kf8ACiH/AFyf7w/nTKAH7F/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wo2L/AM9V/I/4UyigB+xf+eq/kf8ACjYv/PVfyP8AhTKKAJo0Xcf3in5T2PofambF/wCeq/kf8KIvvn/db+RplAD9i/8APVfyP+FGxf8Anqv5H/CmUUAR3unWmoW5gvBHLHkHB3DB9QQMin29nBaW6QWxjjijGFUA8fpWb4gg1G40sppLlJt4LbX2sy+gPbnB6jgH6Vl39l4hfQ7COCdzcpnz9koVj/d+bjOBweeT69a7KdL2kIp1Ek3s3tpv+hzznyybUG3bf9Dqti/89V/I/wCFGxf+eq/kf8K5jVrLxDLPYGyufuRqJmSQKvmZ+ZiOMjpxg9Dx6yXdprj+Kop7eYiwBXI8wBQuPmBXuTzzg9RyMcCw0Wk/aLZv7unzB1nf4X0OmRF2v+8X7vofUe1ULPRtPsJ5JrOOKKSX7xG71zgeg9h7elXE+5J/u/1FMrlU5JNJ6M3cU3dofsX/AJ6r+R/wo2L/AM9V/I/4VzmgWmuQajdPq0xeFgduZAwZs9VH8IxnjjqOOONTVo7uXSbhNOfZcsvyHOO/IB7HGRn+VbToqNVU1JPbXoZxqOUOaz9C/sX/AJ6r+R/wo2L/AM9V/I/4Vk+H4NRt9LCas5ebeSu59zKvoT35yep4I+lV/Ettq1zBANHkddrHzFjk2MeODnjjrxnuPwFRTrey5lbv0B1GqfPyv06m9sX/AJ6r+R/wo2L/AM9V/I/4VBbLMtrEtyweYIBIy9C2OT+dSVg1Z2NFqiYIvkt+8X7w5wff2pmxf+eq/kf8KB/qW/3h/I0ykMfsX/nqv5H/AAo2L/z1X8j/AIUyigB+xf8Anqv5H/CjYv8Az1X8j/hVDVo7uXSbhNOfZcsvyHOO/IB7HGRn+VQeH4NRt9LCas5ebeSu59zKvoT35yep4I+lbKmnSdTmW9rdfUz53z8tvma2xf8Anqv5H/CrFmoExw6t8vQZqpVmy/1x/wB3+tYmheooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIrT/AI84f+ua/wAqlqK0/wCPOH/rmv8AKpaACiiigAqpff8ALP8AH+lW6qX3/LP8f6UAU6KKKACny/fH+6v8hTKfL98f7q/yFADKKKKACiiigAooooAKfN/rn/3j/OmU+b/XP/vH+dADKKKKACiiigAooooAfD/rk/3h/OmU+H/XJ/vD+dMoAKKKKACiiigAooooAfD/AK5P94fzplPh/wBcn+8P50ygAooooAKKKKACiiigB8X3z/ut/I0ynxffP+638jTKACiiigAooooAKKKKAHp9yT/d/qKwdF8SxazfTW6W7xbFLoxYHcuccjseR6963k+5J/u/1FQRW0EEkjwwxxvIcuyIAXPqfXqa2hKmoSUo3b28jOSm5Jp6dQuZ1tbWW4kBKRIXYL1IAzWboOvLrkc5FuYHhIyN24EHOOcD0Na1RwW0FrGUtoY4UJyVjQKCfXiiMqaptOPvdH2BqfOmnoSUUUViaBRRRQA8f6lv94fyNMp4/wBS3+8P5GmUAR3M62trLcSAlIkLsF6kAZrN0HXl1yOci3MDwkZG7cCDnHOB6Gtao4LaC1jKW0McKE5KxoFBPrxW0ZU1Tacfe6PsZtT5009CSiiisTQKs2X+uP8Au/1qtVmy/wBcf93+tAF6iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAitP+POH/rmv8qlqK0/484f+ua/yqWgAooooAKqX3/LP8f6VYjnimeRIpUdom2SKrAlGwDg+hwQce4qvff8s/x/pQBTooooAKfL98f7q/yFMp8v3x/ur/IUAMooooAKKKKACiiigAp83+uf/eP86ZT5v9c/+8f50AMooooAKKKKACiiigB8P+uT/eH86ZT4f9cn+8P50ygAooooAKKKKACiiigB8P8Ark/3h/OmU+H/AFyf7w/nTKACiiigAooooAKKKKAHxffP+638jTKfF98/7rfyNMoAKKq6nfrpmmzXjoZBGB8oOMknA/U1kf8ACWxf2B/aP2R93neT5W8Y3Yz97HTHt1/OuinhqtWPNBXV7fMynWhB2k/M6GisS48SxQ+HYNUFu7ec2xYtwGG5zz6fKe3p0qG78WxW2k2d4to7tdbsIXA27Tg84Pfpx+VXHB15bR62+aJeIpLd9L/I6Gufu9AvJ/FUWppdhYUKnbk7lAHKjtg/UfePHruW063VrFcRghJUDqG6gEZqSsqdWdCT5d7WLnCNRK/qYNl4fvIPFFxqb3gMDbm2gnc4OAEPbA47n7o49G6BoF5pWo3Vxc3YmSUEAAnLnOdzZ7/n1PPr0afck/3f6imVrLGVZRcX1SW3RELDwTTXR3+85/QNAvNK1G6uLm7EySggAE5c5zubPf8APqefXU1azlv9JuLWCXypJFwG59ehx2PT8auUVE8RUnVVWW6t+BUaUYw5FsZnh/TJ9J0sW1zMJX3lgFJKoD2Gfz7ck1p0UVlUqSqTc5bsuEVCKiugUUUVBQ8f6lv94fyNMrFufE8Vtry6SbZ23uitLuHDMOOO4+Yc59eK2q1qUp00nJWuroiNSM21F7HP6BoF5pWo3Vxc3YmSUEAAnLnOdzZ7/n1PPr0FR3M62trLcSAlIkLsF6kAZrN0HXl1yOci3MDwkZG7cCDnHOB6GtantsQnXktFa5nD2dK1NdTWooorlNwqzZf64/7v9arVZsv9cf8Ad/rQBeooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIrT/AI84f+ua/wAqlqK0/wCPOH/rmv8AKpaACmyIJI2RtwDAglWKn8COR9RTqKAOb8I2Nvp15r9rZx+XDHqIwCxYkmCIkknJJJJJJ5JNXIbG40/P2vVbzVPM+79rSFfLx1x5Uadc85z0GMc52KqX3/LP8f6UdEBW3r/zyX8z/jRvX/nkv5n/ABplFAD96/8APJfzP+NPkddw/dqflHc+g96hp8v3x/ur/IUAG9f+eS/mf8aN6/8APJfzP+NMooAfvX/nkv5n/Gjev/PJfzP+NMooAfvX/nkv5n/Gjev/ADyX8z/jTKKAH71/55L+Z/xp8rqJn/dqfmPOT/jUNPm/1z/7x/nQAb1/55L+Z/xo3r/zyX8z/jTKKAH71/55L+Z/xo3r/wA8l/M/40yigB+9f+eS/mf8aN6/88l/M/40yigCaJ1Myfu1HzDnJ/xpm9f+eS/mf8aIf9cn+8P50ygB+9f+eS/mf8aN6/8APJfzP+NMooAfvX/nkv5n/Gjev/PJfzP+NMooAfvX/nkv5n/Gjev/ADyX8z/jTKKAJonUzJ+7UfMOcn/Gmb1/55L+Z/xoh/1yf7w/nTKAH71/55L+Z/xo3r/zyX8z/jTKKAH71/55L+Z/xo3r/wA8l/M/40yigB+9f+eS/mf8aN6/88l/M/40yigCaN13H92o+U9z6H3pm9f+eS/mf8aIvvn/AHW/kaZQA5/LkjZJII2RhhlbJBHp1qL7NafZfs32K38j/nls+Xrnp0680+szxBpk+raWba2mET7wxDEhXA7HH59+QK1pazUXKyvv2InpFtK7NJobZ7f7O9pC0OAPLK5XA6DHTtTZLa0mgSGWyt5IkxtjZMquBgYHbisK60C8n8KwaYt2DNGQWZidrjJ+X1wMjHH8I4HbU0mzlsNJt7WeXzZI1wW59egz2HT8K1nGMIc0Z3d9v1Ii3KVnHp/SL+9f+eS/mf8AGjev/PJfzP8AjXOa/oF5quo2txbXYhSIAEEnKHOdy47/AJdBz6dBWc4QjCMoyu3uuxUZScmmrW/EmR12v+7X7vqfUe9M3r/zyX8z/jQn3JP93+oplYmg/ev/ADyX8z/jRvX/AJ5L+Z/xplFAD96/88l/M/40b1/55L+Z/wAaZWJ4l0W51mCBbWdI/LYlkkJCtkdeM8j6dzWtKEZzUZysu5FSTjFuKuze3r/zyX8z/jRvX/nkv5n/ABqC2iaC1iikkMrxoFaRurkDGfxqSs3o9ClsKYLZ5PtLWkJnTCrIV+YDngHqO/507ev/ADyX8z/jQP8AUt/vD+RplDbe47D96/8APJfzP+NRwQ21rGUtrSGFCclY12gn14paKLu1gsP3r/zyX8z/AI0b1/55L+Z/xplFIB+9f+eS/mf8asWbAzHCKvy9RmqlWbL/AFx/3f60AXqKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yqWorT/jzh/65r/KpaACiiigAqpff8s/x/pVuql9/wAs/wAf6UAU6KKKACny/fH+6v8AIUyny/fH+6v8hQAyiiigAooooAKKKKACnzf65/8AeP8AOmU+b/XP/vH+dADKKKKACiiigAooooAfD/rk/wB4fzplPh/1yf7w/nTKACiiigAooooAKKKKAHw/65P94fzplPh/1yf7w/nTKACiiigAooooAKKKja5gW4W3aaMTMMrGXG4j1A69j+VNJvYL2J4vvn/db+RqC5laC1lljjMrxoWWNerkDOPxqeL75/3W/kaZQtHqD2OYsPE19daHf3j2aNJbY2FA21s9fX7vU89D261qeH9Tn1bSxc3MIifeVBUEK4HcZ/LvyDWnUdxcQ2kDTXU0cMS43SSMFUc45J966atalKMuWFru++y7GEYShZyndJf0yh4g1OfSdLNzbQiV94UlgSqA9zj8u3JFT6TeS3+k291PF5Uki5K8+vUZ7Hr+NWo5EmiWSJ1eN1DK6nIYHoQe4p1Zc8HSUFHW+/6FqL5+a+nYKKKKyNDBsvEF5P4ouNMezAgXcu4A7kAwQ57YPHYfeHPq3QNfvNV1G6t7m0EKRAkEA5Q5xtbPf8uh49OjT7kn+7/UUyuuVak4tKnbRLfquvzMFTmmm5df6RHcytBayyxxmV40LLGvVyBnH41keGtaudZgna6gRPLYBXjBCtkdOc8j69xW3RWUZwVNxcbt9exbjJzTT07GZ4g1OfSdLNzbQiV94UlgSqA9zj8u3JFT6TeS3+k291PF5Uki5K8+vUZ7Hr+NXKKHOHslDl1vv+gcsufmvp2Cuf1/X7zStRtbe2tBMkoBJIOXOcbVx3/PqOPXoKKKM4QnzTjzLsFSMpRtF2Hj/Ut/vD+RplPH+pb/AHh/I0ysTQKKKKACiiigAqzZf64/7v8AWq1WbL/XH/d/rQBeooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIrT/jzh/65r/KpaitP+POH/rmv8qyvE2vT6HbWQsbFb68v7xLS3ikmMMe5gWLO4ViqhVY8KSTgY5oA2qKyNKufEc10y63pWl2dvsJWSz1OS4ctkcFWgjAGM85/D016ACql9/yz/H+lW6q3qM+zapbr0FAFKin+TJ/zzb/vk0eTJ/zzb/vk0AMp8v3x/ur/ACFHkyf882/75NPkikLDCN90dvYUAQ0U/wAmT/nm3/fJo8mT/nm3/fJoAZRT/Jk/55t/3yaPJk/55t/3yaAGUU/yZP8Anm3/AHyaPJk/55t/3yaAGU+b/XP/ALx/nR5Mn/PNv++TT5YpDM5CMRuPagCGin+TJ/zzb/vk0eTJ/wA82/75NADKKf5Mn/PNv++TR5Mn/PNv++TQAyin+TJ/zzb/AL5NHkyf882/75NABD/rk/3h/OmVNFFIJkJRgNw7UzyZP+ebf98mgBlFP8mT/nm3/fJo8mT/AJ5t/wB8mgBlFP8AJk/55t/3yaPJk/55t/3yaAGUU/yZP+ebf98mjyZP+ebf98mgAh/1yf7w/nTKmiikEyEowG4dqZ5Mn/PNv++TQAyin+TJ/wA82/75NHkyf882/wC+TQAyin+TJ/zzb/vk0eTJ/wA82/75NADKxLnw1Fc+Ik1Q3DrtZXaLaOWXpz2HA7ev4b3kyf8APNv++TXI6h4o1O08eW+hx6bvglKDcVbe4YcuvbavOeD9xuR2qOJlh/ei7X0+85MVVo04xdXZtJep10X3z/ut/I0ypo4pAxyjfdPb2Ncd4T8Uanr+s31neab5CW4JyqtmI7sbHz/F19Punj0ylOMZKL6l1MRTpVIU5by2+R1dZHibw+niPSRZvO1uySiVHC7sEAjkcZGCe47VteTJ/wA82/75NHkyf882/wC+TTlFSXKzSrThVg6c1dMzdE0pNE0W30+KRpVhU5dhjcSSScdhknj+dX6xvF2rXvh7QTe2lp5z+aqEyK22MH+I47cAdRyw+ht+H7y61fQLS/ubRoJZ03FApx1IDDPYjkex6nrUxlFS9muiMadWlCp9VhvFJ/LbcvUU/wAmT/nm3/fJo8mT/nm3/fJrQ6gT7kn+7/UUypkikCvlG5Xjj3FM8mT/AJ5t/wB8mgBlFJcieC1lljt5JXjQssaqcuQM46d6x/DGr3mt2873FsFETAK8Sna2RyOc8j69xW0aM5U3UWy/UzdSKmoPdmzRT/Jk/wCebf8AfJo8mT/nm3/fJrE0GUU/yZP+ebf98mjyZP8Anm3/AHyaAAf6lv8AeH8jTKmEUnksNjZ3Dt9aZ5Mn/PNv++TQAyin+TJ/zzb/AL5NHkyf882/75NADKKf5Mn/ADzb/vk0eTJ/zzb/AL5NADKs2X+uP+7/AFqHyZP+ebf98mrFmjrMSysBt7igC5RRRQBnaxr2naDFC+pSyK07+XDDBBJPLK2CSEjjVnbABJwDgAk8UaNr2na9BLJpk7OYH8uaKWF4ZYWxna8bgOhwQRkDIII4NYvi61trzWNHit9ek0PXv339mzCFZEl4XzI2VxtYEYO0FXwpIIwa4zxbreo2Fj4hs7+8srDULa40xp9f0eM2xMMk4XbIGZyrIoY4LsCrA4AJFC1dh2/r+v6/T16ivIfE2p6p4XfXtK8PalczWCLpxkuL3UJJWsWnmaOQee/mOgMaq2SG2btwHSn38viLw5Yapby6lbWVrM9ijxR67PqNzYpLcCOWbzJ41dEKE46gMpIxzQtdvQT03PVbm5S0hEkqyspdUxFC0hyxAHCgnGTyegHJwBmpq8/8RpF4d8PXFrouvX8sy6vp/mxTai88tqsk8SlN7EyBXXJwzHOTjjiue0668U6pNPrn26ys7iHW3tmkvPENxFFEqz+WLdrPyvKyyYAJYsS4YNkgU1r/AF6f5g9Ff+uv+R7DRXll1Jeabqn9r6rc6lfWU2p+VDq+i66zxwk3AjSGWyciIAbvLbYJGyrEgNyPU6S1VwejsFFFFABRRRQAUUUUARWn/HnD/wBc1/lXnXxC0x7nXtOEfhbxHrMU97EbiS01aWOBAqMylI1uoxG6siHeyhc99xFei2n/AB5w/wDXNf5Vxfj3wBpmvm11OLw5pmo3tvexXF2j28SzXsSAjyvNYdfukBiFbbtJCkml9pPzX5jWz9GL4XsdRg8ViSPRNd03TfscglfWtae8Zpd6bAiC6lUDaHySoPTB5IruK4Hwt4UgtPHD69pvhKDwraDT2tJLcxWyy3DmRWDAQMyqqgEZ3ZYsMjCKa76q6L+urJ6v+ugVUvv+Wf4/0q3VS+/5Z/j/AEpDKdFFFABT5fvj/dX+QplPl++P91f5CgBlFFFABRRRQAUUUUAFPm/1z/7x/nTKfN/rn/3j/OgBlFFFABRRRQAUUUUAPh/1yf7w/nTKfD/rk/3h/OmUAFFFFABRRRQAUUUUAPh/1yf7w/nTKfD/AK5P94fzplABRRRQBDdXlrYxCS9uYbeMttDzSBAT6ZPfg1NXP+KvCqeJ4rYG7a2kt2ba2zeCGxkYyOeBzn1ras7VLGxgtIixjgiWJSx5IUYGffioTlzNNaHPCdZ1pRlG0Vazvv30Jqha8tUvEtHuYVuZF3JCZAHYc8hepHB/I1NXM3vguG88Xxa415Im10kaAIDuZAMYbsOFyMHvzzwTcklyq4V51opeyjzO6vrbTqzo4Ly1e+ktEuYWuY4yzwiQF1GOpXqByPzFMgvLW5lljtrmGaSFtsqRyBjGeeCB0PB6+lYWm+C4bPxlLri3kj7jLIsBQDazqc5buOWwMDtzxyzw14Lh8OapcXkd5JP5iGONGQLsUsDye54HPHfjniFKrdXj+JhCri3JKVNJXd9enR/M6SSRIYmkldUjRSzOxwFA6knsKiW+tHsxdpdQtbHpMJAU64+9068VX1vSk1vRbjT5ZGiWZRh1GdpBBBx3GQOP5VjWngmK18Nf2UL12c3H2gzeWAN2NuNuem3368+1bU9aqjPSPV/8A1qTrqrywheNt79e1jpGuYEt/tDzRrDgHzC4C4PQ56d6ejrJGrxsGRhlWU5BHrWLceGopvDsGli4dfJbesu0HLc549PmPf061o6ZYLpmmw2aOZBGD8xGMknJ/U10ThSULxld37dO5rGVRytJaW/EtUUUVzmo9PuSf7v9RTKen3JP93+oplABRRRQAUUUUAFFFFADx/qW/wB4fyNMp4/1Lf7w/kaZQAUUUUAFFFFABVmy/wBcf93+tVqs2X+uP+7/AFoAvUUUUAVNS0rT9Zsms9YsLW/tWIZoLqFZUJHQ7WBHFY+q+CtMu/DSaJpNtaaRaLdwXXlW1qqxkxyrIRsXA+bZjPvnmtu4ZlkGCRx2NReY/wDeb86AG2Wg6RpmmSabpulWNpYy7vMtYLZI4n3DDZQDByODxzTLDw7omlafPY6Xo+n2VncZ863t7VI45cjB3KoAORxz2qXzH/vN+dWoSTECTk0AULXw5oljpw0+x0bT7ayEomFtDaokfmAgh9oGNwKg565A9KH8O6JJra6zJo+ntqi/dvmtUM44xxJjd0469K0qKAMv/hGNA/tz+2f7D03+1M7vt32SPz84258zG7px16VqUUUAFFFFABRRRQAUUUUARWn/AB5w/wDXNf5V5d490Hwo2uaiLvxRLbarqpik/sgWUGqBpUjKRyizaGSQ/KDkrtyB1Feo2n/HnD/1zX+VcD4m1fw1D4h1NdPn8Qx+I7KNHuV8O2dxM5LJ8nmIEa3dmQbQZQcADBGAQnuVG9mL8OdEurO+lvrjwlo2jxSQBY7i30iPTrlskHBRJpiVPBIZo2UqBtOcr6FXLeEtQ8V3NxNB4j0poLWNAYru4EMU0h6BTFFLKpOBln3RjJACdcdTVshBVS+/5Z/j/SrdVL7/AJZ/j/SpGU6KKKACny/fH+6v8hTKfL98f7q/yFADKKKKACiiigAooooAKfN/rn/3j/OmU+b/AFz/AO8f50AMooooAKKKKACiiigB8P8Ark/3h/OmU+H/AFyf7w/nTKACiiigAooooAKKKzodf0u41iTS4byNryPO6IZ6jqAehI7gHIwfQ0nJLciVSEGlJ2vt5mpD/rk/3h/Oq15O9tYzzxQtPJFEzrEvWQgZCjryelWYf9cn+8P50ymU02rI5nwX4lvfEdrdSX1rHF5LqqSRBgr5HI5zyMDv/EOPXpqhvLy3sLOS6vJVhgiXc7t2/wAT7d6of8JPo39j/wBqfb4/se/y9+Dnd/d243Z74x056c1lFqC5ZS1OWlJUKap1qickrtuy0727GrRWVc+J9GtNPt76e/jW3uf9SwBYv68AZ46Hjg8HmnXniPSNPlto7u/hja6UNEc7gyno2RwFPqcDr6Gq9pDuaPEUVvNdOq67ff0MbxX4r1DQdYsbSy09biOdQxLBiZTuxsTHRunr94cevWVnajr+l6TdQ2+o3kcEs/3FbPTOMkj7oz3OBwfQ0Ta/pdvrEelzXka3kmNsRz1PQE9AT2BOTkeoqE1GTvL/AIBjCcadWbnVTu1pp7vl8zH0vxXqF149uNFl09UtoxKocBt6BVOHY9NrcY4H3hye9XQPGWp6pdarHcaTj7HC8qRxhgwYHiJs5+Y/QfdPHp0tpr+l3GtSaXDeRteRq+6IZ6heQD0JHcA5GD6Gr1TGMnqp31f/AA3yMadGrJ3jXuk3fRfd8jmfBfiW98R2t1JfWscXkuqpJEGCvkcjnPIwO/8AEOPXpqKK1hFxjZu52YenOnSUKkuZrr3CiiirNwooooAen3JP93+ornNA1+81XUbq3ubQQpECQQDlDnG1s9/y6Hj06NPuSf7v9RTK2hOEYSjKN29n2M5Rk5Jp2t+IUUUViaBRRRQAUUUUAPH+pb/eH8jTKeP9S3+8P5GmUAFFFFABRRRQAVZsv9cf93+tVqs2X+uP+7/WgC9RRRQBWuf9YPpXPeJrnV7aCA6NG7bmPmNHHvYccDHPHXnHYfj0Nz/rB9KhqZR5la9jWjUVKopuKduj2I7ZpmtYmuVCTFAZFXorY5A/Gr8H+pWqlW4P9StUZt3dzkr/AMS6vZeOI7CcW9pprzxRRefYXDC5V1HzC7QmKNt5KiJ1yxUcjeMZkHjfWtS8R3dlZ2zLZm4urKJv7HuiLZogwE73GRE6l4yNilSNy/NkGuqk8I6NNrZ1WS3mNwZVnZBdyiB5FACyNBu8tnGFwxUkFQc5Ap0fhTRotdfV0tX+1uzPhriQxK7LtZ1iLeWrkcFgoJycnk5Vrxt5P9P+D+nkX1uvL9f+AcHofizxJB4HsJVubK6k0zw9Bq1/LdwSF7tXDlY1cyfI+2Jt0jbgWIO0ciugufFWrQeMLe1lEFnpk0sKRfaNPuGFwroPmF0hMUbbyVETrlivUbxjRPgHw4bWytjZzeRZRmKKP7bPhoi27ynG/wDeRgjhH3KBwABxVmTwjosutf2q9vMbgyrM0YupRA8igBZGgDeWzjC4YrkFQc5ArRtOV/P9f8vu/ET2dv6/p/n5GAvjO/Tx5aaU89jc2d5eS2ix2tjcHySkcj5N2T5TPmPDRBQylsZO0k9zWDH4K0KLV01JLe4E8dw11Gn22fyY5W3bnWHf5ak7myQozuOepreqOiB/FpsFFFFABRRRQBFaf8ecP/XNf5Vk6jr2o2V88Ft4T1jUY1xi5tpbNY3yM8CSdG46cqOla1p/x5w/9c1/lXM+P9OXVLHSLeZLe6t/7UiafT7h0UXyBWzEA5CuRxJtPXy6T3QdGXtM1C71LVxLeeHNZ0oxwsqy3d1AYWyV48uKd8txwxXgAjIzg7teWeAPCCeF/HKRDRtP0qSHTri3aWNod+ooLgGOVFU7wFQgOWVSWZR82AR6F4hu5rDw1qV3anbNDbSPG2AdrBSQcHjjrT+yn/W7BfE1/WyNGql9/wAs/wAf6VlaKr2HiK90tLm4uLZbSC4U3M7TMrs0it8zEnB2A4zgc461Yhl1SbP9t2dnaY/1X2S7a43eud0ce3HGMZzk9McghaKfiP8Avt/3yP8AGjEf99v++R/jQMZT5fvj/dX+QoxH/fb/AL5H+NPkEe4ZZvuj+H2HvQBDRT8R/wB9v++R/jRiP++3/fI/xoAZRT8R/wB9v++R/jRiP++3/fI/xoAZRT8R/wB9v++R/jRiP++3/fI/xoAZT5v9c/8AvH+dGI/77f8AfI/xp8oj858s2dx/h/8Ar0AQ0U/Ef99v++R/jRiP++3/AHyP8aAGUU/Ef99v++R/jRiP++3/AHyP8aAGUU/Ef99v++R/jRiP++3/AHyP8aACH/XJ/vD+dMqaIR+cmGbO4fw//XpmI/77f98j/GgBlFPxH/fb/vkf40Yj/vt/3yP8aAGUU/Ef99v++R/jRiP++3/fI/xoAZWJbeEtMtPEcmtRCb7S7M2wv8is33mA65OT1JHJ46Y3sR/32/75H+NGI/77f98j/GplGMrXWxlUo06jTmr2d15MIf8AXJ/vD+dMqaIR+cmGbO4fw/8A16q3pkTT7h7EeZcrExhR1ADPj5QeemcVWxo3ZXIdT0231fTZrG8DGGZcNtOCMHII9wQDWP8A8IRpP/CPf2P/AKR5Pnef5vmfPv6Z6Y6cYxjHvzWXpOpeLpfC2rTXdtIb2Pb9k8y3CO39/wCXjOByOOTxz0rc8IXOq3ehCTxEjxXPmsF3RBGZOMErxg5yOg4A+p5lKnVkrx3XY8qNTDYupHmpO8ovVrpfZ/1+ZXvPBGk3uj2WnP8AaI47Ld5TpJ83zctnII5PPT6YHFO1LwVpGqS2bTpMi2cSwokcmA0a9FOcnHXkEHnr0qLxtea7ZWtofDccsm52EzRwCRl4G0Y54POTjsOeeehsjI+n273w8u5aJTMiKCFfHzAc9M5pqNOUnHl7Fxo4WpVnR9lsld20faz8jI1vwlpmv30F3fibzIVCkRvgSLnO0+3J6YPPXpgufCWmXfiOPWpRN9pRlbYH+RmX7rEdcjA6EDgcdc5/i2/8S2ms2Mfh23ea2ZQWIhDBn3cq5/hXGOfl6nnjjrsR/wB9v++R/jTUac5NcpUKeGrVakXT1TTba3fRrvb+tzEsfCWmWniaXWohN9pcSNsL/IrMp3MB1ycnqSOTx0xsVNGI9xwzfdP8PsfeuO8JX/iW71m+j8RW7w2yqSpMIUK+7hUP8S4zz83Qc881eNNqKW5rzUsNONKEPjb2Wl/M6uin4j/vt/3yP8aMR/32/wC+R/jWp2DKKfiP++3/AHyP8aMR/wB9v++R/jQAyin4j/vt/wB8j/GjEf8Afb/vkf40ACfck/3f6imVMgj2vhm+7z8vuPemYj/vt/3yP8aAGUU/Ef8Afb/vkf40Yj/vt/3yP8aAGUU/Ef8Afb/vkf40Yj/vt/3yP8aAGUU/Ef8Afb/vkf40Yj/vt/3yP8aAAf6lv94fyNMqYCPyW+Zsbh/D9femYj/vt/3yP8aAGUU/Ef8Afb/vkf40Yj/vt/3yP8aAGUU/Ef8Afb/vkf40Yj/vt/3yP8aAGVZsv9cf93+tQ4j/AL7f98j/ABqxZhPOO1mJ291x/WgC5RRRQBWuf9YPpUNTXP8ArB9K5HxvfeIbK1tD4bhkfc7CZ4oRK68fKMYPB5ycdhyM8xOahHmZhiKyoUnUabt21Z1FW4P9StZ1k9w+n2730ax3LRKZkXor4+YDk8Zz3NaMH+pWrWpsndXJKK4fUfHV1pgvYpbaGW6017ya7jQEZtoYvMRl54ZhJCMnIyW44rNg8d+I/wCxblpLWJrsXFjFBdT6Pd2UB+0TCJk2TEM5TOdytghl4HNC128vxKat/XY9KoripvEevaf4tttO1N7OG1aSGHzG0y5WO7LIMulwrNHCfMJVYXyx2j5vnBqrpniPWtRW30zRnsra9nuNTla4vkluUEcF0YgoUyhssXU53bVAIC4wAen9f1/WoW/r1v8A5Hf0Vw9z4r123vrmeSPT0sdNu7SwvbYI7SyyzCLc8cpZQFXz0wChLbW5XIxT0XXddubW20vS7u3F9c3uqzG61KKS4RIYLtkEYVXQ5/eIB82FVTweKOl/67/lqFtP68/8j0SiuL8NeLNU8T67biBLO007+yrW/mjZGllZpvNGxXDBQAYwc7Tn0GcjtKbTW4vIKKKKQEVp/wAecP8A1zX+VcR8RtE0u5uNIvLkatNqMl+kNjb2usT2sLy+XJjftYiMBd5Lou/jAznB7e0/484f+ua/yri/FevNd/2xZLoEeqadoqxy6hK1+beaM7fMzbhVJMiphgS8fJGD3EyHHsZ3gC80q71rTbwaZfQX2p6Kbu1nu9ZuNQ2x+YgliHnMdmGMRyB83tjFekSxRzwvFMiyRyKVdGGQwPUEdxWD4V8K+HtAtI7jw7bOiTQIsck1zLOwh+8qK0jMVT5idowMnOK6CtJdv63ZK7r+tCjpmjWOjxulhG678bmkmeViAMAbnJOAOgzgdqfff8s/x/pVuql9/wAs/wAf6VIynRRRQAU+X74/3V/kKZT5fvj/AHV/kKAGUUUUAFFFFABRRRQAU+b/AFz/AO8f50ynzf65/wDeP86AGUUUUAFFFFABRRRQA+H/AFyf7w/nVa8vLews5Lq8lWGCJdzu3b/E+3erMP8Ark/3h/OqWp6bb6vps1jeBjDMuG2nBGDkEe4IBpSvbTcipz8j5N+nqGm6nZ6vZi606dZ4SxXcARgjsQeQfr6irVZ2h6HaeH9P+x2PmFC5dmkbLMx7nt0AHA7Vo0o83Kubcmi6jpp1bc3W2wUUUVRqFFFFAD4f9cn+8P51k2fiPSNQluY7S/hka1UtKc7Qqjq2TwVHqMjp6itaH/XJ/vD+dc5pvgrSNLlvGgSZ1vImhdJJMhY26qMYOOnJJPHXrWcue65dupzVniFOPskra3v+FjR0rW9O1uKSTS7pZ1jba42lSvpwQDj39j6VfrI8P+GbHw5FMtgZnadgXeZgScdBwAMcnt3rXpw5uX39ysO6rpJ1klLrbYKKKKs3CiiigB8X3z/ut/I0ynxffP8Aut/I0ygAooooAKKKKACiiigB6fck/wB3+oplPT7kn+7/AFFMoAKKKKACiiigAooooAeP9S3+8P5GmU8f6lv94fyNMoAKKKKACiiigAqzZf64/wC7/Wq1WbL/AFx/3f60AXqKKKAK1z/rB9Khqa5/1g+lQ0AFW4P9StVKtwf6laAKX9gaUdYu9Uayia8vLZbW4lbJ8yJSSEIPGPmPbnv0FUbTwRoFlaNbxWkzo0sMpa4vJpnzCwaIB3csFVhkJnb145Od+ihabAYsnhHRptbOqyW8xuDKs7ILuUQPIoAWRoN3ls4wuGKkgqDnIFMuPBuiXNnHbG3nhSOeWdHtryaCRXlYtJiRHD7WZiSudvTjgY3aKOlg8zDHgzQF1C2vI7DyntUjWOKKaRIP3YxGWhDCNiv8LMpIwMEYGEufBmh3djHaPbTRRxzy3CNb3k0MivKzNJiRHDYYucrnHTjgY3aKNwKNnounadePdWNqkEr28VqfLyFEUe7YoXoAN7dB39hV6iijcAooooAitP8Ajzh/65r/ACrjtU8Fa3cX3iNtL17T7W08QACeK50t5pIsQLCdrrOg6LnleprsbT/jzh/65r/KpaTSe402tUYPh3S9f0qGG11bVtNvbO3t1hjW202S3kyoABLNO4PAPG0cnr2reooqm23dkpJKyCql9/yz/H+lW6qX3/LP8f6UhlOiiigAp8v3x/ur/IUyny/fH+6v8hQAyiiigAooooAKKKKACnzf65/94/zplPm/1z/7x/nQAyiiigAooooAKKKKAHw/65P94fzplPh/1yf7w/nTKACiiigDmfGl7r9na2p8OxSPudhM0UIlZePlGMHg8847Dkd+gs2uHsYGvUWO5aJTMi9FfHzAcnjOe5qaioUWpOV9znhRca0qnM2nbTordjk7+/8AE8fju3trS2ZtKLICREChQj52Z+zD5sDI6Dg556yiiiMXFvW9wo0XTcm5N3d9enkvI5bwdf8Aie61+6j1+2aK2U5UtEECPu4VD/EuM8/N0HPPPU0+H/XJ/vD+dMohFwjZu4Yei6NPkcnLze5na/NqFvoN3Lo8fmXipmNdu49RkgdyBkgdyOh6VzP9p+L/APhBvtP2WT+0vtO3PkDzPJ/veX67uPu9Ocd67eipnTcnfma0M62GlVm5Ko46Wsvz9TO0CbULjQbSXWI/LvGTMi7dp6nBI7EjBI7E9B0rRoorSKsrHTTi4QUW7269woooplj4vvn/AHW/kaZT4vvn/db+RplABRRRQAUUUUAFFFFAD0+5J/u/1FMp6fck/wB3+oplABRRRQAUUUUAFFFFADx/qW/3h/I0ynj/AFLf7w/kaZQAUUUUAFFFFABVmy/1x/3f61WqzZf64/7v9aAL1FFFAFa5/wBYPpXOeKLXWLq3txosjrtY+ascvlseODnjjrxnuPw6WeNncFRkY9aj8iT+7+ta0qjpTU0k7dyKkFOLiytarMlpCt04ecIokZejNjkj8a0IP9StQeRJ/d/WrESlYwG4NZt3dylojzDxh4m1RNM8QaItxG93p1ve3dwZbeORZLXyswqUZSpBaRV5HPkv71euNb1tW8TXKaxJDDaX9tpttF5EXl2qypb7pySu5mXzWIBO31BHTup9L0+6a4a5sbaZrqEQTmSFWMsYzhGyPmX5m4PHJ9ag1DRLW90u/sottl/aAxcSwQRM0mVCksJEZGyoC/Mp44pLRfL+vw/zReja/r+v8jhP7U1O38V22nXWrDVhaa40Ec9xbQeainTnlwSiABtx6qFODjoTnJn8Q6+vgcXGp6sdTOreErnU2iuLODyoJUWLAVQnzKRKch9wOOw4r0Lw74K0jw3Yrb20K3LLMZxLNBEpVymzKrGionyfLhFXgnOSSTpNomlPbpbvplm0Mdu1qkZt0KrC2MxgYwEO1cr04HpTVk/67Nfnb7gTV0/63uc1DqN/eeINQnm8QrpNppd5BaCzeGIw3CvHG2XLAOHYylV2OBlV4bkHP8KeJNUvPGFpbT32oX2nanp017BcXdtbQQy7Xi2tbrGfNVMSHibLYC8nkntZtD0m41aDVLjS7KXUbZdkF49ujTRLzwrkZA5PAPc1FY+GdB0u+kvdM0TTrO6kLM89vaRxuxPUlgATnvQtH/Xb+n5EdLen9f1uadFFFIYUUUUARWn/AB5w/wDXNf5VLUVp/wAecP8A1zX+VS0AFFFFABVS+/5Z/j/SrdVb1iuzGO/UA0AUqKf5rei/98D/AAo81vRf++B/hQAyny/fH+6v8hR5rei/98D/AAp8kjBhwv3R/CPQUAQ0U/zW9F/74H+FHmt6L/3wP8KAGUU/zW9F/wC+B/hR5rei/wDfA/woAZRT/Nb0X/vgf4Uea3ov/fA/woAZT5v9c/8AvH+dHmt6L/3wP8KfLIwmcYX7x/hFAENFP81vRf8Avgf4Uea3ov8A3wP8KAGUU/zW9F/74H+FHmt6L/3wP8KAGUU/zW9F/wC+B/hR5rei/wDfA/woAIf9cn+8P50ypopGMyDC/eH8Ipnmt6L/AN8D/CgBlFP81vRf++B/hR5rei/98D/CgBlFP81vRf8Avgf4Uea3ov8A3wP8KAGUU/zW9F/74H+FHmt6L/3wP8KACH/XJ/vD+dMqaKRjMgwv3h/CKZ5rei/98D/CgBlFP81vRf8Avgf4Uea3ov8A3wP8KAGUU/zW9F/74H+FHmt6L/3wP8KAGUU/zW9F/wC+B/hR5rei/wDfA/woAIvvn/db+RplTRyMWPC/dP8ACPQ0zzW9F/74H+FADKKf5rei/wDfA/wo81vRf++B/hQAyin+a3ov/fA/wo81vRf++B/hQAyin+a3ov8A3wP8KPNb0X/vgf4UACfck/3f6imVMkjbX4X7v90eopnmt6L/AN8D/CgBlFP81vRf++B/hR5rei/98D/CgBlFP81vRf8Avgf4Uea3ov8A3wP8KAGUU/zW9F/74H+FHmt6L/3wP8KAAf6lv94fyNMqYSN5LHC/eH8I96Z5rei/98D/AAoAZRT/ADW9F/74H+FHmt6L/wB8D/CgBlFP81vRf++B/hR5rei/98D/AAoAZVmy/wBcf93+tQ+a3ov/AHwP8KsWblpiDt+72UCgC5RRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/AB5w/wDXNf5VLUVp/wAecP8A1zX+VS0AFFFFABVS+/5Z/j/SrdVL7/ln+P8ASgCnRRRQAU+X74/3V/kKZT5fvj/dX+QoAZRRRQAUUUUAFFFFABT5v9c/+8f50ynzf65/94/zoAZRRRQAUUUUAFFFFAD4f9cn+8P50ynw/wCuT/eH86ZQAUUUUAFFFFABRRRQA+H/AFyf7w/nTKfD/rk/3h/OmUAFFFFABRRRQAUUUUAPi++f91v5GmU+L75/3W/kaZQAUUUUAFFFFABRRRQA9PuSf7v9RTKen3JP93+oplABRRRQAUUUUAFFFFADx/qW/wB4fyNMp4/1Lf7w/kaZQAUUUUAFFFFABVmy/wBcf93+tVqs2X+uP+7/AFoAvUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/9c1/lUtRWn/HnD/1zX+VS0AFFFFABVS+/5Z/j/SrdVL7/AJZ/j/SgCnRRRQAU+X74/wB1f5CmU+X74/3V/kKAGUUUUAFYV1a603ieKaCYixBXI8wBQuPmBXuTzzg9Rzxxu0VMo8xtRrOk20k7q2oUVmw69Zz6u+nJ5nnKSu4r8pI6gd/Xt2rSoUlLYmpTnTaU1a+oU+b/AFz/AO8f50ynzf65/wDeP86ozGUUUUAFFFFABRRRQA+H/XJ/vD+dMp8P+uT/AHh/OmUAFFFFABRRRQAUUUUAPh/1yf7w/nTKfD/rk/3h/OmUAFFFFABRRRQAUUUUAPi++f8Adb+RplPi++f91v5GmUAFFFFABRRRQAUUUUAPT7kn+7/UUynp9yT/AHf6imUAFFFFABRRRQAUUUUAPH+pb/eH8jTKeP8AUt/vD+RplABRRRQAUUUUAFWbL/XH/d/rVarNl/rj/u/1oAvUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/wAecP8A1zX+VS1Faf8AHnD/ANc1/lUtABTZGKRsyo0hUEhFxlvYZwPzp1Vf7L086kNRNjbfbgu0XXkr5uMYxvxnGKAKHh3V77VX1JdRs0s3tbvyUhV97KpjRxuI4LfPzjgdMnGSsOrW+sZ+yR3kflfe+12U1tnPTHmqu7pzjOOM9RVrT9N+wXmoz+b5n265E+3bjZiNEx15+5nPHWn33/LP8f6UdEBW8pvVf++x/jR5Teq/99j/ABplFAD/ACm9V/77H+NPkjYsOV+6P4h6CoafL98f7q/yFAB5Teq/99j/ABo8pvVf++x/jWVr2mzappn2e2mEbbwx3EhWA7HH5/gKn0q0ksdLgtp5fNeNcFufXoM9h0/Cpu+a1tDZ04eyU+bW+36l7ym9V/77H+NHlN6r/wB9j/Guf13QrvVNQtp7a6ESxDBBJyhzncuO/wCXQc+hdaFdz+J4tRS6CwoVO3J3KAOVHbB+v8R49Yc5X+E2jQouKbqW0b22a6fM1Y9Gs4tQa9jgiW4bOX3jv1OM4B9/r61b8pvVf++x/jXP2uhXcHieXUXug0LljtydzAjhT2wPr/COPTdqobPSxGISTVp82i+Xl8h/lN6r/wB9j/GnyxsZnOV+8f4hXOaFoV3peoXM9zdCVZRgAE5c5zubPf8APqefXoJv9c/+8f504NtXasRWpwpz5YS5l3Dym9V/77H+NHlN6r/32P8AGmUVRiP8pvVf++x/jR5Teq/99j/GmUUAP8pvVf8Avsf40eU3qv8A32P8aZRQBNFGwmQ5X7w/iFM8pvVf++x/jRD/AK5P94fzplAD/Kb1X/vsf40eU3qv/fY/xplFAD/Kb1X/AL7H+NHlN6r/AN9j/GmUUAP8pvVf++x/jR5Teq/99j/GmUUATRRsJkOV+8P4hTPKb1X/AL7H+NEP+uT/AHh/OmUAP8pvVf8Avsf40eU3qv8A32P8aZRQA/ym9V/77H+NHlN6r/32P8aZRQA/ym9V/wC+x/jR5Teq/wDfY/xplFAE0cbBjyv3T/EPQ0zym9V/77H+NEX3z/ut/I0ygB/lN6r/AN9j/Gjym9V/77H+NMooAf5Teq/99j/Gjym9V/77H+NMooAf5Teq/wDfY/xo8pvVf++x/jTKKAJkjba/K/d/vD1FM8pvVf8Avsf40J9yT/d/qKZQA/ym9V/77H+NHlN6r/32P8aZRQA/ym9V/wC+x/jR5Teq/wDfY/xplFAD/Kb1X/vsf40eU3qv/fY/xplFAEwjbyWGV+8P4h70zym9V/77H+NA/wBS3+8P5GmUAP8AKb1X/vsf40eU3qv/AH2P8aZRQA/ym9V/77H+NHlN6r/32P8AGmUUAP8AKb1X/vsf41Ys0KzEnb93swNVKs2X+uP+7/WgC9RRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/AB5w/wDXNf5VLUVp/wAecP8A1zX+VS0AFFFFABVS+/5Z/j/SrdVL7/ln+P8ASgCnRRRQAU+X74/3V/kKZT5fvj/dX+QoAzdZ1VdHsRcNEZSzhFUHHPJ5P0BrPuvFUdvpdndras5ut2ELgbdpweee/Tj8q3JYo54zHPGsiN1V1BB/A02S0t5YVhlt4niTG1GQFVwMDArKUZtvlZ10qmHjGKqQu7667q233mPqHimGxe1AtpJFuIlmJ3AFVbpx3PXjj61u1HJbwzOjzQxyNGcozKCVPqPToKkqoqSbuzOrKlKMVCNn11vfsY1t4jjuNffTBbsu1mQSbhyy9eOw4Pf0rZqNbeFbhp1hjEzDDSBRuI9CevYflUlOKkvidxVpU5NezjbT117hT5v9c/8AvH+dMp83+uf/AHj/ADqjEZRRRQAUUUUAFFFFAD4f9cn+8P50ynw/65P94fzplABRRRQAUUUUAFFFFAD4f9cn+8P50ynw/wCuT/eH86ZQAUUUUAFFFFABRRRQA+L75/3W/kaZT4vvn/db+RplABRRRQAUUUUAFFFFAD0+5J/u/wBRTKen3JP93+oplABRRRQAUUUUAFFFFADx/qW/3h/I0ynj/Ut/vD+RplABRRRQAUUUUAFWbL/XH/d/rVarNl/rj/u/1oAvUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/x5w/8AXNf5VLUVp/x5w/8AXNf5VLQAUUUUAFVL7/ln+P8ASrdVL7/ln+P9KAKdR3EbTWssUchiZ0KrIvVSR1/CpKKBptO6Mbw5o9zpEM63Myv5jAqiElVwOvPc/TsKteI9Nm1TT/s9tMI2yjHcSFYAdDj8/wABUupXy6bp0t26FxGB8oOMknA/U1HpGrrrVl9pWIwlW8tlLZ5AHQ/QisbQS9kdrqYiUvrltnv5+hQudCu5vDEGnLdAzRkFmYnawyfl9cDIxx/COB2gvvDl7c6LY2aXas9vneHLbWz09fu9Bx09OldJWVrmuLoqQkwGZpScDdtAAxnnn1FKdOmk3L0NKGKxM6ihT1d29lu1qUtU8PXt9NYtFfY+zxqjO5bcGB5ce5+o6DmpbrQrufxPFqKXQWFCp25O5QByo7YP1/iPHqah4phsXtQLaSRbiJZidwBVW6cdz144+tbtJQpybt5FTr4ujCLkrJppaLZ7mFa6FdweJ5dRe6DQuWO3J3MCOFPbA+v8I49N2iitowUdjhrVp1mnPorfcYWhaFd6XqFzPc3QlWUYABOXOc7mz3/PqefXoJv9c/8AvH+dMp83+uf/AHj/ADohBQVkFatOvPnnuMoooqjEKKKKACiiigB8P+uT/eH86ZT4f9cn+8P50ygAooooAKKKKACiiigB8P8Ark/3h/OmU+H/AFyf7w/nTKACiiigAooooAKKKKAHxffP+638jTKfF98/7rfyNMoAKKKKACiiigAooooAen3JP93+oplPT7kn+7/UUygAooooAKKKKACiiigB4/1Lf7w/kaZTx/qW/wB4fyNMoAKKKKACiiigAqzZf64/7v8AWq1WbL/XH/d/rQBeooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAIrT/jzh/65r/KpaitP+POH/rmv8qloAKKKKACqt6VGzcCevQ4q1UM8Hn7fm27c9s0AUcx/3G/76H+FGY/7jf8AfQ/wqz9g/wCmn/jtH2D/AKaf+O0AVXWGRGSSMsrDDKzAgj06ULFbW6rFBAI0CjCphQMjPQCrX2D/AKaf+O0rWW458zHAH3fQUDu7WKuY/wC43/fQ/wAKjngtLlAlzbiZQchZMMAfXkVd+wf9NP8Ax2j7B/00/wDHaNwTad0UpILSZ0ea3EjRnKM2CVPqOOOgqTMf9xv++h/hVn7B/wBNP/HaPsH/AE0/8doC7asVsx/3G/76H+FGY/7jf99D/CrP2D/pp/47R9g/6af+O0CK2Y/7jf8AfQ/wp8pj858q2dx/i/8ArVN9g/6af+O1S0Wb+3NBsNW2+R9vto7nys7vL3qG254zjOM4FAEmY/7jf99D/CjMf9xv++h/hVn7B/00/wDHaPsH/TT/AMdoArZj/uN/30P8KMx/3G/76H+FWfsH/TT/AMdo+wf9NP8Ax2gCtmP+43/fQ/wozH/cb/vof4VZ+wf9NP8Ax2j7B/00/wDHaAIYjH5yYVs7h/F/9amZj/uN/wB9D/CrSWWx1bzM4Ofu0n2D/pp/47QBWzH/AHG/76H+FGY/7jf99D/CrP2D/pp/47R9g/6af+O0AVsx/wBxv++h/hRmP+43/fQ/wqz9g/6af+O0fYP+mn/jtAFbMf8Acb/vof4UZj/uN/30P8Ks/YP+mn/jtH2D/pp/47QBDEY/OTCtncP4v/rUzMf9xv8Avof4VHrU39h6Df6tt8/7BbSXPlZ2+ZsUttzzjOMZwau/YP8App/47QBWzH/cb/vof4UZj/uN/wB9D/CrP2D/AKaf+O0fYP8App/47QBWzH/cb/vof4UZj/uN/wB9D/CrP2D/AKaf+O0fYP8App/47QBWzH/cb/vof4UZj/uN/wB9D/CrP2D/AKaf+O0fYP8App/47QBDGY9xwrfdP8XsfamZj/uN/wB9D/CrS2W058zPBH3fUUn2D/pp/wCO0AVsx/3G/wC+h/hRmP8AuN/30P8ACrP2D/pp/wCO0fYP+mn/AI7QBWzH/cb/AL6H+FGY/wC43/fQ/wAKs/YP+mn/AI7R9g/6af8AjtAFbMf9xv8Avof4UZj/ALjf99D/AAqz9g/6af8AjtH2D/pp/wCO0AQoY9r4Vvu8/N7j2pmY/wC43/fQ/wAKjvpv7PvNNttvmf2lcm23Zx5eIZJd2O/+qxjj72e2Dd+wf9NP/HaAK2Y/7jf99D/CjMf9xv8Avof4VZ+wf9NP/HaPsH/TT/x2gCtmP+43/fQ/wozH/cb/AL6H+FWfsH/TT/x2j7B/00/8doArZj/uN/30P8KMx/3G/wC+h/hVn7B/00/8do+wf9NP/HaAIQY/Jb5WxuH8X19qZmP+43/fQ/wq0LLCFfM6kH7v1/xpPsH/AE0/8doArZj/ALjf99D/AAozH/cb/vof4VZ+wf8ATT/x2j7B/wBNP/HaAK2Y/wC43/fQ/wAKMx/3G/76H+FWfsH/AE0/8do+wf8ATT/x2gCtmP8AuN/30P8ACrFmU847VYHb3bP9KX7B/wBNP/HakgtvJctv3cY6UAT0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEVp/wAecP8A1zX+VS1Faf8AHnD/ANc1/lUtABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQA2SRIo2klZURAWZmOAoHUk1n6Lr9jr6XUmms7xW03kmRlwsh2q25fVcMMHv1GRgmx9kn/tIXX9o3Pk7cfZNsXlE4652b89/vVU0eyuLXUtalnj2JdXolhO4HcvkxrnjpypHPpQt/67gatFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAGdqmsppjwxLaXN5PMrusNsF3bFxub5mUYGVHXJyMA1ctLqG+s4bq1cSQTxrJG4/iUjIP5VkaxFfW+sWmp6fYvf7Lea3eGOVEYbyjK3zkDGUwec8jANXNB059J8O2GnysryW1ukbsvQsBzj2zQtv68/wDgAzQooooAKKKKACiiigAooooAKKKKACiiigAooooAy7nxFp9rrtpo7SGS9uWIEcY3eV8jOC5/hyFOO57DAJGpWVq9lcXWq6JNBHujtbtpJjuA2qYZFzz15YDj1rVo6A9wooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCK0/484f+ua/yqWorT/jzh/65r/KpaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArnvEXiHUdM1rStK0bTLW+udSEzA3V61ukYjCk8rFISTu9K6GuN8W6Edb8beGRLHfi0hS7M09lcTW5jJRNoMkTKRnB4zzik7jL2leKLl9X1DS/Ella6Xd2Nql6zwXpngaBiw3b2SMqQY2yCuMYOTziPVfiN4X0zw+NZTWtPvLI3UdoJba8idPMdgMFt2PlDbj3CgnFYvjPwNFb+Db1fDlvey3M11bXF4xuGurq5iikVige4L78KCVjbKk5GPmOcPUtLkvbHU9Ysn8V6rMs2nGZ9R0xbcypDdLIRHCkMcjsqljnYQQcAkjAas38/6f6fj5C/r+vz/q56PeeLfDmnXUFtqHiDS7W4uEV4Yp72NHlVuFKgnJB7EdaNH13+1dW1uy+z+V/ZV2ttv37vNzEkm7GBj7+Mc9M15j47fV9Vs/FdpZ2WsW/wBrg/0O003Qs/2kDAp8y4uJI2GRyoQGORQuBuYqK7Hwgs+n6x4hlv7W8jW+1KAQM1tId/8AokILZC8KCrAseARgnNOOt/T9UD0/r+v67m94f1z+3Y9Qb7P5H2K/ms8b92/y2xu6DGfTt61K3iHRU1xdGbV7BdVYZWxNynnkY3f6vO7pz06c1yfhbW4dDu9asNSsNZjmn1q5ljaPRruWNkd/lYSJEUwfXNc1p/h+6SWfRdauvFn2ptce8ENjYQG2lzP5qT/amg+UBduQ0ocbSoB4UqOvL5pfpf8AMJac3k392tj01fFPh99Tj01Nd0xr6VmWO1F5GZXKkqwCZySCrA8cFT6Us3ibQbfVJNNn1vTor+PbvtXu4xKu4gLlCcjJZQOOdw9a8/XQLuP4f3McelTrdyeLPthQW7eYy/2iCJcYzjywDu/ujPSs6/UafoNjoWp6NfNqkXi2G6N0bN/JPmX29ZxPjYxKOF2hiwyQQACQ4q9l3aX32/z/AAHLS/lf8L/5fj9/WRfFbQbqCzurO4tXs5tTmsLi4e8jVbYRpK/msRkbWEWRkjKsDntXXabqun6zZLeaPf21/asSFntZllQkcEBlJHFeZWOk3M15o1jdaVeMdP8AF93dzGSzkEYjcXLxShyu1lyycgnBIBwa6/wpZT2niTxe8ttJBDcaoksLNGVWUfZoQWXsfmBBI7g0R1Xy/wDkf82EtJaf1rL/ACR1NFFFIQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUARWn/HnD/1zX+VS0UUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVgQ+CNAt9VXUIrOUSLcNdJCbuZrdJjkmRYC/lK2STuCg5JPU5ooo63DpY36KKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA//2Q==)

Figure Scatter plot of Petal in PCA

### **Correlation Matrix**

#Correlation Matrix

ggpairs(iris)

![Chart

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM4NwAAkpIAAgAAAAM4NwAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjowODoyOQAyMDIyOjAxOjA0IDIyOjA4OjI5AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MDg6MjkuODcyPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAWwCQgMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAqOeZbeFpXBKrjOOvWpKqan/AMg2X8P5igCL+2bf+5L+Q/xo/tm3/uS/kP8AGsSszU/EOnaTMIbySZpfL80x29rLOyJ03MI1baOvJwDg+hoA67+2bf8AuS/kP8aP7Zt/7kv5D/GsCGaK5gjnt5FlikUOjocqykZBB7ipKANv+2bf+5L+Q/xo/tm3/uS/kP8AGsNmCqWbgAZNURrVgdKttSE/+iXRiEMmxvm8wgJxjIyWHUcZ5oA6r+2bf+5L+Q/xo/tm3/uS/kP8axKKANv+2bf+5L+Q/wAaP7Zt/wC5L+Q/xrErP/tzTzffY/tH7/7T9l2bG/1vl+btzjH3Oc9O3XigDq/7Zt/7kv5D/Gj+2bf+5L+Q/wAaxKKAOpkcRxM7ZwoJOKo/2zb/ANyX8h/jVu7/AOPOb/rm38q5mgDb/tm3/uS/kP8AGj+2bf8AuS/kP8axKybLxPpOoXqWtrPIzy7vJd7eRI59vXy5GUJJxz8pOQCelAHY/wBs2/8Acl/If40f2zb/ANyX8h/jWJRQBt/2zb/3JfyH+NH9s2/9yX8h/jXOXF9b2s9tDcSbJLqQxQjaTvYKWI46cKTz6VDdazYWcV7JcTlVsVDXGI2JQEZGABls+2fSjYPI6n+2bf8AuS/kP8aP7Zt/7kv5D/GuWOr2XmQxrI8jzxrLGI4nfKFgobgHAyw69Bk9ATUt3f21h5H2uTy/PlEUfyk7mwTjjpwpoem4bnSf2zb/ANyX8h/jR/bNv/cl/If41yun61YaqwFhP5pa3juR8jL+7kzsbkDrtPHUY5q/RsBt/wBs2/8Acl/If41ejcSRK65wwBGa5aumtP8Ajzh/65r/ACoAqf2zb/3JfyH+NH9s2/8Acl/If41iVXvr2302wnvb2Ty7e3jaSV9pO1QMk4HJ/CgDo/7Zt/7kv5D/ABo/tm3/ALkv5D/GuQsPEWn6ldi1gN1HOUMipdWU1uXUYBK+Yi7sZGcZxkVcvL630+FZbuTy0aVIlO0nLOwVRx6kgUAdH/bNv/cl/If40f2zb/3JfyH+NYbMFUs3AAyaojWrA6VbakJ/9EujEIZNjfN5hATjGRksOo4zzQB1X9s2/wDcl/If40f2zb/3JfyH+NYlFAG3/bNv/cl/If40f2zb/wByX8h/jWJWf/bmnm++x/aP3/2n7Ls2N/rfL83bnGPuc56duvFAHV/2zb/3JfyH+NH9s2/9yX8h/jWJRQB08Ey3EKyoCFbOM9etVZNWgjlZGSTKkg4A/wAafpn/ACDYvx/maxLv/j8m/wCujfzoA1v7Zt/7kv5D/Gj+2bf+5L+Q/wAaxKzdS16w0m5ht7s3LTTozxx21pLcMVUgMcRq2ANw6+tAHW/2zb/3JfyH+NH9s2/9yX8h/jXN6fqFtqlmt1ZSF4mJX5kZGVgcFWVgCpBBBBAIpUvreTUJrFJM3MMaSyJtPyq5YKc9OSjflQB0f9s2/wDcl/If40f2zb/3JfyH+Nc5cX1vaz20NxJskupDFCNpO9gpYjjpwpPPpUN1rNhZxXslxOVWxUNcYjYlARkYAGWz7Z9KNg8jqf7Zt/7kv5D/ABo/tm3/ALkv5D/GuWOr2XmQxrI8jzxrLGI4nfKFgobgHAyw69Bk9ATUt3f21h5H2uTy/PlEUfyk7mwTjjpwpoem4bnSf2zb/wByX8h/jR/bNv8A3JfyH+Ncrp+tWGqsBYT+aWt47kfIy/u5M7G5A67Tx1GOav0bAbf9s2/9yX8h/jVq1uku4i8YYAHHzCuarb0b/jzf/rof5CgCSfU4beZonWQsuM4Ax0+tR/2zb/3JfyH+NZ+p/wDISl/D+QqpQBt/2zb/ANyX8h/jR/bNv/cl/If41iVU1HU7TSrdZr2RlVnCIscbSPIx6KqKCzHgnAB4BPQUAdN/bNv/AHJfyH+NH9s2/wDcl/If41zGm6paatbNPYyMyo5jdZI2jdGHVWRgGU9DggcEHvVygDb/ALZt/wC5L+Q/xo/tm3/uS/kP8axKjhmWeMugcAMy/PGyHIODwwBxxwehHI4oA3/7Zt/7kv5D/Gj+2bf+5L+Q/wAaxKKANv8Atm3/ALkv5D/Gj+2bf+5L+Q/xrEooA6O1vY7zf5YYbcZ3D1qxWTof/Lf/AID/AFrWoAKKKKACiiigAooooAKqan/yDZfw/mKt1Xv08yxkXOM45/EUAc5XK6+Ft9da4/4m+nySW6ot/pdsboTAFiY3j8uQLtJBDFQTuIB6iu1ew2Oy+ZnBx92hrDAU+Z94Z+770gPJda0nVLj+zvtdkluw01I7ZLfSWufstwHJYx7JFWBv9WQzHb8uM4BzPPaQ3HjPWNljczauNRtDbXiQMUhAiiMh8wcRjbncCRuBA+boPUxYfIW8zoQPu/X/AApkGkwpcO0QSN53BkdYwC5wACfU4AH0FUnZ/wBd7hueYtbzt43guYNIa2k+2zrcuunztK8ZjkVWa6J2MhOwiMZC/KM/LirjrND8N9FtXs7w3FmunSzxLaSMyqsqFuAuSQFbKjJHcciuv1TXPD+iXS22teIdN06dkEixXd1HExUkjcAzA4yCM+xqzpt1petW7XGi6taalArbGltJVlVWwCVJUkZAI49xSWi+78Aerucd4puv7f0WD7Bb3LW0N5G15FeaPcOHjw2MwMEaUB9hIXOMZ7YqhYeHBeyaPBq1g17ZxWF4VS4sjHHHmWMxIY2ZtuFztVjkADgEcemmw+QN5nUkfd+n+NC2GQx8z7oz933pW0/rtYd9jyPVbUL4Thl8TabdXTr4eRLZ3tnc21wEbzCxx+6Y/u/mYr90jPFTReGrefxJ5Vxom6GXV0uJ2NmfLkiNkQCzY2sPM3ZBJ5bkfNz6TceFtL1K/gub6xs7m5iIEU81srvHg5G0nkYPPFXPsX/TT/x2qvq33/zuLpb+trHM+ELaWz8P/ZpYXgEV1cpFEyFdsYnfYAP7u3GO2MYrcq21hgKfM+8M/d96BYfIW8zoQPu/X/CkBt3f/HnN/wBc2/lXM109wu61lXplCP0rL/sWT/nqv5GgDKfJjbChjjgE8GuI0lJUvtLtbC31OOO3kxLp2oWe6CxUIwJiuGQFiCcAh3yrEAY+76Z/Ysn/AD1X8jR/Ysn/AD1X8jQHSx4naaZfWega7Jdo0VwujXSX5XS3txPMQSGeZpCJmzvIZVxhjkjIFalraQxaTqEmlaFd/YJLW2jntpYJY/Om3nzJCgG6XCkFyoPmY25avVJvD/2iB4bgxSxSKUeN03Kynggg9RTxobqoVZEAAwAB0o/r8/8AMbd3/Xl/keS+H7K7j1CzC2Lx2sOtNNH5Gmy2kKRGyZcrE+Sg35B9WPvW5qlrJfeJLB4LWeSz1OOI3DtCyiIQOZVDgjKlt2MHB4xiu/8A7Fk/56r+Ro/sWT/nqv5Gn28hf1+NzypNJvv7PlD2c+60v7GygHlnLQQXIbzB6rtfk/7PtUN7o0VxrUMd3ok9xqj6rK9xefY2Mb2zLIEDS42smwouzPBHIHWvW/7Fk/56r+Ro/sWT/nqv5Gptdf15f5Dv/X3/AOZ4lZeGFk8M3j/2FIt1a+H7dLUPZsjJdKZi5QED95vwdw5OQQcNz6wmfLXd1wM1q/2LJ/z1X8jR/Ysn/PVfyNU3di6/15f5GZXTWn/HnD/1zX+VZn9iyf8APVfyNaluNtuiHqg2/XHH9KQHMVjeL4JbrwXrMFtE8s0llKqRxqWZiVOAAOprq10aRlDCVcEZ6Uv9iyf89V/I0DTs7nC3Xhu8XT7q6i1a+vtUWxmhsmuTEggd16jy0QZJC8nOMcY5rkIdAWTw/cbtMMtmlzYyNaJoUlsoKSDzXETs7O/lnDFVwwHBbmvaf7Fk/wCeq/kaP7Fk/wCeq/kaa0d/T8HcS2seSm3mbxtb3Nvo7Wr/AG2Zbh106dpXjMciqzXR+RkJ2ERjO35Rn5cVddZofhvotq9neG4s106WeJbSRmVVlQtwFySArZUZI7jkV6b/AGLJ/wA9V/I0f2LJ/wA9V/I0lovu/AHq7nnPim6/t/RYPsFvctbQ3kbXkV5o9w4ePDYzAwRpQH2Ehc4xntiqFh4cF7Jo8GrWDXtnFYXhVLiyMcceZYzEhjZm24XO1WOQAOARx6r/AGLJ/wA9V/I0f2LJ/wA9V/I0raf12sO+x43qtqF8Jwy+JtNurp18PIls72zuba4CN5hY4/dMf3fzMV+6RnipovDVvP4k8q40TdDLq6XE7GzPlyRGyIBZsbWHmbsgk8tyPm59Qu/BWn395Fd31lY3NzBjypprdXePByNrEZHPPFXv7Fk/56r+Rqr6t9/87i6W/raxyHhC2ls/D/2aWF4BFdXKRRMhXbGJ32AD+7txjtjGK3K0/wCxZP8Anqv5Gj+xZP8Anqv5GkBd0z/kGxfj/M1iXf8Ax+Tf9dG/nW/ZRGC3ELEEoSMjv3/rVCTSnnmkkWRQGdjgj3oAyq5rWdMvL7xnpklrd3ljHHY3Ie5to42wS8OEJkRlGcE9M/L9a7j+xZP+eq/kaP7Fk/56r+Ro63A8t8UeHTaW+mwIjX1gr3El0bnTn1AyTvgiRooipB/1mGHCkgYGRis+kvZXF3Ne6PNqNzPo9lHJM1q4aXa5EvmGPcWIGwtGGJcLjkV63/Ysn/PVfyNH9iyf89V/I0dB/wBfjc8k8P2V3HqFmFsXjtYdaaaPyNNltIUiNky5WJ8lBvyD6sfetzVLWS+8SWDwWs8lnqccRuHaFlEQgcyqHBGVLbsYODxjFd//AGLJ/wA9V/I0f2LJ/wA9V/I0+3kL+vxueVJpN9/Z8oezn3Wl/Y2UA8s5aCC5DeYPVdr8n/Z9qhvdGiuNahju9EnuNUfVZXuLz7Gxje2ZZAgaXG1k2FF2Z4I5A6163/Ysn/PVfyNH9iyf89V/I1Nrr+vL/Id/6+//ADPErLwwsnhm8f8AsKRbq18P26WoezZGS6UzFygIH7zfg7hycgg4bn1hM+Wu7rgZrV/sWT/nqv5Gj+xZP+eq/kapu7F1/ry/yMytvRv+PN/+uh/kKr/2LJ/z1X8jV6wt2tI3iYhjndke/H9KQGTqf/ISl/D+QqpWpfWLzXjuu7Bx0XPYVB/Zkn+1/wB8GgClWH4ojRrW0lltrx1huN4ubEFprQ7WAkVACX67SuCMNyCAa6r+y5NpOWzkDGyk/syT/a/74NAHk+qKJobBtWtru+sZNbQiSbT/AC7i7QWzg+ZEqKWAIK42Asq4wepbqWk3L6Ppgksm/slZbspZ3Oly3vlKzfuMwIysuE3hT/BkDA7erS6KJmjaaISNE++MvFko2CMj0OCRn3NSf2ZJ/tf98Gjp/XkO+qf9df8AM81l09Uns/8AhJ9NvtY26bBHaOtqzyJOpbzDlSRDIcx/OXA4+9xWdqGk3j6VZLeWRayW91FpYLjS5b0b3mYxP5SMrfd34fkDcPUGvXP7Lk2g5bOSMbKT+zJP9r/vg0PUS0/ryseV6vp1wP7MNzZ3GpahDYwIgu9Mkl3yA5yk0bn7NLn7zsxH3TkhTXow6c1e/syT/a/74NH9mSf7X/fBpt3FYpUVajslnUvbTCZAxQtGNwDKSrLweoYEEdiCKf8A2ZJ/tf8AfBpDLGh/8t/+A/1rWrFikbSs7oy/m+vy4x/+uueu/inZ2d68TaPqEttGZQ97Hs8pREQJTgsHIQnBwp6HGcUdbAd3RWSNcyARb8H/AG//AK1XrK6+1wmTZsw23Gc0AWKKKKAGyFhGxQZbB2g9zXFeFo4YdQ0OWxCiS/0qSfUHTrNIGiw7nu25nGTzyRXb1TTR9Mj+1eXp1on2wk3O2BR5+c538fN1PX1NC0d/66/5/gHQ53xFZ2ceoQataQWrTQX0Iur1Zd1zD8yKIkBHAYNgruUYYkKxNb17HqBvEkjubZdPCYlga3Yyu3PKyb8KPu8FD0PPPEj6RpsmpJqD6fatexjCXJgUyKMYwGxkdTU9zj7O24Ejjocd6FtYOtynKY/OfKtncf4v/rUOY9qZVvu8fN7n2olMfnPlWzuP8X/1q5zx1PdHw2mmaNcNaanrEi2FrPyTFvLGWRcFfmSFZZB8w5QAZJAIBi2ujp8QdQvtU8Q/apfDcM6w6VpfmbLe8VCrG7lCsROrOh8sN8uwBtp35rS/4Vr4RkW5toNNurK1vTi4s7HUbi1t5MqEOYYnVOVAB457101tBa2lgltaW6wW8ISOOKPCqigEBVAGAABjFSxGPzkwrZ3D+L/61AFDS9I0jRLVrbRdLt9OgZzI0VpEkSliANxCqBnAAz7Cqmp+D/Cuq6g95qnhrS726lVd89xZxSO+FAGWZSTgAD8K18x/3G/76H+FPkMe4ZVvuj+L2HtQBx978OtIgBvfB7zeFNSKlRPpYRYZMK4Xzbcr5UoBkJ5UNwMMK1vDOupqdtc2N+YV1vTVji1S2hf5Y5SqsGQcny3B3ITzjg4YMBtEx+Svytjcf4vp7VynixZtIvLTxXp5ZINPBTWYvNVRPYclnPyEs0LfvFAIOPNUcvggHVxGPzkwrZ3D+L/61MzH/cb/AL6H+FPiMfnJhWzuH8X/ANamZj/uN/30P8KAHuY9qZVvu8fN7n2oBj8lvlbG4fxfX2ocx7Uyrfd4+b3PtQDH5LfK2Nw/i+vtQBem/wBS/wDun+VPpk3+pf8A3T/Kn0AFFFFABRSMQqknoBk1z9kNX1nS01OHU2snuF8y3tlhRolXqofKliSOpDL14oA6Gism41s2bC3ks5ru6jgE1ylmFZYh65YrnJBwBknHSkXxHbzX0dtZW9xd74EufMiChBE5OGJZh6dOvoDzQBr0Vl6Xrf8Aa1pFdW2n3a2820pJJ5YyDnJxvzgYweO/GRzWpQAUUUUAFMi+4f8Aeb+Zp9Mi+4f95v5mgAh/1Kf7o/lT6ZD/AKlP90fyp9ABRRRQAUVg27ahrhup4dRl0+COaSCBII42LbCVLuXVs5YHAGOPXtZbVLiwhtba9gN5qUqsfKsgPmVer/OQFHI6nqcDNAGrRWL/AMJPbSGzW0tbq6lvEkZIo1VWUoQHVtzAAgn17H2zLZa7/aBnNpp146QyNE0h8tQXVtpAy+ffOMY754oA1aKKKACiiigBiffk/wB7+goi+4f95v5mhPvyf739BRF9w/7zfzNAD6KKKACiisXzb3VdWvbe3vJLC2smWMvCiNJLIVDHl1YBQGHGMk96ANqiskX1zpNkkeqt9uuZJvKtxbIBJcDGRkHChsAknIXjPHSo38T2yQxH7JdmeS5NobYKvmJKFLbT823kY5BI5HNAG1RWTba99qvZ7WHTL0yW2BNnygI2KBwud/JOccZGeuBzWqjFkVipQkZKnGR7cUALRRRQAUwf65v90fzNPpg/1zf7o/maAKdyoNwxLqOnBz6fSoti/wDPVfyP+FS3LAXDAop6cnPp9ai3r/zyX8z/AI0APCL5LfvF+8OcH39qZsX/AJ6r+R/wp4dfJb92v3hxk+/vTN6/88l/M/40AGxf+eq/kf8ACjYv/PVfyP8AhRvX/nkv5n/Gjev/ADyX8z/jQA8ovkr+8X7x5wfb2pmxf+eq/kf8KpxaqsuuXOl/ZlH2a3huPM3n5vMaRcY7Y8rrnnd2xzc3r/zyX8z/AI0AGxf+eq/kf8KNi/8APVfyP+FU9V1WPSrD7S1m9yTLFCkMBG93kkWNQNzAfeYdSKr/ANrar/0Juqf9/wC0/wDkigCHwmi/2NP+8Uf8TO/7H/n8m9q2ti/89V/I/wCFc1oc2taZp8sE/g/UmZ7y6nBS4tSNss8kij/j4HIDgH39etXhr08d/Z22oeHL+wF7KYYpp5IGTeI3kwfLmYj5Y27UAWNV8xIM2wjll2sUVmKKW7AnBwPfB+leXXzSzadf6vd+GNOaGwupjOg1yZQzAqJD5fkhWU7AdrD5uuCW59Uv2B8vChevTPtXkeoeKNKXxBfXV9B4cm1G2ecWyvArXSPBIAqFi2S0i52kAbTx8xGKF8Q+h6gpyoPtW5o3/Hm//XQ/yFYYOVBxjI6GtzRv+PN/+uh/kKCVsaFFFFAxshYRsUGWwdoPc1xXhaOGHUNDlsQokv8ASpJ9QdOs0gaLDue7bmcZPPJFdvWVZw+H7mbUYdPj02WSRyuoRwLGzMxzkSgdT9773vQtHf8Arr/mHQxtT0yy1HxE8enw/aNUSeKWfUHwTp6LtPlqw5BYA/IP75LcEZ3r2PUDeJJHc2y6eExLA1uxldueVk34Ufd4KHoeeeIbnQvDp1CO5u9K0s3k0n7uWW3j8x3AzwSMkgLn149q0bk4t2JAPTg/WhbWDqU5TH5z5Vs7j/F/9auPtoYtc+KV7qFxbzNb+HLVLCzMgi2rczDzp3Xgvnymtlydo+aQAHJNdHrmrW+i6beahcwtKkAJEUQzJM2cLGgJG52YhVXuzAd6peE9JuNA8J2FjqUy3l/tee8nzxJcSyPLKVwFG3e7YGBxigDaBj8lvlbG4fxfX2oiMfnJhWzuH8X/ANagOvkt+7X7w4yff3oidTMn7tR8w5yf8aAGZj/uN/30P8KfIY9wyrfdH8XsPamb1/55L+Z/xp8jruH7tT8o7n0HvQAEx+Svytjcf4vp7UIY9r4Vvu8/N7j2oLr5K/u1+8eMn296Eddr/u1+76n1HvQByng++g0vWLjwXMjRy6VHHNp5aVP31i7ERbVyW/dbfJYtydisTmTA6jMf9xv++h/hXLeNbPUI1sfE3h62WfVdCMky2e6X/Trdl/e2+EJ+ZtqMhKt88acYJrodP1K01XTLXULDbLa3cKTwyYZd6MoZTg4IyCODzQBbcx7Uyrfd4+b3PtQDH5LfK2Nw/i+vtQ7rtT92v3fU+p96A6+S37tfvDjJ9/egC9N/qX/3T/Kn0yb/AFL/AO6f5U+gAooooACAQQeQawYLHW9MsTp2m/Ynt0+W3uJpHDwoegKBSHK9juGcDOK3qrHUbIX4sTeW4uyMi381fMIxnO3OelAGQdI1OwnMmmzxXbS2iW8rXsrKwZM4kyFO7O45Bx9afpXh+TS7ptsqyQjT4bRSchiyFskjoAdw71u0yKaOeFZYJFkjcZV0YEMPUEUPW4f1/X3FDSLK50vQtPsmEMkkEaRykOQAAOSvy8/Q4rSqB760jsvtkl1CtrtDee0gCYPQ7umKdbXMF5brPaTRzwv92SJwyt9COKb1YEtFFFIApkX3D/vN/M0+mRfcP+838zQAQ/6lP90fyp9Mh/1Kf7o/lT6ACiiq1pqNlftILG8t7kxHEghlV9h9Dg8dKAM1LLVNLluk0mOzuLaeRpkW4maIwuxyw4Rtyk89sZIqNdI1O0mtL2C6jvryJJUnW5cxrIJGDfKQGKhSAAMHjita81Kx0/Z9vvLe18w4Tz5VTcfbJ5qO71rS7Cbyb7UrO2lI3bJp1RseuCaAMzTPD9xY39lcyyxOY47gz7cjMkrq/wAo9Bgjn2q5pdjdaZp00QEMsz3MsqjzCq7XkLcnaecH06/nU82taXbwQzXGpWcUU4zFI86qsg9VJPPXtVppY0dFaRVaQ4QFuW4zx68c0APopoljaVo1dTIgBZAeVB6ZHvg/lRHLHMm+F1kXJG5TkZBwf1GKAHUUUUAMT78n+9/QURfcP+838zQn35P97+goi+4f95v5mgB9FFFABWRJY39lqlxeaSltOl3tM0FxK0eHUAB1YK3UAAjHYHNXotRsp7yS0gvLeS5i/wBZCkql0+qg5FOu7600+Hzr+5htos7d80gRc+mTR5gYzaPqrLDeyXcUuoRXX2gQszCEKU2GJTgkDBzuxyecc0yLQLw30F9cPAJ21A3c6IxKovlGNVU4G49Dkgd63/tMH2X7T50f2fZ5nm7xt24zuz0xjnNMur+0sbcT3t1BbwkgCSaQIpJ6cnijb+v67Bv/AF/XcqWVhcWV5qtx+6c3cwlhXcR0jVcMcccr2zxWihYou8ANj5gDkA/WoxcwGGOUTR+VLt8t942vu6YPfPan+bGJhEXXzCpYJnkgcZx6cijyAdRTUljkLiN1co21wpztOM4PoeRTqACmD/XN/uj+Zp9MH+ub/dH8zQBVuDL57bZMDjjeB2+tR5m/56/+RB/jTrkJ9obczA8dFz2+tRYj/vt/3yP8aAJQZfKb95zuHPmD396bmb/nr/5EH+NUJdSji1y20vYxFzbzXHm/3fKaNduO+fOznPG3vni5iP8Avt/3yP8AGgCDVNROk6Reajcu7Q2cDzyLG4LFUUsQBnrgVS/tjW/+hV1r/wACLP8A+SKh8aCP/hAtfwzZ/sy5/h/6ZN71y323Uv8AouWi/wDgDZf/ABdAG9Dca/H4mvdRPhfVvKuLO3gUC4tNwaN5mOf3/T96uOfX8bk3iLUbTynv/D+rWkEk8UBmkmtmVGkkWNSQsxONzDoDXK/bdS/6Llov/gDZf/F1Vvrq9kawS4+K2ma/GdTst2nW9pao83+kx9CjluPvcf3fSgDr/HMd/N4UkWyuJo51urR1lghNy8W25jYyCIZL7QC23HOK5f7V4o/6KJq//hDy/wDxuvRsR/32/wC+R/jRiP8Avt/3yP8AGgDzaLUfEdwheD4k6pKoZkLJ4IkIDKSrDhOoIII7EEVPp3/CQXPivQ2vfE+o61BDdSO0U/ht9PSH/RplEhlKgdWC7c87/aur8M27W+kzJcpLE51C9cK8eCVa6lZW5PQqQQe4IrXxH/fb/vkf40AVdR3/ALve27rj5s+lcu2k6jdSyyjxDrFmrSNtgEdmQo3HGD5LHGORkk4xnnNdNfhR5e0k9eox6V55Y6V4PivJ7PxFa+H21i4vp3EV0IHnkEkzNHwcscqVwOtHUfQ7Gzt5LW1SKe7mvHXOZ5wgdue4RVX24ArotG/483/66H+QrnbOxtNOtUtdPtYbW3TOyGCMIi5OTgDgcnNdFo3/AB5v/wBdD/IUCNCiiigBsgYxsEOGwdpPY1w3hy8tPtOjNFNHGNM0iWLUyzBfs75j+WTP3W3LIcH0Jru6z7DXNP1O4kgsp2d0G75onQOucbkLAB1z/EuR055oWj/rz/zDoZOuafajxd4e1AIzXL3bx72kZgq/Z5ThQThc4GcAZwM5xWte2kzXiXY1C5SCNNrWSrH5Uh5+ZiU355HRgPlHHXJLrunwaounyTsLhiq8ROUVm+6rOBtVj2UkE5GByKt3JxbsSAenB+tHQOpyOtQXer+NNPtREsel6Y32+7MsTFbyU70hjU7tp2MDK2QSrLAR1yOid12p+7X7vqfU+9ErqJn/AHan5jzk/wCNDuu1P3a/d9T6n3oAA6+S37tfvDjJ9/eiJ1Myfu1HzDnJ/wAaA6+S37tfvDjJ9/eiJ1Myfu1HzDnJ/wAaAGb1/wCeS/mf8afI67h+7U/KO59B70zev/PJfzP+NPkddw/dqflHc+g96AAuvkr+7X7x4yfb3oR12v8Au1+76n1HvQXXyV/dr948ZPt70I67X/dr931PqPegAidTMn7tR8w5yf8AGuJkstU8F6pqWqaRbzavoF15l5c6QjF7m2uCdzva7jh1clmaIsMNkpktsPbROpmT92o+Yc5P+NM3r/zyX8z/AI0AYmm+OfDesah/ZtpfwpqSMYzp92kltc527+IZQrkbSGzjGM88Gt4Ovkt+7X7w4yff3rO1/QtI8S6SNP17S7W/tXUny51J2E7l3Kc5VsE4YEEZ4Iqroej3miGWFdVmv9MLM8cN/umuInZiQonL5aNRkBXVn5++QAAAdTN/qX/3T/Kn0yb/AFL/AO6f5U+gAooooAq3Wow2csccyXLNJ0MNrJKB9SqkD8cVycgz4TmuMA3g1rcCfvCQXQUf+O4H0rtqzzoenHUPthgPm+Z5uPMbZvxjfszt3f7WM0Le/wDW4PaxLqlml/pstvLJKkbD5vKcoWA525HOD0OO1Y+jWSX/AMPdPtpZJY42tI93lOULAAHbkc4PQ47VvpAkauoLkOxZt7s3X0yeB7DgU21s4LOxjs7ZNkESBETJOFHbJ5pNaNdx9UcfCCfCnhNIEEtz5kTQwv8AcciNidx/hAGTkAkEDg1seGS5uNY+0IIbk3pM0KHKIdi42t/FkYJJAOSeKvvomnyaZBp7QEW9vtMIWRg0ZXoVcHcCPUHNT2VhbadAYrSMqrMXYs5dnY9SzMSWPuTVX1b/AK6f5E9F/XcsUUUUhhTIvuH/AHm/mafTIvuH/eb+ZoAIf9Sn+6P5U+mQ/wCpT/dH8qfQBl+J5JYvCmqPASJFtZCCOo+U81S8uKDxToq2SqqGwmRtv/PNfL2/gCePrXQOiyRskihkYYZWGQR6VQtNC0+x8z7NFIrPH5W4zuzIn91SSSg9lxQtHf8Arr/mH9fkY2p/aT4ovm0y2hvJl01UmS4bYqAs5UKeck4OVIA4HzCmbxN4O0TTLGeX/iYpHAJWG1xEE3OeCcHapHU9a3LzQrC/kR7iOXzFj8rfHcSRsyf3WKsCw9jnv61P/Z9p51rIIVVrRSsAXgRgjBAA46DFHS39dQ63/roZOppZadL5enWK3Gp3Nt9mhgGdoiX+92VAW5PfgcnFQ/8ACHxMumGSeNnsIo4yWgVvO2kZ3Z6jGQB/CTnrWpdaFY3d815J9pSdkCM8F5LFlRnAwjAdz+dXoIVt4EijLlUGAZHZ2/FmJJ/E0LuHkYcfhS3j1O8u827i6R1ML2qlE3YwQPz3f3s89Kt6DoaaFaywRyibe+7zDGFc8DhiPvc5x6A47VqUULQAooooAYn35P8Ae/oKIvuH/eb+ZoT78n+9/QURfcP+838zQA+mTFhA5j5cKdv1xT6KTV1Ya3OMslVdF8HywYM7TLub+I74nMn1yeT9K09Z80+KdKNjFHcXccM7CKZtkYT5QW34JVskAYU5BPTrWhbaHp1nefabeArIN2wGRmWPd97YpO1M99oFLc6LZXccCzrMWtyTFKtxIsq56/vA27B7jPp6VV9biOVmso7z4Z3vmvNGYDdSSQo2xRIGfKfKTlFboM4OASO1al/5p17RDYxR3F3HbSsIpm2RhMIC2/BKtkgDCnIJ6da2v7KshpLaaIALNozG0YJGVPXnrk5POc0280izv1g+0RuGt8+VJFK8bpkYIDqQ2COozzSD/gnM2Hh+LXfDsAZ1t5obi4LAwK2x/MbKDk5jDfw5+YAZx0rXbwxbnX49TXyVCAAwC3XaRtxn/ezjDdgMd61rS0gsbVLa0jEUUYwqj/PJ75PWpqPQDG0Pw7FolxcSxvG/ngcLAqeXychcdE+7hegxnvWzRRQAUwf65v8AdH8zT6YP9c3+6P5mgCrcKxnbEO7pzg88VxM/xK0mC8ubdrQB7eeSB/M1CzhO5HKH5JLhWAypxkDIwe9dpcqDcMS6jpwc+n0ri5vhppE13cTm7XdcTyTt5mnWcpDO5cjdJbsxGWOMk4GB2oAzJvH+myeJrLUVt7cQ29ncQOp1jT9xaR4WUj/SumImzz3H4aH/AAs7SP8An1i/8G+n/wDyVWfN4A02PxNZactxbmG4s7id2Oj6fuDRvCqgf6L0xK2eOw/HQ/4VjpH/AD9Rf+CjT/8A5FoA6vS75NW0iz1G2tXWG8gSeMOpDBXUMM4JGcH1q1tb/n3/AEb/ABqlpmmQaVpNnp1vNuhtIEgjaTJYqihQTgDnAq1sX/nqv5H/AAoAx7VW/wCE+1X9x/zDLLjDf89br3rb2t/z7/o3+NR/ZYFYzqIhM4CPKE+ZlXlVJxkgFmIHbcfU0uxf+eq/kf8ACgB+1v8An3/Rv8aNrf8APv8Ao3+NM2L/AM9V/I/4VV1PTINV0m8064m2w3cDwSNHkMFdSpIyDzg0ASWOp2OsQm40ie1v4VIRpbaXzVDBQSuVJGQCOPcVZ2t/z7/o3+NcZ8P/AIcweAYb5Rqpvpr1oyzmExqqqDtAXJ5+ZsnPpwMc9hsX/nqv5H/CgCrqII8vMezr2PPT1rynXbXTYWu47m+vra0865+0sdAuZPkmZS4EoXbkMp2vggAjg4Br07W7mHT7F7u4kAhgjeWRgDwqjJ/QV51qF62qWV3NdXHib+xn3rebI7JYoVziSM4HmkLypKbjwcMetC3H0O/XhRjpjvW5o3/Hm/8A10P8hWGuNo29McVuaN/x5v8A9dD/ACFBK2NCiiigY2RS8bKpKkggEdq43QhOlxpLz2V5broulyW12Xtn+aTMYCpgfvB+7Y5TI6dzXaUULR3/AK6/5gcZqFvcvf3+mpaXLS3up2t5DOIWMQjTyixLgbVK+Uw2kgnjGc101xpcNxqMd8ZLlZ402Kq3UgiI5+9EG2MeTyVJ6egxmarq+oabrVpG02nmC6uEhisgrG4mU4DSBtwA25yRtPC/eGeNK51SKDUI7Hy7gzypvVhaymEDn70oXYp4PBYHp6jIvh/rsge5O1szMTvXk5/1YNBtmIHzrwMf6sUx7iVXYAR4B4yw/wAaGuJQFwI+Rz8w9frQA/7M20jevJB/1YoW2ZWB3rwc/wCrApguJdhOI85H8Q9/ehLiVnUER4J5ww/xoAd9lb++v/foUrWzE/fXoB/qxXlvxK+Odv8ADjxPp2j3OjSX/wBphW4uJopgvlRFyo2jne3yOcEqPu88nHp7XEoPAj6Dqw9PrQA/7M20DevBJ/1YoFswB+deRj/VimG4l2A4jzk/xD296FuJSGyI+Bx8w9frQA9bZlYHevBz/qwKT7K399f+/QpqXErOoIjwTzhh/jSfaZvSL/vof40ASG2YgfOvAx/qxR9mbaRvXkg/6sUxriUBcCPkc/MPX60C4l2E4jzkfxD396ALDrujZR1IIpMyf3F/76P+FOckIxUZIHAqsZ7jYD5XOTkbT7UAT5k/uL/30f8ACjMn9xf++j/hUBnuNgPlc5ORtPtQZ7jYD5XOTkbT7UAT5k/uL/30f8KMyf3F/wC+j/hUBnuNgPlc5ORtPtVLWdftvD2h3GrazNHZ2VqpeaaUHCjgD3JJOABySQACTQBqZk/uL/30f8KMyf3F/wC+j/hWFovi2x8QNdxaXI7XNjII7q2ntpYJoCyhkLRyBXAYHIJGDg46GtYz3GwHyucnI2n2oAnzJ/cX/vo/4UZk/uL/AN9H/CoDPcbAfK5ycjafagz3GwHyucnI2n2oAnzJ/cX/AL6P+FGZP7i/99H/AAqAz3GwHyucnI2n2oM9xsB8rnJyNp9qAJ8yf3F/76P+FLGpVcNjOSePrVcz3GwHyucnI2n2qyhJRSwwSORQAxBIiKu1TgY+8f8AClzJ/cX/AL6P+FIhkdFbcoyM/dP+NLiT++v/AHyf8aADMn9xf++j/hRmT+4v/fR/woxJ/fX/AL5P+NGJP76/98n/ABoAMyf3F/76P+FGZP7i/wDfR/woxJ/fX/vk/wCNGJP76/8AfJ/xoAMyf3F/76P+FGZP7i/99H/CjEn99f8Avk/40Yk/vr/3yf8AGgAzJ/cX/vo/4UZk/uL/AN9H/CjEn99f++T/AI0Yk/vr/wB8n/GgAzJ/cX/vo/4UZk/uL/30f8KMSf31/wC+T/jRiT++v/fJ/wAaAFQMNxbALHPBz2pqiRcgKpGSfve/0pyFjuDYJU44GO1NUyNkhlAyR933+tAC5k/uL/30f8KMyf3F/wC+j/hRiT++v/fJ/wAaMSf31/75P+NABmT+4v8A30f8KMyf3F/76P8AhRiT++v/AHyf8aMSf31/75P+NABmT+4v/fR/wozJ/cX/AL6P+FGJP76/98n/ABoxJ/fX/vk/40AGZP7i/wDfR/wozJ/cX/vo/wCFGJP76/8AfJ/xoxJ/fX/vk/40AGZP7i/99H/CjMn9xf8Avo/4UYk/vr/3yf8AGjEn99f++T/jQAZk/uL/AN9H/ChQ29mYAZAHBz6/40Yk/vr/AN8n/GhS29lYg4APAx6/4UAMktUkkLsWyfQ037FH/eb8xRLPKkhVfLwPVhn+dM+0zekX/fQ/xoADplsZlmZAZkUqspA3KpwSAccAlVJHfaPSn/Yo/wC835ivP9U+LsWl/EqDwk+lvIZJYYHuxKAEeQArhe6/MmTuGPm4OBnvftM3pF/30P8AGgB/2KP+835ij7FH/eb8xTPtM3pF/wB9D/Gj7TN6Rf8AfQ/xoAk+xx7QuWwCT1/z6Un2KP8AvN+YppuJdgOI85P8Q9vek+0zekX/AH0P8aAH/Yo/7zfmKPsUf95vzFM+0zekX/fQ/wAaPtM3pF/30P8AGgCRrONjklugHWk+xR/3m/MU1riUHgR9B1Yen1pPtM3pF/30P8aAIL3RYb2ExSENGylXSRAwcHggj0rzm/8AhhqAivLTStNtDaysxQ3HibUFVyejPEqEdhkbu3WvRbrUZ7fbhYjuz7/yNcnL46v7bxK2mXF94bQFj5UL3jJcy7l+RDEfunJ+8C2R0XnhdR9DobDRrx7GNtSMEF1j95Hbu0qDns7BSeP9kVrWVr9jhMe/flt2cYrFsdZ1P7FF/aSWn2ojMgtw2wH0GTk46Z4z1wOlbGn3T3duzyBQQ2PlHsKp7krYtUUUUhhRRRQBxutXk8+qzWk808ujJdQi4lSzQ/Z5MoyoJPMBxnYSRG2Nx+Yfw9bc4+ztuBI46HHeuR1fVZ38Y2mmatp1ybSSYfYYYJYCLp1G8yyAyBtqYyF24yMnJKgdJeaXp0l6mpy2Vu1/CmyK8MKmaNeeFfqB8zcA9z60L4UD3GymPznyrZ3H+L/61DmPamVb7vHze59qdJJiVx50g+Y8AdP1rzH4b/G2z+I/ibUNHt9Mu9P+ywtcW8zzB/OiEgUl1GNjfOnALD73PAyAd/rEt5D4c1GXRLZbjUUgdrSGVxtkmCNsU9OC2AeR9RXz6vi7xRf/AAm8Rab8V9Wk8OXGoukGk3d5ZPDLMR800bRRLvMWAil9mB5rAluFrnPip8dm+IHhuTQNP0y5sLT7asxne8y1xEm7ajxhcDJKNjcwBQdcA1xWoHxt4j8MWMN3DqGraNoMLC3nhh8+K0RkSRlaVAcbU2ZVm+QDbhcYoA9+8P6JYfCv4Kf2z4risvFUumzG+057fbLHb+a0axiCRwdql9shdQPvEgMRk9z8N/iDa/Ejws2sxabNYPFcNaywNMJAGVVIKttGQVZeoHOR2yfMvE/wp1P4naP4LvdI1zT7bTbPSobO4tY52nhtGXAkMBVnWQjBQ5YZ8pcueo92srGx0iyisdKgjsLSJf3dvawrHGmeThVwBkkk+5NAE5Mfkr8rY3H+L6e1CGPa+Fb7vPze49qcZP3SnzpPvHnH096Fk+V/30h+X06cj3oAbEY/OTCtncP4v/rUzMf9xv8Avof4VLHJmVB50h+YcEdf1rzD4bfGy0+I3ifUdIg027sBbQtcW8zzB/OiDhSXUY2N8yHALDlueBkA9Ncx7Uyrfd4+b3PtQDH5LfK2Nw/i+vtXE/F7wbqfj7wGNG0XVfsc/nxzMs5ZYrhVLfI5XJxkhhw3KLwOo868PfAnxbpPjjw1rd14xW5t9JSAStvl82FV3E20QJwYiMpksnDt8nYgH0VLzC/b5TzVAovkr+8X7x5wfb2q/J/qnwM/KePWqRVvKX9x/EeMN7e9ADSi+Sv7xfvHnB9vagovkr+8X7x5wfb2pxVvKX9x/EeMN7e9BVvKX9x/EeMN7e9ADSi+Sv7xfvHnB9vauL1iRfE/j+w8OwTqbHQimq6oUc4aYn/RIDtcMOVaYhlI/dxf3q63Ur6DSdGudR1BPJtbOKSed9jnYiruZsDk8A9PSsbwTbX58MjUtY0/7Lqer3D391Ad+6LeFEUbAhcMkKxRn5RzGSckkkAz/GFwfDOsaN4n82FNO806bq7EBdsMrKIZmZmUYilwOQ2FnlIA5rsCi+Sv7xfvHnB9vaodR06DVdHuNOv7PzbW7jkgniy67kddrDIIIyCRkGsnwff6je+HVtdehjbW9NkNnqXlksrTKiMJAQFGJEdJMADbv28EEUAbhRfJX94v3jzg+3tQUXyV/eL9484Pt7U4q3lL+4/iPGG9vegq3lL+4/iPGG9vegBpRfJX94v3jzg+3tQUXyV/eL9484Pt7U4q3lL+4/iPGG9vegq3lL+4/iPGG9vegBpRfJX94v3jzg+3tV+LiFO/yjmqRVvKX9x/EeMN7e9XY/8AVJkY+UcelACQ/wCpT/dH8qfTIf8AUp/uj+VPoAKKKKACiub0zTLLXUvbvWbaK+la6mhUToHEKI5UKoP3eBkkckmpluJ7ea00fRrqOVgkrvdXZM+xUYLswpUs2WA5PAHOTQBvUVzFvr+p6hdWFrara28sy3AuHkjaRUeFwh2gMuQcnvxkenNvSL3VtUjuZnls4Y47iWCNRAzE7JNu4neOoBGMdec9qANyiiigAooooAYn35P97+goi+4f95v5mhPvyf739BRF9w/7zfzNAD6KKKACiiuehsrbWte1T+1oY7uO0lSGC3nUOkYMasW2njcSx564GKAOhorAZhoywaXokqPJPcmNFnfzEtBs3kbQQcbRwuR94cgVXk1/UxNHYotp9sGofY5JTG3llTEZA4XdkcY+Xceh55zQB09FYVheaveanf27TWSR2TrEWFu5MjGNWzjzPlAJ6c5HGR1rcTcEXeQWx8xAwCfpQAtFFFABTB/rm/3R/M0+mD/XN/uj+ZoAp3JT7Q25WJ46Njt9KizH/cb/AL6H+FT3D4nYebIvTgDjp9awoPEV5eCV9P0LWbuCOeWATRvaqrtHI0bEBpw2NynqBQBBdw2jeP8AS3azgaX+z7pxM0SGVSjwquJCu5RiWQYBwdxzW7mP+43/AH0P8K5yefXJPE9lqK+GdY8m3s7iBgZrPdukeFhj/SOmImzz6de2j/a+r/8AQsa5/wB/rP8A+SaANLMf9xv++h/hRmP+43/fQ/wqDTNUi1XSbPUbeW4WG7gSeNZFAYKyhgDhjzg1a8z/AKbS/l/9egAJj8lflbG4/wAX09qZmP8AuN/30P8ACpTJ+6U+dJ9484+nvTfM/wCm0v5f/XoAZmP+43/fQ/wozH/cb/vof4U/zP8AptL+X/16q6nDLfaTeWlvqFxaTXEDxR3EYO6FmUgOMMOQTnqOlAFqQx7hlW+6P4vYe1MzH/cb/vof4V5/8IfCt74U0nUhd6ulylxdFEhtd5jieItHIfnC/MWBU4XpGpyRjHofmf8ATaX8v/r0AZuqzRwQeaVk2xqzMFUyMQPRVGSfYAk15PqD6LdRXJXUr6GyNxcrclvD90zKJ2Qum/aArhhwxBwCoxwDXruotu8v52fr97t0968zvLjTZpNThafW7fS908txbRiAQXKpIFuSpIMoUMxLAFc5O0HNC+IfT5nfLwox0x3rc0b/AI83/wCuh/kKw1xtG3pjitzRv+PN/wDrof5CglbGhRRRQMKKKKAOX1sacnjPQVi+yrqMt0zyhdomeMQTAE/xFQTjJ4rZvNNgkvU1BpLhZok2KoupRCRz96INsY/MeSpPT0GOV1OWMapqOnllGqXGr2dxbR9HeJfJy6juqhJASOBg5rqryznkvUul1G4SFE2tZAReTIefmYlN+eR0cD5Rx1yL4b/10B7/ANeZxHjr4ueGvAPiKy0nXXuDPeDzGaC2Drbxl9odycEjIbhQx+U8cjPySvjrxNpGoa//AGV4gZH1i5829vLJPKNyyyMwdG2q8YJZjgBOGwR2rrPjTpPi+y+Ms1xrEb373l1u0YiITxywiT93CqFSpK7gGjK8k5Ibfluq8VfswXun6PcXPhTUm1e7Nwpgs5jHAVgywYFy213GUOfkGFfgkgAA8X8TJeJ4gmGp31nqF2yRPNc2cqSo7GNScunyu4zh253OGJZiSx7jw98KfiPqnw9e40K3A07Wp4mfTzOsMtykYYxynfgeXljgFsk7W2kBWrb+H/wT+IOj/ELRNTv9GtbW0tLyOaea4uraVVRTlhtDMdxAIUgZDEHK43D1H4qR+LfGuiaZN8H9bguYYLmRL3+yNVjjdn2qU/eBwMKC2V3D76nBxkAHTfCvwEPhz4KXSJL+O7uppjdXUgT5BKyqpVMrnaAgGTyTk8ZwPIvEnj7xR8VPihY2Pwj1S9tbTTYQ7tI620TMswVp3XOZI8GL5GUnGfk5IPnHiD4hfELS/Gt9Hf8Aiy+a/wBPvGhkFtcFbdnibZxEAEKkr0K4buOTXM2ur65pd1JrOmXV3pj3jyRm5sCbZXOVd418vaoA3Idg4GV4HFAHoF54y+IXw8+K8A8Z65qsq296J7mFJzJb3VuzfO0UbYjKsu4KMLtIx8pXj0LxR+0wP7BgvPA2kmR/tJhu21W1IWAbd0Y/dttJfD4+fI8p/l5BrxzxJ8VfEfi3wPp/hnXWt7mGwnWdL1lb7TKyqyje27DfK+M7cnAJJOSePitp545pIIZJEt0EkzIhIjXcF3MR0G5lGT3YDvQB9UaX+1B4QuJLNdR0/VLJ5Cgnf7PHJFATjcdwbcyjnkLkgfdzxXRfDz4h+B/FfifWrLwjYx2V9zcXFwdPSH7eocgy7lGW5cH95tb950+9jwPwL8Frjx38OdR8QaTqkU2pRO8FtpoHljzFKMQ8jcZKM2ABjLJlxhgItDvvGPwB8UJcax4etv8AiYwhWS4KSeZErgsI5o2OxuORkjlSyn5aAPsdj8qfPH93+57n2oB/dN88f3h/B9favlf4s+KPGd+1p448O65qNp4Q1OOKGwFreNbmGQBxJFJGrAlxJHKS3zKRtAYjAHunwg1K91j4Q6Hfapfpqd1JGwkuWZgzbZHUBiwBLKAFJ7lSctncQD0GXmF+3ynmqBRfJX94v3jzg+3tV+XiF+M/KeKoF18lf3a/ePGT7e9AAUXyV/eL9484Pt7UFF8lf3i/ePOD7e1BdfJX92v3jxk+3vWD4q8WW/huwtkjsm1HVb+VodO0yBsSXUgAJ5J+VFHLueFHJ5wCAUvE62niTVrPwdIizw5j1LU/MgZohbpJmKPcVKlpJowNpBzGk3Q7c9WUXyV/eL9484Pt7Vg+FtDk0mwmvtYSyn17U5fO1K7tYmRZGAASNcnOyNMIueuCxG5mJ3i6+Sv7tfvHjJ9vegAKL5K/vF+8ecH29q5TxToOqQ30XijwlOr6vbxeRcafNKVg1O3UlhEc8RyKXcpJ2LENlScdWXXyV/dr948ZPt70F18lf3a/ePGT7e9AFLSdU07X9CtNU0e+hu7K6BeKaPOGHAx0yCCCCDgggg8g1dKL5K/vF+8ecH29q4y5kHgzxhDPBZKnh/xDPsuhb2xIttSZkVJXYNkLMCEJ24DohJBkYnsy6+Sv7tfvHjJ9vegAKL5K/vF+8ecH29qCi+Sv7xfvHnB9vaguvkr+7X7x4yfb3oLr5K/u1+8eMn296AAovkr+8X7x5wfb2q/FxCnf5RzVAuvkr+7X7x4yfb3q/FzCnGPlHFACQ/6lP90fyp9Mh/1Kf7o/lT6ACiislvEVst75XkXBg+0C1N2FXyhL02/e3dflztxnjNHkA6fQw9zPNZ6heWBuOZltim12xjdh1bBx3XGcCmnw5aJFarYyTWUtoGWOeFgXw3LA7wwbJ5OQTnmtVmVFLOQqqMkk8AVjR+KbGfTIb21jnnFzcG3t4kUb5mBI4yQAMKTkkcflR5AT2mg2llNaSwGXdaxyRrubO/zGDMzcZJJGfxNTWumJZWclvazzR+ZM8xk+UsCzliBkYxyR06fnVT/hJbYWxZra6FyLj7N9j2r5vmYzj723G35s7sY70SeJ7KDT57q5iuYTbyGOaFo8tG2M4YglQCCCDuxyOaANiisubxFYwXFrC63W+6/1Y+yyDPBPQrk9OQASOpwOakttbtLvVJrCIT+dCAX3QOoHXqSOOnBOAe2aANCiiigBiffk/wB7+goi+4f95v5mhPvyf739BRF9w/7zfzNAD6KKKACs+70hZ737ZbXdzY3DIEkktyh8xR0DK6sDjnBxnnrUN94itrC4mRre4ljtQpup4lUpbhum7LAnjk7QcDmrt/fw6dYvdXBYouAAgyzknAUDuSSAPrQBRHhqzWzSJJZ1nSf7QLzeDMZcYLkkEEkcYxjHGKdD4etYmgczTyTRXRumldhulkKlMtgYxg4wAOgoXxBbCC5a6hntZrUoslvKFL5f7mNpKnceBg9euKQeIbZI7n7ZBcWc1vsLW8wUu284TbtYqcnjr164oAtQabHbTX0sMsqyXr+Y7cHY2wKNuR6KDznmraAqiqWLkDBY4yffistPEFuEuftdtdWktqFaSGSMOwVujDyywI4POeMHOKjbxRp6WNrdst15d0VWP/Rn5Jx3xg9eME7v4c0AbNFZo12zOrJp2248903gG3cDHHPI6c9egPBIPFaVABTB/rm/3R/M0+mD/XN/uj+ZoAq3B/ft88Y6cFMnp9K8rsrq+je/WD4raXoEY1O9xp01pau8P+lSdS7Bufvcjo1eqXAzO3yRnpyXwen1qPb/ANM4v++//r0Aec/bdS/6Llov/gDZf/F0fbdS/wCi5aL/AOANl/8AF1202myy+JbLUlFuIbe0uLd1Mh3FpHhZSOcYxE2ee469tDb/ANM4v++//r0AYngs/wDFA+H/AJ4x/wASy26p/wBMl9q293/TSL/vj/61Z3iG+l0nwzqmo28Nu0tnZyzorsSpZELAEBs4yK4T/haej/8AQ7aL/wCE5e//AB6gDvIdSll8S3umsbcQ29pb3CMIzuLSPMrA8YxiJccdz17aG7/ppF/3x/8AWrymP4h6FHq9xqK+OdJMtxBFAynw7e7QsbSMCP32c5lbPPYe+bkPxOsbi/srbT/E2kalPc3kEAtU0S7gZ1eVUYiR5SqkKxPIPSgD0O8vrXT7V7q/vbS1t48b5p8Ii5OBkkYHJA/Gsz/hNfC//Q0aH/4FxVV8fbk8Iu0d3Bpri9sit65Vltj9qi/eEMcEL1weOOa537bqX/RctF/8AbL/AOLoA1PDHi7w5b6TOk/iPR4mOo3zhZLqMEq11KynnsQQR7EVvWfijQdQuktbDX9JuriTOyGC4jd2wMnAHJ4BP4Vxv23Uv+i5aL/4A2X/AMXSWlxdzeLvDy3PxG07xUn22Qiyt7e3iZD9ln/eExsTgdMdPmHtQB3WonPl/Mp6/dXHp7V5tc+Fjf391cW2j2N3DJcSksfEt2quS2HDRrGUGcYZeRxjtXpOojHl/Ko6/dbPp71wHiCfxDp09xe3+opb6PGw8ttPlgglwTgCQXKlCc8bhIn+7nil1H0OqsmuntEN/BDBPzujgmMqLzxhiqk8Y7Cuj0b/AI83/wCuh/kK5LQJbWfQ7aXTzctbupZDdSvK5yf77MxYehBKkY2kjFdbo3/Hm/8A10P8hVPclbGhRRRSGFV725ltLfzILKe9fIHlQNGG+vzso/WrFV72+i0+38+dJ3TIGILeSZv++UBP44oA5/WLV28VeHL+Se6UvdMotJHXZF/o8pPC9W9yWx2wCc7F7HqBvEkjubZdPCYlga3Yyu3PKyb8KPu8FD0PPPGBq1qt5rdrJbXd1caqZori1iDPHHZQcBmkjJ2jI8wZYbiW2jG3joLyXUUvUSK3t/sBTMtwblhMjc8LHsww+7yXHU8ccvoD3GymPznyrZ3H+L/61DmPamVb7vHze59q5/4h6Fe+K/A2s6HpepyWF1eRFI5TuC8MCUYqc7WAKHg8MeD0OR8JPBmqfD/wJHo+tat9sna4knVYCzRW6sQNiFsHGVLngcu3B6lAeXa1+0poOteG9e0m48M6isd5E1tblL2NTLE4ZGZ2KHymCnIAEgzxnAyaHhjTW8E/sz674u8OateJqWsrAPN2LEbYJP5LKmCxzl5cPkHBUgKRVe/+FfhLR/j1pmk2/ifTo7F7mK4bSbyN5ZV5LC3JwYyG2qAHcNhx8rnBf3Xx34P/AOEs+Gt94U0m4jsPOhijtVMWIY/LdWRMKflX5AvAO0HIBxigD4buLia7upbm7mknnmcySyysWZ2JyWJPJJPOTXrr/s4+Kx4HjvxEg18XLb9LNxGQ0BChSHztDg7mI3EFSOQwKn2L4V/CKw8F+HkXxHbaXqWtLeG6S7S0WQ22NoRUkcBuNm7OFwWOOmTW+LfiP4oaT4z0S3+H9lNc6bLEhlKWolWWbfgpKxz5abdnzZT7z/Nx8oB87z+Bo7P4g6P4O1W4uLHULjyIL+RUS4WG4mO6MIAy5UI8Ib5uG8wjcNufaPFI8IfAz4eWvhufw43iR/EAdb+SaYQfaPL2ksW2sV2s67FH3eTu3ctg+EvCvxK8YfG6PxP4uF9o50q5Dy3EiMieWrH/AEa35wyMNykgldrMzFi3z/RWp6RpWvWZttcsrfUrdGEixXlusyqw4DANkZwSM+hNAGT8P9N8Oab4R0xvCWmNp2m3saXsUTNl/wB6obLkkktggcscAAA4Aq14j8NaF4t0htM8RacL60LrJseQqVYdGVlwynqMgjgkdCRW1HJmVB50h+YcEdf1pvmf9Npfy/8Ar0AeXfFr4e3Op/COy8M+AdMtUSznjdLNigJiG8HY7jh9zBixYEjfkncQ3TfDDRL/AMN/C/SNJ12KGO/to8Spb7QqZZ2UfKACwUgMectk5bOT1rSfKn76QfL6deT70CT90x86T7w5x9fegC7J/qnwcfKefSqRZvKX9/8AxHnLe3tV2X/UvnptNct4i1u50qGxt9J0W61W+vbgxxIrGOCFRgvJNNsYRqB0GCzHAUHnAA3xX4sj8NafbJEsmpatfSNDp2mQPiW7kABIyeFRR8zuflUc9cAx+GPD99p6NqniPVf7S166LGaZWfyLVTt/cW6H7kY2rk/ecqGYkgBa/hXwq+mSTa74jnXUfEt+uy5uo8iO3jBBW3gU8rEpP1c5ZucAdQTH5K/K2Nx/i+ntQA4s3lL+/wD4jzlvb2oLN5S/v/4jzlvb2ppMfkr8rY3H+L6e1BMfkr8rY3H+L6e1ADizeUv7/wDiPOW9vags3lL+/wD4jzlvb2ppMfkr8rY3H+L6e1BMfkr8rY3H+L6e1ADbqCK8sJLa7Mc8E6vHLFKpZJEIwVYEYIIJBB45rnUtPFGgiV7PU49f04SEw2V0Wiu4Ywq/ItwSVmI2naJApJf5peCT0hMfkr8rY3H+L6e1BMfkr8rY3H+L6e1AGZ4c8S2XinQo9Q0y5kUCR4p4J1ZJraVcb4ZU6q6nqPcEEggnVLN5S/v/AOI85b29q5HXvCl1/ax8SeDbuHTNbkjaK5S5jMlrqKqn7tZlUqQysRtkX5gMghgQBND4svLW2H/CS+FdV0/bI6edZY1CGQg4XZ5IM2Co3ZeJAOhOcAgHUFm8pf3/APEect7e1XY/9UmTn5Rz61y2leLtD1m/k0yzkuo7+GIXDWl5ay2spiJ2hwsqKWXIIyAQDjPUV1MX+pTHTaKAEh/1Kf7o/lT6ZD/qU/3R/Kn0AVbqS/SWMWVtbTRn77TXDRlfoAjZ/MVyLyIdFm0Hf/xM31QkQfxlTceZ5mOu3Zzu6cV3FFC3DoZGsx3GqWawaYbW4iE227jknKblHWPKq2OcZGOmR3rB03XW0Xw7K92lpFNPqM8UAe5xHuMjElmKjao556kAcZOK7WigDiLj7Emn2k0erQXJk1ES3uqwOGFu5QgEYJVR91BuyoB5BrQ8P2dvqNvqAutuoW7Xxkju26XWFX5jj5Wwfl4AX5eBXT0Uf1+X+Qf1+f8AmZ50LTm+zbrfcbVUSAl2JjCkEYOfUD645zUsOlWVvfvewwBbmQMHk3HLbiCc88/dGPTHGKt0UAFFFFADE+/J/vf0FEX3D/vN/M0J9+T/AHv6CiL7h/3m/maAH1WvHvURTp9vbztn5hPO0QA9iEbNWaKAOLv7pLO38S2N2Ql7f/NbQg5affCqAJ0LYYEcdPaujN9DpumgSMZmtVjScREM0WQBuYcYAHJ9ua0aKOn9dA/r7zgr1ftE13PYX731mJ7W4n1GIo7LtchkBUbcIu1uBxkk5zT79vtHmjSL+a40m3ltppLhJzcmNg537XYtnC7WIycdcc13VFC0B6nN6YlrqF7fWdpcNqGjtDHl2uXnHm5bcokLEkbQuVzjn3NaUvh/S5rNLWS0DQIXKJvbClySxHPHU49O2K0qKAKbaVZNqK37QZulIKy7jkfKVx16YJ46c561coooAKYP9c3+6P5mn0wf65v90fzNAFO5KfaG3KxPHRsdvpUWY/7jf99D/Cp7h8TsPNkXpwBx0+tR+Z/02l/L/wCvQAAx+S3ytjcP4vr7UzMf9xv++h/hXnmsfD3WtR+Lln4sg13y7G3eIlWZ/OjVQQ0SAHBRsHPzD/WNwf4vRvM/6bS/l/8AXoAyPE9o+o+EdYsrKFpLm5sZook3gbnaMgDJwOpHWpf+EqvP+hT1r/v5Z/8AyRWl5n/TaX8v/r0eZ/02l/L/AOvQBjp42le/lsl8La0biGJJXTfacK5YKc+fjkxt+X0qrrWqahrdlBZR+GtUt831pK0s8trsRI7iORidszH7qHoDU9rJ/wAV9qp86T/kGWXOP+mt171t+Z/02l/L/wCvQAzMf9xv++h/hRmP+43/AH0P8Kf5n/TaX8v/AK9VdUuL2LSLyTSi098kDtbRScK8gU7VJ3DgnA6j60AU/D9nJp+myw3kLRyNfXcwHmA5SS4kdDx6qyn8e3StPMf9xv8Avof4Vw3wu1nxnqdjqDeOI7qHy5EFq89sIJHyDuG0bflHykHHJZuTjjvPM/6bS/l/9egChflT5e0Edepz6V5zqGjSDxJJqlhouupeI7bbpGsJw3J5UzyNIiEE/KpQYPQGvSNRbd5fzs/X73bp7143r8tjbtrAu7jwk2orPM8OoXOrH7bbDcSoCiIuGQcBVPGAMHnK6j6Hpmmm9Niv9p7DchmDNHF5asAxAIXe+ARg/ez6gdB02jf8eb/9dD/IVy2jX51PSILsvaP5gPzWdz9oiOCRw+1c9OeBg5FdTo3/AB5v/wBdD/IVT3JWxoUUUUhhRRRQBkHwxpn9pzX6fbIrieQSSmK/njV2AABKK4U8ADGMYrWdQ6lT0PtS1HcOUgZlOCMfzoAQ26sxJPU/3V/woNupA56D+6v+FVZLmVZXAfgMQOBQ1zKFTD9VyeB6mgDkNT+DXhbVviRb+Nbv7b/aUDxSmJJgIZJIwAjsu3ORhOAQDsGQctnuRbqrAg9D/dX/AAqqLmXymO/kMB0HvRHcytKgL8FgDwKALP2ZfX/x1f8AClNupPXt/dX/AAqn9qm/v/oKdJcyhhh/4Qeg9KALX2ddoGe/91f8KBbqAeeo/ur/AIVVNzL5SnfyWI6D2oW5lKvl+i5HA9RQBaFuqsCD0P8AdX/Ck+zL6/8Ajq/4VWjuZWlQF+CwB4FN+1Tf3/0FAFw26kDnoP7q/wCFH2ddpGe/91f8K8M+NXxyn8Ks/hzwncyRa/G0TXNy9srxwIwL7V3cFyPL/hK7WPO7p13wv+Ip8TeBdDk1/VrAeIL6JyLYOkcs6xySp5gizk5ERJIGMhsAAYAB6SRlSMkZHUVH5HygebJ167qfISsTkdQpIqkbmXylO/ksR0HtQBa8j5QPNk69d1HkfKB5snXruqqbmXylO/ksR0HtQbmXylO/ksR0HtQBa8j5QPNk69d1HkfKB5snXrurw/wF47+JsGpeKb/4k6dcQ6NplnNdcWSRbHjJPlwNx5qlA/JLfdT5huy298PPjba+ONA1vUr2xk0ddEUTXRMnnp5JVm3AhQSR5b5Xb6YJzgAHqXkfKB5snXruo8j5QPNk69d1cN4B+Kmj/EayvJdC+1wy2UirPDdwqrAMPkYbSykHa465+U5A4z15uZfKU7+SxHQe1AFryPlA82Tr13UeR8oHmydeu6qpuZfKU7+SxHQe1cB8VPi4PhlY6W7abJqVxqMkoRBMIlVIwu4ltrHOXXAx68jABAPSfI+UDzZOvXdR5HygebJ167qydH10a34d0/V7TzEhv4EuI1lUBgjorAEDIzhuxNXDcy+Up38liOg9qALXkfKB5snXruqQDCgZJwOpqibmXylO/ksR0HtV2MlokJ6lQTQA1UkVQodcAY+7/wDXpcSf31/75P8AjVZJpC3M6ng/w+30pvnyf8/C/wDfJ/woAt4k/vr/AN8n/GjEn99f++T/AI1WE0nlk+eucjnb9fam+fJ/z8L/AN8n/CgC3iT++v8A3yf8aMSf31/75P8AjVZ5pA3E6jgfw+30oSaQtzOp4P8AD7fSgCziT++v/fJ/xoxJ/fX/AL5P+NVPPk/5+F/75P8AhXI3Hj3UNSsxP4E0Z/EcAklRr43KWtqxjDZSN3BaQllChlQxkv8A6wbWwAdziT++v/fJ/wAaMSf31/75P+Nc9oXica7FMPLudOvLdyk9jfwhJovmZVbAyrI21trqWVsHByCBsPNIG4nUcD+H2+lAFnEn99f++T/jRiT++v8A3yf8arJNIW5nU8H+H2+lN8+T/n4X/vk/4UAXEUruLEEsc8DHakCOuQrLjJPK+/1ohYtCpZgx9QKRQzgnzGHzEYAHr9KAFxJ/fX/vk/40Yk/vr/3yf8aNjf8APVvyH+FGxv8Anq35D/CgAxJ/fX/vk/40Yk/vr/3yf8aNjf8APVvyH+FGxv8Anq35D/CgAxJ/fX/vk/40Yk/vr/3yf8aNjf8APVvyH+FGxv8Anq35D/CgAxJ/fX/vk/40Yk/vr/3yf8aNjf8APVvyH+FGxv8Anq35D/CgAxJ/fX/vk/40Yk/vr/3yf8aNjf8APVvyH+FGxv8Anq35D/CgAxJ/fX/vk/40qqwYsxBJAHAx/nrSbG/56t+Q/wAKEyJGUsWGAece9ACPArsWPU/7I/wpv2ZfX/x1f8KguLiVJ2VWwBjsPSo/tU39/wDQUAXPs67SM9/7q/4Un2ZfX/x1f8KrC5l8pjv5DAdB7037VN/f/QUAW/sy+v8A46v+FH2ZfX/x1f8ACqn2qb+/+go+1Tf3/wBBQBc+zrtAz3/ur/hSfZl9f/HV/wAKrG5l8pTv5LEdB7U37VN/f/QUAW/sy+v/AI6v+FH2ZfX/AMdX/Cqn2qb+/wDoKPtU39/9BQBcNupPXt/dX/Ck+zL6/wDjq/4VkaXrcuqWb3ATydlzPb7chs+VK8e7OB12Zx2zjnrVz7VN/f8A0FAE0+nRXG3ezDb02gD+lcxffD57i3uobPxJqNrFcM7G3+y2bwjeSWBUw5YHJ6tk55JrZur+5j27JMZzn5RXF6z8QpA0trC2rW8StJv1O0gt2WMRMBKcSZJCk4JCHvjOKOoztbHw5FZ2aQy3t1duuczTCMM3PcIir7cAVpWtqlpEUjLEE5+asC21C+itY0e9kuGVQDNIiBn9ztUDP0AFbOmTyXFszzNuYORnAHGBTZK2LlFFFIYUUUUAZdz4i0+11200dpDJe3LECOMbvK+RnBc/w5CnHc9hgEi/cnFuxGO3UZ71n6vZXF1quiTQR7o7W7aSY7gNqmGRc89eWA49alvdLsJLxNUksbZtQhTZFdtCpljXnhXxkD5m4B7n1o6A9xJZGEzjC/eP8IoeRtqcL93+6PU0SyyCZwHYDce9DyyBUw7crzz7mgAEjeSxwv3h/CPeiKRjMgwv3h/CKpWOu2GpSXlvp2q213cWUojuYoLhXeBvmG1wDlTlSMH0PpRqGvafokUVzrmq22nW7SCMS3lysSFjk7csQM4BOPY0AWvNb0X/AL4H+FYHjvx1pfgDQRq+uCVoWkjgjjt4VeSR2XOBnAHCseSBgeuAfFPG/wAfPHWneONW8M6LpVvbvHctZ2m+CWW5Yn5UkUbgrFsh1GwjDKPm6ny7Xfi34w8VWKWHinUIdXsFmSY2txZxKrFT/ejVXXIyCVZThiM8mgD0TWf2kNUX4k2tzo9wreE4/I82zNinmyKyAy5J58xSzAbWC5ReoyW1p/2q4joMxtfC7R6szFIkknV4EXbw7MFDMd38GBkc7weK+dbeB7q6igjMavK4RTLIsagk45ZiFUe5IA70LO62rwAR7HdXJMalgVDAYbG4D5jkA4PGc4GAD6O0f9pqa78JXv2jRFfxPBFJLbxW8LG1mCkEscEuuxN7sDwREfnXIA8k0lfHfxT8RyvZ6rd6jq2no2oQJLeeWYyZYwxhyQkZBZWwNoATjoBUHwn8S6f4Q+Kei63rLyR2NvI6zPGm4oHjaPdgckDdk4ycA4BPFfaNjpWn6XdXd1plha2dxfP5l1LbwrG9w2SdzkAFjlmOTnqfWgDw/wAZ/BvXvEPwu0a9nsre88dxLGt/P9oCvcQgyKqM2QjyKpiBduSIz87cZueEvgHeLqvhzxR4o1p01LT1tnuLCKFGG6AYhQSDAAVI4VYbWyVfDHcCPdXlkCph25Xnn3NAlk8ljvbO4d/rQBflOIXP+yaoGRvJU4X7x/hHtV+U4hcjg7TVAyyeSp3tnce/0oADI3kqcL94/wAI9q4D4q/FiL4ZWGls2ktqU+oSyhEEixIioE3EttY5y64GOeeRgA4mg/FzxJqvxyv/AAVc6GsOnW7zoJgJBNEqLlZnJ+Uo+Bj5R/rU+Y/xHx+8Z3Phfw5o6/8ACO6drcF1dyF31a2NxBAyINo28AOwdsHPRX4OSQAWdM+N2ieNfD/iGHw3Lc6TqWn6XPeRzajaLsQKmPMwnmZCMVJGMnIwG5x8jySSHSoIzfb4lmkZbPc/7olUzJgjb8+AOCT+75AAXPrPxv8ABulaN4d8L+INE8NSaHJq4ll1GEGQrBKyROsJDfKhGZQFAX7p44wOM8N614Rg8G6xpninQnu9RKySaRfWwKvFK8e3ErCRdyKyRso2tjMnrigDW+HfxUm+H3hDxJZafEo1TUPJNhP9kjdYmBYSM7HDHCkFFO5Q2eOWzraJ+0Z42t9c0uTW76G602Bwt5CljCGuELHc3AXDhTgYKr8i5B+bPkldv4QtfAetaAuh+I7i70bX7i/zBrYQSW0UO1QI5VMg4Lb/AJgBglSW2gigD6O8a6n4g+InwbstT+FV3NDNeXCyMFcW07RKSrxq5xtYSAZIYAhGAYg4bJ1j4Q6z4/8Ahn4VtPGWuva+INKEolnEa3AZX2/I+Cu5wqxgvuOSGzuzur0DwDoVr4U+HmkaRpOotf2sMbPHdhhtn3nzC67eNpLkjk8EcnqejMsnkqd7Z3Hv9KAKWj6fFofhzTtKtGZ4LCBLaJpQpYqiKoJIAGcDngVdMjeSpwv3j/CPagyyeSp3tnce/wBKDLJ5Kne2dx7/AEoADI3kqcL94/wj2q/Ecwof9kVQMsnkqd7Z3Hv9KvxHMKE8naKAKEZj3HCt90/xex9q5L/hNT9n/tT+wrr+wPO8n+0PtMe7b5m37Vs6fZcfN5u/dt+bZs+erHjqO51LQ4fDsV28D+ILgae0qMp2wlHknHIYAmCKZVODhmXp1G5/Z1v/AGV/Zn2e3/s/yfs/2TC+V5W3b5ezpt28YxjHFAFkGPyW+Vsbh/F9famZj/uN/wB9D/CuV+Hk09jpeo+FLi8jmuPDV0tlE32hWka1MYkt2YBV2ny3VDxgtExyea63M3/PX/yIP8aACQx7hlW+6P4vYe1EZj3HCt90/wAXsfanSGXcMSY+Uf8ALQen1qOW5FpbzXN5dRw28MbySSyzBVjUKSWJJwAAM5PSgDmPFV6NRuYPCmlahNZalqCGW4mtZlE9pZqfnlUEcFm2xKeoMhcZ8siukggtbSwgtrW3WC3hHlxRRYVY1AACgAYAAwAB0rmfBFvc3n9peKrm582XXpRJakSMFSxTItVCs5xuVmlPCndMwIBGK60mXyl/ec7jz5g9vegDlPGmiXl/aRax4ammt/EGkpI9iN4MVyGAL20qEqGSTYozkFSFYEY519E12x8R6Lb6pZQ3UUcwKtFcoYpYXQlHjdSOGV1ZT2yDgkc1pZm/56/+RB/jXHXL/wDCGePrUQfZ7XRfFEpWYLsjCansDLIWLgnzkRlICnLxqeshJAOxjMe44Vvun+L2PtTMx/3G/wC+h/hUsZl3HMmflP8Ay0Hp9abmb/nr/wCRB/jQBctsfZ12ggc9TnvTovuH/eb+ZpLfPkLuOTzznPeli+4f95v5mgB9FFFABVa81Gy05FfULy3tVY4Vp5VQE+gyas1iaWqyeJ9ZlnGbiN44493VITGCNvsW3fUj2oA2IZoriFJreRJYnG5HRgysPUEdafXOT3Fta3MemaFMto1zftHcyIufKfy/MYIGBXcQB2IGTxmqj6nqhuo9NS/YOmqfZXuhEm94zCZORt2hhnGQMcDjqKN/69P8w2/r+ux11Fc/pn9oXeranFNqtx5NnKsMarHEC2YlJZjs65ORjAz6jit9AVRVLFyBgscZPvxQAtFFFABTB/rm/wB0fzNPpg/1zf7o/maAKdzIRcMAF7dVB7VF5rei/wDfA/wqW5kdbhgrsBxwD7VF50n/AD0b/vo0APEjeSxwv3h/CPemea3ov/fA/wAKeJZPJY72zuHf60zzpP8Ano3/AH0aADzW9F/74H+FHmt6L/3wP8KPOk/56N/30aPOk/56N/30aAHmRvJU4X7x/hHtTPNb0X/vgf4VTi1eSXXLnTNrA21vDceb5n3vMaRduO2PKznPO7tjm550n/PRv++jQBn65rsOgaPLqN4m+KN40IQRqcu6oOXKqBlhkkgAZNc7/wALQ0v/AJ4xf+DTTP8A5Jrc8T2FxrOhNZxxwXJNxbytBduRFMscySMjHa3BCkfdPXpWN/wj8f8A0Tvwf/3/AB/8iUAZmh/ECw0zT5YJ47dme8upwU1XTSNss8kijm464cZ962dN+IenanrFpp0MIEt07IhS6spwCqM5yIpnYDCHnGM4Hes/T9OttStnng+HPhFVSeaAh5wDujkaNjxa9Moce2Kt23h1013S7y28L+H9EFncPLJPp02ZXUwyR7MCBOMuCfm/h6UAdFfsW8vOO/QAeleXauq3c+pC00rQ5Li0nkYQTa+6sXchV8yFV2YkKofLZgCTzgk16jfuz+XuYt16n6V5RqOnSC+vrcandRwSPdxssfhi8kYJO4ZwJFO1iCMhsEfUcUL4h9D0Sxe6ks421CCK3uMfPHDKZEHPZiqk8ewro9G/483/AOuh/kK5yxuor2zjngWZY24AngeF+DjlXAYdO4ro9G/483/66H+QpvclbGhRRRSGFFFFAGFdeI5LbUpE+xK1hb3MVrPcmbDrJJt24TbgqN6AncCMng4q9earYw3qaY1/bpqMyb4rQzKJpF5yVTOSPlbkDsfSsm88P30+pXMUbWw028vIb2VyzCVGj2ZQLjDBjEvzbgRk8HiuguQWt2Cgk8cD60Lb+v63uHUqyfaPNfb5mNxxjNDfaNqY8zO3nr6mmyxSGZyEYjce1DxSFUwjcLzx7mgDxnwn4C8N/BTxBresXHiZru9OnTSW2lkxx3JtV3SuQpbMrYhA3AKvytkf3eC8feLLb4zfDW/8RNaXOlXvhGaP9wZRPFPFdOqfewpDBkz0xgd93y874o8MePfAvjK18ceOrE3gi1iJzd/aoyLt0beqqB8yKViOMoAoAGBwK+hPDGkeGPiV8IY4rTQV0fR9cUtNa2cawmOVH2lwUABIeIEMRyFXIxlaAPi6rupz6hqd1PrepCSR9QuZXkujHtWWbIeTBAC5HmKSB03DpkV9ET/sqWDauJLbxFfR6dvUm3ktFeYrxuHmghcnnB2cZHBxz7pZ6TbaVZx2elWENlaRL8kFtCI40zycKoAGSST7k0AfHGg/A7x34j8M/wBuafpKrbyIklrFPMscl0rHG5AeAAPmy5XIIK7s10Vt+zB46ntY5ZLnR7Z2QO0Ms8peMnHynbGVyM4OCRxwTX1cYpPJUbGzuPb6UJFIFfKNyvHHuKAOItfg/wCFZNN8O2mtaHbahNodvHBHOYTEsm0hmLopwwZ9zFW3DLt13Nnt/wDSf+mv60RRSCZCUYDcO1M8mT/nm3/fJoAlb7RtTHmZ289fU0D7R5Tf6zO4Y6+9NeKQqmEbheePc0CKTyWGxs7h2+tAF+TPlPtznacYrEm1uyg1S30ibU7ePVLhWkisnuFE8iYPzKmdxHytyB/CfQ1tyjMLgcnaa8j1r4I22sfFq18cvql1EY54biWxEAO+SEKEIfPyqdiZBUk4bBGRtAPmn4mafcr8UvFhj0+8hWG/mnnEyliivIP3pO0YR2dSuR0kQZbOTN4m8aWfiD4Y+EtBkXUJdV0I3KSXM8gMXlOwKIo5Y4VUA+6FC4AbIK/U3xa0jxlq3gEW3gGaaDUvtaNKIZvIlkhxyqOcbTu2nquQrDJzg/Ntjo+p/BrXIr/4h+CLXU4NRtpYba0vJ4XXcrRlnGBIAQCByB984PWgDg7HW9V0u1u7XTNTvLO3vk8u6it7ho0uFwRtcAgMMMwwc9T61d0PwlrHiPy/7KggbzZhbw/aLuG38+Xj93H5jL5jDcuQuSN65xuGfpH4ZfA3w5YoviaUtrtjq1okljZanYRn7PFJtkBflg0mNo3LtH3uDnja+JPwRtviL4j03WLjVLqxNvELa4hjgD+bErlhtJI2N87jJDD7vHByAeG+B/2f/F3ix3m1W3m8PWUT7Ge+tXEznbn5IjgkZ2gklRycFiCB6if2XtD/AOENFj/aN1/bnnmQ6r5J27eP3fkbsbcd87t3O7Hy17cYpPJUbGzuPb6UGKTyVGxs7j2+lAGH4J8K/wDCE+B9N8PWlxPcpZBwZnXaXZmLscDoNzNgc4HGT1O8ftHlL/rM7jnr7U0xSeSo2Nnce30oMUnkqNjZ3Ht9KAHH7R5S/wCszuOevtQftHlL/rM7jnr7U0xSeSo2Nnce30oMUnkqNjZ3Ht9KAHH7R5S/6zO456+1XY8+Um7OdozmqBik8lRsbO49vpV+IYhQHg7RQBQjMe44Vvun+L2PtTMx/wBxv++h/hUse/cc+X909NvpTf3n/TL/AMdoA5PWIjpXj/R9cijYWd9E+k37G6ZVVifMtXK4KHDiWIE4O65UAnOK6nMf9xv++h/hWd4n0L/hJfCl9pL3H2V5wphuYm2tbyqd8coKspyjqrAZGduOmafoGrPrehwXzQxW8zbo7i33K3kTIxSWPdgbtsisu4cHGRwRQBoyGPcMq33R/F7D2rmPFk8N/Np/hVEm3a60iXJVSwWzjTdcbiFwocFYc7lIM4ZclcV0t5cJaW8lzdTW8EEMfmSyysiqihcliTwABk56YrB8Ib9Ua78UP5Z/thV+yfd+WyQN5Hp9/e83IDDztjfcFAG7mP8AuN/30P8ACnkx+Svytjcf4vp7UfvP+mX/AI7Tjv8AKX/V53H+77UARZj/ALjf99D/AAqrremWus6VcafdedGk8QAlhcCSFsArIhIO11YBlbsyg9qu/vP+mX/jtOk37hjy/ujrt9KAOf8ABmuz63pMw1a2W21bT55bLUIYt4jEqDO5N6glHRkkXr8rjk4NbeY/7jf99D/CuQ8TO/g7XE8YWlohsJl8jxD9mtlkkMKo3lXJwQf3THDYDExuxIIjXHZfvP8Apl/47QBctsfZ12ggc9TnvTovuH/eb+ZpLfPkLnGeemMdfali+4f95v5mgB9FFBIAJPAFABVK90izv50nnSRZkUoJYJ3hfb12lkIJGecHis+z8RSXM1k8tkIrLUGZbWcTZYkAld67Rt3AEjBPvirWo6pNbX9tYWFqtzdXCvJiSUxoiLjLFgrHqVAAHegB/wDYWnf2alitsFgRxIu12VlfOd4cHduz/FnPvSw6Lp8CQLHB/qJjOjNIzMZCCCzMTljgnrmqcfiFryO2j060El5MJN0M0pjWLy22vuYK38RwMDn2qQatfTQWwttJkF1KXEkdw5jji2cHLhTnJ+7gcjnigC+lhbxtdNGjI1226ZldgWO0LkHPHAHTFTooRFUZIUYGSSfzPWufn8XQwaVZ3pspitzJ5ZBkQbHDbWXJPPQ8/d45Iqw3iELr8elGxmErx7wTJHnH03fXvnjgEc0AbNFZOja8usz3UaWskJtn2MWdG59DgnnOemV465yBrUAFMH+ub/dH8zT6YP8AXN/uj+ZoAq3Hnee2zzNvGMZx0qP/AEn/AKa/rTrmN2uGKoxHHIHtUXkyf882/wC+TQBKPtHlN/rM7hjr703/AEn/AKa/rQIpPJYbGzuHb60zyZP+ebf98mgDO8T2d/qPhHWLG0jllnubGaGJM43M0ZAGTwMk968t/wCFN6H/ANADxt/4Fad/8XXsfkyf882/75NHkyf882/75NAHiqfCjw4+oS2KaJ41NzDEk0ifaNP+VHLhTnfjkxv+X0q5ZfCiz07VtOvtI0TxTFdW19bzB764sjCqrKpcsI33HChsY74rY0fx/Y6h8YL/AEKLTbpLiRTYi4MqlWa3MrH93jKjLSc7jnC8DJx6N5Mn/PNv++TQA/8A0n/pr+tH+k/9Nf1pnkyf882/75NHkyf882/75NADlga3XZbRGJCS5WNdoLMdzHjuWJJPckml/wBJ/wCmv60SRSFhhG+6O3sKZ5Mn/PNv++TQBV1HzP3fm7u+N2fauNsdT126S4bTNJsHtku54la61aUOxSVlJx5DYGQcAEgDAFdhfoyeXuUr16j6V5hdeKL7RL6WGxGnQ25u7oLYSxyNcTSq6ttV9/35fM3KAhwCOo6HWw+n9eZ3tm929qjahDDBcHO+OCYyoOeMMVUnj2FdFo3/AB5v/wBdD/IVhg5AJGPatzRv+PN/+uh/kKBGhRRRQAUUVXvdPs9Tt/s+pWkF3DkN5c8QkXI6HBGKAMzUdZv7TxJplhFYAWd1M0cl1I4+Y+U7gIoOeqclsewOci3e6jCl4mnFLkzzJvV1tZDEBz96ULsU/KeCwPT1GUu9IS4udLkhZYI9OmMixKnDDynjCjptA35/DFXLkbrdgMdupx3oDqU5Y2MznK/eP8QrnPHfjTSvh/4bj1jXfOeFpFgjitlDySOxY4GSB91WOSQOPXAPgHxS+J/izWvi3JpPgWbVrb+yLiS2jtLPLNdTRuxkdo0B3r8uArbhtUnA3MK8k0vR9c8Y681vpdrd6tqVy/mSEZdiWYAySOeg3MMuxAGck0AfXmv/ABI8Gv8ACS38UazavqOh6nLHFHZyWqyPLIGbKMjHblTGxyTj5OCflzteH/GPhebwXpOvW9/ZaTolwFitvtkkdqsZXK+VhiACuxhgZHynGRzXxteeAPFNh4wg8LXWjzLrNxt8m2VlbzAwyGDglSowctnC7WyRtONvVvgn4/0bTIby68PzTebMYfs9k63UqfKCGKxFvlPIB7FTnGV3AH2Ne6pp2m3VrbajqVjaT3j+XbRT3UaNO2QNqAnLHLKMD1HrV+SNiw5X7o/iHoK+OtV+GHjm9+GcXivXfOVNHhNqmn3kbC5jtEcbWVcFtoaSUkPt2ogIyuMfRnwm8Z6r8QfA661rWnw2M4uHgUxbljnVQMSIGJOMkqeT8yNyOgAO5MbeSoyv3j/EPahI22vyv3f7w9RQY28lRlfvH+Ie1CRttflfu/3h6igAijYTIcr94fxCmeU3qv8A32P8afFGwmQ5X7w/iFM8pvVf++x/jQA9422pyv3f7w9TQI28lhlfvD+Ie9DxttTlfu/3h6mgRt5LDK/eH8Q96AL8ozC4/wBk1QMbeSoyv3j/ABD2q/KMwuP9k1QMbeSoyv3j/EPagAMbeSoyv3j/ABD2qlquhabrdhHba1p9lqECSmRYruJJUDYwGAbIzgkZ9/euU+Ld/wCL9I8AfafAVs1xqP2tFlMMKzyRwnqyRnO47ggPytgMTgY3DW8BXHiDUPh7o914vgW21iSMtcRkLGevyllz8rFQpK8YJIwvQAHRGNvJUZX7x/iHtQY28lRlfvH+Ie1BjbyVGV+8f4h7V4p8d9K+I7TW+reEdSubfQrCxllu0stQFu8TrlndhuUuCgXABYja3Az8wB7WY28lRlfvH+Ie1cn45+Ivh34f6Ysuu3ivcswMdhbOj3EiscBgm4YX5W+YkD5cZyQD8d+HvC+tat4d17X9FlCxaHCn2tI3cTPFNuRtoUcqFD78kDbnORmr3hv4UeNfF2jLqugaG1xYu7RpNJcRQhyvXaJHUsAeMjjIIzkGgD7M8MeILHxf4TsNc0d2NpeBmQSjYykHaykHuGUg4yOOCRg1i/EH4kaJ8N7Cwk15bqZ76WRYYbONXYhQu5iSwUAblHXPzDAPOPkjUPD/AI5+Gt9JPc22raDIcW5vLaRkjk3APsE0Z2twAcBjyvPI47DR/gh4y+Iei2viuPxDpd8uoru86+u5zMSvyFXLRk5Urt6kfLwSMGgD6h0LxLoniiwWfw9q9lqCqqyOsE6l4g4yu9c7kJweGAPB44rWMbeSoyv3j/EPaviSxHjf4T3Wp3UuiXemveW8ukteXEEiohYgloZVIUuPLyrAkcZGetdroHwm+MGg2Wjz+GtTazt750unt49RaFbRiEObiF9oJxgMoVz8hBB4BAPqYxt5KjK/eP8AEPar8QxCg/2RXi2vfCTxFqnxy0/xrbeIIYdNgeFzEZX86JY1w0KAfKUfnPzD/WvlT/F7TEMQoP8AZFAFCMR7jhm+6f4fY+9MxH/fb/vkf41LGJdxzHj5T/yzHp9Kbib/AJ5f+Qx/hQAAR+S3zNjcP4fr71xtzYaj4X8TSX3hvSV1DR9UdpdRsbURxXEV1j/j5QyOqOHCqrqSpBAcZJfPaAS+U37vncOPLHv7U3E3/PL/AMhj/CgDi7+HXvGGr29le6dc6B4dhVJb1bpoJZ9SIPFvtjd1WEgAyEnLg7AACxrtIxHuOGb7p/h9j706QS7hiPPyj/lmPT6URiXccx4+U/8ALMen0oAixH/fb/vkf408iPyV+Zsbj/D9PejE3/PL/wAhj/CnES+Uv7vncePLHt7UARYj/vt/3yP8afII9wyzfdH8PsPejE3/ADy/8hj/AAp0gl3DEeflH/LMen0oAgktrW7gmtrpFngmieOWKWMMrqVIKkE4IIJ4PWuT0WSHwdrFl4QeO9bS7hG/se9cGVVI3u1o7FiQURSYycAoNvWMl+zjEu45jx8p/wCWY9PpTcTf88v/ACGP8KALltj7Ou0kjnqMd6dF9w/7zfzNJb58hdwweeMY70sX3D/vN/M0APpsqeZC6ZxuUjP1p1FJq6sGxyGnw3M9t4f0yS0uIpdLkDXMjxMsaiONkG1zw+4kfdJ4zmr2tFJbrT79ItRhCiRRd2cJaWLI+40TIxKtjqV4IHTNdDRTeoHCWWgJYSWl1rFhPcWsqT+ZAY2uDGzy703ooO7jvggED61q2bTWejpb39neLYzPKYzb+Z5tum/MSbYxvA2+n3cAGumoo6WDzMXQ9OB0RIL+0jMaNIkEcsQ3LAWO1WBHUrjIPPrzmtU2luZhKbeLzA24PsG4HG3OfXBI+lS0UARQ2tvbsWggiiJUKSiAcDJA47DJ/M1LRRQAUwf65v8AdH8zT6YP9c3+6P5mgCncxlrhiCvbqwHaovKb1X/vsf41LcxlrhiCvbqwHavNdT+GXiW+1a8u7f4h6laQ3E7yx28bPthVmJCDEw4AOOg6UAbV98RtC03xpF4TuTcfb5pI08xYwYkdxlULZzk7l5AIG4ZIwcdX5Teq/wDfY/xr5j1rw5NZ/F230K68RX1zfPPBG+qNFmRJXC+WRmXJAynzbgRzgcDPpv8AwqjxV/0UzVP++n/+P0Aen+U3qv8A32P8aPKb1X/vsf41DZWtzBYW8V5crdXEcSrLPhU81gMFtoOBk84HTNTeU3qv/fY/xoArpo9jFevqMVlaJfTApLdKiCV1wuAX6kfKOM9hVjym9V/77H+NPMbeSoyv3j/EPameU3qv/fY/xoAPKb1X/vsf40eU3qv/AH2P8aPKb1X/AL7H+NHlN6r/AN9j/GgB8kbFhyv3R/EPQUzym9V/77H+NPkjYsOV+6P4h6CmeU3qv/fY/wAaAKd+pXy8479CD6V55r19fRi+Gkaz4lN8pYW9smjBoC+eEEjW2NueNxfGOcmu68QQ3UmlzR2EqRXUkMiwSE5COR8pOM98V5nLFr1tot1cXGl+IItQg3tbXL6zEIIkX7hkU3G1sAfMWVi2CSeeBbj6HpK52jPXHNbmjf8AHm//AF0P8hWGpyoPXitzRv8Ajzf/AK6H+QoJWxoUUUUDCiiigApCAwwwBHoaWo7jPkNtODxznHegCpHoWkRaxNq0WlWSalcJsmvVt0E0i8fKz43EfKvBP8I9KyfDvw68JeE9UvdR8PaHbWN1ff66RNx43btqAkiNc/woAOF4+UY1pDL5r4kwNxwPMA/rQxl2piT+Hn94PU+9AF3yo8Y2Lj6UCKMHIRQfpVIGXym/ec7hz5g9/eiMy+amZMjcMjzAf60AXPJj/wCea/8AfIpTFGeqL+Vcd4/8R6l4T8BatrmmWpv7qzh3pBvJHLAF2C8lVBLnpwp5HUZXwl8caz8QPA41nWbJLGcXLwKYSyRzqoH7xAxJxklTyfmRuewAPRvKjxjYuPpR5UY6IvPXivkHxD8c9Uk+M0es6Pr2q/8ACM2tzEi2iHas0C4Ev7okKxbMhUv8wyv3SBt6L40/Fe71Pwn4V1LwL4ivbOz1B7lrhbacwzJJGIgI5Cp3KV8w/LnByG5G00AfTgijByEUH6Unkx/881/75FeO/C/446V4xvtI8O3L6iNcktV86aeFFiuJkQGTbsY4zh2GVUYGODgGP4VaF8U9K8Ya3P4+1aS506VCIhJfrKssvmZDxKD+7Tbv+XCfeX5ePlAPZ/KjPVF46cUeVHjGxcfSuQ8deOdO+H/htNY1x7hoWlWCOO2AeSWRtxwMkD7qsckgfLjrgG54X8S2vi/wpaa7o80jWl4N0fm/I6kFlZWGeCGBHGQcZBI5oA6UjIweRTfKjxjYuPpRJnynxwdpwc4qkTL5S/vOdx58we3vQBd8qPGNi4+lHlR4xsXH0qkTL5S/vOdx58we3vQTL5S/vOdx58we3vQBd8qPGNi4+lHlR4xsXH0ryzQ/jZonixNdt/C0Go32oaTaTXkVu8ZT7eqcDyiNx5baAGUN84wp5Az/AIUfFvVvGXhXXtY8VWcNha6MfMa9tlkETpsLOoUliWQLk4JOJF4H8QB6tpehaRolq1roulWWn27OZGitLdIkLEAFsKAM4AGfYVd8qPGNi4+lfNF5+1PJ/wAJbbiw0hj4cUqJjMSLxsj5mXD7Bg4wpznafmXd8uF4u+KfjSfXYfiH4U1S9Twut0llBZ3EoWNJhHueGaAN8xYbn3jdhXUB1ZdqgH094k8J6F4v0ZtK8R6bFe2ZdZBGxKlWHRlZSGU9sgjgkdCRVnR9C0zQNGttK0eyhtLG1TZDCi8KO5yeSSeSTkkkkkk15FqmseOviX8AdK1fwXKdO1m7nzcxWt4IWkSN2jYRyMRty6q+NwO3K7m6N1/ha+1Hwr8NdGHxJ160t9SUGKe5vL6NQzEkohkJAZwgAJyclWOW6kA7vyo8Y2Lj6UeVHjGxcfSqRMvlL+853HnzB7e9BMvlL+853HnzB7e9AF3yo8Y2Lj6U4DAwOBVAmXyl/ec7jz5g9versefKTPJ2jJzmgAEUY6Iv5Unkx/8APNf++RVOMy7jmTPyn/loPT603M3/AD1/8iD/ABoAv+VHjGxcfSk8mP8A55r/AN8iqYMvlN+853DnzB7+9NzN/wA9f/Ig/wAaAL5ijPVF/KgRRjoi/lVKQy7hiTHyj/loPT60RmXccyZ+U/8ALQen1oAueTH/AM81/wC+RS+VHjGxcfSqGZv+ev8A5EH+NOJl8pf3nO48+YPb3oAueTH/AM81/wC+RSmKM9UX8q+Z/D37U0janef8JXpDR2Lc2n9mkvLH833ZN7gPwR8w28j7vPy+aap8afHN94h1XUrLxFqNlDqG+NbRbjdHbxNwFQYAVgAB5ihWzk5yTQB9xiKMdEX8qTyY/wDnmv8A3yK8F/Zo8Ta94g07xAuueILnU/s8kRiiu53klh3K+W3t/C20YAY4KMcLnLdX4r+NvhLwhr1vpN/qMt1O7lbhrArOlnhtp80hsgghsqAzDbyORkA9RACjCgAegpvlLz94c54Y0lvnyF3HJ55znvWdqmoJpOl32o38skNpZo080m1jsjRWZjgZJwB2oA0vKX1b/vs/40eUvq3/AH2f8a86Hj/V9OisdS8V+HbjQ9DvnKLezXReSzJYCL7VHsAhDg9QzBGIVtuc13LfaNqY8zO3nr6mgC55S+rf99n/ABo8pfVv++z/AI1R/wBJ/wCmv606T7R5r7fMxuOMZoAueUvq3/fZ/wAaPKX1b/vs/wCNU4/tG47vMxtPXPpXLyeItX1nV7jTfCCwSxWbvBfatO5lhtbhdh8gQqytI+G5+ZFT+8zApQB2nlL6t/32f8aPKX1b/vs/41xLav4u0COaTxFpyavY+fGiXWhwzeeittG57VixKqS2WSR2xt+TqRt6PrNv4g0e21XRbs3ljdJvhniJIYdD7ggggg8ggg4IoA2/KX1b/vs/40eUvq3/AH2f8apt9o2pjzM7eevqab/pP/TX9aAL3lL6t/32f8aVUCkkZyfUk1Sk+0ea+3zMbjjGas2u/wAo+Zuzu/ioAkMaMcsik+pFJ5Mf/PNf++RVW4MvnttkwOON4Hb61Hmb/nr/AORB/jQBSufBHhu88TQ+ILnSIJNUhxsnOeoGFYrnazDsxBIwuDwMbfkx/wDPNf8AvkVTBl8pv3nO4c+YPf3puZv+ev8A5EH+NAF7yY/+ea/98ijyY/8Anmv/AHyKo5m/56/+RB/jRmb/AJ6/+RB/jQBf8qPGNi4+lJ5Mf/PNf++RVMmXyl/ec7jz5g9vem5m/wCev/kQf40AXvJj/wCea/8AfIo8mP8A55r/AN8isq8vo9PtXur++htbePG+ae4VEXJwMknA5IH41mf8Jp4d/wChp0j/AMGcX/xVAHUmKM9UX8qTyY/+ea/98iuK0rx9o95ZyS33iLSIJVuZ4lT+0I1yiTOiNgv/ABIqtnoc5HBFadn4n0fULpLWw8QaddXEmdkMF/G7tgZOAGyeAT+FAHQtbwt96GM/VRXP3Pw78H3iXIu/DemzvdM7SzSW6tKxcksfMPzDqcYIxxjGBVm9mnj2YmYZz92T/A1xWveL4PtkVra+IbixvLackytazzWxwNrrIy7UwN4z842naT6UdRnodlo2mabZpa6fp9rbW8edkUUKqq5OeABgc1bSNI1xGioM5woxXIaX9vstPSG61Oe8n3M8kzMRuZmLEAZOFGcAZOAAM10ekyPJaMZHZzvIyxz2FNkovUUUUhhRRRQBiajrN/aeJNMsIrACzupmjkupHHzHyncBFBz1Tktj2BzkW73UYUvE04pcmeZN6utrIYgOfvShdin5TwWB6eoy6/037dfabcebs+w3DTbdud+Y3TGc8ffz36VZuRut2Ax26nHejoD3KcsbGZzlfvH+IUPG21OV+7/eHqaJY2MznK/eP8QoeNtqcr93+8PU0AAjbyWGV+8P4h70RRsJkOV+8P4hXknwo1z4n6t4u1228e6a1tpsSkxtJbLCkU3mELHC4/1qFd/zZf7qHdz83eeJvGnh7wPDa3PinVIrGO4l2RDDSO5HJIRAWwOMnGBkAnkZAPLPEH7SNnoPjW+0VvDc89rYXjWs10LtVc7G2uyx7SDghsAuMgDO3PHrnh/xJo/jDSU1Xw3qEN9ZsfL3qShV1ABVlbDKehwQOCD0INcNqQ+FPxI12/8ADhm0e91u6hy13aogmbaqkNHc7drsox8oZuFIIIDCvlHxLpFnoWvXFhp2tWetQROyrd2auEOGIx8wAJwAcqWXkYZqAPY/jtoPw78OaTNpnhtNPsfErXsd5dW8Xmu3lFXGxSAyRcuG2ZQbQpx9wHzvwl4C1nxz4YvF8JWYvL6zvEN9FI8MeImRvJaN3wR8yzBxuAOYjg4JXnNQ0qLT/EUmlnVrC5jimEL6hbNI9v1ALA7NzKOeVU5xldwxnV1fTDp3g22+w+LbPVrGS/k83T7SeRFhkEa7ZTDKEclgXXeE2jaBuycAA7rwx8F/ixo1/c3mlWdtpN2tpKsc8l5btI24YKRMpYxyMCQH+THPzDPPsfgrUNX+HfwvN58YdZWGZbxlia4uPtMyo2NsZKbjI2Q7cFiFPUBSF0/h7480HUI9G8MSeILa98RwafAbpBP53myLEhk2zDKStkknazHhj2OPlzwV4Hvfif46u9O0/VR/HdzX2oAiWSLzVVnKgtmQ7w20tgnPzd6AO0+Pb+IdaltfE1vqg1DwPfCEaYYLkeWkmx8q0XBEm5ZSWIJAO0kEbR0Pws+NGjaPa+FvAtho99LDMY7ea+nmQMlzK7FgqAYaPfIMEsCF7Ejn2zS/BGiaP4Ks/C0dlDd6VbxbTBelZhKfMLlmDcElzu6YB6AYAF2Pw1o8VzbXsekacl3ZRrBa3CwRh7eIBgERsZVcMRtGBgmgDoJRmFx/smqBjbyVGV+8f4h7VflGYXH+yaoGNvJUZX7x/iHtQAGNvJUZX7x/iHtXn3xW+KUPwwsNLL6U+pz6hLLsRbgRIioE3EthjnLrgY9eRgZ3rTx54Y1DxZN4Vs9atpdaty/mWwJHKgFlDkbGYc5UEkbWyPlOPHv2q7Z/7P8ACs+6LZHLdoR5y7iWEJGFzuI+U5IGBxnG4ZAN3xFB8OPB3wt1LX9Ls7fRrvxhpMy2iHc0snmwF1jVAWEa5ddwXCA7AT92vOvgqpPwx+KZGONHHU4/5Y3NW/jlapafC34Zwzyg3UOntGFhZJYmAgtwx8xWIOCFxtBDAk5GBu81j0KxsdAs9ds/GumRakJHkSziW5WeF41jdcMI+H3MQCdqZX5Xb5toBW8N6beeVdeIv7Lj1LR9GeH+045JEUGOZjGEG75gW+YBkBKHDDBANeg+EfCGsfE/WbKTQ9FGmeALfUkE+ntqeYo2RVaUnkSSSMrkB9pIDqu4Kox574U0y31K8ufP8TWnh8x2022S480GYGGTcgKKRhgNhBIJD4VXJ2n0nwT8aovhj4bHhy3t/wDhJ40ne4F2l1JbxRbwP3UayRlioxuJIT5nf5SBuYA+n9J0Sx0HQrTStHtobSytQUihjYYUcd88knJJOSSSTya8M/aqWzXRvDAl877f9oufJ2FTF5W2PzN3fdny8Y4xuz2r2LwT4mi8beBtM8QWtu1ql4HJhldSUZWKMM9xuU4PGRg4GcVo6roWm63YR22tafZahAkpkWK7iSVA2MBgGyM4JGff3oApeDo7Q/D/AMP/ANkmb7D/AGfAbb7Uy+b5XlJs3443YxnHGa2jG3kqMr94/wAQ9qDG3kqMr94/xD2oMbeSoyv3j/EPagAMbeSoyv3j/EPar8QxCg/2RVAxt5KjK/eP8Q9qvxDEKD/ZFAFCONgx5X7p/iHoaZ5Teq/99j/GnxxsGPK/dP8AEPQ0zym9V/77H+NADxG3ksMr94fxD3pnlN6r/wB9j/GniNvJYZX7w/iHvTPKb1X/AL7H+NAD5I2LDlfuj+IegojjYMeV+6f4h6GiSNiw5X7o/iHoKI42DHlfun+IehoAZ5Teq/8AfY/xrkvib48i+G/g6PWJ7FtQeW7W2igSUICzKWyzc4AVG6A84HfIg+IfxH0XwFpk8d7qNtHrEtnLNYWjo8vmuqnZvCfdUtxklQcNg8HHyf4r+JfijxtpNnp/iXUPtcVpO86FY1i3Myqo3KgCnbtO04yN784OAAT+J9f8L+KTFB4a8FW/h3ULm8Dvc/2szRENkFNrhY413MpzwFC9hWhc/An4iWdtLcXehQwQQoZJJZdTtVVFAyWJMuAAOc1U+GPw/h+I2oatpSX72epQWBubLcg8l2DopEjZyB8wHAP3t38O1s/x94B1T4da9BpOtz2c9xNardK1nIzoFZmUAllU5yh7elAHrFt8SvB3wy+GdvbfD+O3vtc1KBoL28gZ18q4SBQZmEy72Xe+UXaEP7zoQQeZ/Z88L+GvFfjG+tvEdi99Pa2y3VpFIwEHyyKHLjI3HLIApypBfIPFdT4a/Zk1ux8UaPeazqmj3FjbyrPewLuk37HLeUFZQHVgqglsY3NwdvzfQNloWnabdXVzp2n2NpPeP5lzLBHGjTtknc5HLHLMcn1PrQBt2w226g479DnvWJr2gWniGxax1VFnsvtKTS2zFSk+wllVwRyoYK2BjJUA5Usp27YbbdQcd+hz3qrIE/e5Zv8AWc/L9fegClqGlwarpl1p9+iy2t3C8E0fm7d6MpVhkEEZBPI5rH8FXsl34cXT7qWaW/0SV9LvJLncHmki4WY7uvmRmOXILDEmNxwTXQYj/vt/3yP8a5+5WPSPHdnIhaO0123eGX5eGu4hujIUH7zQiYMxzkW8S5GACAdB5Teq/wDfY/xp8sbGZzlfvH+IUzEf99v++R/jT5RH5z5Zs7j/AA//AF6AOT8d6heQaba6DotysOs+IJTY2siSLvt0Klp7gDzEP7uIOwIP39g71u6RodjoOkW2l6PbQ2llapsihjYYUfnkknJJPJJJOSaw/B15B4l1bVPEqFntfMk0/S5co6PbxcSSptZseZMHBII3JDCSOMnqMR/32/75H+NADxG3ksMr94fxD3rltZ8Ei61f+3PD9+dF1svEZbmNi8N2iZGyeDeqyjazANw6/LhhjFdSBH5LfM2Nw/h+vvTMR/32/wC+R/jQByWmeMLi21eDw945gstH1eSJDaTR3O601LJCt5DuFIcO2DEfmAKkFgc11vlN6r/32P8AGqutaPpmv6LLpes263dldRFJYZE4YZJ9cgg8gjkEAggiuS0fVrzwjrFv4Z8XXk13aXTiLRdcmAzcntbXB6CcD7rdJQOzgggHdSxsZnOV+8f4hVqzUrCQcfe7HNVZRH5z5Zs7j/D/APXq1Z7fJO0kjd3GKAK9zGWuGIK9urAdqi8pvVf++x/jUtzGWuGIK9urAdqi8pvVf++x/jQA8Rt5LDK/eH8Q96Z5Teq/99j/ABp4jbyWGV+8P4h70zym9V/77H+NAB5Teq/99j/Gjym9V/77H+NHlN6r/wB9j/Gjym9V/wC+x/jQA8xt5KjK/eP8Q9qZ5Teq/wDfY/xrMgubmTxZf2DyqbaCxtpo0yvyu7zhjnqciNOO2Pc1p+U3qv8A32P8aAMDxrMbDw2t4YZLn7Pf2Mvk2wDySbbuI7UXPLHGAPWoP+Fof9SP4z/8FH/2dbWq6T/ath9ma4e2IlimSaB03o8ciyKRuBH3lHUGq/8AZGsf9Ddqn/fuy/8AjFAGb/wtD/qR/Gf/AIKP/s6pz+Mf+Ej8SeHLMeHNf0rZfyS+dqlj5EbYtLgbQ24/NznHoDV3Q4Nd1PT5Z5/FmpKyXl1AAkVkBtinkjU8wdcIM+9Xh4fu5L+zudQ1+/vxZSmaKGf7MqbzG8eT5cSk/LI3egC3fqV8vOO/Qg+leZa1Yl472S10DxJPBFJdMYopLaOO4DkeYgDN5ux2QnKjcdx28ECvTb9Svl5x36EH0rxrUUgt9W1SJdW8KW8txLcpLNNq4WcbpA0bOvl/fiK/KN3HTI60L4ilt8/8z1KxuHurKOWW0ms3YcwTlS6fXaSPyJro9G/483/66H+QrnLG9tdQs47mwuobuB/uzQSB0bBwcEcdQa6PRv8Ajzf/AK6H+QpvchbGhRRRSGFFFFAHN3niC9g1C4mjFsdOs7yGymQoxldpNnzht2AFMq/LtOcHkZrUvdRhS8TTilyZ5k3q62shiA5+9KF2KflPBYHp6jNG68NyXOqSyfbgthcXEV1PamHLNLHt27X3cKdiZBU5weRmtm5G63YDHbqcd6Ft/X9b3DqU5Y2MznK/eP8AEKHjbanK/d/vD1NEsbGZzlfvH+IUPG21OV+7/eHqaAOc8d6tp2h+BNTl1jW10OO4jNtFfJl5IpHVlVkVDuZhndhecKTwASPm68+FEel/AXUfFF7rltqgWaC40v8As64doY1d0il3K4HzNlQw2hlMKgnqo15PhJ8WfFXimKy8b3tzcaI1/wCbc3B1aNoQoLZeKLcdpKlgg8sY3AEKM49X8WfDRv8AhR134J8HxqzRwp9mS4uBulZZllbLHjcxDei5b+EdAD5I8M+I7/wl4ls9c0ho1u7Nyyeam5WBBVlI9CpI4weeCDg11fiHw/4Wu/hanjTw1a6lp00mtnT5bC5u0nihHlNL+7YIrkY2AFueoOfvG9N+zz8RYrG2nTSrWaSbf5lul/CHgwcDeWYKd3UbWbjrg8V0SfCn4yL4c0PRTJarpcUzH+z2u4DFbfvg+64T7sylvnA/e4AIwM4IB5RYeDfE+q2Md7pnhzVr20lz5dxb2Mskb4ODhgpBwQR+FdHoXwW8da7ri6b/AGJNp2YBO11qCNFAilQwBfBy3zKNgywOQQNrY+0YLOK0sILa0ihgghGyOKPaqIoAAVQOAABjA6VKkbbX5X7v94eooA+Z7L9mDxRa3OlXNt4m0+2ulnD3EkLSBrXDja8LDBdsfNz5eCAAe4+ibLQtO026urnTtPsbSe8fzLmWCONGnbJO5yOWOWY5PqfWr8UbCZDlfvD+IUzym9V/77H+NAD3jbanK/d/vD1NAjbyWGV+8P4h70PG21OV+7/eHqaBG3ksMr94fxD3oAvyjMLj/ZNUDG3kqMr94/xD2q/KMwuP9k14tr3hz4oT/HLT9S0rUmTwojwlkF6iwpEF/fI8Ocs7HfhtrY3p8y7flAMr4k/DS68J3Nz4++G9rfXHiOe9LSRxlbhbdZARJLFFglmLHBB3gCRiFGAV8u+JHj9PHvw08KSXk1pca5YSzpqTKGikjLYEZVMhWDrHuYqCFYKMpuCt3ni7wd8b7rxd4hn0bVbn+zJ3JtBBqyRI0XmIUSNdw8t1UDc2Fzsf5m3fPg+Av2b9a1DUrk+P7eXSrBIf3P2W+gaWWUkem8bQAc5wclcZ5wAeJrcTLavbLNIIJHWR4gx2syhgrEdCQGYA9tx9TViy0fU9Stbq507Tru7gs08y5lggZ1gXBO5yBhRhWOT6H0r0t/gP8TrbS7/T4dOtZbRryJikd7B/pLIsqrKpZgQoDtwxUnzF+U4O36h8KeHl8O+E7Cx+y6db3QjVr02EUcMUtxsQPIFUKOSvoOMcDpQB8f8Aw2+FmqfEuTUhpd9Z2aaeimQ3LNlmdX8sAAdCyYJzwDkBulfRXw2+Cum+F/CBs/FunaHrWpS3UkzTPapKI0Kqqxq8gyR8u7oMFiMdz6Hpmhabolh9m0XT7LToGlaRorSJIkLEKN2FwCcADPsKumNvJUZX7x/iHtQBFBZxWlhBbWkUMEEI2RxR7VRFAACqBwAAMYHSpTG3kqMr94/xD2oMbeSoyv3j/EPagxt5KjK/eP8AEPagAMbeSoyv3j/EPagxt5KjK/eP8Q9qDG3kqMr94/xD2oMbeSoyv3j/ABD2oADG3kqMr94/xD2q/EMQoP8AZFUDG3kqMr94/wAQ9qvxDEKD/ZFAFCONgx5X7p/iHoaZ5Teq/wDfY/xp8cbBjyv3T/EPQ0zym9V/77H+NADxG3ksMr94fxD3pnlN6r/32P8AGniNvJYZX7w/iHvTPKb1X/vsf40Ac/b+PPDGo+Mp/C9lrVtLrNupElsCR8yqNyhyNrMOcqCSMNkfKceH/tAeKfH+la5faWhnsfCt3DHDHNbwrsudy5dWmGSGJDqUyuUXlSCS3S/Er4HXQv7nxX8Nbi8t/EU9358kKagsIxIpEpiY4KsWbccuBguB2WvOrv4S/GjxF5FjrpvLm1Mytm/1uOaKE9PMK+ax4BPIBOM4B6UAeSS3E00cMc00kiQJ5cSuxIjXcW2qOw3MxwO7E96s6Npc+ua9YaTaNGk9/cx20TSkhFZ2CgsQDgZPPBr2/wCGfwN8U6L8Rll8V6NpU+iRJMk7XLwXMdwMEJ5aHLKd21gSFO0EHGdp+gLXwjoFhLaXNjoelW1xZh47eaG2iRoUOSVRgMqCXckD+83qaAOT+HXwb0X4dXUl/Y3Vxe6jPbLbyzzyqFAyC+xF6BmVThixG0AHrnmvhx8C7/wr461DXvFd/p2t7gTaPIvmytIZA4uGL/ckG0dCxy7fNxz7J5Teq/8AfY/xp8kbFhyv3R/EPQUAEcbBjyv3T/EPQ0zym9V/77H+NPjjYMeV+6f4h6GmeU3qv/fY/wAaAL9sNtuoOO/Q571VkKfvcq3+s5+b6+1WrYbbdQcd+hz3qrIw/e/Ip/ee/PX3oAizH/cb/vof4VkeLdETXtBWKCKE39rJHe6e9xykdzE++MsQpIUsNrbcHYzAEZrX3r/zyX8z/jT3ddqfu1+76n1PvQBQ0jVbTWtIttQtopo0nTcYpSBJC3Ro3AztdWBVl7MpHasfx9eXrab/AGJoBlj1fWJTaxTxEE2kRP765I3KQI0PBB++0Y6sKgfQ9U0HV7y/8Hx6fLDql4bq/wBNvmMEYcxBDJDJGhKsxRS4dXDHJBQ53TeGfDE2l311rfiSaHUvEt+Nt1dIGEVvGDkW9upOViU/8Cc/M3OAADf0uxstK0620/T4GhtbS3EEMfmFtiKm1Rk8ngYyTU2Y/wC43/fQ/wAKfG67j+7UfKe59D70zev/ADyX8z/jQA8GPyW+Vsbh/F9famZj/uN/30P8KeHXyW/dr94cZPv70zev/PJfzP8AjQA9zHtTKt93j5vc+1ZevaNZeItEuNMvTdRRzbWWa2nMcsTqwdJEYDhlZVYdsjkEcVqO67U/dr931Pqfemb1/wCeS/mf8aAMTw1qlzcw3Oma5HMNX0uT7PcySFF+2L/BdIq8KkoBOP4WDpzsJrqLPb5J2ggbu5zXL69oks/iOw1zRUsoNTtpRb3Ms8bH7TZM+ZYSQcgg4kU9mTHCu+eosyDCcKF+boKAK9zGWuGIK9urAdqi8pvVf++x/jUtzGWuGIK9urAdqi8pvVf++x/jQA8Rt5LDK/eH8Q96Z5Teq/8AfY/xp4jbyWGV+8P4h70zym9V/wC+x/jQBkeLbWe48E63DbxmWWTT7hEjjO5nYxsAAByST2rzPZq3/QpeCf8AwlNR/wDjFex+U3qv/fY/xo8pvVf++x/jQB4wH1Frh4F8LeBzMiq7RjwtqO5VYkAkeRwCVbB9j6VLDbarPqWmofDPhm3Uahau0um+Hb63nRVnRiVkkiVVGAckkfLmvWk0qOLU59SVz51xDHA6l12hY2dlI98ytnnsOnex5Teq/wDfY/xoAPKb1X/vsf40eU3qv/fY/wAaPKb1X/vsf40eU3qv/fY/xoAit9OhsIzDaIscbO8xHmZy8jF3PJ7szH0544qXym9V/wC+x/jT5I2LDlfuj+IegpnlN6r/AN9j/GgCnfqV8vOO/Qg+lccfGFrHrEujWUN7qmoROxkhzDA6DOQAsrRllAPDKGGAMknk9jfqV8vOO/Qg+lcD4kg13U7iSxvtKjm0dmDZs4ILqTAJwx+0Mqqeh2iKTjOGyeF1H0Oss3upLVG1CGGC4Od0cExlUc8YYqpPHsK6LRv+PN/+uh/kK5LQI7aHQraKxN0YEUqpu4nik4PdGVSo9AFCgY2gDFdbo3/Hm/8A10P8hVPclGhRRRSGFFFV73T7PU7f7PqVpBdw5DeXPEJFyOhwRigDM1HWb+08SaZYRWAFndTNHJdSOPmPlO4CKDnqnJbHsDnIt3uowpeJpxS5M8yb1dbWQxAc/elC7FPyngsD09RlLvSEuLnS5IWWCPTpjIsSpww8p4wo6bQN+fwxVy5G63YDHbqcd6A6mdeyRWsdxc3U0MEEIaSSWWVVVFHJZiTgADkk1lR+LfDV1p815beJNHltbNVFzOmowskG9iF3sGwuTwM9TXzv8SNU8c/E/wCLl/4G0uGeys7W4eH7HvaOJolcH7TOcDKnCMuQQAVCgsctwfi34R+M/BVhNqGt6UBp0U3lfbLedJUOSQrYU7lUkcFlHJAOCQKAO6+KnxN8SeHfjK1z4d8S/adPt4beWCzhlZrVkaINtdRhZNwctuBY4dcMCoC+m23x00nSvhz4b8T+KbSdLnWDKq2mnoJMmFykjjeyhVyFOCc/OB82Ca+XvDvg/wAQeLBenw5pU+oCwh8+48oD5F7AZI3McHCDLNg4Bwa1vDXgjxz8QNJWPQLO61LTtMcxxJLdpHDCz/MyxiRgMngsF9VJ6jIB9PeJfjP4R8LXWjRX811Mmr20d5FNb25ZYoJDhJHyQwB+Y4ALDacjpn0SSNiw5X7o/iHoK+ZZv2f/ABnrvgO2u9Z1FV17TYXt7TTJp45AbZWzHF5oOFbLS4yWGGjXKAHHsPwn0jxjpXghbf4gXTXGpfaHaITXSzyxwnG1XcE7jncR8zYVlGRjAAO5MbeSoyv3j/EPahI22vyv3f7w9RQY28lRlfvH+Ie1CRttflfu/wB4eooAIo2EyHK/eH8QpnlN6r/32P8AGnxRsJkOV+8P4hTPKb1X/vsf40APeNtqcr93+8PU0CNvJYZX7w/iHvQ8bbU5X7v94epoEbeSwyv3h/EPegC/KMwuP9k1QMbeSoyv3j/EPar8ozC4/wBk1QMbeSoyv3j/ABD2oAraheWmlaY15ql5a2VrE37ye4nSONMkAZZiAMkgfiKkgkiu7CC4tJoZ4Jh5kcscqsjqQCGVgcEEc5Fcr8S/h7F8RvB8ejzag1g8V2tzFOqrIAwUrhlyMjazdCMHB9jo+C/CUXgvwPpvh62uWuksw+ZpCql2Zt7HA6DcxwOcDAJPUgG8Y28lRlfvH+Ie1BjbyVGV+8f4h7UGNvJUZX7x/iHtXinx38NfEfWZreTwjNczaEljKt3ZWV2I3Z+d+5Mgyhk2gKNx+VhtG75gD17TNU03W7D7RoupWWoQJKyNLaXKSoGwp27lJGcEHHuPWvH/AB/8ctU8C/FJdCvNDifQ4VjeSXDefOrrkyRMSEwp+XGDkxsNwz8vz54L1DxZDriab4HvL6G/1L9x5NpKU83KsMtzj5QzHefuctkYyPQtd+Fvxr13TLG11r7TqlvGpdYJtYhcRPvf7+6TDPhid2W+VlXPG0AHY/DXWvFni74yXGs2/iaK58NXCTzjT5NRj3JAcLHH9lzujdGMYZ9oB2sQ7BwX6bxD+0N4P8Pa9e6LPa6tdT2E7wyy20EZjLrgMAWkUnDAjOMccZGDXgOufDTx/wDDaCPxBcW01jFCUUahp94pMLSJypKNuXG4oTjaTwCQwzJbfCf4keMrOHxDFojXMd+gkW4luLeBpxjHmFWdWJbG4uRl87iTuyQD6Y8FfFnw14/1q90fQWuhcWStMGuIhGk8YYKXQ5JxkrwwU/MOODjuTG3kqMr94/xD2r578X/B/wAQeEvBWj3Xw1ga31aK3K67Lpt84nuWWNTmMsQxTcJCY0wWLR/Ido285oviL4y/Faewu/D9y9rbaVJHBJdQSrawPKSC0koJxKcBSyKrADGEG/DAHt2qfFnw1pPxEtfBF011/ac0kcZlSIGGOSUAxozZzk5XkAqN4yRhsekRDEKD/ZFcbefDzwxf+KrfxRd6Pay61ARsui56qMKxXO1mGeGIJGFwflXHZRDEKD/ZFAGPe3lvpOm3eo6hKsVraW8k88g+bYioWY4GScAHgDNfL/xU+Oz+KLXTYPA15rWjJC8j3ZJWBpThQmGjctgfPkZA5HXAx0f7TF14q0u60uWx1O6t9Au7aS1lhtZWVWlJO8SleGDIQFVic7JMAc58ItvC+uXXiaLw9FpV2urzOEWyliMcgJG4bg2No2/MScADknHNAH1f8Ifi1ZfEDTV0i5E0XiCztEluvMVRHcbTsaRGXAHJUlSFxvwNwBNel+U3qv8A32P8a8L+Avwx8YeDPEmqX3iTT7WxtJrQQqGmglldy4I2shYqoCtuG4ZJThtuV908pvVf++x/jQA+SNiw5X7o/iHoKI42DHlfun+IehokjYsOV+6P4h6CiONgx5X7p/iHoaAGeU3qv/fY/wAaeY28lRlfvH+Ie1M8pvVf++x/jTzG3kqMr94/xD2oAZ5Teq/99j/GnyRsWHK/dH8Q9BTPKb1X/vsf40+SNiw5X7o/iHoKACONgx5X7p/iHoaZ5Teq/wDfY/xp8cbBjyv3T/EPQ0zym9V/77H+NAF+2G23UHHfoc96rv537zHmff4xnpzVi2G23UHHfoc96qyKP3vzqP3nvx19qAG/6T/01/WnN9o2pjzM7eevqai2L/z1X8j/AIU90Xan7xfu+h9T7UAH+k/9Nf1p0n2jzX2+ZjccYzUWxf8Anqv5H/Cnyopmf94o+Y8YP+FADo/tG47vMxtPXPpTf9J/6a/rRGi7j+8U/Kex9D7UzYv/AD1X8j/hQBKPtHlN/rM7hjr703/Sf+mv60BF8lv3i/eHOD7+1M2L/wA9V/I/4UASt9o2pjzM7eevqab/AKT/ANNf1odF2p+8X7vofU+1M2L/AM9V/I/4UASyfaPNfb5mNxxjNWbXf5R8zdnd/FVSVFMz/vFHzHjB/wAKtWYAhOGDfN1FAFe5jLXDEFe3VgO1ReU3qv8A32P8aluYy1wxBXt1YDtXmup/DLxLfateXdv8Q9StIbid5Y7eNn2wqzEhBiYcAHHQdKAOd8R674ot/wBoCy0y1vL5LFp7ZY7VM+VJCVHmNt+6wGZcuc42nkbePZ/Kb1X/AL7H+NeVN8IvFTX0U/8AwsS/bZG6ecWk8xMlTtH737p25PI5VeD1E3/CqPFX/RTNU/76f/4/QB6f5Teq/wDfY/xo8pvVf++x/jVXTLCex0mztLi6+1zW8CRSXEjjdMyqAXOSeSRnqetWvKb1X/vsf40APMbeSoyv3j/EPameU3qv/fY/xp5jbyVGV+8f4h7Uzym9V/77H+NAB5Teq/8AfY/xo8pvVf8Avsf40eU3qv8A32P8aPKb1X/vsf40APkjYsOV+6P4h6CmeU3qv/fY/wAafJGxYcr90fxD0FM8pvVf++x/jQBTv1K+XnHfoQfSvH9Y1Hw2LnVb+4h8GrNaXMqyafd2cb3VwyNgnzNwwz9R8jYzyTzj2C/Ur5ecd+hB9K828Qya9BZ6pJLc+JoYB5u2e0j04RRR5O0gFvNwBjncG4J+XsutxrY7PTJ9PubBZ9IktpbWRmZXtWVkZix3HK8E7s598102jf8AHm//AF0P8hXK6L9p/siH7d9r87B3G88nzTycbvJ+Tp6dsZ5zXVaN/wAeb/8AXQ/yFU9yVsaFFFFIYUUUUAFISFGWIA9TXl2vakY/Hs8ENjaz3v8AaNqsOoG+RbiBSIt0SRH5ypDNnHy4ck967m91Dy/EltYf2xpkXmxb/wCzZI83U33vmQ+Z93j/AJ5t91ufQWseYHo7GuZYwcF1B+tHmxjq689OarumXb5e/wDd/wDsao67dyab4dv76CNGltbSWZA6ZUlVLDPA449v60Aa3mx4zvXH1oEsZ6Ov514vafG6dLRUvtCimnz87wz+Wp5OMKUbHHufw6V6vDf2UmpS2Ed1bteRJukt1dTIi4HJXbkD5h+Y9aANDzo/+ei/99ClMsYOC6g/Wq2z/Y/8c/8AsaV0y7fL3/u//Y0AWPNjHV156c0ebHjO9cfWq7Jwvy9v7vv/ALtAT5D8vcfw/X/ZoAsebGejrx15oEsZOA6k/Wq6pw3y9v7vv/u0ImHX5e/93/7GgCfzo/8Anov/AH0KUyxjq6/nVbZ/sf8Ajn/2NKyc/d7D+H2/3aALVFI+NjZ6Y5qsvl4bHpz9z1oAtUVVHl7D6ZH9z3oHl7D6ZH9z3oAtUVVHl7D6ZH9z3oHl7D6ZH9z3oAtUVVHl7D6ZH9z3rJ8U65H4b8MXOqi2+0/ZyuIt6Ju3Oq9cHH3s9KAOgorK0q+j1PQrG/MflfaoEm8vch2blDYzgZxn0FWz5ewemT/c9qALVFVT5ewemT/c9qD5ewemT/c9qALVFVW8vC59OPuetWUxsXHTHFADfOj/AOei/wDfQpTLGOrr+dVt/wDt/wDj/wD9lXiPxrOfGlpzn/iXR9/9uT3NAHu4ljPR1/Ok86P/AJ6L/wB9CoFfn73Y/wAXt/vUm/8A2/8Ax/8A+yoAs+bHjO9cfWgSxk4DqT9arl/kHzdz/F9P9qhHy6/N3/vf/ZUAT+dH/wA9F/76FL5seM71x9arb/8Ab/8AH/8A7KlD/Ifm7j+L6/7VAE/nR/8APRf++hSmWMdXX86rb/8Ab/8AH/8A7KlZ+fvdh/F7f71AFgSxno6/nSedH/z0X/voVAr8/e7H+L2/3qTf/t/+P/8A2VAFoEMMqQR6ilpkRzGOc/jn+pqq2zfL/q/f73qOtAF2ivLfg1t/4Q673bM/b3+9u/55x+lehts2p/q/u/7XqaAL9FZ37v8A6Zf+PU6TZ5r58vO49d1AF+iqC7Nr/wCr+7/teopv7v8A6Zf+PUAaNFUDs8pf9Xjcf73tTf3f/TL/AMeoA0aKoSbNwz5f3R13elEezcceX909N3pQBforO/d/9Mv/AB6rdrjyjt243fw5/rQBIZEU4Z1B9CaTzo/+ei/99CuV+IWpXmj+EdRv9OPk3EXlbJtm7GZEU8HI6EjpXjH/AAsvxb/0Fv8AyWi/+JoA+kvNjxneuPrSedH/AM9F/wC+hXzf/wALM8XbSP7W4Jz/AMe0X/xFJ/wsvxb/ANBb/wAlov8A4mgD6R86P/nov/fQo86P/nov/fQrx/UvF2u2/wAJdI1mK62X1xeNHJceSh3qDLxgjb/CvQdvrXHf8LL8W/8AQW/8lov/AImgD6S82PGd64+tJ50f/PRf++hXzf8A8LM8XbQP7W4Bz/x7Rf8AxFJ/wsvxb/0Fv/JaL/4mgD6R86P/AJ6L/wB9Cjzo/wDnov8A30K8f+Jvi7XfD/ia3tdKuvskL2iyMnko2WLuM5YE9APyrjv+Fl+Lf+gt/wCS0X/xNAH0kZYx1dfzpPOj/wCei/8AfQr5vPxM8XMedW7Y/wCPaL/4itDw/wDEHxRe+JtMtbnUvNhnvIo5E+zxjcrOARkLnoe1AHv7XEK/emjH1YVDcNYXdtJb3bW88EqlJIpCrK6nqCDwR7Vl6iCPLzHs69jz09a5648SaXai6MtwxFrIkMhjhd/3jHAjXap3v0yq5IyMgUAdyLq2AwJ4gP8AfFSJIki5jdXGcZU5rjrK9t9Rs47qzk8yGQfKcEEYOCCDyCCCCDgggg10ejf8eb/9dD/IUAaFFFFABRRRQB5f4mgtY/Fss8GlxzRf2naPdavHtM1pL8gEIB5IICHIOBvPBPFehXUeoG+SSK5tVsAmJYHtyZXbnkSb9qj7vBQ9Dzzx5f4imij8eXcL2ulnfqtmRPKsRuwP3WQhMgcDpgBGGC3Ir0W9XSB4ktpJtO3asIv3F9/ZzP5SfNlftG3an8Xylh97p8wyR+Bf10QP4v68zj/FPjKXw98TNPtL28WDRntTJcJ5KvliZQDkKWHIXgf41ys/xPFxB4nsdSlmvLa7WWHSzFBGoiRvMA3cK2MFPU8GvaXkcOwE2BnpheP1oaR8L++xx6Lzz9aAPkuu78NfEGKz8d33iLXrZma7tfJMdlGMBvkA4ZumE9epr3kSPsJ87nI5wvv70LI5PM2eD2X0+tAHL67470bw3rcOm6ss0TTQ+d56IrxqMsBnALZyvYHqK6C3vIL+1iu7UrJBcIJY3yo3KwyDgjI4Pfmp/Mk/57fov+NK8jh2AmwM9MLx+tADWI2r8q9P7yep9qAR5Z+Veo/iT39qc0j4X99jj0Xnn60CR9hPnc5HOF9/egBqkbW+Ven95PUe1CEeYvyr1H8Sf4U5ZHw377PHovHP1oSRy6gzZGemF5/WgCPI/uL/AN9J/hTnI3fdXoP4k9PpS+ZJ/wA9v0X/ABpWkcHibHA7L6fWgCyxwpPTioRKCD87cD1SpjnacdccVGGlwcr24+Uf40AN80bSd7dR3Sqml6zZ61pceoabcvNbSk7JCoXOCQeGAI5B61d3S7T8vOf7o/xo3S7T8vOf7o/xoAb5o2k726julcv498R6ZpXha+tNQu2jn1C0nitk2bvMbZjGVBA5ZeuOv1rqt0u0/Lzn+6P8aN0u0/Lzn+6P8aAPHU8Q6n4c+Buh3Wi3Rtp2vXiZtiP8peY4wwPdRXOr46+0/DXUtB1a41C81G6uFkimmfzEVA0Z2lmbcPuNwBjmvoTdLtPy85/uj/GjdLtHy85/uj/GgDxb4Raj/ZOi+Kr/AGmT7LbxzeWGC79qytjJBx09DUetfGrVL6xSLRrU6XOJAzTmVJ9y4Py7WjAHODn2r23dLtHy85/uj/GjdLtHy85/uj/GgDk/D/xK0DxHdR2dnPdw3krMEgnhAZgF3E5GVAwD1IPB9qu23jfQbzXTotvqMj6gskkRh8kj5kB3DcV28bT3/pW/ul2j5ec/3R/jRul2j5ec/wB0f40AZmneI9M1a8vbTT7x5Z7B/KuV2bdjZYYywAPKnpkcVrqcqD14qMtLgYXtz8o/xqQZ2jPXHNAGbealZ6dCJdQvYLWNm2h55wik9cZL9eD+VfP/AMQ/FFl4t8QwX+nR3EcUdqsJFwoDbgzHsx4+Yd6+i98nq35H/wCJpWaTPBboO3/2NAHJ+HPiPoPiO+SztJbmG7lLiOC4iYFgqFichioGAepB4+ldRv8A9v8A8f8A/sqkVpM8luh7f/Y0m+T1b8j/APE0ANL/ACD5u5/i+n+1Qj5dfm7/AN7/AOyp+6TaOWzk9v8A7GhWk3DJbGfT/wCxoAj3/wC3/wCP/wD2VKH+Q/N3H8X1/wBqnb5PVvyP/wATS7pNp5bOR2/+xoAj3/7f/j//ANlSs/P3uw/i9v8Aep2+T1b8j/8AE0rNJngt0Hb/AOxoAYr8/e7H+L2/3qTf/t/+P/8A2VSK0meS3Q9v/saTfJ6t+R/+JoAliOYxzn8c/wBTXPeKfFdp4T0/7bqCTSxyTCFVtxlgxBPOWAxhT0rooyTGN2c+/wD+oVCZsNIPM+7+nP8Au0AeA+C/iQ3g/RZdPGl/a/MuDPv+0mPGVVcYCn+71969kh8T2H9i6bf6le2mnfb7ZZ0juLkr1AJAJxnGQM1r/aP+mv6//Y0rT4C/vOo9ff8A3aAK1tqEF7brcWd3BcQvnbJFIzK2Dg4IOOoqd5SJGG9Rye70v2j/AKa/r/8AY0rz4dh5mMHpn/7GgBqykq3zrwPV/UU3zj/z0X/vp6kWfIb950Hr7/7tJ9o/6a/r/wDY0AIZT5YO9ep7v7U3zj/z0X/vp6kM/wAgPmdzzn6f7NJ9o/6a/r/9jQAjykN99eg7v6UJKS3316Hu/pTmnwf9Zjgd/b/doWfJ/wBZng9/b/doAj84/wDPRf8Avp6s27boycg89if61D9o/wCmv6//AGNTwPvQndu56/5AoA4r4qhf+ED1Xk7v3PGOP9alfPVfQ3xV3f8ACAar93H7n0z/AK1Pxr55oAKKKKAPQNX2/wDCitCwTn7e2Rj/AGp68/r0HWM/8KI0H7uPt7emfvT/AI159QAUUUUAegfGPb/wmFrtJI+wJ1GP+Wklef16D8Zc/wDCY2m7bn7An3cf89JPSvPqACtbwt/yOGjZ6fb4P/Ri1k1reFf+Rx0bGM/b4Ov/AF0WgD6F1WWO3g80+YyxqzMFjLNgeirkk+wGa8w/tLSo7t7k6hef2baX0t1HE/h+7zFcvkESSbcEBpGIXCnJAzxXqmo7v3e7b3+7j29K8v1W905L27td2vLo80k7Xa2y2/2VtrD7Qfm/fbdzHds/2tvehfEPodpo2nf2XpaW7TefIXeWWXZs3yOxdiF52jcxwMnA7muq0b/jzf8A66H+QrDXG0bemOK3NG/483/66H+QoJRoUUUUDCiiigDyrxDp0w8fvcS3lm80mp2vk6a9qjXFxD+7+dZSN4RSjEgcfK2TzXeXs+3xJbRfb9Tj3RZ+zR2e61f73LzeX8re3mL0XjnngvEhjufFt4lzPC91HqtnFAGsJHkjQ+UQi3AISMHLnaRk8+ox6Rcx6gdQjeO5txp4TEtubVmmdueVk3hQPu8FD0PPPBH4F/XRA/i/rzJHfDt83f8Avf8A2VDPwvzdv73v/vUOF3tmOQ89RGp/pUV5brd2MtuTcw+dE0fmQgK6ZyMqccMOoP0oAlD/ACH5u4/i+v8AtVzvjPxcfB+jRX4tftvmTiDy/P2YyrHOfm/u+nfrWYnww0+O9kvo9a8SJdyAI84u1EjjjgtsyR8o/IUXfww0/UohDqGteJLqNTvCT3auoIB5wU68kfjQBzX/AAvNv+hf/wDJ9v8A4it3S/i9o2qX1nZ/ZNQhubuRIsbVKI7ED73mAkAnrgcdu1Q/8KY8N/8APxrX/fcf/wARSn4L+GwxH2nWTg9Q8f8A8RQB0Fp4uN549vvDX2XYLK3E32nz878hDjb2/wBZ/ePT8tGbxDptvrkGizXZXULlPNih2sdygNk7s7R91upHT6Vwum+BfClt4kudK0nXdft9Vgh3TxwSiNlQ7TywjAI+ZDjPp6VetfhDodlOtzZ6hr1vMh+WSKZEYZBBwQmenH40Ad6r8N83b+97/wC9Qj5dfm7/AN7/AOyrB8M+ELDwxJfy2c2o3Ml8VaZ7wq7MQSc5CjkljnOa3kC71xHIOepjUf0oATf/ALf/AI//APZUrPz97sP4vb/epML/AM8pf+/a/wCFKwXP+rkPA6Rr6fSgCywypHXioREAD8jcj0SpmGVI68VkajoY1G8srj7bqNp9jff5VrMsaT8qdsgx8w+Xp7n1oA0fKG0jY3Udkrnr3xx4V062Ek+tWjqzhQLd0mbOD/CmTj3I9PWrHibwpZeK9KSw1E3UUUc6zA25jViwVh3BGPmP6Vy3/Ck/DuP+PnV/p50X/wARQB0Wt+KrDTfCN7rmnGHVIbV0VlgnjKliyrjcoYAjeD09PWvHde+Keva1BPaxC3srOZZI3iihVmdGGMMzA8gZGVC9T7Y9Ztvh1pNr4PvPDscl+bS8nE0js8fmBht6HbjHyDt3NYF38HfC1hYz3l3eavHBbxtLI3mxHaqgknATnAFAGj8O76x034W6VNqV1DaRM8qiSeREUt5snALd8A/lXXWV5Y6nbGXTbmG8iVype3kjkUNgHGRxnBFcnZeD/DviX4eafpun3d/NpMU7TQTqUSR2DSA53J0yzDoOgos/hbY6dbmHT9c8R2sRYsY4L1EXdgDOAuM8D8qAO18obQNjdT2SjyhtA2N1PZKhtbIWlhBbbp5vJQJ5kxVnfAA3Me5OOT61N5Q2gbG6nslAB5Q2gbG6nslHlDaBsbqeyUeUNoGxup7JR5Q2gbG6nslAAYgQPkbgeiVMowoHTioTECB8jcD0SplGFA6cUAVdn+x/45/9jSsnP3ew/h9v92k/df58ulby88+g/uelAAqc/d7H+H2/3aTZ/sf+Of8A2NKvl549D/c9KT91/ny6AFKfIPl7n+H6f7NCJh1+Xv8A3f8A7Gq62xW8e4a9neJxhbZlg8tDxyCF3Z47sep46VyR+GOmy6jFetr/AIga8jG2O4N+hkQc8BtuQOT09TQBSf4taXZ+IL3TNV0+a3W2umt1uIysikK5Uuw2gqOAcDcev40ZPjFZ23ie7haJbvRQi/Z5baDErPhc53lRjJcfdB6fjoS/B7w5PM8s+oavJJIxZ3e5hLMTySSU5NN/4Uv4Z2k/bdV6/wDPeH/4igD0HZ/sf+Of/Y0rJz93sP4fb/drnfDnhCy8LR+Tpuo37WxkMrwTG3ZXYqFyTs3dh0I6fWuiby88+g/uelAAqc/d7H+H2/3aTZ/sf+Of/Y0q+Xnj0P8Ac9KT91/ny6ALEQxGOMfhj+gquzjdL+8bj/bPHP0qxFjyxt6fh/TioiV3SfvJPf5xxz254oAh8xf+ezf99n/4mnM67V/esOP7555PtS5X/nrL/wB/F/xpWK4X95J0/wCei+v1oAj8xf8Ans3/AH2f/iajvb22sY5J728W2hQ/NJLNsVcnAySMDk4qfK/89Zf+/i/41Q8QaNaeIdIudLvprhIJyu8xSoCNrBhjOe4HagAvtWis/D95qkEn2qOC0a5TZNxIAu4YbHf1561m+FfF1l4n0uG4S4jgu3VmeyF35kkQDlckBQcHg9O4rIuPhTo19bww3ms65cRWqbYY5byN1iXgYUFcKOB09BV/wz8P9G8KanJfabdX7yyQmEiaaMjaSD2A5yooAv8AhnxTZeKtIe+sBdQxxztCRcEBiQqn+HPHzD9a1/MX/ns3/fZ/+JrldI+HtnoGDpGv67apvLeUl1EYyxGCShTaTjHUdh6CuisrSS13+fq19e7sY89oRs+mxV6++elAFp3UN/rWHA/jPp9KEdS3+tY8H+M+n0pzFc/6yQcDpIvp9aFK5/1kh4PWRfT60AR+Yv8Az2b/AL7P/wATVm3IMZwxbnqTn+lQ5X/nrL/38X/Gp4MbDhmbnqzA/wAqAOK+KpX/AIQPVeDu/c854/1qV89V9DfFUn/hANVHmcfufkyf+eqfhXzzQAUUUUAegavt/wCFFaFgHP29snP+1PXn9eg6wT/wojQRvyPt7fLzx809efUAFFFFAHoHxj2/8Jha7QQPsCdTn/lpJXn9eg/GUk+MbTL7/wDQE55/56SetefUAFa3hb/kcNGz0+3wf+jFrJrW8K/8jjo2Dj/T4OfT94tAH0RflT5e0Edepz6V5jq02nvPf3kui2slnYXjCeOTVZYpndioYfZwuxvMKgqjNh+DjLV6hqJJ8vMm/r3PHT1rzXUtdeHVZtureJFtA8xa4t7exMESxsBLgNH5hVCcE4J4OM4NC+IfQ7wcgY4rc0b/AI83/wCuh/kKwIEaOPDTPNliwZwoOCcgcADA6Dvgc5PNb+jf8eb/APXQ/wAhQSjQooooGFFFFAHi/iW7tH+LElibjyZ31C1wrWELgj9ySfPJ3qOD8qg8jngmvT72Dd4ktpfsGpybYsfaY7zbap97h4fM+Zvfy26rzxxxHiW9tm8WTGPUbeOG31O0Fxo+UEt7KCmJlJ+YbdyDAGGEZ5FdveyZ8SW0H23U13RZ+yR2W61k+9y83lna3HTzF6LxzyR/hr+uiB/Gy+6Zdvl7/wB3/wCxoZOF+Xt/d9/92mR+VdxJc2xSeGZRJHLGwZXU8hgQ2CCOc028SaKxlktbT7TPHExjh3BPMYZIXcW4yeM9s0AShPkPy9x/D9f9mhU5+72P8Pt/u1Q0y4nuLKBNVso9O1CZWkNl56ysFVsFgQ3zD5kyR03gVfWDB/1eOD29v96gBNn+x/45/wDY0rpl2+Xv/d/+xrzzxOnjLxH4cutKHgtbX7Rs/ejVIn27XDdMjP3cfjVPSLr4kW+iWMNh4d0q4tY7eNIJhcK3mIFAVsifByMHI4oAt6Mv/F+9fG3/AJh6cbf9mD2/pXdvf2UV6lhJdW6Xko3x2zOokdeeQu3JHB5x2NeKa74D8d+INan1O80KKKafbuSG5iCjaoUYzIT0HrXXeMdH8RL8SNN1bw5p9vdSw2LBIp50XdhnVztMgYgCVeRwCwoA9GVOG+Xt/d9/92hEw6/L3/u//Y15zZT/ABNhg1NbzQkuJLpCLVkureNbM88gZO8AleGP8PXk1asNY8caRo6vrfhaK6e2VpJ72TVIIF2glskD5VAXjPtmgDu9n+x/45/9jSsnP3ew/h9v92vPLfRvE2q/E7S9e1Pw8NNtbW3eGQC8jm/hkweGB6uBXZafLqd3fXseo6KLKCFwttN9oWX7SuSN20EbOApwf73tQBtNyp4zx0qEI2D+6Xp/cHP61MwypHXioREAD8jcj0SgA2NtP7peo42D/GjY20/ul6jjYP8AGqd7diz2RRWk13cS5ZbeFoFkKLwzgOygqCygnsWX1rA+IWma/qHhyGHwqLhLwXau/kzrC3l7HB+bIyMleKAOr2NtP7peo42D/GvPh4mvde0nx9YXdtaxx6VFNDCYYyGYbZhlssRn5B09TU94fF+qeBL+yvbaGw8RzSBrSCzuEjZ4UePc4O89NxBOe4HfnjtK8L/ETSbHWLWLRYZxrCbLmW4uY3fo4JB8zr85OTmgDvfhapPwz0vEanmXqoOf3z+9dLZX1nqdsZtNntbyJXKl7dkkUNgHGQ2M8j9K84n8P+JrT4X6PoWliS11xLh5pIIbyONzCGkyQwYblBkjzycFlrJ8OaF8TvC8XkabpcLWpkaVreaS3ZWYqFyTu3dh0I6fWgD2bY20ful6njYP8aNjbR+6XqeNg/xqhZXEzaXEt7Ap1SO1Sa5s4Gj3KzKeACcAFlYAk4O088Vn6/c+I10GCfwzo6vfNPiS2vjF8keDk5V9uchejHg/kAb+xto/dL1PGwf40bG2j90vU8bB/jUYaFpmt1IM0aiR4gU3KrZCsR2BKsAe+0+lSeUNoGxup7JQAFGwP3S9P7g4/Wpl4UcY46VVRoZmkSIiR4G8uVVKExtgNtYdjhlOPQg96tKMKB04oAq7/wDb/wDH/wD7KlZ+fvdh/F7f71O2Sejfmf8A4qlZZM8Bug7/AP2VADFfn73Y/wAXt/vUm/8A2/8Ax/8A+yoklW2UPcyCJCwQNI+AWYhVHLdSxAA7kgU/ZJ6N+Z/+KoAaX+QfN3P8X0/2qEfLr83f+9/9lT9sm0cNnJ7/AP2VRyyrawvcXUghghUvJJI+1UUckklsAAc5oAN/+3/4/wD/AGVKH+Q/N3H8X1/2qdsk9G/M/wDxVY+r6nrdpmPSPDlxqLhx873cUMZXHJBLls5wMFR39sgF19Ss476OykvYFu5F3JbtOBI455C78kcH8jSw6lZ3k80VpfQTyW5CzJFOGMbdMMA/ByD19DXjuneFviTYeIrbW5dPe/vLZWSNr2+ST5SrDGfMBx8xPB61HYeHfiJFrtxrWl2mxri8aa4jt9QjEMjrI25GCy8gNuUgnI5HXNAHtyvz97sf4vb/AHqTf/t/+P8A/wBlXJaZq3jwWd9/a/hqP7T5f+hfZZo9m/Df6zdPnGdvTnr7Vr+H7zXbqzjTxDpElleBWMjxyI0JO7gLiZmztx1GOD7UAb0RzGOc/jn+pquxO6X5m/7+j1/SrMYIjG7Off8A/WahKS7pMCTB6fvB69vSgCHc395v+/4pzM21fmbp/wA9h6ml8ub+7L/39FNWTzmdIXMjwtslVJwTG2A2G9DtZT9CKAE3N/eb/v8AinOzeY3zN1P/AC2ApfLm/uy/9/RSukpdsCTGeMSgUANVm2t8zdP+ew9RTdzf3m/7/ilaTyWRJnMbzNsiV5wDI2C2F9TtVj9AahSW7a+kgaxvEjVci5aePy3PHAAbdnnuoHB9sgE5ZvLHzN1P/LYe1N3N/eb/AL/is7+1NT2gf8I3q+cn/l5tf/jtcPoGkeN9G8Zajd22iqmn6tfiW4ae4jMkcXmMcjbJ94K59eaAPS3Zt33m6D/lsB2oRm3febof+WwPauHl1n4hyavO2naJY3mmR3Txo8d2gZ0RypG7zcBvlIOV4OcjjFX/AA9J40ufFl3NrtjJYaQ1sfItvtMMuyT5R95fmOfnPPAz7CgDp9zf3m/7/irNuSYzkk8933VzOmap4outRih1HwtLYWzZ33H9qxS7OCR8oGTk4H4108AZUO8MDn+Js0AcX8VQf+EA1U+Xx+5+fB/56p+FfPNfTni3QP8AhJNEu9M8+S3+0bP3oh3hdrK3TIz93Fee/wDCj/8AqPS/+C//AO2UAeS0V6ufgrEs6wN4jImdS6RGxG5lBAZgPMyQCygntuHrT/8AhR//AFHpf/Bf/wDbKAMbWAf+FEaCdmB9vb5uefmnrz6vebv4bfavAtj4c/tKVPsc5m+0fY878lzjbv4+/wCvasD/AIUf/wBR6X/wX/8A2ygDyWivVx8FYmnaBfEZMyKHeIWI3KpJCsR5mQCVYA99p9Kf/wAKP/6j0v8A4L//ALZQBjfGUEeMbTKbP9ATjn/npJ6159XvPjH4bf8ACWaxFff2lLaeXAIdn2PfnDMc53j+9+lYH/Cj/wDqPS/+C/8A+2UAeS1reFf+Rx0bAz/p8HHr+8WvQYvgrFOhe38RmZAzIWjsQwDKSrLkSdQwII7EEVd0v4Of2brFnff21LL9lnSbZ9gxu2sDjPmcdKAO81EEeXmPZ17Hnp615NrGq6Q19ej+w47iSyuZ5p4G1GSPCAorF4gCMysF2RkFX+8cEmvXL22kbZ5ccrdc/u+lVPslx/zwl/74NC3uHQhByoOMcdD2rc0b/jzf/rof5Csn7Jcf88Jf++DWxpMbx2jCRGQ7ycMMdhQBeooooAKKKKAMG68NyXOqSyfbgthcXEV1PamHLNLHt27X3cKdiZBU5weRmt4kAEk4A6misbW7gw2l5/bFvajQhbsbmc3LiTbt5HlhOnbh8+3aleyHuyfQp9HfSobXw9d21xZ2Ua26C3nEojVVAVSQTzgDqc1pVzHhe/stb1O61W3u7FpZII4ktLWdJHhiUsVMhUn5iWPHQdATyT0Vy1wls7WcUcs4HyJLIY1Y+7BWI/I1T0EtSG5hso76DUbopHPEjW0UrybQBKyZXrglmRMd+MDrVuuT8U2IudO02/1K3RL6C/tQqR3DyRxk3CAlchQTjjdtBwSOldZS6f15AQ3d5bWFq9zfXEVtAmN8szhFXJwMk8Dk1HpdvZ2mkWdvpe37FDAkdvsfevlhQFw2TkYA5yc1l+JporS40e8vZEisre+3TyycJHmKRVZj0A3MBk9yKd4RUjQS4BEMt3cS2/8A1yaZ2Qj2III9iKED0NyqkkNk2sW88hT7fHBKkIMmG8tmjL4XPIykfOOOPXm3XMnTra0+JNrcwo3nXOn3JlkeRnJxJDgDJOFGThRgDJ45oW9v62DodNWdrs2kJpE9v4hura3sbxGt5PtE4iVwykFd2RyRnoc1o1zXijXNM0bULTzpLRNUnikjtnvZxHFFGSu9mJOMcLwPmboMDJCYzpFZXQMjBlYZBByCKWs/Qbe2tPD9jb2Fyl3bxwqsc6EFZBjqMcY+nFaFU9yVsFFFRXLXCWztZxRyzgfIkshjVj7sFYj8jSGUr+40ey1azudSu7W2vTHJBbGe4CF1dkLKqkjdkonYnj350q4jX9Y09bqbStRm0zTtV1C0Ed9NcXYMUEGWAClwu9jubChQOct0G7rm8yLTR/Zyx3DrGBEJZSqv6ZcK3bvg0dLh1sNuYbKO+g1G6KRzxI1tFK8m0ASsmV64JZkTHfjA61brk/FNiLnTtNv9St0S+gv7UKkdw8kcZNwgJXIUE443bQcEjpXWUdP68gM8SaVceIVC3FvJqtnA8flLMDJHHIUZsoD0JSM5I+nXnQrhrGWN9W06wiZTqdrrF3PdRjh0iYTfOw6hWDx4PQ5GK7mjpcHvYqRw2S6xcTxFPt7wRRzASZby1aQplc8DLyc4559OLdczounW2neOdZS0Rl820tpJGeRnZ2LzclmJJ6AdeAAOgro5WRYXaVtqBSWbOMDuc0norh1sULK40e61q8m0+7tbjUBGkFyIbgOyKjOVVlB+XBd+wPPsK0WYKpZiAAMkntXG+GdS0bW9WtZtKu7GK3sbZ4LGzjnVp3jO3Luudyr8owp57tg8Dq79rZdOuGv4xJaiM+chiMgZccgqAc8dsU3ogW5W0ibSLr7ZeaJc290LmcPcS284lVpBGidQSAdiIMDHTPetGuY8O3cV74m1W5tb211GGaKLbc2X+qQKXAiOCwLgHJOehHyqMZ6egAooooAr3tnb31uIrxN8aSxzAbiMPG4kQ8ejKD+HPFSwzRXECTW8iSxSKGSRGDKwPQgjqKy7mzn1fTrq21+ygjgzlEt7yRxKBnh/kTj1X5ge9N8Hf8iRon/XhD/6AKFrf5fqBs1n65JpQ0ie31+4t4LK8RraT7RMIlkDqQVDZHJGehzWhXN6/d2eneIrC71eSOGyNpcwiSXhPMYxkLk8ZZVbA74NJuw0dJRWV4WhuLfwlpUN4rJPHaRq6v8AeUhRwfcVq1TVnYlaoKqabDZQWrpphQwtPNI2yTePMaRmk5yed5bI7HjjGKlu7WO9tJLafzPLkG1vLkaNsezKQR+BrF8EwRW3hswW8axxRXt2iIowFUXEgAFIb2OgooooAKKKKACqkENlZ39wISkd1fP9pkQyfNIVRIywBPQKqDjjp3NLfSahGI/7Ntba4Jb959ouWi2j1GEbJ9uKwzp1tafEm1uYUbzrnT7kyyPIzk4khwBknCjJwowBk8c0LV2/ra4dDpqKKKAM+7k0qbV7G2vLi3/tCBzc2sDTBZM7HQsEzlhtZx0I6+laFcNqcsY1TUdPLKNUuNXs7i2j6O8S+Tl1HdVCSAkcDBzXc0La4dQooqG7tY720ktp/M8uQbW8uRo2x7MpBH4GgCLTYbKC1dNMKGFp5pG2Sbx5jSM0nOTzvLZHY8cYxVuuf8EwRW3hswW8axxRXt2iIowFUXEgAFdBQAUUUUAFBIAJJwB1NcVfagIvHSp9vaaQ3MSLaxX8kUsalQCPsxUpLHyWMnBAJwfkFU7a6v7vxddWs94iyvcXMU1qNRm8z7PtOzEATbHxsYSBhnPXLYpX0uh7PU7dILK8urbVItk0iwPHBOj5UxyFGbGDggmNDn246mrVeW2d5Fb+FdPjGqXFu0ejI2mJFevme8ywdMbv3jKwjXyzkDJGPTJ1DV9Zg1S4t5NYlFzY7Ld4W1GSF9hIDP5YDbwIwzmTGV8zPOwVT3sLpc9ooJABJOAOprxrRNU/tPxDaWo1eYwTarLAyQ+IbiaTyxExC4wuYywysg5wQDzk11lhqP8AxV8sSag95I73CssV/IWiUZIEtqy4jVcBQ6kFjtP8ZqXtf+u4dbf11/yOvtoLKW6bVLTZJJdQRxmdH3LJGpdkxzjGZGOR1z9KsswVSzEAAZJPavPrLUI5bHS28Q6zeWStpNtLaSR3Lo88xz5hAB/fPxH8hDfe6HNZk+oajP4yn04ajereS3bySwJO+2G1TedpTOEBCwEMACfMYZOSKJ+7f5/gNf1/X9anqUE8V1bxz20qTQyKGSSNgysD0II6iiaeK3QPcSpEpYIGdgoLE4A57kkAD3ryO21IwaTbo+rXVtdw+HLWTTLaO7dBNcHfjEYOJGyEG0g5B6Hs7SNSkk1jUmsNbv7u2hudOjhLX8sqAPJH5g5YgknII7cjgHFUleXL/W9iFK8b/wBdP8z1W0s7fTrd4rVPKjaWSZhuJ+eR2kc8+rMx9s8cVLDNFcQJNbyJLFIoZJEYMrA9CCOorhrCW5jubC9N/eyS3WqXttIsly7R+WvnlVCE7Rgxrg4z744qGy1COWx0tvEOs3lkraTbS2kkdy6PPMc+YQAf3z8R/IQ33uhzSWv9epT0/rzsehUVwEWtA+OrRLa8lzJfSwXEU+pMZdoSTANqBsRNyrtfhiMZ+8a7+jpcOtgooooAKKKKACiqflD+/L/39b/Gjyh/fl/7+t/jTEXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFyiqflD+/L/39b/Gjyh/fl/7+t/jQBcoqn5Q/vy/9/W/xo8of35f+/rf40AXKKp+UP78v/f1v8aPKH9+X/v63+NAFqWMSwvG5YK6lSUYqcH0I5B9xVPTtHs9LaV7VZmklwHluLiSd2AzgbpGJwMnAzjk+tO8of35f+/rf40eUP78v/f1v8aALlFU/KH9+X/v63+NHlD+/L/39b/GgC5RVPyh/fl/7+t/jR5Q/vy/9/W/xoAuUVT8of35f+/rf40eUP78v/f1v8aALlFU/KH9+X/v63+NFAH//2Q==)

Figure Correlation Matrix of PCA

### **Splitting the dataset**

#splitting the dataset

set.seed(12420352)

iris[,1:4] <- scale(iris[,1:4])

setosa<- rbind(iris[iris$Species=="setosa",])

versicolor<- rbind(iris[iris$Species=="versicolor",])

virginica<- rbind(iris[iris$Species=="virginica",])

ind <- sample(1:nrow(setosa), nrow(setosa)\*0.8)

iris.train<- rbind(setosa[ind,], versicolor[ind,], virginica[ind,])

iris.test<- rbind(setosa[-ind,], versicolor[-ind,], virginica[-ind,])

iris[,1:4] <- scale(iris[,1:4])

![Table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAM2NgAAkpIAAgAAAAM2NgAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjoxMTo0OQAyMDIyOjAxOjA0IDIyOjExOjQ5AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MTE6NDkuNjYxPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAJUCVgMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APfbyWz0+zlu9QultbaFd0k09wURB6licAVBpWqaPrts1xomqW+owo+xpbO8Eqq2M4JViAcEce9Z/j+Ga48B6pHbQTXEpjUrFBG0jthgeFUEk4HQCsG+uJdS1PWNf0nw/dXVtHozWkkF9ZSW51CTduCeXIokZVUtzt53kLuOQC+tv66/8MT/AMD8/wBNzupEhijaSWRkRAWZmlYBQOpJzSRLBPCk0ErSRSKGR0mJVgeQQQeRXlnhrw7Ddr4l0m50S1ay1GzimtIU8OzafaNKodSfKl3BJA2zkkMQAQMDNbOgR6Xpvw0vI9A8JkXcVgi3ljJpElmLuTy8MDujHm/xZ2hs9BnIy9dfK36/5C1ul3/4H5ne+QnrJ/38b/GjyE9ZP+/jf41578NrRtN8QaxCtitpaXkME9v9k0GfTLYlS6Sfu5Cdr/d6kFgAQMDNejUwRH5Cesn/AH8b/GjyE9ZP+/jf41JRSGR+QnrJ/wB/G/xo8hPWT/v43+NSUUAR+QnrJ/38b/GjyE9ZP+/jf41JRQBH5Cesn/fxv8aPIT1k/wC/jf41JRQBH5Cesn/fxv8AGjyE9ZP+/jf41JRQBH5Cesn/AH8b/GjyE9ZP+/jf41JRQBH5Cesn/fxv8aPIT1k/7+N/jUlFAEfkJ6yf9/G/xo8hPWT/AL+N/jUlFAEfkJ6yf9/G/wAaPIT1k/7+N/jUlFAEfkJ6yf8Afxv8aPIT1k/7+N/jUlFAEfkJ6yf9/G/xo8hPWT/v43+NSUUAR+QnrJ/38b/GjyE9ZP8Av43+NSUUAR+QnrJ/38b/ABo8hPWT/v43+NSUUAR+QnrJ/wB/G/xo8hPWT/v43+NSUUAR+QnrJ/38b/GjyE9ZP+/jf41JRQBH5Cesn/fxv8aPIT1k/wC/jf41JRQBH5Cesn/fxv8AGjyE9ZP+/jf41JRQBH5Cesn/AH8b/GjyE9ZP+/jf41JRQBH5Cesn/fxv8aPIT1k/7+N/jUlFAEfkJ6yf9/G/xo8hPWT/AL+N/jUlFAEfkJ6yf9/G/wAaPIT1k/7+N/jUlFAEfkJ6yf8Afxv8aPIT1k/7+N/jUlFAEfkJ6yf9/G/xo8hPWT/v43+NSUUAR+QnrJ/38b/GjyE9ZP8Av43+NSUUAR+QnrJ/38b/ABo8hPWT/v43+NSUUAR+QnrJ/wB/G/xo8hPWT/v43+NSUUAR+QnrJ/38b/GjyE9ZP+/jf41JRQBH5Cesn/fxv8aPIT1k/wC/jf41JRQBH5Cesn/fxv8AGjyE9ZP+/jf41JRQBH5Cesn/AH8b/GjyE9ZP+/jf41JRQBH5Cesn/fxv8aPIT1k/7+N/jUlFAEfkJ6yf9/G/xo8hPWT/AL+N/jUlFAEfkJ6yf9/G/wAaPIT1k/7+N/jUlFAEfkJ6yf8Afxv8aPIT1k/7+N/jUlFAEfkJ6yf9/G/xoqSigBnmj+5L/wB+m/wo80f3Jf8Av03+FR63qf8AZOmmcAGRm2IG6ZwTz+ANcsfEOuWsNvqEhWa0nJwjKoHBIIyACDxx1/GtoUZTV0ZTqxg7M63zR/cl/wC/Tf4UeaP7kv8A36b/AApz3xOk/brS2mvN0QljghKB5MjIA3sq5+pA965vTPFn2PwPf6/rX26VbW7uRJC9tEs8QWdkEW2N2VtuNuQxLYz1OKwva9+htbS50Xmj+5L/AN+m/wAKPNH9yX/v03+FVLTXbi7tr6QaBqsMlr/q4ZlhVroEZBjPmbefRypHcCsnSfFX2XwPqOv63JdslncXZkjmgijlhWOVl8rEbsh2427t2DjJI5ouO2lzofNH9yX/AL9N/hR5o/uS/wDfpv8ACmaRqVxqds0t1pF5pZDYWO7eBmcYzuBikcY+pB9qv0xFPzR/cl/79N/hR5o/uS/9+m/wq5RQFin5o/uS/wDfpv8ACjzR/cl/79N/hVyigLFPzR/cl/79N/hR5o/uS/8Afpv8KuUUBYp+aP7kv/fpv8KPNH9yX/v03+FXKKAsU/NH9yX/AL9N/hR5o/uS/wDfpv8ACrlFAWKfmj+5L/36b/CjzR/cl/79N/hVyigLFPzR/cl/79N/hR5o/uS/9+m/wq5RQFin5o/uS/8Afpv8KPNH9yX/AL9N/hVyigLFPzR/cl/79N/hR5o/uS/9+m/wq5RQFin5o/uS/wDfpv8ACkEykkBZDg4P7tuP0q7UUP8Arbj/AK6D/wBBWgLEHmj+5L/36b/CjzR/cl/79N/hWRZ6zrDeO5tH1G2sYbT7E1zAYJXlkYCUKGYlVC5B+4AcEfeOcCtc6/qUXj1dLlvLWwsWaNYFuNKnb7WSpZlS58xYg/BwmC3BODSTvbz/AOD/AJB1a7f8P+p0Hmj+5L/36b/CjzR/cl/79N/hXLz+K9VElzq0AsDodnqQ0+WBo3+0PiURPKJNwVQrk/JsOQmdw3ADtKE7q4NWdmU/NH9yX/v03+FHmj+5L/36b/Cse48a2lvqE0Z0+/ewt7kWs+qKI/s8UpIG0gv5hwzKpYIVBPJ4JGZp/jeW21DU4tWtL6a0h1k2K3yRRrDbBvLWNW+YM2WcDcqtjPzEY4E7tJdf+B/mgen5fn/kdX5o/uS/9+m/wo80f3Jf+/Tf4Vm2/ikXviK60qw0m/uUs5hBdXqNAIoHKB8FWlEh4ZeQhHPGa3qfS4WKfmj+5L/36b/CjzR/cl/79N/hVyubuvG1paX9zGdOv5LGznW3u9TRY/s9vIdvykFxIcb1yyoyjPJGGwr9AsbHmj+5L/36b/CjzR/cl/79N/hXEvrviLVfiRdabDaa/YafYC3ytoNOKPvd90kpkZn2EKMCPDgBsgEivQqfS4W1sU/NH9yX/v03+FHmj+5L/wB+m/wrn77XtSg8dxaY95a2Fg/lCL7TpM7/AGpm3FkW5EixI/GApBPsa6ylfS4dbFPzR/cl/wC/Tf4UeaP7kv8A36b/AAqofEtmserForgSaTII5odgLyEqrJsAPzbtwA6c8cVX1rxV/YVzELzRdSaykkhifUIjAYomkcIoZTIJPvMoJVCOfrRfYLGn5o/uS/8Afpv8KPNH9yX/AL9N/hWO/jSM65daXZ6Jq969ldxWt1Pbwp5UJkVGVyWcFlAk+baGKgEkAYJW/wBYvU8baVpogvrS1kaXM5jgeC8xEW2Z8zzEKnnOwAkY6c0+lwatua/mj+5L/wB+m/wo80f3Jf8Av03+FZut+Kf7Bu4hd6NqMli8sUTajF5JhjaRwigqZBJ95lyQhHP1rFj8bT6d4g8RQ6naX11p9hfxRfaoYoxFZRNBC2XJZWYbnYnaHIHXAxQtf69P8wtpc6zzR/cl/wC/Tf4UeaP7kv8A36b/AArB1WTUtP8AHeh+VrN29lqU8sUtg8cHlKFgZgVYRiTO5QeXPep9V8a2elahcW7WV7cw2RjF/eQLH5VlvwV8zc4Y8EMditgEE4yKL7C7mv5o/uS/9+m/wo80f3Jf+/Tf4VmN4qD+Jp9FsNH1C/e1aIXdxC0Cx2/mDILCSVXI285VWHUDJBA36Olx2Kfmj+5L/wB+m/wo80f3Jf8Av03+FXKKAsU/NH9yX/v03+FHmj+5L/36b/CrlFAWKfmj+5L/AN+m/wAKPNH9yX/v03+FXKKAsU/NH9yX/v03+FHmj+5L/wB+m/wq5RQFin5o/uS/9+m/wo80f3Jf+/Tf4VcooCxT80f3Jf8Av03+FHmj+5L/AN+m/wAKuUUBYp+aP7kv/fpv8KPNH9yX/v03+FXKKAsU/NH9yX/v03+FHmj+5L/36b/CrlFAWKfmj+5L/wB+m/wo80f3Jf8Av03+FXKKAsU/NH9yX/v03+FHmj+5L/36b/CrlFAWKfmj+5L/AN+m/wAKPNH9yX/v03+FXKKAsU/NH9yX/v03+FFXKKAsZuvaUdX0trdHCSqweMt03DI5/AkVyw8P69dw2+nzotvawE4cyKVOSSTgHJPPHT8K7bbcf89Yv+/R/wDiqrxXsc83kw6hZySj+BOW/LdW1OtOCsjGpRhN3ZZt4EtbWK3i4jiQIufQDArnp/CHneEtS0T7dt+3XU9x53k/c8ycy7du7nGcZyM9faug23H/AD1i/wC/R/8Aiqhtrn7ZGz2d7a3CJI0bNENwV1OGUkN1BBBHYisNzf7PL0LdYtlol5pei3lrpt/Cl1PeT3Uc89sXRDLM0m0oHUsAG28MM9eK1dtx/wA9Yv8Av0f/AIqoba5+2Rs9ne2twiSNGzRDcFdThlJDdQQQR2IoHd2sZHhLws3htb9pJrMveyiVodPszaW0ZAxlYi74ZurNu5wOOK6Kottx/wA9Yv8Av0f/AIqjbcf89Yv+/R/+KoJ2JaKi23H/AD1i/wC/R/8AiqNtx/z1i/79H/4qgZLRUW24/wCesX/fo/8AxVG24/56xf8Afo//ABVAEtFRbbj/AJ6xf9+j/wDFUbbj/nrF/wB+j/8AFUAS0VFtuP8AnrF/36P/AMVRtuP+esX/AH6P/wAVQBLRUW24/wCesX/fo/8AxVG24/56xf8Afo//ABVAEtFRbbj/AJ6xf9+j/wDFUbbj/nrF/wB+j/8AFUAS0VFtuP8AnrF/36P/AMVRtuP+esX/AH6P/wAVQBLRUW24/wCesX/fo/8AxVG24/56xf8Afo//ABVAEtFRbbj/AJ6xf9+j/wDFUbbj/nrF/wB+j/8AFUAS1FD/AK24/wCug/8AQVo23H/PWL/v0f8A4qooln8yfEkf3xn92f7o/wBqgDn28PeIz40GuDXNLEKxG2Ft/ZMm7yDIHxv+0Y38Y3bcf7ParesaDqOtara/adUhi0i2uIrr7JDaETSSRncoaYyEbNwBICAnGM4zna23H/PWL/v0f/iqNtx/z1i/79H/AOKoWlrdP+H/ADE1e/n/AMMc1N4OuJL6WGLVEi0S4vVv5rEWv70yhw5VZd2BGzqGKlCxJb5gDgdVUW24/wCesX/fo/8AxVG24/56xf8Afo//ABVGysPrc5W68E3NxJd2K6nCmg3t59tuLI2ZaYuXEjKs3mbQjOuSDGT8zAEZBDZPA95NfXEcusxtpF3qa6nPafY/3rOrKyoJd+Am6NCQUJPPIB46eGc3Jk+z3dtL5TmOTy13bHHVThuDyOKl23H/AD1i/wC/R/8AiqSSVmv62/yQPX+uuv8AmzmdR8JX2reKbLVL6/03ybC4822eHTGS9Ref3f2jzSNhzhgEG5cjrzW7DaX6a7c3UupeZYSQxpDY+Qo8lwW3P5nVtwKjB4G33qztuP8AnrF/36P/AMVRtuP+esX/AH6P/wAVTWisG7uS1yF94JuruTULNNVhj0LU7n7Vd2bWZabcdpZUl3hVVigJBRj8zYIyNvVbbj/nrF/36P8A8VWbqHiDTNJvoLLVNd0uyu7nHkQXMqxyS5OBtVnBbnjjvRpcOg+00b7J4l1LVvP3fboYIvK2Y8vy9/Oc853+gxitSottx/z1i/79H/4qjbcf89Yv+/R/+KoEYutaDqGuahbJPqcEWjwzw3LWsVofPkkiYOoMxkwF3KpICZ4xu5rfqLbcf89Yv+/R/wDiqNtx/wA9Yv8Av0f/AIqjpYZj33hlbzxRb6sLny4lVBdW3l7hcmMs0JJJ+XYzs3AyTt5GMHn/ABL8NW8Qa9c6k19Yb5Hhlt5bvTftE9o8RUqsUvmLsiLLlkCgnc/zDOR3G24/56xf9+j/APFUbbj/AJ6xf9+j/wDFUDuzO0bRH0vUNWu5blZ31O5S4YLFsEZWGOMgcnOfLz+OO2TNfaV9t1fS77ztn9nySPs2Z8zfGUxnPGM571LLc+RcQwTXtrHNcEiGNxhpCBkhRuycDnjtU224/wCesX/fo/8AxVPcl67nD+Jfhq3iDXrnUmvrDfI8MtvLd6b9ontHiKlVil8xdkRZcsgUE7n+YZyLV34Hv7y61RJNbhXT9YuY57+3WxO9gkcaFEk8zChvL5yrHDYGCNx6mK48+WaKC8tpJLdwkyIuTGxAbDANwcEHB7EVTGv6a2uHRl1zSzqgGTYiVfPAxu/1e/d056dKS02G23uO1LRv7Q1nR7/z/L/syaSXy9mfM3RNHjOeMbs9+lc3rPw2tdQ8UXGt21voMs14Y2uBrGii9YMihQY38xCmVAyDuGRkY5z2e24/56xf9+j/APFUbbj/AJ6xf9+j/wDFUdbh0aOZ13wjfa/rdrcXV/pyWtnOk1syaa322DBVmVLjzcKGK4OI+VJHvXV1FtuP+esX/fo//FUbbj/nrF/36P8A8VRsrAS0VFtuP+esX/fo/wDxVG24/wCesX/fo/8AxVAEtFRbbj/nrF/36P8A8VRtuP8AnrF/36P/AMVQBLRUW24/56xf9+j/APFUbbj/AJ6xf9+j/wDFUAS0VFtuP+esX/fo/wDxVG24/wCesX/fo/8AxVAEtFRbbj/nrF/36P8A8VRtuP8AnrF/36P/AMVQBLRUW24/56xf9+j/APFUbbj/AJ6xf9+j/wDFUAS0VFtuP+esX/fo/wDxVG24/wCesX/fo/8AxVAEtFRbbj/nrF/36P8A8VRtuP8AnrF/36P/AMVQBLRUW24/56xf9+j/APFUbbj/AJ6xf9+j/wDFUAS0VFtuP+esX/fo/wDxVG24/wCesX/fo/8AxVAEtFRbbj/nrF/36P8A8VRtuP8AnrF/36P/AMVQBLRUW24/56xf9+j/APFUUAY/i+4lt9D/AHXSSQI/+7gn+YA/SuQu4LePRLC8S4ZbyQsWQE54c4bPbGBXo91aw3tq9vdRiSKQYZT3rEg8GaXDcCVzPMoORFK4K/oAT+Jrso1oQjZ/8OcdajOcrr/hjShFxqHh+LNzLZ3M9upM0KpviYqMkB1Zcg+oI9q4mLUNR0j4U63c2N4o1C1v7yOO7a1iUswumTe6IqoWI5JAGTk9ea9Eqs2m2LWktq1lbm3mdnkhMS7HZm3MSuMEluSe55rjet/M7PsW6/8AAZRtNJ1SK2vorrxFeXDXPMMwt4Ee0OOQmE2kZ6bwxHctWD4fTVT4B1SDSryAaqt9fQQXdxDHEGkFw6h3EcYXccZJ2HJ5IPQ9rVOfSNNudPmsLnT7WWzuGZpreSBWjkLNuYspGCS3Jz1PNHcata3n/mYnhPU38vU7XVb3VXu7CQNcDV1tVaJGXKsrW6hChAJyfmHOcdKua+7ar4Mu7jRNXltxJatNBe6e0blxtJG0srKQfUDPPBHWrmn6FpOk6e9hpWl2VjZyEl7e2t0jjYkYOVUAHIq1bWtvZWkVrZwR29vCgSOGJAqIoGAABwAPSpmuaLQRdmmzi7e91Xw18I7nXn1O9128i0gXka36xfKwh3YzGiFhnk7iW461Dolx41uNP1NCbtfOsUbT73WzZDFy2RgfZSw8s5QjcpIOfvdK6/SvD+jaEJhomkWOmicgyiztkh8wjoW2gZ6nr61VtvBnhezhuobTw3pEEV4my5SKxiVZ1znDgL8wz2NXJ3bff+v6ZMVywUe39f0vMwbCfUL3Rdd0qbWvEFrq1modpLqOy82NSpKmMxRGMo21h8w3jB4XitLwBb3yeDdMutR1u/1WS7soJc3oizGTGCQCkak5z1cseOvWtjStE0rQrVrbQ9Ms9Nt3cu0VnbrCrNgDcQoAzgDn2pul+H9G0SSeTRdIsdPe5IM7WlskRlIzgsVAz1PX1NC0v52/D+v6uFtvK5oUUUUhhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABUUP+tuP+ug/9BWpaih/1tx/10H/AKCtAHEeLdNsrPxhousz6Pp9vu1C3jOrW+Pt0krZjWIjaD5ZBAY72O3I2Y+YZV1b2zwalrlxHCPEtv4iS0t7jd++jTz0WOBW5Ko0LAlBwQ7MRyTXoA8PaKuuHWV0ewGqEYN8LVPPIxt/1mN3Tjr0qR9F0uTWY9Xk02zfUo08tL1oFMypz8ofG4Dk8Z7miOn9en+X4/eS1/D8L/5/h912vPb7Xdajg1TXo9UmjGn6sLBNGEUJilTzUjG4lfM3uH3KQ4HKcHkH0Ks+Tw/o0utJrEuk2L6pGNqXzWyGdRgjAkxuHBI696F8V/6/r/MHtY89ivtR0ufWtR0/VyNnilLX+zFijKT+a0KMHJBfdtYsNrKBgZDCt6a91jTvGccms6jqC6XeXogslsltWtBlcLHNuTzw5cNypK9OV5A6P/hHtF/tdNV/siw/tGPdsvPsyecu7OcPjcM5OeecmmQ+GNBt9abV7fRNNi1NyWa9S0jWZiRgkuBu5HXmlBcsYrsl+SX6fK+3dPrbrf8AFt/137l1L60kvpbKO6ha7hRZJLdZAZEVshWK9QDg4PfBqeoEsbSO+lvY7WFbuZFjkuFjAkdVyVUt1IGTgdsmp6YzzzUtd1mOLXdch1aWMaRqK2cWjrDCYpl/dgByV8ze/mZXa6jlODzuk0rRb5vitr8//CS6oBHDZSNF5VrtkQtMRET5O7YOQMEN8xyxPNdfL4f0a41mLV59JsZdThG2O9e2QzIOeA5G4dT37mraWsEd1LcxwRrPMqrJKqAM4XO0E9SBk49MmiN0l/X9XE9SWuD8T6Ta6V4ys/FF7Z6PfrcXNrZolzYBruF2farwzFj0Lbim3OAx3DFd5VBtC0ltaXWG0uyOpqmxb426ecFxjAkxuxgkYzR1TG9U0X65F9Y1ODU9R0KW6zfTXcZ0+by1ytvICxOMbSY/LmA4P3UzknnrqhaytXvkvXtoWuo42jScxgyKhIJUN1AJAJHsKOodDz7xl4n1Gw1tn0K81d0sb2ztrxEhtPsMZlkjBRzIBOWKSA5jJA3L05rTsjr+teLNdSPxFJZWel6lBHDbRWkLCSPyYZJEkZlJIbcwBUqVLE5YYA6C+8MaDqd815qWiabd3TxGFp7i0jkdoyCChYjO3BPHTmrttY2ll5n2O1ht/NIaTyowu8hQoJx1wqgfQAdqcdP69P8AL8fvd10Oc1W2uIfiBoVw1/LPBcSTItpLBAyQEQMd0b+X5ik45+cg5I6cVheMvE+o2GuM+hXmrvHY3tnbXiJDafYYzLJGCjmQCcsUkBzGSBuXpzXoclvDLNFLLDG8kJJidlBKEjBIPbIOOKz77wxoOp3zXmpaJpt3dPEYWnuLSOR2jIIKFiM7cE8dOaXVCXW/U4C8vNQ0rVfG2rafrDW5stUtitgkURW7dre3UI5ZS3zcKuwqQSeW4A6vxH/yOXhD/r8uP/SaStU+GtCOoQ350XTvtkDborj7KnmRnaFyrYyDtVRx2AHar0lrBNNDNNBHJLAxaJ2QFoyQQSp7EgkcdjT6Jf1sKWrPPNa8QeLbnxjq1l4es9SkGkvbiKG2+xCC4DqHYzmZxKFOWUGMDG08seBpavfaxpfipLzU9R1CLQ5bqGC3GnLbPChbam25EiGYFpG2gxEjGM7MEno9U8NaFrlxDPrWi6dqM0AxFJd2iStHzn5SwOOfSk/4RfQDrf8AbJ0PTf7Uzu+3fZI/PzjbnzMbunHXpxSjpa/9f1+A3rexqUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAUr5rHT7R7i4gj2r2CDLH0Fc8niyyWdBc6WscD/AHZVw3GcZxtHHB6ZrT8V2U97ouLVWd4pBJsUcsMEED165/CuPa7e/wBMs9ItLUyzwsxYhcsCWJx7DnnP9K7aFKE43l/wxx1qs4Ssv+HO/uX0yysZL28a0t7WJPMknlKoiL/eLHgD3rM0XWtN1XQZNXmXToLJZ5UjuIruKaF41kKrJ5i/KN2AcZyCcHkVr2FubTTba2ZtzQxLGW9cADNcdfeGtRufhvrukNZrJc3t9dyRwM6ESRyXTOuSTjlDnB+hriel7HZ9i/X/AIDOhi1nw3Pa3l1DqWlSW9gxW7mSeMpbEdRIc4Qj3xUOiazp+raDNrEqadDZRyzBbiK6inhaKNmAl8xflAIXcRn5eh6Vsw2tvbkm3giiLKqkogXIUYUcdgOnpXLQaJLH4L1ew1XSZ79bm/vJfsdvOiSTRyXLupV96hTtYNyykexo7jS0v5/5m1pOpaBr1u8+hXum6lDG2x5LOWOZVbGcEqTg4PSnate6LoOmy6hrU1nY2kQ+ea4Koo9Bk9z2HU1leGZPEcdnqcmrQXkiK26wg1FrYXJ+XlWaAmPbuwFP3uu7tWntvdY8Jsl9aDTr68systsZRKIJGTBXevDYJxkdambai3Hdf1/XYUbNq5W0zxH4V1nS5dR0rVdKurOFQ000U0ZWEEZG/wDuHHZsGrFrqnh++W8ayvtNuFsWK3ZimjcW5Gch8H5SMHrjoa5i4sdX1n4TXugS+H7uzvY9NS0SO6ltytwwQKdpSVhjj+Lb1rp9StLiz0G9bw3Z2i6kLXy7ZXjCoxVT5anGPlGTgZA57VpOybsRBydub5kVnr3hfUNOudQsNV0i6srQE3FzBcxPHCAMnewOF455qHRdc0zVdEuNWkGmw2EU8qR3UV3FNDJEjECTzF+VcgZ2k5HQ1heCtL16z8Y6pqOtW+qyRahY28a3GpNZeZG8TS5RltiFwRICpAbockcCptT8O6jdfDzxNpS2gkub+4u2ghLriRZJCV5JwMg9/wAaT0lZdvx0L6fP9GdHp+p6Bq11c22lXum3s9o2y5itpY5GhbJGHCklTkEYPoav/ZLf/nhF/wB8CsNNHmt/HNjd2lqkOnQaRJafu9qqjeZGUQKO21WxgYFdDR0T/rdr/giV7v8AroiL7Jb/APPCL/vgUfZLf/nhF/3wKlopDIvslv8A88Iv++BR9kt/+eEX/fAqWigCL7Jb/wDPCL/vgUfZLf8A54Rf98CpaKAIvslv/wA8Iv8AvgUfZLf/AJ4Rf98CpaKAIvslv/zwi/74FH2S3/54Rf8AfAqWigCL7Jb/APPCL/vgUfZLf/nhF/3wKlooAi+yW/8Azwi/74FRRW0BknBhjOHAHyDj5RVqoof9bcf9dB/6CtAGLZa7pd94ln0SHT7lJ4IWlaWeyMMbBX2ELvALckfMAVIPDHBxHd69b6frMVnfeH7yC1muFtotSZIDA8jfdGBIZBk/LkoBnvgg1nNcaz/wspb8eFdUNitm1j9p8+025MwbzNvn7tmBnpu/2ald9WvvG4Gq+G9QfTrOcf2fPFPbGAHbg3EgMokz8zKF2HAGeSflI3ajfzv9/wDlt/w5Mrpy/D7v8yzP4n0uDVmtW0q5a0juVtJdSWGP7PHO2AsZ+beeWUbghQFsFgQcdD9kt/8AnhF/3wK4ebQtYSO98OwaZI9ne6t9vGqfaIxHHE04mdSu4SeZkMoAUrgqS3UDvaFflV/60X6lO13YyZNV8PRa0mjy3+mJqkg3JYtNGJ2GCciPO48Anp2qhpvibRLzVbnTbptPsr5L2W1t7aSdPNudgBLKhwT16DOMdawr7Qtakg1TQY9LmkGoasL9NZEsIiiTzUkG4FvM3oE2qAhHCcjkiGbw7rEt1qWmJoRjj1HxBFqR1VZodiRRvG4LDd5nmHyiqgKR8wyRyAo3clfZr9Y/ld+tvuJeXf8ADX/gHYS6z4bg1pNHm1LSo9TkxssXnjEzZGRiPO48c9K0/slv/wA8Iv8AvgVx0lrrVt4yD6Bpep2MFxfCXUJZprV7G6TaFZ8bzOj7VUKFVRuA3AjJrqIbu/fXbm1l03y7COGN4b7z1PnOS25PL6rtAU5PB3e1NapMHuWfslv/AM8Iv++BWdLqvh631mLSJ7/TItTmG6OyeaMTOOeQhO49D27GtavPNS0LWZItd0OHSZZBq+oreRaws0IihX92QXBbzN6eXhdqMOE5HO01v/Xl/XyB7Etz8QdHfxqfD2kyeG53iaJJnu9XSBzI7spiijWNzI67eVJXllHfjufslv8A88Iv++BWNp2m3cHjjW9Qli22t1bWscMm4HeyebuGM5GNy9fWt6n0FuzAl1aMeIm0m28O3l2IxGZryIW4hh35xkPIrnAGTtU1tfZLf/nhF/3wK5LxJpE1/wCKbCfSfDvk6hDcQO/iEmFAkCtmSLIfzX3LuTYV2/NnPFdlSWwdSkJNLaGeUPaGO2ZlncFcRFRlgx/hIHJz0qnca34ZtNVh0u61PSYNQn2mG0kuI1lk3fd2oTk57YHNZeoaBet4pnW0gDaTrBik1FtygRvFwflPLeYojQgDACNk8jOJ430zxbrGpXNvbW19Lp8U9rcWsVo1msE6xOkjiUynzfNJVgu3anCZb7xoXT+vX/gFWOxudZ8N2d9HZ3eo6VBdSzCCOCWeNXeQhSECk5LYdTjr8w9RVa41zS08VWmg2n9m3N5JvN1ALuJZ7ZQm5W8k/MwPA4HAOelV9A8P+Xr3iW/1PTIk/tK+gniaVY3Z0jgi25wT9yRXxnoeR1zV/VbC5ufEehXUEe6G0mmaZtwGwNCyjg8nkgcU+i/roTLTYW51rw1ZavFpV5qWlW+ozbfKs5Z41mkycDCE7jntgVRtvFGhtr9/pGoNp9hc296tpbJPOivdsYo5PkU4JI80DAz+uK53xvpni3WNSube2tr6XT4p7W4tYrRrNYJ1idJHEplPm+aSrBdu1OEy33jTdR0HWrm68T2sGgOv/CQ3kDJqJmgAt40hhBZ/n35Uq+0KG+Yfwg7io67/ANar/glNJI6W81O6sPF2n6ZcaLp50/UZHjhu0uiZQyxGQ7ojEAB8pHDnsfatG81LQNP1C2sL+9021vLs4t7eeWNJJjnHyKTlufSqutabd3fiXw5dW8W+CyuZnuH3AbFaB0BwTk/MQOK5HxF4T1ebxRrMp/t6603WDAxXSHsF8sRqF2ubkBxhl3Axt/EeAeSdUie7O0vNb8NafqsOmX+p6Ta6hPt8m0nuI0lk3HC7UJycngYHJrT+yW//ADwi/wC+BXG6paa1B4safwzpepWktxcwteXbzWrWN2gCqxdWczKwjBUGNVJYLncBx29C2uPqRfZLf/nhF/3wKPslv/zwi/74FS0UARfZLf8A54Rf98Cj7Jb/APPCL/vgVLRQBF9kt/8AnhF/3wKPslv/AM8Iv++BUtFAEX2S3/54Rf8AfAo+yW//ADwi/wC+BUtFAEX2S3/54Rf98Cj7Jb/88Iv++BUtFAEX2S3/AOeEX/fAo+yW/wDzwi/74FS0UARfZLf/AJ4Rf98Cj7Jb/wDPCL/vgVLRQBF9kt/+eEX/AHwKPslv/wA8Iv8AvgVLRQBF9kt/+eEX/fAo+yW//PCL/vgVLRQBF9kt/wDnhF/3wKPslv8A88Iv++BUtFAEX2S3/wCeEX/fAo+yW/8Azwi/74FS0UARfZLf/nhF/wB8CipaKAIvOf8A59pfzX/Gjzn/AOfaX81/xrP8Ram+l6V5sPEkjiNWxnacE5/IGuUa81mzsbXV472R45mIKO5ZQQxGCpPQgdv0renRlNXMKlaMHY7vzn/59pfzX/Gjzn/59pfzX/Gs+/1mS18KS6xaWE17Itr58dpCCXkJXIUYBPfsCfQHpWTbeNo4/B2p+IdVOltbaeHL/wBkal9sU7QCVLNHGFfJxtPTjJFYN2vfobrW3mdN5z/8+0v5r/jR5z/8+0v5r/jXB6f8SLnWdP1lNHt9Du9S021S7AtNZ+02zI2/hpUiyHXYcptwcrhucjVsvFWqW/gca94j02zhd4IXgisLtpfPaTaFU7402EsyjGWxnrxR38v1/wCGF1S7/wDA/wAzp/Of/n2l/Nf8aPOf/n2l/Nf8a5h/F+p2KalbapoaHVrOy+2w2mnXT3S3MZJUAN5SsGDDkBDwQRuPAuaF4hutY0G8vgNFkkgZ1jFhqxuYSyrnbJIYlMZzwRtOBz7UX6j62Nvzn/59pfzX/Gjzn/59pfzX/Gua8GeNU8V3WpWwGmPJYGImbStSF9A4cEjEmxMMCpyuPTnmuqpivci85/8An2l/Nf8AGjzn/wCfaX81/wAalopDIvOf/n2l/Nf8aPOf/n2l/Nf8alooAi85/wDn2l/Nf8aPOf8A59pfzX/GpaKAIvOf/n2l/Nf8aPOf/n2l/Nf8alooAi85/wDn2l/Nf8aPOf8A59pfzX/GpaKAIvOf/n2l/Nf8aPOf/n2l/Nf8alooAi85/wDn2l/Nf8aPOf8A59pfzX/GpaKAIvOf/n2l/Nf8aPOf/n2l/Nf8alooAi85/wDn2l/Nf8aiilcST/6PIcuO68fKPerVRQ/624/66D/0FaADzn/59pfzX/Gjzn/59pfzX/GuU1C81Sz8dRnUL3V7PR5ZYorVoI7RrSSRh/q5SVadSzcA/KvQZBIzSm13WHjvfEUGpyJZ2WrfYBpf2eMxyRLOIXYttMnmZLMCGC4Cgr1JSd/680v1XyBpr+u9/wDJncec/wDz7S/mv+NHnP8A8+0v5r/jUtchdeNrm3ku75dMhfQbK8+xXF6bwrMHDiNmWHy9pRXbBJkB+ViAcAF9bB0udV5z/wDPtL+a/wCNHnP/AM+0v5r/AI1wdl4q1TSrrWJ7uyN1pUWvm0kuZbw+ZCJDEieXFtIZAzjILJjkgN32IPFt3P41k0RrPT7WNJSifbNQaK7uFCBjJFB5REiZONwk7HOCMUovmSa6q/4J/qLv5Nr8bHSec/8Az7S/mv8AjR5z/wDPtL+a/wCNS0UxkXnP/wA+0v5r/jR5z/8APtL+a/41yt942urSTULxNKhfQtMufst3eNeFZtw2hmSLYVZVLgEl1PytgHA3Y+zxHrXxRvoru2jFlp6WpjS38RXVuqIzyHzDHHEFldgoyjnaNoAYgk0LW1hPS56F5z/8+0v5r/jR5z/8+0v5r/jUtcdqt5qll44ha+vdXs9FkeCKB7aO0a1eViRslLK06lmKqCMLyOQTR1SHsrnWec//AD7S/mv+NHnP/wA+0v5r/jUtc+PFDCPU45LHZe2N4tpHbmXicvtMTBscBg4zwdu1+u3JOtgNvzn/AOfaX81/xo85/wDn2l/Nf8a5PxV47/4RbW7S0uE0h4rmSCMRPq3l3reZII90duYzvUE5zvHRvSrC+KNZu/EWo6fpXh+O4t9NvYba4uZb8RlldI3LxpsO4oJCSrFcgDaSSQGve2/r+rjszpPOf/n2l/Nf8aPOf/n2l/Nf8a53U7rUl8eaLbzQ+Vp7vMIZbfUGBmbySSJoPKwVGDjEh5AOO1VfFXjv/hFtbtLSdNIeK5kgjEUmreXesJJBHujtzGd6gnOd46N6Uuy7i7+R1nnP/wA+0v5r/jR5z/8APtL+a/41wX/CU6to2ueLLmSz+26Tp+oRefLNelWt4jbwEiGPa27BLMVJQc8EknGnrNr9j+IPh27tru/Vr+4mjuITfzGB1W3cj9yX8scqDkKOeafZhLQ6rzn/AOfaX81/xo85/wDn2l/Nf8a4fxH8VNO0DxDdaazaaRp7RLeLc6msFwd4DfuIdpMpCsCeV9Bk5xpzeLrpPGo0NbPT7eMyKkcmoag1vNd/IHZreLymEwUHBw4IIIIHBKWuwPTc6Xzn/wCfaX81/wAaPOf/AJ9pfzX/ABqWigCLzn/59pfzX/Gjzn/59pfzX/GpaKAIvOf/AJ9pfzX/ABo85/8An2l/Nf8AGpaKAIvOf/n2l/Nf8aPOf/n2l/Nf8alooAi85/8An2l/Nf8AGjzn/wCfaX81/wAalooAi85/+faX81/xo85/+faX81/xqWigCLzn/wCfaX81/wAaPOf/AJ9pfzX/ABqWigCLzn/59pfzX/Gjzn/59pfzX/GpaKAIvOf/AJ9pfzX/ABo85/8An2l/Nf8AGpaKAIvOf/n2l/Nf8aPOf/n2l/Nf8alooAi85/8An2l/Nf8AGjzn/wCfaX81/wAalooAi85/+faX81/xo85/+faX81/xqWigCLzn/wCfaX81/wAaKlooApavpker6c9rIxQkhkcDO1h3x39PxrmU8HajM0MF7exC0hyE8sksATk4BAAJz1yfxrrJF8qNpJbt0RRlmbYAB65xWfFrWnTXIt01RxITgBkCgn0BK4renUqRVomFSnTk7yLl1YmbSzZ2l1Pp+FCxz2wQvFjGMb1Ze2OQRWTbeDbJbHVbfU7q61Z9XUJeXF0UR5EC7VX9yiKMAnBAB9+Bjc8l/wDn5l/Jf8KPJf8A5+ZfyX/CsNzczNO0Ge0t7iDUdd1HWYJ4/L8u+W3ARcEHBiiQnIPO4mq1r4Qji8Oz6Jf6tqGp2UkSRRLc+SrW6qPl2NFGhyMA5bJyorc8l/8An5l/Jf8ACjyX/wCfmX8l/wAKO4GHbeFGgF3M+vapcalcxpCNSkFuJoY1bcFRViEeMkk5Qk55JwMRjwPZS6TrFlqV9e6jLrCCO7u5/KWRlVdqgCNFT5f90575HFdB5L/8/Mv5L/hVPTb+21e3lm06/lmjinkt3PlhcSRsUccqOjAjPT0o8g8ylo/hf+yNYn1N9Z1G/uLmBYZ/tQgCybGJRsRxrgqGK/LgEHkE81vVF5L/APPzL+S/4VDdyfYrOW5mnumjiUswhg81yB6IiFmPsATQBborK0bVbTX7FrvTLy6aJJWhcTWzQOjqcMpSRFYEH1FaHkv/AM/Mv5L/AIUAS0VF5L/8/Mv5L/hR5L/8/Mv5L/hQBLRUXkv/AM/Mv5L/AIUeS/8Az8y/kv8AhQBLRUXkv/z8y/kv+FHkv/z8y/kv+FAEtFReS/8Az8y/kv8AhR5L/wDPzL+S/wCFAEtFReS//PzL+S/4UeS//PzL+S/4UAS0VF5L/wDPzL+S/wCFHkv/AM/Mv5L/AIUAS0VF5L/8/Mv5L/hR5L/8/Mv5L/hQBLUUP+tuP+ug/wDQVo8l/wDn5l/Jf8KiiicyT/6RIMOOy8/KPagDO1Hwymraxb3eoalfTWltMk8em5jW3Eqcq5wgkbB+bBcrkA44FQz+DrSfVmumvr5bSS5W7l01XT7PJOuCsh+XeOVU7Q4QlclSSc2Z9e0a11iPSLnxFaQ6lLjy7KS5hWZ89MIfmOfpUr6pp0esx6RJrcCalInmJZNNEJmTn5gmNxHB5x2NC8v6/qy+5dhPz/r+v1fc065u48FWlxqE0h1C/SwuLkXU+lqY/s8soIO4kp5gyyqxUOFJHI5IO/5L/wDPzL+S/wCFHkv/AM/Mv5L/AIUdbjOdbwLZtqj3L6lqLWst8NQm04vGYJZwQVY/JvABVSFDBcqCQec2J/Cn2zWIbzUNb1K7t7e5F1BYSiAQxSDO0hliEnGeAXPocjitCyu4NQNyLO+lkNrO1vN8gG2RQCRyvPUcjirXkv8A8/Mv5L/hQrJK23T8LfpZ+gnZ3/r1/W5Wh0vyddudT+3Xr/aIY4vsjzZgj2ljuRMcMd3JzzgelXqi8l/+fmX8l/wo8l/+fmX8l/woGYF14JtLu/uZDqN/HY3k63F3piNH9nuJBt+YkoZBnYuVV1U45By2dW30iC21y+1WN5DPexxRyKxG0CPdtwMZz85zye1WvJf/AJ+ZfyX/AArIvfEWn2GtJpUt1qEt6yo5jtbCS4EauxVWdo42EYJVuWI6E9qF2DzNysXU/DS6vqkFxf6nfSWcEiTLpoMS27SIcq7EJ5hw2GwX25A4rV8l/wDn5l/Jf8KzLnXtGstXi0q88RWdvqM23yrOW5hWaTJwMIfmOe2BR1QdDYrKm8PWk3iaHW2eYXEUXl+WrARuRuCuwxksoeQDnHzng8Y0PJf/AJ+ZfyX/AAo8l/8An5l/Jf8ACgDmtW8BWmq31/P/AGrqNomoPFNcQW5h2NNFt8uXLxswK7EIXds+XlTk52dL0WHSrrULmKaaaXUJlnnaUr95Ykj4wBjIjB+pP0q55L/8/Mv5L/hR5L/8/Mv5L/hQtAuyC70yG81KwvZWkEli7vEFIwSyFDnj0PbFYOreArTVb6/n/tXUbRNQeKa4gtzDsaaLb5cuXjZgV2IQu7Z8vKnJztXN9bWeoWVlc38qXF8zrbpsB3lVLNyFwMAE84q35L/8/Mv5L/hQC02ObuPAdpc311NNquptBfXEdxe2e+IRXTIkaqG/d7gP3akhWXOSDkcDavdIgv8AU9NvpnkWXTpHkiCkbWLRsh3cdMMemOaLS8t766vLe1vpXlsZRDcLsA2OUVwMlefldTxnrVN/EFhF4ii0SW61CO9mJEW+wkWKQhN5CzGPy2IUE4DdjTE/MZeeFzLrE2paZrWo6RNdbDdLZiBkuCo2qzCWJ8HaAMrtyAM5wMN1Hwn/AGtqKy6hrepTWK3EdwNMIgEAeNgyfMIvNwHUNjf146cVt+S//PzL+S/4UeS//PzL+S/4UlpsPcloqLyX/wCfmX8l/wAKPJf/AJ+ZfyX/AAoAloqLyX/5+ZfyX/CjyX/5+ZfyX/CgCWiovJf/AJ+ZfyX/AAo8l/8An5l/Jf8ACgCWiovJf/n5l/Jf8KPJf/n5l/Jf8KAJaKi8l/8An5l/Jf8ACjyX/wCfmX8l/wAKAJaKi8l/+fmX8l/wo8l/+fmX8l/woAloqLyX/wCfmX8l/wAKPJf/AJ+ZfyX/AAoAloqLyX/5+ZfyX/CjyX/5+ZfyX/CgCWiovJf/AJ+ZfyX/AAo8l/8An5l/Jf8ACgCWiovJf/n5l/Jf8KPJf/n5l/Jf8KAJaKi8l/8An5l/Jf8ACjyX/wCfmX8l/wAKAJaKi8l/+fmX8l/wo8l/+fmX8l/woAloqLyX/wCfmX8l/wAKKAMbxi8qaEGizt85fM9hg4/8e21x95/Z/wDYFlt/4/cP5u3pt3Njd7/0/CvR5J7SWNo5ZYXRhhlZgQR6EVmwaNoFtci4higEgORulLAH1AJwK66NeNONmjkrUJTldMZqdlqd/wCCWgtLmS11b7MjxShipE6gMA2CMqWGCOhBINc/da/qmteDta8R+GfPMqWBisIFyf3oXdI2zBy6t8mCDgxsMckHt/tdv/z3i/77FH2u3/57xf8AfYrkd3c61ZWPHrXVbw+EvE0ul+JbKSFbSAxJp/iSXVLi2lLkNIXlRWj3AqNnIyp4GTnvdU0eDRvC+slfEt5pq3afPqGoXjzLasflLqXYeWCT0VlA/h210n2u3/57xf8AfYo+12//AD3i/wC+xQ1cS0lc43wNcWOt6Tq1hbyTS26ShGvbTxBc38cwZR/qrlmDow/iVSNpI5Oc1DY3GqWfwv1xtJnvLm+tLnUIrV5ZHuplVLiRVwXLM5VRwDnOAK7j7Xb/APPeL/vsUfa7f/nvF/32KHqmNaK3nf8AP+vkefLqWip4H1m48AeI7jV75bRXkYatLqE8K93ETu+x8bjtCjJGMcYq94RvbKXxVcW/hXWJdY0IWQeadtSkv1iud+AoldnIJTkpuwMKcDdk9n9rt/8AnvF/32KPtdv/AM94v++xR9q/9df69RdLf10OCjub+08CeL59JMq3Uep3hR4U3yIPM+ZlXBywXJAxyQKxtT1WKHRvEQ8EeILq/wBKj0cytex6pJem3ut+AEmdnIYpyU3YGFOBuyfVvtdv/wA94v8AvsUfa7f/AJ7xf99ikla3krfhb/g+o3rfzd/xv/wCho+iR6RJcSR32o3RudrOLy7eYKwzlkDH5M55VcKMDAFalRfa7f8A57xf99ij7Xb/APPeL/vsVW4krKxLRUX2u3/57xf99ij7Xb/894v++xSGS0VF9rt/+e8X/fYo+12//PeL/vsUAS0VF9rt/wDnvF/32KPtdv8A894v++xQBLRUX2u3/wCe8X/fYo+12/8Az3i/77FAEtFRfa7f/nvF/wB9ij7Xb/8APeL/AL7FAEtFRfa7f/nvF/32KPtdv/z3i/77FAEtRQ/624/66D/0FaPtdv8A894v++xUUVzAJJyZoxlwR845+UUAchrWpw6P45txo+ufaNTv7qCK70BfKkJiI2tNgDzI9qfNuLbMLjGWBrHuri2SDUtDuJIT4luPESXdvb7f30ieejRzqvBZFhUAuOAEZSeCK9M+12//AD3i/wC+xR9rt/8AnvF/32KIpL+vNP8AQG7/ANev+ZLXlmo6qyanqDHWLiPxbHqoisNJGoSKslt5ihcWoba6GIszSFDj5juGzI9O+12//PeL/vsUfa7f/nvF/wB9ihfFcHtY8mN5Bb67qcdhrF0niF/Eyi005LtkEkJeITMYAQJE8sSZdg23acFSONb+1LK2+Jqp/bS61cXN8YxZ2uuTJNYDZt2tYq3luilSWchSN2SDjJ9D+12//PeL/vsUfa7f/nvF/wB9ilBcqiu3+S/yE9b26/rf/MrQ61YT67c6NFPuv7WGOeaHYw2o5YKd2MHJVuAc8VeqL7Xb/wDPeL/vsUfa7f8A57xf99imM8x1jVTHqmss2s3UXiuHUFj0rShfyIssP7vbttg22VGBcs5RsfP8w2DbqaV4ZsW+KmvzmfVN8UVnOoGr3QUsTKSCvmYZcjhCCoGQAASK7r7Xb/8APeL/AL7FH2u3/wCe8X/fYoWiX9f15iauyWuH1/UodH8a276Trvnatez20NxoAMUhlhLYaXaF81NqFm3btny4I5rs/tdv/wA94v8AvsUfa7f/AJ7xf99ijqmPoS1xUtze23iG98Mm8uGfUrhbu0lMjb4bZuZ1VskjaykA8bfOjAxgV2H2u3/57xf99ij7Xb/894v++xR1uHQ8p+IHiVbTxRItldNY3WnT2hlebX5rdni8xGkeOyGY5YghYNI+0DD/ANyug0nTm8Q+LPENzPreq+TY6pbtZx2t+8cKKLeCQjapw6vnBVty4JKhSST232u3/wCe8X/fYo+12/8Az3i/77FOPu/16f5Duc5qloLTx9od3Bc3yteyTRzwm+mMDKsDEfuS3lg5AOQoOa4z4geJVtfFMgsrprG7064tDK82vzW7PEZEaR47IZjliCFg0j7QMP8A3K9W+12//PeL/vsUfa7f/nvF/wB9il1XkJaXv1PI9SvrSHxB4qmstauI9bk1O3OkWcF6yLcube35ESkCZTkbtwYKvPy5JPc+I/8AkcvCGf8An8uP/SaSuj+12/8Az3i/77FH2u3/AOe8X/fYp9EhPV3PKfF2r6vF441CCfV9O0fyWgOkSah4glsI2XapdhAsZS5y+5WDNxwMLnJ0dX1azsviMhk1pdWnlu4Yl0m11ua3ubLIUcWiNsuFyTIxcKQmfvgAD0X7Xb/894v++xR9rt/+e8X/AH2KUdLeX9f0xvW5LRUX2u3/AOe8X/fYo+12/wDz3i/77FAEtFRfa7f/AJ7xf99ij7Xb/wDPeL/vsUAS0VF9rt/+e8X/AH2KPtdv/wA94v8AvsUAS0VF9rt/+e8X/fYo+12//PeL/vsUAS0VF9rt/wDnvF/32KPtdv8A894v++xQBLRUX2u3/wCe8X/fYo+12/8Az3i/77FAEtFRfa7f/nvF/wB9ij7Xb/8APeL/AL7FAEtFRfa7f/nvF/32KPtdv/z3i/77FAEtFRfa7f8A57xf99ij7Xb/APPeL/vsUAS0VF9rt/8AnvF/32KPtdv/AM94v++xQBLRUX2u3/57xf8AfYo+12//AD3i/wC+xQBLRUX2u3/57xf99ij7Xb/894v++xQBLRUX2u3/AOe8X/fYooAg1TUY9LsWuJBuOcKucbj9fzP4VzQ8Y30DQz3VnG1pNkoUBViAcHBJIJGOnH4Vt+JdMl1TSDFbYM0biRFJxu4Ixn6E1yf2XWr6xtdISwlijgYkvJGVUksTksRjAz2/Wu2hCm43l/SOOtOopWj/AEztrzVrLT9MGoXc/l2h2fvQpYAOQFJwOBlhkngDk4FJd6taWUkscrSvLDAbh4oIJJnCZxkKikkk5wBycHAODTJtGtbrw4+i3a+dayWv2WQMPvJt2n9KqeGNL1HT7J5NenhuNSl2pJJCSVKIu1cZAPOC5HZnYc9TxdWdnQq6V4tt28JXev61dwQ2VvcTq0qW80XlRpKUAdJFDq4wA3GM5xxV218V6PdWl/dLdPDb6cN1zLc28kCouM7wZFG5SBkMuQexrJuPCd9N4H1fRlltxcXt7cXEbFm2BZLhpVBOM52nB4PP51peNLJdQ8GanBJe29iPJ8z7RdNthjKEODIeMJlfm9s0m7fcN/G0tr/qJZeMtH1BbwWrXxlsoVnnt3024SZUYsFIiaMO2djYABJxVfSvFtu3hK71/WruCGyt7idWlS3mi8qNJSgDpIodXGAG4xnOOKx/BOrz+IvGms6qZdMuLdbG1thLpN0bq3V1eZigmKrvYB1Y4Ubd4HPU37jwnfTeB9X0ZZbcXF7e3FxGxZtgWS4aVQTjOdpweDz+dNqy+QnpF28vy/z0NKz8YaPqBvBaSXcjWcIndP7PuFaSM5AeJSmZlO04Me4HjHUU3w94hGpaHeapf3FvFbQ3NwBIYZbfyoUYgeaswVlcAfNkAZ6cVMdJnPjdNY3x/Z105rUrk795kDZxjGMD1rPl8Jy3vg/XtDurlIjqst2ySxjf5aysxUkHGSMjI6Hpmkm/wf5/qtRrs+6+62v4l/S/FWm6zbTXFimoGGGMSl5tMuYQ6kZBTfGPM4H8Ge3qKk0bxLpmvTXMOnvcLPa7TNBd2c1tIgbO07JVVsHBwcY4PpWeieMb3w/e2l5HpWl37WpS2vbG7ecebjG4o8K7Bnkcvj3xzm+DfCuraD4lvtRvUiEN/aQxOjaxc38kTxNIRh5kBZWEmcfKFI4ByTVaXZOtjt6KKKQwooooAKKKKACiiigAooooAKKKKACiiigAqKH/AFtx/wBdB/6CtS1FD/rbj/roP/QVoA55vFVxJ47k8PWsWknyVR5BPqhjumQrkukAiO5R0zvHPpUc3jG4jvpZotLSXRLe9WwmvhdfvRKXCFli24MauwUsXDAhvlIGTLr+laxrer6fAsVhbabZ3kN59s89nuSY+Six+WFTd90tvPylhjnihP4U1UyXOkwGwGh3mpDUJZ2kf7QmZRK8Qj2lWDOD8+8YD42naCVG/Xz/ADX6X+7zQO35fr/wPv8AJnaVizeLtGt9YOmy3EwmWVYXlFrKYI5GxtRpwvlqxyoClgcsoxkjO1XD3fhLWZo7/RYvsP8AY2oah9tkvGuZBcxAyLI0YiCYb5lIDeYMBhwduC18Vv6/rcHsW9N8d2UmrX+n6rKIZodUaxhaK2lMY4TYJJACiOxbADFd2QAOa1o/FGmTa4+kwfbJrmOTypHi0+d4EfbuKtOE8sEAjILcHjrxXNz+EtduLi90+Q6d/ZF9rK6lLcCaTz0VHRxEI9m0ktEuW3jAY8HHNqTQNak8YRX9rbWOlW63Xmz3NpqUxa8TGMS2vlLGzkbRvLMy7Rg8YpQvyx5uyv8Acv1vf8F3T0v8/wA3b9P1Z2NFUYf7W/t258/7F/ZPkx/Z9m/z/Ny2/fn5duNuMc9c9qvUxmJceL9FtdXbTZrmUTJIsUki2srQRSNjajzBfLRjuXCswPzLx8wzzs3jm9vfH8uiaWZLS2tPJWVrjw7eztM7u4YB12LEgCjEjblOSRwtS6h4T1q4TV9Hg+wnR9XvPtUt49w63EAbYXQRhCrnKHDGRcBhwdvzb9jpE9r4u1bVZHjMF7b20UagncDH5m7PGP4xjk96I9GxO+qRs1zM3iq4/wCE7/4R21i0klY45XFzqhiuWRslmjgETbwAOu4fhXTVzfiLStY1zULG1jisINNt7uC7a9M7tcho237Ui8sKM427t/3Wb5aOq/r+v6Q3szpKzl17TWs7y6Fx+6sZmguMxsGSRSAV24yScjGAd2QRnIrRrm5/Ddw3i43kMkK6XctHc3cJJDvcRAhCABgg/ISSf+WKjBycHUOhb1LxXpWkajFZ6i13C8rxos32CdoAzttUNMEMakkgYLDqPWobnxvoFrrEmlyXkjXkNxFbTRxWk0ghkk2+WJGVSEDb1AZiATkZyDjnPF3g3xFr2sXMsNxDNbCW3nsxJqtxbpD5TK5ia3jQxybmU/vHJK7hhTsAPT6DpF3p2qa7eXhh/wCJneJcRpE5bYBBFGQSQP4kP4Y+lOPn/W3/AAf63ehHeeIinjDT9FtzsMhkNx9osrhRIBGWUQzbPKZgeo3dM96m1LxXpWj6jFZ6i13C8roizfYJ2gDO21Q0wQxqSSBgsOo9ak1LTJrzXdHvYmjEdjLK8oYnJDRMgxx6n2rkvF3g3xFr2sXMsNxDNbCW3nsxJqtxbpD5TK5ia3jQxybmU/vHJK7hhTsAM9UJa3NSDx5ZweJNZ0vV5PJFnfRW0Lw20rqqvFEwaZ1BWPLuwBYqDjvg1Z1HUta07xrpNq1xYS6XqcskQhFo6zxFIWfPm+aVbJXpsHB/Gse/8J+IL2bXrQf2Ymn6/dRy3Ev2iQy28awxI6qnl4ct5bAEsuMg8/dHSato899r+g30LxrFps8skoYncwaF0G3jk5YdccVXRf10FLyDUfFmjaVqa2F7cyLOSm/y7aWRId5wnmuqlYsnpvK5pZPFOmJrh0hTeTXauqSfZ7CeaOJmAIDyohRDgg4ZhgEE8EVyuveALm88TalfQ2yanZ6q0b3FvNr15YLGURUI8uFWSUEKD8wBHI5BGNDU/D2t3fiqO8022sdLRbmOSTUrbUplluI127llthEI5SVBQF3O0HcuDxSjra43pex2VFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAGT/AG3/ANO//j//ANaj+2/+nf8A8f8A/rUUVVibh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qamsbGkPkZ3tu+/04A9PaiiiwXHf23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qP7b/AOnf/wAf/wDrUUUWC4f23/07/wDj/wD9aj+2/wDp3/8AH/8A61FFFguH9t/9O/8A4/8A/Wo/tv8A6d//AB//AOtRRRYLh/bf/Tv/AOP/AP1qKKKLBc//2Q==)

error <- c()

for (i in 1:15)

{

knn.fit <- knn(train = iris.train[,1:4], test = iris.test[,1:4], cl = iris.train$Species, k = i)

error[i] = 1- mean(knn.fit == iris.test$Species)

}

![Graphical user interface, application

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMzNgAAkpIAAgAAAAMzNgAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjoxMjo1OQAyMDIyOjAxOjA0IDIyOjEyOjU5AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MTI6NTkuMzU2PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAH8CpwMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APf457WVZmiu96wMUlK3BIjYDJDc8EehqSMRyxrJFK7o4DKyzMQwPQg5ridd02/TxbNpllYzy6X4nVTezxp+7tjEAspc+ssW1B3ytYXxDs577X5fs/h6EXFibaW2vI9CmurmZEcSMYrmMhYduGAQ7mYg4HzKC10/r1J6nc3fiEWPiax0e50zVES/lMNvf+dGYHcRNIRgS+YOEYcpjI/Gtzyh/fl/7+t/jXN+IIZr3xD4PurW3neGLUJJZW8lh5SG0mALgjK8sBzjkgda53Wlu4NQ8W2SaXqNxNqV3aT2xgtHeNo1jhRm8zGwYKNlc7sDIU05aJBo9fI9G8of35f+/rf40eUP78v/AH9b/GvLPiDol7qHiu6e/wALYy2Mcen3Q0C51R7SUFt7RGFwYJASjbyvOFwflIq54lsbb/hK4L+HSn1vV1Fsgi1HQJZ4sKcgw3O3Zbt8xJLMQCo4B5MrUJaHo/lD+/L/AN/W/wAaPKH9+X/v63+NPopgM8of35f+/rf40eUP78v/AH9b/Gn0UAM8of35f+/rf40eUP78v/f1v8afRQAzyh/fl/7+t/jR5Q/vy/8Af1v8afRQAzyh/fl/7+t/jR5Q/vy/9/W/xp9FADPKH9+X/v63+NHlD+/L/wB/W/xp9FADPKH9+X/v63+NHlD+/L/39b/Gn0UAM8of35f+/rf40eUP78v/AH9b/Gn0UAM8of35f+/rf40eUP78v/f1v8afRQBGIVBJDSDJyf3jc/rS+UP78v8A39b/ABp9FADPKH9+X/v63+NHlD+/L/39b/Gn0UAM8of35f8Av63+NHlD+/L/AN/W/wAafRQAzyh/fl/7+t/jR5Q/vy/9/W/xp9FADPKH9+X/AL+t/jR5Q/vy/wDf1v8AGn0UAM8of35f+/rf40eUP78v/f1v8afRQAzyh/fl/wC/rf40eUP78v8A39b/ABp9FADPKH9+X/v63+NHlD+/L/39b/Gn0UAM8of35f8Av63+NHlD+/L/AN/W/wAafRQAzyh/fl/7+t/jR5Q/vy/9/W/xp9FADPKH9+X/AL+t/jR5Q/vy/wDf1v8AGn0UAM8of35f+/rf40eUP78v/f1v8afRQAzyh/fl/wC/rf40eUP78v8A39b/ABp9FADPKH9+X/v63+NHlD+/L/39b/Gn0UAM8of35f8Av63+NHlD+/L/AN/W/wAafRQAzyh/fl/7+t/jR5Q/vy/9/W/xp9FADPKH9+X/AL+t/jR5Q/vy/wDf1v8AGn0UAM8of35f+/rf40eUP78v/f1v8afRQAzyh/fl/wC/rf40eUP78v8A39b/ABp9FADPKH9+X/v63+NHlD+/L/39b/Gn0UAM8of35f8Av63+NHlD+/L/AN/W/wAafRQAzyh/fl/7+t/jR5Q/vy/9/W/xp9FADPKH9+X/AL+t/jR5Q/vy/wDf1v8AGn0UAM8of35f+/rf40eUP78v/f1v8afRQAzyh/fl/wC/rf40eUP78v8A39b/ABp9FADPKH9+X/v63+NHlD+/L/39b/Gn0UAM8of35f8Av63+NHlD+/L/AN/W/wAafRQAzyh/fl/7+t/jR5Q/vy/9/W/xp9FADPKH9+X/AL+t/jR5Q/vy/wDf1v8AGn0UAM8of35f+/rf40eUP78v/f1v8afRQAzyh/fl/wC/rf40U+igBuZf+feT81/xozL/AM+8n5r/AI1booHYqZl/595PzX/GjMv/AD7yfmv+NcP4m8fatp/iPUbHRrGW4XSliaSCPRru7e9ZxvKJLFiOE7cAF92SeQAOdWHV/E2qeKNYstMOlW9npd5bxk3MMryTI8Ucki8OAjAOcN8wPAKjGSLUfKdHmX/n3k/Nf8aMy/8APvJ+a/41zkWreJtT8VazY6Y2kwWelXlvETcQyvJOjxRySDhgEYBjhvmB4BUYya2s+K9Zt38RX+nGxXTvDfFzbT27tNdlYVmbZIJAIxtcAZR+QT7Uk76j5Hex1mZf+feT81/xozL/AM+8n5r/AI1zh1nxJqniTUbHQzpdvbWKWsoe8hld5RIpLJhWULwOG5x02nrXXUXIVnqipmX/AJ95PzX/ABozL/z7yfmv+NW6KY7FTMv/AD7yfmv+NGZf+feT81/xq3RQFipmX/n3k/Nf8aMy/wDPvJ+a/wCNW6KAsVMy/wDPvJ+a/wCNGZf+feT81/xq3RQFipmX/n3k/Nf8aMy/8+8n5r/jVuigLFTMv/PvJ+a/40Zl/wCfeT81/wAat0UBYqZl/wCfeT81/wAaMy/8+8n5r/jVuigLFTMv/PvJ+a/40Zl/595PzX/GrdFAWKYeRiwEEmVODyvBxn196XMv/PvJ+a/41ND/AK24/wCug/8AQVrgj4v8SrZXWruNKTTrPW20424gkaaeP7WIA+/eFjYZzja4OM/LnAV9bf1/Wo+V2v8A1/Wh2+Zf+feT81/xozL/AM+8n5r/AI1zln4rvriyjmeK3DNr82mEBWx5SSugPX72EHPTOeKxV8b+Jt7TvDpItBOwAEcpkCLffZyPvY3MpDZ6KVPDbvlSkmr/ANbX/JhJcsnF9P8AO35ne5l/595PzX/GjMv/AD7yfmv+NW65G50bS9V+KJm1PTbS9ltNMhktnuIFkaF/Ok+ZCQdp4HI9BTv7yXf/ACb/AEC2jf8AW9jo8y/8+8n5r/jRmX/n3k/Nf8a520jvLT4oywTatfXkE+mPOsM7qI4j5wACoiqOASNxBYg8scDG+/8Aa39vw+X9j/sj7O3m7t/2jztw27f4dm3dnPOcUJ3Sfe/4XX6E6Xa7f5J/qPzL/wA+8n5r/jRmX/n3k/Nf8a520jvLT4oywTatfXkE+mPOsM7qI4j5wACoiqOASNxBYg8scDFbWIbjS/G0Or6oLmTS7i4t7eCSDWbiMW8jYRQ9qMROrOQC2WOWHy4BIE78tuv+bX6BpeS7f5J/qdXmX/n3k/Nf8aMy/wDPvJ+a/wCNYdzo2l2nxC03UrTTbSC+uorgXF1FAqyzABMbnAy3QdTXT0lK47FTMv8Az7yfmv8AjRmX/n3k/Nf8a4S4ub17a/8AEpvr+K9s9bFlDai5YQeQLhYfLMOQjF1JbcQWBcYbAAr0amndJ/1tcbjZtf1oVMy/8+8n5r/jRmX/AJ95PzX/ABrhr+e8lg1fxGL/AFCK90zVhbW1tHdMsJiV0Ty2hyEcuGY7mUsN4wRhcVb7V76fxVrGp3ttez6XompRWhW31aa18pdkTbxBHxcZaXLCRh8oAUHkETvb0v8AJ2/zE7K/lp89f8j0PMv/AD7yfmv+NGZf+feT81/xrzy+1e+n8Vaxqd7bXs+l6JqUVoVt9WmtfKXZE28QR8XGWlywkYfKAFB5B6HUtBtr/wAYW4tL7VobiN0vLsxavdLEqA4RPJ8zy8OVII242q/QkGmtbX6/8P8AkD6+R0WZf+feT81/xozL/wA+8n5r/jVuvO7+e8lg1fxGL/UIr3TNWFtbW0d0ywmJXRPLaHIRy4ZjuZSw3jBGFwrq9vn+X+YNWV/6/rQ7nMv/AD7yfmv+NGZf+feT81/xq3XnOtXV7Lb+KtdW+vobvQLrZY28FyyRFUhjk2vFnZJvLsMuCQGG0ggGmrt2/rov1B2Sud3mX/n3k/Nf8aMy/wDPvJ+a/wCNed67q9/L4n13ULu1vptJ8OyQrJHbatNZlEMSSu6xxf8AHw3z8rIwXCgLks1Gu6vfS+J9d1C6tr6fSPDskKyJbatNZlEMSSvIscX+vb5+VkYLhQFyWaha28/6/UGtz0TMv/PvJ+a/40Zl/wCfeT81/wAa53WtCtdT8T2yWt9q8F27JdXDW+r3UcccSEYHlB/L+cjbjbyN56iuto6BZXKmZf8An3k/Nf8AGjMv/PvJ+a/41wmtXV7Lb+KtdW+vobvQLrZY28FyyRFUhjk2vFnZJvLsMuCQGG0ggGvRgcgHGPajWyff/hw0vYqZl/595PzX/GjMv/PvJ+a/41wmtXV7Lb+KtdW+vobvQLrZY28FyyRFUhjk2vFnZJvLsMuCQGG0ggGtDxwjWt5Y6lEdYs2SaDzdRhv3FpbIJV3CW3EmH3Alc+Uw5BZlAyDon3/XUTtr5HV5l/595PzX/GjMv/PvJ+a/41yvjlGtb2y1GI6vaFJoPM1GG/cWduglGRLbiTD7gSufKYcgsygZB45RrW9stRiOr2hSaDzNRhv3FnboJRkS24kw+4ErnymHILMoGQk9htWudVmX/n3k/Nf8aMy/8+8n5r/jVuvOddu724i8Y6yL2+tbnw5Jt0+KG5dIiFt45jvjB2yb2cqd4bA+7g801duy/r+rj5bnd5l/595PzX/GjMv/AD7yfmv+NWkYtGrEYJAJB7V51rt3e3EXjHWRe31rc+HJNunxQ3LpEQtvHMd8YO2TezlTvDYH3cHmhXbt/X9aiSutDu8y/wDPvJ+a/wCNGZf+feT81/xrk/Gytb3Vhqcf9sWbLLB5uoQ37i0tkEq7lltxJh9wJXPlMOQWZQMhfiFGbaCLUojq9q8AVn1K21B47WyRXDF5oFk/eDBbjy3yBhio5AtfvFodXmX/AJ95PzX/ABozL/z7yfmv+Ncp8QkNvBFqcLavatAFZ9SttQeO1skVwxeaBZP3gwW48t8gYYqOR2wORkdKOlx6XKmZf+feT81/xozL/wA+8n5r/jXFa+93fXXiy9bUb+wk8PwK2niC5eOIMIBMZHQELKCx2kPuXCHGCWrurOZrixgmkTY8kauyn+EkZxSTuNxt/Xp/mRZl/wCfeT81/wAaMy/8+8n5r/jXFa+93fXXiy9bUb+wk8PwK2niC5eOIMIBMZHQELKCx2kPuXCHGCWqTxu0g0uz1gDWLGVIo5ZdQt9QeO1sVVlZmmgWTEnBbjy3zjDFRyBO/wDXcHG39en+Z2OZf+feT81/xozL/wA+8n5r/jXKfEJDbwRanC2r2rQBWfUrbUHjtbJFcMXmgWT94MFuPLfIGGKjkO+IcbRWC6jAdXt5IE3nUbO/eO3slVgxkmhWQeaMZ48t8gYOBzR5it2OpzL/AM+8n5r/AI0Zl/595PzX/GrSkMoIOQRkEd6WmBUzL/z7yfmv+NGZf+feT81/xq3RQFipmX/n3k/Nf8aMy/8APvJ+a/41booCxUzL/wA+8n5r/jRmX/n3k/Nf8at0UBYqZl/595PzX/GjMv8Az7yfmv8AjVuigLFTMv8Az7yfmv8AjRmX/n3k/Nf8at0UBYqZl/595PzX/GjMv/PvJ+a/41booCxUzL/z7yfmv+NFW6KAsRfa7f8A57xf99ij7Xb/APPeL/vsVLRSGYGp+HtB1bUPt1xLPBdFBG81jqc1o0igkqHMLrvxk43Zxk46mr9rbaXZXl5dWzRpNfSLJcP52d7KgQHk8fKoHGOlZeq6xexeMtF05Ir60tZpnD3HlQSQXeIXby8+Z5iEEbs7MHbjODXSU+gX1M+1t9Msr29u7ZoknvpFkuH83O9lQIDgnA+VQOMdKoah4c8PapqTX15lpXCiWNL6WOGcL082JXCS+nzqeMDoK36KQasoQQaZbahdX0LRLcXYQTP5ud4QELxnAwCelWvtdv8A894v++xUtFAEX2u3/wCe8X/fYo+12/8Az3i/77FS0UARfa7f/nvF/wB9ij7Xb/8APeL/AL7FS0UARfa7f/nvF/32KPtdv/z3i/77FS0UARfa7f8A57xf99ij7Xb/APPeL/vsVLRQBF9rt/8AnvF/32KPtdv/AM94v++xUtFAEX2u3/57xf8AfYo+12//AD3i/wC+xUtFAEX2u3/57xf99ij7Xb/894v++xUtFAEX2u3/AOe8X/fYo+12/wDz3i/77FS0UAVYrmASTkzRjLgj5xz8orPbRNAbTZrBkiNrNd/bZI/Pb5pvNEu7O7P3wDjp2xjitWH/AFtx/wBdB/6CtYGl63q8/jjUNG1S1soIILKK6g+zSvKzB5ZUyzMqjkRg7QvBz8zUaXt/Xf8AQetr9v8Ahv1FXwr4ZXVf7RESm4F19rQNeSNHFMc5kSMvsRjuOSoG7Jzmpv8AhH/DvkmLyothJbH2hupm84/xf89Pm/TpxWcniHVD8Qp9Ju7u1sbIShLWGfSp916vkq58u6MgiLBi/wAgUthDx1I2fD+tf27aXc32fyPs99cWm3fu3eVIybugxnbnHbPU0JaJL1/T/gBKLvd+X+Zofa7f/nvF/wB9isG8sLtvFkesaZrOn28TW6W9zBcWpmZ0V2b5HEqbCdxGSrduO1dHRR1T7C6WOZPhLw82vf2ybrUPt27O/wDtu6243btmzzduzP8ABjb7VpPYaPJr8OtP5R1CG3a2jm84/LGzBmXbnHVRzjPFalFG1vIDmT4S8PNr39sm61D7duzv/tu6243btmzzduzP8GNvtVu50TQ7zW4dWu3ae5gYPCkt9I0MbgEB1hL+WGAJ+YLnnrW3RRsG9/MwPsl3N4ri1K71jT3sbZJFt7WK1KSguFBLSmUhvunoi9fatr7Xb/8APeL/AL7FS0UWSAwZfD3h6bWxq0iIbnzFlKi6cQvIowsjQhvLaQAABypYbV54GLUNho8Gu3OsxeUt/dQxwTTecTuRCxUbc4GCzcgZ5rUooAwbnw74du9aXVLhFa5WRZSounELyKMLI8Iby3dcDDspYbVwflGEuvDvh291kapcIpudyO4W7dYpXT7jSRBgkjLgYZlJG1cHgY36KAuzAuvDvh291kapcIpudyO4W7dYpXT7jSRBgkjLgYZlJG1cHgY0oE0+2urq4hkjEt06vMxmzuIUKMAngYA4GB1PUmrtFAXZF9rt/wDnvF/32Kxrnw74du9aXVLhFa5WRZSounELyKMLI8Iby3dcDDspYbVwflGN6ijZ3Ay4bDR4NdudZi8pb+6hjgmm84nciFio25wMFm5AzzVa98P+HtR1VNQvEV51ZXZRdOsUrJ9xpIgwSQrgYLKSMDGMCt2ijQDBv/D3h7U9UXULxVacbN4S7eNJthynmxqwWXaem8NjtRf+HvD2p6ouoXiq042bwl28aTbDlPNjVgsu09N4bHat6iiyEUok0+G9uLuOSMT3ARZXMudwXO0YJwMZPT1NWPtdv/z3i/77FS0UDMK98P8Ah7UdVTULxFedWV2UXTrFKyfcaSIMEkK4GCykjAxjAqyun6OniB9bXyhqMlsLVpvOPMQYsF25x1JOcZrUooWmwPXcwr3w/wCHtR1VNQvEV51ZXZRdOsUrJ9xpIgwSQrgYLKSMDGMCjUtB0LV9RjvNSkkuGjKkQNqEv2clTlS0G/y2IPOSp5APYVu0UbbAYWpaDoWr6jHealJJcNGVIgbUJfs5KnKloN/lsQeclTyAewo1LQdC1fUY7zUpJLhoypEDahL9nJU5UtBv8tiDzkqeQD2FbtFAEX2u3/57xf8AfYrH1Dw/4e1TUkvr5EkmUqWUXTrHMUOUMkasEk2nkbwcdsVu0UeYGX/Z+j/8JEdd/df2kbX7J5/nH/Vbt+3bnb945zjPvVbUPD/h7VNSS+vkSSZSpZRdOscxQ5QyRqwSTaeRvBx2xW7RR28g3MLUtB0LV9RjvNSkkuGjKkQNqEv2clTlS0G/y2IPOSp5APYUatoOha5dxz6rJLOECj7P/aEq277TuG+AOI35/vKc8elbtFGwGFq2g6Frl1HPqkks4QKPs/8AaEq277TuG+AOI35/vKeg9K2PtVv/AM94v++xUtFAGDqnh7w9rN+t5qCLJKFVHCXTxpOqnKrKisFlUEnCuGAycdTVp7DR5Nfh1p/KOoQ27W0c3nH5Y2YMy7c46qOcZ4rUooAwdU8PeHtZv1vNQRZJQqo4S6eNJ1U5VZUVgsqgk4VwwGTjqaXVtB0LXLqOfVJJZwgUfZ/7QlW3fadw3wBxG/P95T0HpW7RQBhatoOha5dRz6pJLOECj7P/AGhKtu+07hvgDiN+f7ynoPSjWNA0LX50k1aSWdFUKbYajMlvIAc4eFXEcgz13Kcjg8Vu0UAQi6tgMCeLH++Koy2Gjz69b6zL5TahbQPbxTecRtjcqWG3ODkqvJGeK1KKAMuWw0efXrfWZfKbULaB7eKbziNsblSw25wclV5IzxRLYaPPr1vrMvlNqFtA9vFN5xG2NypYbc4OSq8kZ4rUooAi+12//PeL/vsUfa7f/nvF/wB9ipaKAIvtdv8A894v++xR9rt/+e8X/fYqWigCL7Xb/wDPeL/vsUfa7f8A57xf99ipaKAIvtdv/wA94v8AvsUfa7f/AJ7xf99ipaKAIvtdv/z3i/77FH2u3/57xf8AfYqWigCL7Xb/APPeL/vsUVLRQAUVF9mT+9L/AN/W/wAaPsyf3pf+/rf40AU9R0n7fqmk3nneX/Z1w82zZnzN0Tx4znj7+e/StGuevNesYPFFhoVrcW1xeXDt9pg/tRUntoxGzB/KLbnBIAwBxnPQVYvte8O6ZP5Opa7ZWcvmCLZcagI23kBguC33sMpx1wR60xbGzRXOeJ/EukeGbGdrm9ha/S2e4gsJL/y5bgKCTtUnJHB5APSt0W6EA5l/7+t/jR0uHWxNRUX2ZP70v/f1v8aPsyf3pf8Av63+NIZLRUX2ZP70v/f1v8aPsyf3pf8Av63+NAEtFRfZk/vS/wDf1v8AGj7Mn96X/v63+NAEtFRfZk/vS/8Af1v8aPsyf3pf+/rf40AS0VF9mT+9L/39b/Gj7Mn96X/v63+NAEtFRfZk/vS/9/W/xo+zJ/el/wC/rf40AS0VF9mT+9L/AN/W/wAaPsyf3pf+/rf40AS0VF9mT+9L/wB/W/xo+zJ/el/7+t/jQBLRUX2ZP70v/f1v8aPsyf3pf+/rf40AEP8Arbj/AK6D/wBBWuZt/DniKLxtLrsmuaW8U0Mds9sukyK3ko7uAH+0HD/vCC20jgfLXQxW6GSfmThwP9a390e9ZEGvWN54ubQ9PuLa7MFu8l28OqK0ttIrKojaENvGQxO7oNuO4oXxLv8A8APsvsP1DQtS1TXrWe81SFdKs51uYbOC0KStIq4G+YyEFcknCop6AnGQaui+Hde0S/uFt9a06TTLi/nvGgfTJPOAlkLlBKJ9vBbAOz8Kvtr3h1NQhsH12yW8ndo4rc6gBJI6sVZVXdkkMCCB0IxVPT/Gng/VdYk0rTvEtjcX8cnlfZ0v8u7bdxCDd8+B125wQQeQaUbLb+tv8kN3s0/63/zZ0tFRfZk/vS/9/W/xrBvNR1BfFkej6Zp8FxEtulxcz3GpSwsiM7L8iCN95G0nll7c96fVLuLpc6OisCy1+wvvEs+iQwamk8ELStLPHLDGwV9hC7yC3JHzAFSDwxwcabS2K6gli14ovHjMqW5uT5jICAWC5yQCQM9ORR0TDq12LlFYc+uabB4rtPDxN097cwPPlHYpEq9N53cFucDnO1vSqs/iiwg1ZrVrPU2tI7lbSXUlb/R452wFjPz7zyyjcEKAtgsCDgWrsgOmorA+26hD4ri027sIEsblJGt7qLUpXlJQKSGiMYC/ePR26e9bX2ZP70v/AH9b/Gi6YEtFc5d6/Hp+sxWd9pGrQWs1wttFqTSoYHkb7owJTIMn5clAM98EGpLXX9Pu/E8mhxQ6klxHC8plmilijYI6qwUvgvy4wygqezULXb+uonpv/XQ36Ki+zJ/el/7+t/jWJqWuJpWr29reaTqotLiaOBdSWZGgEj8KpAl8wZbC52YyRzjmjrYfS50FFcve+KrCy1R7d7PU5LSG4S1udSjYfZ7eV8bUbLhz99MsqlRu5IwcdH9mT+9L/wB/W/xo6XAlorAtdf0+78TyaHFDqSXEcLymWaKWKNgjqrBS+C/LjDKCp7NSTa5H/br6Xp2manqTwOiXc9tMixWpYAgOZJVJO0hiEDEAjjkZO3mHddjoKKi+zJ/el/7+t/jWDqviCPRtQSK+0nVlsWmihOprKhgV5CFUEeb5mNzKuQhAJ64BIOtgOjormdQ8UWGn6jNbtaalPbWsiRXt9C2YbR2AKh8uHPDKSVVgoYFiBnHQ/Zk/vS/9/W/xoAlorATX9Pk8VLoCw6kLloZZfNkjljiIjKBgGYjf/rF5UFevORiq+peKtP0y/mhe01Ke1tJEivr+FwYbNmAIEmXDnhlJKqwUNkkDNG9vMDp6Ki+zR/3pf+/rf41j6jr2mab4j0rQ5jdPe6oziIRMxWMKjPuc7vlB2MB3JBwOCQdbAbtFRfZk/vS/9/W/xrH1PXdN0rXtK0ec3T3eqyMkKxMxEYVGYs5z8oO0gdyeg4JB1sBu0VzGreK9P0i8uI5bTUp7ayKC/vYHBhsdwBBky4YjawY7FbapycCuhFvGRkNJj/rq3+NHS4E1FYH9v6f/AMJXF4fEOpC5kilkErxyxw/u9mQHYjf/AKwcpuHUEg8VDrOvy6NeeW3hvXLu3Mkca3dtcQFGZyAMK04k4Jwfk7E9OaAOloqL7Mn96X/v63+NYms64uh3kK3Wk6rJZSPGj6hDKjQxM7hAGXzRJ1IyQhAz9cAHQUVF9mT+9L/39b/GsHXNfTQJi13pGrSafGFafUoZUMMAJxllMokIHBJVG4PscAHR0Vzmua/HoExe70jVpNPjCtPqUMqGGAE4yymUSEDgkqjcH2ON77NH/el/7+t/jQIloqL7Mn96X/v63+NH2ZP70v8A39b/ABoGS0VF9mT+9L/39b/Gj7Mn96X/AL+t/jQBLRUX2ZP70v8A39b/ABo+zJ/el/7+t/jQBLRUX2ZP70v/AH9b/Gj7Mn96X/v63+NAEtFRfZk/vS/9/W/xo+zJ/el/7+t/jQBLRUX2ZP70v/f1v8aPsyf3pf8Av63+NAEtFRfZk/vS/wDf1v8AGj7Mn96X/v63+NAEtFRfZk/vS/8Af1v8aPsyf3pf+/rf40AS0VF9mT+9L/39b/Gj7Mn96X/v63+NAEtFRfZk/vS/9/W/xo+zJ/el/wC/rf40AS0VF9mT+9L/AN/W/wAaKAJaKi23H/PWL/v0f/iqNtx/z1i/79H/AOKoAyta0+5u9e8P3FvFvis7uSSdtwGxTbyIDgnn5mA49a53UfCt5PF8Q5YtPja61qDybOTKBp1FoqBd2eAJN3DYHU9811d5qcVhfWNnd3cUc+oStFbJ5DnzGVGcjIOB8qsecdKubbj/AJ6xf9+j/wDFUpK6KhJwldHnOs6Dr503xJpsOhtqUmswQtDdNPCscOyFE8ttzb9wZGZcKVJfll5I9KHCj6Vn3mpxWF9Y2d3dxRz6hK0VsnkOfMZUZyMg4Hyqx5x0q5tuP+esX/fo/wDxVW22QlYloqLbcf8APWL/AL9H/wCKo23H/PWL/v0f/iqkZLRUW24/56xf9+j/APFUbbj/AJ6xf9+j/wDFUAS0VSv7z+zNOub6+uYora1iaaZ/JY7UUZJwDk8DtUyGeRFdJoirDIPlHp/31QBPRUW24/56xf8Afo//ABVG24/56xf9+j/8VQBLRUW24/56xf8Afo//ABVG24/56xf9+j/8VQBLRUW24/56xf8Afo//ABVG24/56xf9+j/8VQBLRUW24/56xf8Afo//ABVG24/56xf9+j/8VQBLRUW24/56xf8Afo//ABVG24/56xf9+j/8VQBLRUW24/56xf8Afo//ABVG24/56xf9+j/8VQAQ/wCtuP8AroP/AEFayp9PuX8d2WorFm1i064geTcOHaSJlGM55CNz04rQiWfzJ8SR/fGf3Z/uj/aqXbcf89Yv+/R/+KprR3/rawmrq39b3OCPhG/j8IatbW+nRpf3niL7f8jIGljF8sgctnqIlzyc4GOvFbOnwajpPjfWWOkXd1Z6vcRTrewyQiKDbCkZVw0gfOY8/KjDDD3x0m24/wCesX/fo/8AxVG24/56xf8Afo//ABVSla39dl+hbm3fzv8AjqS1yNzrOl6V8UTDqepWllLd6ZDHbJcTrG0z+dJ8qAkbjyOB6iup23H/AD1i/wC/R/8AiqNtx/z1i/79H/4qi3vJ9v8AJr9SejX9b3OQa41n/hZS348K6obFbNrH7T59ptyZg3mbfP3bMDPTd/s1vypIfF1u40OGSIWcgOrl08yE71/chcbsN97IOPlGe1aG24/56xf9+j/8VRtuP+esX/fo/wDxVNKyS7X/ABv/AJ/0hdW+/wDwP8jh7bwn4nsvGVjfnVNNu7Y3VxcXUv8AZrJLh1AClvtBBIUKikLgBRkGibQtYSO98OwaZI9ne6t9vGqfaIxHHE04mdSu4SeZkMoAUrgqS3UDuNtx/wA9Yv8Av0f/AIqobu5axtzPc3EaRhlXIhZiSxCgAA5JJIGB60kkn/Xl/kh3f9fP/Mw7nWdLu/iFpum2mpWk99axXBuLWKdWlhBCY3IDleo6iunqLbcf89Yv+/R/+KrNPiDTBrg0U67pY1U8iw81fPPy7v8AV7933eenTmhLUDHd9WvvG4Gq+G9QfTrOcf2fPFPbGAHbg3EgMokz8zKF2HAGeSfliuLjWf8AhZVvfp4V1R7GG0lsjcie02ktLGwkCmfdswhPTd/s11+24/56xf8Afo//ABVZK+I7VvEQ0MzTR3zKzIJdNuEjkCgFtkrARtgEdGNNaNeX+VhNXT87fnc2643xFZ6nf+KtPfStI1BZra5hJ1Ge8jNisIOZMQeaSZCpZA3lBsn7wXmut23H/PWL/v0f/iqNtx/z1i/79H/4qjqn2H0aOB8T+Fr7WNZutO0+21e3sL+4hmvJHuLYWLlShaQAMbjftQLtG1CwyQRkn0Oottx/z1i/79H/AOKrJXxHat4iGhmaaO+ZWZBLptwkcgUAtslYCNsAjoxoW1hdbmNcXGs/8LKt79PCuqPYw2ktkbkT2m0lpY2EgUz7tmEJ6bv9msfU/Bl6/ibVHj0U3Vzf6jDe2GuCaMf2aoWJZF+ZvMU/um4RWVwyhiBnHo+24/56xf8Afo//ABVG24/56xf9+j/8VQtLeX+d/wAxuzv5/wCVvyJa4/VDqt/4yjg1Dw5qF3o1pLE9rJBNbeS8uQfOlDSrIRGcbVCnkFsMdm3Xn8RWVvfPaTX8azpcxWrL9mkOJZRuRcjjkd+g7mtTbcf89Yv+/R/+KoW910C/Q4fV9C1cx+ItEs9NkuLbxFceYNQWeNI7RXjSOQOCwfcNjFdisDlQSvJrvQMAAdqi23H/AD1i/wC/R/8AiqNtx/z1i/79H/4qjokLrc4/VJtZ/wCFjaff2/hXVLmysrW4tXuI57QK5laEhlDThto8ts5APTANUPGnhW+1y+v9N0u21aG11hUW+lW4tksX4CmRhk3G8IqjagVWKqG+Xca7/bcf89Yv+/R/+Ko23H/PWL/v0f8A4qmtLeRV3qSAbVAHQDFcBe+EfFCeMdP1O31TTrqA6u11Mz6e4lhi8iWNVLfaMMAG2AKo+Zt5B+bPd7bj/nrF/wB+j/8AFVk3niSxsLyS1u9Qjjmikt4nX7NIcNO+yIZHHzMMZ7d8UK/NoLZW/rY268/1Pwj4nPi6z1S01PTbiJtXFzKZNOfzIIVhlRVL/aAGUB8AKo+Zy+PvA93tuP8AnrF/36P/AMVWTe+JbDTrya0vNQjjngNuJEFrI23z5DHFyMj5nUj26nAoV73Q76Nf12OZ8beGL/Wru/07SLbVoYtYhWK9njntksn+XZvkBJn3qgHEYAbChjjOO/jQRxqi9FAApm24/wCesX/fo/8AxVG24/56xf8Afo//ABVJaKwnqcfrU2s/8LD0u+tfCuqXdlp9vcwPcRT2gEhlMRVlDzq2BsbOQD6A10D2lxeeJknuocWdjEGtSSp3zPuDNjqCqfKOn+sbrWhtuP8AnrF/36P/AMVRtuP+esX/AH6P/wAVQtENtslrjvGNjqWpalZx6TpOoPdQSRSQ37Xka2MWHDMZITJlyADg+USCRtZSNw6C81OKwvrGzu7uKOfUJWitk8hz5jKjORkHA+VWPOOlXNtx/wA9Yv8Av0f/AIqjqmLpYlrkPEL6teeJIrKfw3qGoaFEscu+0ntgs827OJBJKjBE2qcAHcTzwMN1W24/56xf9+j/APFVk3fiS1sddtdIu55o7q7cJAx02cwuxUttEwHl7sKxxuzxR1QNXTMvxC+rXniSKyn8N6hqGhRLHLvtJ7YLPNuziQSSowRNqnAB3E88DDdfUW24/wCesX/fo/8AxVG24/56xf8Afo//ABVHSwutys93frr8Nomm79Pe3aSS/wDPUeXIGAWPy+pyCTu6DGO9D3d+uvw2iabv097dpJL/AM9R5cgYBY/L6nIJO7oMY71T1DxHY6VcTwX1/HHLbxRTSqLWRtqSyGNDxnqwI9upwOa1dtx/z1i/79H/AOKoXT+v6t+mvUb/AK/r+tys93frr8Nomm79Pe3aSS/89R5cgYBY/L6nIJO7oMY71eqLbcf89Yv+/R/+Ko23H/PWL/v0f/iqOgEtFRbbj/nrF/36P/xVG24/56xf9+j/APFUAS0VTluhBdQW099axz3G4QxOMNLtGW2gtk4HJx0qfbcf89Yv+/R/+KoAloqnLdCC6gtp761jnuNwhicYaXaMttBbJwOTjpU+24/56xf9+j/8VQBLRVOW6EF1BbT31rHPcbhDE4w0u0ZbaC2TgcnHSp9tx/z1i/79H/4qgCWiqct0ILqC2nvrWOe43CGJxhpdoy20FsnA5OOlT7bj/nrF/wB+j/8AFUAS0VTnu1tp4Ibm+tYZblykEcg2tKwBYhQW+Y4BOB2Bqfbcf89Yv+/R/wDiqAJaKpz3a208ENzfWsMty5SCOQbWlYAsQoLfMcAnA7A1PtuP+esX/fo//FUAS0VTnu1tp4Ibm+tYZblykEcg2tKwBYhQW+Y4BOB2Bqfbcf8APWL/AL9H/wCKoAloqLbcf89Yv+/R/wDiqKAJaKi85/8An2l/Nf8AGjzn/wCfaX81/wAaAOa1q1+y+OfD15Bc3yPd3MkM8X22YwOgtpWA8nd5YOVByFzx1qjYaZLrnjbxKbzV9Wji0/ULU2sFvfPFHFi3idhtUjcGJwVbK9SACST2fnP/AM+0v5r/AI0ec/8Az7S/mv8AjR2BaX8zmtatfsvjnw9eQXN8j3dzJDPF9tmMDoLaVgPJ3eWDlQchc8da5/xBqllYfEJHl1sanO1zbxLo9trk1rc2n3RlbWNttwpLb23hSFzywwB6L5z/APPtL+a/40ec/wDz7S/mv+NPqvIO/mS15R4x1aKDX/FMM/iC+tNRhtLdtEsYb54fNuij7RHGCPNJfYCh3L0yvOa7S98GeFtSvZbzUfB2lXd1M26Seewt3dz6ljyTVrS9Fs9Gvrq406ykgW5jhi8iMRrFEsSlVCKMYGD0/lUNXsF7NM5+20241/xlrUOpapqlutpFZPHBZ3rwpFIUYscKeckYKnKnuM81gfEPVNUh8WXdrJq9jo0C2MbaVc3+vy6ZEJiX3vtWNluCpCZjc4Axx85Nep+c/wDz7S/mv+NHnP8A8+0v5r/jTtqKPuo8r8eajbSweJYNe1ie1uY9GzpdpbXjol1uhcySLEp/fDdkHcGCqoOFySfU7T/jyg/65r/Kl85/+faX81/xo85/+faX81/xqug+iXb/AIH+RLRUXnP/AM+0v5r/AI0ec/8Az7S/mv8AjSAloqLzn/59pfzX/Gjzn/59pfzX/GgCWiovOf8A59pfzX/Gjzn/AOfaX81/xoAloqLzn/59pfzX/Gjzn/59pfzX/GgCWiovOf8A59pfzX/Gjzn/AOfaX81/xoAloqLzn/59pfzX/Gjzn/59pfzX/GgAh/1tx/10H/oK15r4J8PR3OvajqU3hPw9Oqa7fMNXlcG9QrO+CF8g9CAAfMHHPtXosUriSf8A0eQ5cd14+Ue9S+c//PtL+a/40LSXN/XT/Id7x5fP/P8AzPJ9W8UwR/Ee2ltr42C22rrb3yXHiCbf5ewpuaxOYo4WZk2yEqSShHLDO1p+paPL4yvk8VeIZ7LW49SMdlp0urS2kbQ5Ah8uEOqzBhySVfLErnjA77zn/wCfaX81/wAaPOf/AJ9pfzX/ABojpa/9bbdtvxYpat/13/z/AAPO/D+n6Do3xP1yC91e4ttQnvIpbC0udcn3XKG3QFhE0v70bg4GQ2NuBjaMVdR1Vk1PUGOsXEfi2PVRFYaSNQkVZLbzFC4tQ210MRZmkKHHzHcNmR6d5z/8+0v5r/jR5z/8+0v5r/jSirW8v+B/kOT5jj/DumSarrWr395q2qs9jrUq28KXrrCiBU+Qxg7XU56MDjtiu1qLzn/59pfzX/Gjzn/59pfzX/GiKtFR7JflYnq36/nc8tbXtbH27Tv7SuFhjv7jRWfB3rPPIzwyCQ/MNkTRAYOPn9QK7qX/AIm/iqO3B3Wmj4ll54e5ZfkU8/woS5BHV4yOlbHnP/z7S/mv+NV7SCOxSRbazlUSyvM5Lhizsck5LZ/DoAABgACqWyv/AF/Wr+7sPvb+v6VkXa4PxXrNtJ4w0fTV1PTr94dQgZtFt8G9jfn98x3HEaKwcjYvA+/g7W7fzn/59pfzX/Gjzn/59pfzX/Gkt0+wPVNdyWuZ1n/konhj/rje/wDoKV0PnP8A8+0v5r/jR5z/APPtL+a/40mgPJ9c1fVx8RL+C61jT9JmhvrcaYL/AMQS2Ykt9sZbbaiMx3G5jKpZiSDwNu0V1Etze23iG98Mm8uGfUrhbu0lMjb4bZuZ1VskjaykA8bfOjAxgV2HnP8A8+0v5r/jR5z/APPtL+a/401ol/Xb/LUG7v8Ar+vQ8n1vV9XX4iX9vdaxp+kzQ31uNMF/4glsxJb7Yy221EZjuNzGVSzMSDwNu0V2+s/8lE8Mf9cb3/0FK6Hzn/59pfzX/Gjzn/59pfzX/GjokD1dzzu51WztPiYinW01i4uL4RDT7bW5op7AbAu02StslQEM7OwUhTnDYzXpNRec/wDz7S/mv+NHnP8A8+0v5r/jQtIpA97iNZWryGR7aFnZ1kLGMEll4Vs+o7HtXnesarZ2PxGQvrS6tPJeQwrpNtrc1vc2QIUf8eiNsuFyTIxcKQufvgAD0Xzn/wCfaX81/wAaPOf/AJ9pfzX/ABoWjTB6qx5T4u1fV4vHGoQT6vp2j+S0B0iTUPEEthGy7VLsIFjKXOX3KwZuOBhc5OjcafoOl/GC6uNa1e5sGvLO1ezE+uTwrczedNuRFMoDgZT93gqN33Ru59F85/8An2l/Nf8AGjzn/wCfaX81/wAaI+7YG7387fgeYeJdWeHUvEpm1i5tvEttIo8Paat+8QuV8lCm23DBZw0hkBLK3QjjaMWdV1a1sviHGZtZTVbmW7giGkWuuTW9xY5Cji0RtlwuSZGLhSEyfnAAHo3nP/z7S/mv+NHnP/z7S/mv+NNaW8v6/HuD1v8A1/Xl+p5T8QPEq2vimQWV01jd6dcWhlebX5rdniMiNI8dkMxyxBCwaR9oGH/uV6l9lsbr/SPIt5vN8t/N2K2/adyHPfBOQe3UVJ5z/wDPtL+a/wCNHnP/AM+0v5r/AI0lorA9WVrnWtPtNastJuLjZfX6SPbRbGPmCMAucgYGMjqR7VPLY2k8jPPawyOxQszxgk7G3JnP91uR6HkVDJbxzX8F5JZzNPbq6REyDChsZO3djPAGcZAyB1ObHnP/AM+0v5r/AI0AchqV5f6d4lvdFS7mJ10RyaczSEtARhLnYedoRAsgHTcxHFcr421TVrbxff2sms6foywQwNo8+p+IZtPjJxln8tYytz84wyuxwAOF3ZPrPnP/AM+0v5r/AI0ec/8Az7S/mv8AjRHRp/1/SDucXp+my67408SG81fVUjsL+1NrBbXzxRR4t4nYbVI3KxJyrZXqQASSc7xBqllYfEJHl1sanO1zbxLo9trk1rc2n3RlbWNttwpLb23hSFzywwB6L5z/APPtL+a/40ec/wDz7S/mv+NC0a8ht3Oa1q1+y+OfD15Bc3yPd3MkM8X22YwOgtpWA8nd5YOVByFzx1rH1jUdIXx1qEHjbxDPo0EKQnS4jq0unwzIVzI4ZHQStv8AlKkttAXgbue985/+faX81/xo85/+faX81/xo6ryJ7+Z5l4o1XydU8Rm61m4s9etgv/CO2EeoyRfah5KlCtuGCzlpi6nKt0x2rpvFpc3/AIOMwCyHWk3AdAfs0+a6fzn/AOfaX81/xo85/wDn2l/Nf8aO3k1+H+fUq+r9GvvVvw6HnPizU4Ydc1xdX1u502+t7dG0C2h1CSD7S/lk5WJWAuHMvy7GV+ijHzYN7T9PvPEPinVY9Y1PVLVra3sZFt7O+eFIZijFyApG4E8FWyp7jPNdx5z/APPtL+a/40ec/wDz7S/mv+NJK39ev9fJEy1aGy2VrO7PPbQyM6qrM8YJYKcqDnqASSPQ1Bfa1YadqGn2N7P5dzqUjRWqbGPmMqlyMgYHygnnFWfOf/n2l/Nf8arz28V1dW1xPZSvLaOzwkuMIxUqTjdgnaSMnpk+tMYj61YR6/Dorz41Ca3a5jh2N80asFZt2MdWHGc80PrVhHr8OivPjUJrdrmOHY3zRqwVm3Yx1YcZzzVnzn/59pfzX/Gjzn/59pfzX/Gj+v6/D+tgx9bmsI/EPh9L3Vb2zuZLmQWttbuwjvG8piUlABBAXLDJHIH0rdqLzn/59pfzX/Gjzn/59pfzX/GgDz7xXrPhDRviVoM9zqOiWGoi5kOoSSTwxTBfsriMykkNj5gBu9RjrXoqsroHRgysMgg5BFR+c/8Az7S/mv8AjR5z/wDPtL+a/wCNHQOtzz7xXrPhDRviVoM9zqOiWGoi5kOoSSTwxTBfsriMykkNj5gBu9RjrXoqsroHRgysMgg5BFR+c/8Az7S/mv8AjR5z/wDPtL+a/wCNHQOtzz7xXrPhDRviVoM9zqOiWGoi5kOoSSTwxTBfsriMykkNj5gBu9RjrXoqsroHRgysMgg5BFR+c/8Az7S/mv8AjR5z/wDPtL+a/wCNHQOtzz7xXrPhDRviVoM9zqOiWGoi5kOoSSTwxTBfsriMykkNj5gBu9RjrXoqsroHRgysMgg5BFR+c/8Az7S/mv8AjR5z/wDPtL+a/wCNHQOtzz/xxq3hTSPHXhq4vb/RrHU11ANdyzTRRzCH7NOFLkkNsywAzxk+9ehRSxzwpNBIskUihkdGyrA8ggjqKb5z/wDPtL+a/wCNHnP/AM+0v5r/AI0LawPV38jz/wAcat4U0jx14auL2/0ax1NdQDXcs00Ucwh+zThS5JDbMsAM8ZPvXoUUsc8KTQSLJFIoZHRsqwPIII6im+c//PtL+a/40ec//PtL+a/40LawPV38jz/xxq3hTSPHXhq4vb/RrHU11ANdyzTRRzCH7NOFLkkNsywAzxk+9ehRSxzwpNBIskUihkdGyrA8ggjqKb5z/wDPtL+a/wCNHnP/AM+0v5r/AI0LawPV38iGfVtOtp3hub+1hljCl45JlVlDbtpIJ4zsbHrtPoaKm85/+faX81/xoqly9SZc3RktFRfa7f8A57xf99ij7Xb/APPeL/vsVJRwFhrNxD8RvFOjaWI49QvLyKSOe7iYwRqtpDnoR5j9/LDA4BJIGMzax4o8TQzeLJdO/smKz8OKJB58EsklyPsyzMnDqE6nD/N1+7xk9De+H/D1/wDbDcou+8njuZZI7p43EsaqqOrqwZCFUDKkd/U1LLpGhzQ6rFKsbJrC7b4eef3w8sR+vy/IAOMevXmps1HTf/hv6/qxopRcve20/wCD/X/DnK6h4v8AErR+KLzSxpUFloMSTqtxBJLJcD7MkzRna6hD82A/zdfu8ZPfW0wuLWKcDaJEDgHtkZrJOiaAbTU7YpF5Oqp5d4vnt+9XyhFjO7j5FA4x69eafFpWiQa4usRLEt+tmLJZvPJxCG3BcZx15zjPvV9f68/+AQ7WXf8A4b/g/h8uM8SeHb/xH8UYLW+fQLyyh015re31LRWuliBlQNwZwC5x98AYHGO9bniWK6TxX4XaU2M2nnUdkUDW8izQy/Z5j5iyLKFIwCNpjPU89Mb5g0w6sNT3RfbBAbcSeb/yzLbsYzjqOuM0t3Dpt9NaS3TxO9nN58B83Gx9jJng8/K7DB45pR0ik+j/AFb/AC/EX2pN9Vp91vzOavLnxY3xI/s6x1nTIdPawNysE2lvIwAkVSCwnUluTzwMfwk812dYuq6No2s3dvdXk80c9upVJbTUZbZtpIJVjE67hlQcNkVq/arf/nvF/wB9ihaRSfn+f+QvtN/1sS0VF9rt/wDnvF/32KPtdv8A894v++xQMloqL7Xb/wDPeL/vsUfa7f8A57xf99igCWiovtdv/wA94v8AvsUfa7f/AJ7xf99igCWiovtdv/z3i/77FH2u3/57xf8AfYoAloqL7Xb/APPeL/vsUfa7f/nvF/32KAJaKi+12/8Az3i/77FH2u3/AOe8X/fYoAloqL7Xb/8APeL/AL7FH2u3/wCe8X/fYoAIf9bcf9dB/wCgrXn/AIZ1m91fxJeR3niHxCskOrXUCWkWkJ9i8uOVgqm4+zEfdUAnzc54zmu7iuYBJOTNGMuCPnHPyiodPt9M0uGWKwaKJJp5Lhx5u7MkjFnPJPUknHT0oXxX/roO65bdb/5/8A5S/wDGd9aeOrLTrW8tL2xuNQFnLDHpNyDATGxObveYS4YDKbQcHHUZrT0vUtf13VruezuNNs9Js757QwS2kktxN5Zw7bxKix5OQBsbgA5OcBZ/B/hi4vpLp/NWR5/tO2PU5440mzkyJGsgVHJzllAJ3MDnc2Z38N+H21xtWjkmtruSRZZfsmpTQRzOuMNJGjhHOAASynIAByKI9L/1t9/XfuKWrdv63/4H3GV4cuvFl34x1221HWdMnsNPvI4/JTS3RyrQI4CP5x28vzuD5OcYBADLvxbrMMd/rUX2H+xtP1D7FJZtbSG5lAkWNpBKHwvzMSF8s5Cjkbsjek0fRn14awJ5orz5d3k6jLHFJgYBeJXCOccZZScAegqGbw34duNYOpSgmZpVmeIXsggkkXG12gD+WzDCkMVJyqnOQMKN1a/9bf8AB+8cmnt/X9MqaVqniXWNZvvJbSodOsNTe0eN4ZGmmiCqchtwCMCx7MD/ALNdXVCyg0zTzcmzaKM3U7XE373O6RgATyeOg4HFWvtdv/z3i/77FEbqKT7L77a/iT1b9fz0/A4c/EC/EM9v/Z8P2xftUCSliI/tKTSJDHsJyd6xliQwxj/aBHQ6sx1LWLPREwYwBd33GR5an5EP++49wVjcd6YfDfhozTy/Z4PMnv01KRhOwLXCgKr/AHvRRx068cmrenW9vZT3txLexT3F5OZHfIXaoG1EAycBVA+p3NgbsVS6X/r+n+C8x97f1/S/FmpXE+JENj4x0q9RtXskkvIUmvm1B2sn3ZQQfZ/MIDMSo3GNVBOd+7g9j9rt/wDnvF/32Kx7jQdCu9bj1W7kluLiKQSxxzahK8COBgMsBfyww7ELkHnrzSXxJg/ha7o3a43UdH02z+Kmg6haadaQXt3Dd/aLmKBVkmwkeN7AZbHvXW/a7f8A57xf99iqs0GmXGo2t9M0TXNoHWF/NxsDgBuM4OcDrSsBxWoeP9VXxbfWOl2Mk1tpt7DZy26aPd3D3G5UZ3Fwn7qLasn3WBztySoYY3T4jv0n1PTpYrcanDepDZgKdssUo3RyFc5+UCTdyM+UxGM8WLvw9oV5q51Npp7e7YqZGs9TmtlmK/dMiRyKrkDjLA8ADoMVcksdIm1qHVpPKa+giMUcvmnhT/s5wTycEjIDMAeTlrZf12/ryuDeun9f1+Jx2oeP9VXxbfWOmWMk1vpt7DZy26aPdzvcblRncXCfuotqycKwOduSQGGNLUdH02z+Kmg6haadaQXt3Dd/aLmKBVkmwkeN7AZbHvWnd+HtCvNXOptNPb3bFTI1nqc1ssxX7pkSORVcgcZYHgAdBitCaDTLjUbW+maJrm0DrC/m42BwA3GcHOB1o6LuD3Ofm1/WLXxotnqc1rpmmzXIhtBJpss32sbAc/aVkEcTFiVCOmTt43ZFdfXPv4d0GTWF1Kaa4lmWbz1il1Sd7dZOzCAyGMEHkfLweRzzW39rt/8AnvF/32KF8KvuD3Mm48KabdalJfS+aZpLyC8OGGBJEu1McdMday9R8QaxYeMEtr+a10vSJJ44baSbTpbgXe4Ln/SElCQMWbYqyLycY3ZwOq+12/8Az3i/77FYlx4c0G61b+0bma4ml81ZvJfU52t9642t5Bk8rIIBHy9RnrzRFWfl/wAN+gPX1Od17x9qlp4n1Cw0iylnTSpIUlt00e7unuy6q7BZov3cOFYY37snrgcm7BdeLZviXqGnLrOmDTYLW3uVt20pywR5JQVDicfPhACxBXphBznX1Hw/oWp6l9vmmnguiqq8llqc1qZQv3d/lOofGTjdnGTUl/o2jajqsOpTzTR3cKqoktdRlt96q24K4jdRIASeGBHJ9TRHS1wfX5GBrHi7WLRfEeq2f2FdK8NyFLi1lgd57rbEkrlZBIBHxIAAUbO3PQ8WL7xFq9n4tjgvprXS9HlmiitpJ9Nln+17guczpIEgYs2wLIvJAxuzgaN74b8O6hqjX90CZZCpmjS9kSGcrwDLCriOQgADLqeAB0AouPDmg3Wrf2jczXE0vmrN5L6nO1vvXG1vIMnlZBAI+XqM9eaa6X/r+vuB9bf1/X4+Rh+LvGt5oOuxw6feWtzElxaw3FkNKuJWTzZFU7rpH8qJtrbgrrk8ddwroNQ8I6ZqWoTXl15xlmltJm2uAA1tIZI8cep59R6VX1Lwn4a1a8uLm9Dl7naZli1CaKORlACuURwu8bVw+Nw2rgjAxuxz20caotwhCgAFpdx/Ek5P1NKN0vMHZk9YWpeD9M1XULi9uvO864NmX2uMf6NMZY8ccfMxB9R6daW90qwvvFOl63LcwiXTYp0jAbkmUKDzuxjCnjBOccjBB1/tdv8A894v++xTV1qgOeufEl5Z3+tWE8ELXMBgbTQqtidZvkTd15EoYMR0XB4rB8R+PtY07xBf2GlWUlydKSFpYItFu7pr5nXeUSSL5IPlwAX3ZJ5AAyexubHSLzVrPUrnynu7EOLeTziNm8ANwDg9O4OO2Kp6n4e0HVtQ+3XEs8F0UEbzWOpzWjSKCSocwuu/GTjdnGTjqaUdGrhpqUIdX8Tap4o1iy0w6Vb2el3lvGTcwyvJMjxRySLw4CMA5w3zA8AqMZKatr+s6d4tSC7ntNL0Z5Yo4JptNluRdFsbgZklVLc7iEUSLgnBBbO0b9rbaXZXl5dWzRpNfSLJcP52d7KgQHk8fKoHGOlULvw7oN9qv2+8luJpPMWUwPqc5tyy42kweZ5RwQD93qM9eaFo0NtMo67Fd/8ACeeGpbo2M9mbqUW0f2eRZ4JPs0uX8wS7WBAI2mPv1yM1LLqevar4n1DT9DuNOsLbSzEk0l5aSXDzu6h8KFljCKFI5+bJJ4G3nauYtNu7q0uLh4nls5DJA3m42MUKE4B5+ViOfWs3U/DmgatqX9oXEk0F55Yiaex1Ka0eRAchXMLrvAJON2cZOOpp9UT3uZGseK9Zt38RX+nGxXTvDfFzbT2ztNdlYVmbZIJAIxtcAZR+QT7UnivTNMk8TeENaj062XUJtWSM3nkKJjH9mnOwvjdjpxmti/8ADfh7U9RN7ebmkcKJUS+ljiuAvTzYlcJL6fOp446VoXlvpeoS2cl20Uj2U/2i3Pm42SbWXPB5+V2GDxzS7eTX/B+/8CrrX0a+9afd+Jz2seItbW+1xtGawitdAiWS4iu7d3e7Yx+aVR1dRGNuBuKvyTx8uC231/xHrutXkGhf2Xa2ttDaXCm9hleSQSoWZCFZQpwBhucdNp61qap4d8Pazffa7/LSMgjlWK+kiS4QZwsqI4WVeSMOGGCR0Jq/b2+l2t/c3luYknugizMJfvBAQvGcDAJ6Ukn/AF8/+B9xMtWrFPVfCWmazeXNzeiUvcwQQPtYAbYZTKmOOu49a3Ki+12//PeL/vsVkarpVhq2taNqM11Er6TPJPGA3LM0bR4znGMMT0PQdOcu1ir31ZuUVlvYaPJr8OtP5R1CG3a2jm84/LGzBmXbnHVRzjPFD2Gjya/DrT+UdQht2to5vOPyxswZl25x1Uc4zxR/X9fh/W6Jr7+1v7Q0/wDs37H9j8xvt/2jf5mzadvlY4zuxndxjPer1Zd9YaPqOoaffXvlSXOmyNLav5xHlsylCcA4PykjnNX/ALXb/wDPeL/vsUAcvrSXlr4/8Oyrq181veXE0bWW5VhULbOeiqGbJAPzlsEcYrra5rVfCnh7WtUTUb+5vvtMZzG0GtXUCxHbtJRI5VVSRwSAM5Oetby3NsiBRcR4UYGZMn8yeaOgdTmdaS8tfH/h2VdWvmt7y4mjay3KsKhbZz0VQzZIB+ctgjjFdbXNar4U8Pa1qiajf3N99pjOY2g1q6gWI7dpKJHKqqSOCQBnJz1reW5tkQKLiPCjAzJk/mTzR0DqczrSXlr4/wDDsq6tfNb3lxNG1luVYVC2znoqhmyQD85bBHGK62ua1Xwp4e1rVE1G/ub77TGcxtBrV1AsR27SUSOVVUkcEgDOTnrW8tzbIgUXEeFGBmTJ/MnmjoHU5nWkvLXx/wCHZV1a+a3vLiaNrLcqwqFtnPRVDNkgH5y2COMV1tc1qvhTw9rWqJqN/c332mM5jaDWrqBYjt2kokcqqpI4JAGcnPWt5bm2RAouI8KMDMmT+ZPNHQOpzHiZby28YeGJ4tVvVgudRML2Suqw4FtOxztUM2SqnDMQCAQBXXVzms+F/D+vahFe6lcXhngIaIwaxcwLG2Cu5VjlVQ2GIyBkgmtuKa1hhSJLhSqKFBebcxA9WJJJ9zzQtrA9WrdjmfEy3lt4w8MTxarerBc6iYXsldVhwLadjnaoZslVOGYgEAgCuurnNZ8L+H9e1CK91K4vDPAQ0Rg1i5gWNsFdyrHKqhsMRkDJBNbcU1rDCkSXClUUKC825iB6sSST7nmhbWB6tW7HM+JlvLbxh4Yni1W9WC51EwvZK6rDgW07HO1QzZKqcMxAIBAFddXOaz4X8P69qEV7qVxeGeAhojBrFzAsbYK7lWOVVDYYjIGSCa24prWGFIkuFKooUF5tzED1Ykkn3PNC2sD1at2LFFZ09vYXE7yyXcoZwoIjvpEUbd2MKrAD7xzgc8ZzgYKpKPUmTl0NGiiipKCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP/2Q==)

ggplot(data = data.frame(error), aes(x = 1:15, y = error)) +

geom\_line(color = "Blue")

![Chart, line chart

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMyMAAAkpIAAgAAAAMyMAAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjoxMzozNgAyMDIyOjAxOjA0IDIyOjEzOjM2AAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MTM6MzYuMTk4PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAWUCCAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKAGyOI4yzZwPSoftsf91vyFOuv+PZ/w/nWdQBf+2x/3W/IUfbY/7rfkKoUUAX/tsf8Adb8hR9tj/ut+QqhRQBf+2x/3W/IUrXkasVIbIOOlZ9Pm/wBc/wDvH+dAFz7bH/db8hR9tj/ut+QqhRQBf+2x/wB1vyFH22P+635CqFFAF/7bH/db8hR9tj/ut+QqhRQBofbI9obDYJI6f59aT7bH/db8hVM/6lf94/yFMoAv/bY/7rfkKPtsf91vyFUKKAL/ANtj/ut+Qo+2x/3W/IVQooAv/bY/7rfkKVbyNmCgNknHSs+nw/65P94fzoAufbY/7rfkKPtsf91vyFUKKAL/ANtj/ut+Qo+2x/3W/IVQooAv/bY/7rfkKPtsf91vyFUKKAL/ANtj/ut+QpTeRgAkN8wyOKz6e/3I/wDd/qaALn22P+635Cj7bH/db8hVCigC/wDbY/7rfkKPtsf91vyFUKKAL/22P+635Cj7bH/db8hVCigDQF5GQSA3yjJ4pPtsf91vyFU0+5J/u/1FMoAv/bY/7rfkKPtsf91vyFUKKAL/ANtj/ut+Qo+2x/3W/IVQooAv/bY/7rfkKPtsf91vyFUKKANBryNWKkNkHHSk+2x/3W/IVTm/1z/7x/nTKAL/ANtj/ut+Qo+2x/3W/IVQooAv/bY/7rfkKPtsf91vyFUKKAL/ANtj/ut+Qpftke0NhsEkdP8APrWfTz/qV/3j/IUAXPtsf91vyFH22P8Aut+QqhRQBf8Atsf91vyFH22P+635CqFFAF/7bH/db8hT4rhJmKqGBxnms2rNl/rj/u/1oAmuvvQf9dP/AGVqKLr70H/XT/2VqKYixRRRSGFFFFABRRRQBDdf8ez/AIfzrOrRuv8Aj2f8P51nUAFZuowa5LcKdI1HT7WHZhkurB52LZPIZZkAGMcY9eeeNKirhNwd1+KT/MNzC+yeLf8AoN6L/wCCeX/5Ko+yeLf+g3ov/gnl/wDkqt2itvrM+y/8Bj/kLlRhfZPFv/Qb0X/wTy//ACVVzw7qc2teF9L1W6WNJ76zhuZFjBChnQMQASTjJ9TWjWL4U/5BV3/2F9S/9LZquU3UoOUkrprZJbqXZLsLZm1RRRXGUFFFFABRRRQA8/6lf94/yFMp5/1K/wC8f5CmUAFFFFABRRRQAU+H/XJ/vD+dMp8P+uT/AHh/OgBlFFFABRRRQAUUUUAFPf7kf+7/AFNMp7/cj/3f6mgBlFFFABRRRQAUUUUAPT7kn+7/AFFMp6fck/3f6imUAFFFFABRRRQAUUUUAPm/1z/7x/nTKfN/rn/3j/OmUAFFFFABRRRQAVz95e67deKLnStJu9PtILWzguS11ZPOztK8ykZWVAABCOx6mugrF0D/AJCvif8A7C6/+kVrXVh9FOVtUuqv1S6+pLGfZPFv/Qb0X/wTy/8AyVR9k8W/9BvRf/BPL/8AJVbtFL6zPsv/AAGP+Q+VGF9k8W/9BvRf/BPL/wDJVbUAmW3jFy6STBAJHjQorNjkhSSQM9snHqafRWdSrKorO3ySX5JAlYKs2X+uP+7/AFqtVmy/1x/3f61kMmuvvQf9dP8A2VqKLr70H/XT/wBlaimIsUUUUhhRRRQAUUUUARXJxbsRjt1Ge9UPNb0X/vgf4Veuv+PZ/wAP51nUAP8ANb0X/vgf4Uea3ov/AHwP8KZRQA/zW9F/74H+FHmt6L/3wP8ACmUUAP8ANb0X/vgf4VieH5DBqfiSyjCi3tdXfykKg7fNhinfk8nMk0jc9N2BgAAbFYtj/o3jvxDaJzHMltqDE9RI4khIH+zttYzjrktzggDpo606i8k//Jl/m/vE90bvmt6L/wB8D/CjzW9F/wC+B/hTKK5hj/Nb0X/vgf4Uea3ov/fA/wAKZRQA/wA1vRf++B/hR5rei/8AfA/wplFAExkbyVOF+8f4R7UzzW9F/wC+B/hQf9Sv+8f5CmUAP81vRf8Avgf4Uea3ov8A3wP8KZRQA/zW9F/74H+FHmt6L/3wP8KZRQA/zW9F/wC+B/hT4pGMyDC/eH8IqGnw/wCuT/eH86ADzW9F/wC+B/hR5rei/wDfA/wplFAD/Nb0X/vgf4Uea3ov/fA/wplFAD/Nb0X/AL4H+FHmt6L/AN8D/CmUUAP81vRf++B/hT3kbanC/d/uj1NQ09/uR/7v9TQAea3ov/fA/wAKPNb0X/vgf4UyigB/mt6L/wB8D/CjzW9F/wC+B/hTKKAH+a3ov/fA/wAKPNb0X/vgf4UyigCZJG2vwv3f7o9RTPNb0X/vgf4UJ9yT/d/qKZQA/wA1vRf++B/hR5rei/8AfA/wplFAD/Nb0X/vgf4Uea3ov/fA/wAKZRQA/wA1vRf++B/hR5rei/8AfA/wplFAE0sjCZxhfvH+EUzzW9F/74H+FE3+uf8A3j/OmUAP81vRf++B/hR5rei/98D/AAplFAD/ADW9F/74H+FHmt6L/wB8D/CmUUAP81vRf++B/hWJ4TkMumX964U3F1q975z7R83lTGBOOgxHDGvHXbk5JJOxWL4K/eeBNKuz/rNQRtQlA6LJcHznC/7IaQgA5OMZJPNdMNMPN+cV/wClf5L7iepu+a3ov/fA/wAKPNb0X/vgf4UyiuYof5rei/8AfA/wo81vRf8Avgf4UyigB/mt6L/3wP8ACrFm5aYg7fu9lAqpVmy/1x/3f60ATXX3oP8Arp/7K1FF196D/rp/7K1FMRYooopDCiiigAooooAhuv8Aj2f8P51nVo3X/Hs/4fzrOoAKKKKACiiigArFf/RfiVc+Zz/aOmJ5W3+H7PM+/d9ftUeMZ6NnGBnarF1b9x8QNHuJflilt7yzRuuZmMMqrj3SCU56fLjOSAenD6uUejT/AAV/zSJZtUUUVzFBRRRQAUUUUAPP+pX/AHj/ACFMp5/1K/7x/kKZQAUUUUAFFFFABT4f9cn+8P50ynw/65P94fzoAZRRRQAUUUUAFFFFABT3+5H/ALv9TTKe/wByP/d/qaAGUUUUAFFFFABRRRQA9PuSf7v9RTKen3JP93+oplABRRRQAUUUUAFFFFAD5v8AXP8A7x/nTKfN/rn/AN4/zplABRRRQAUUUUAVNV1GLR9GvdTuVdobK3kuJFjALFUUsQMkDOB61H4c06bR/B+j6ZcsjTWVpFbyNGSVLJGqkjIBxkelUfG/z+BdYt15lvLV7OBf780w8qNc9su6jJ4Gckgc10B/1K/7x/kK6Xph1brJ/glb/wBKYuoyiiiuYYUUUUAFWbL/AFx/3f61WqzZf64/7v8AWgCa6+9B/wBdP/ZWoouvvQf9dP8A2VqKYixRRRSGFFNkYpGzKCxAJAHeuR8Oz3CX+jO93cXH9raa91crNMzqJAYyGUEkIP3jDauB09KFq7f11/yA7CiuN1G5uUvr/UlurlZbLVLa0hgEzCMxP5QYGMHaxPmsdxBI4x0pNMvLw6/De6h9ojiur64tImW+Yq20yBVNuV2Ku2P74O4kc8E0LX+vT/MHodbdf8ez/h/Os6pLmXVf7QaNrKzGm8f6SLtjN0/55eXt+9x9/pz7UmI/77f98j/GgBlFPxH/AH2/75H+NGI/77f98j/GgBlFPxH/AH2/75H+NGI/77f98j/GgBlYvij5Nc8PTP8ALFFq7eZIeFTdbXEa5PbLuij1ZlHUit3Ef99v++R/jWJ42Cf2TF8zZ/tfT8/L/wBPsPvXThda0Y99Pv0/UUtjYop+I/77f98j/GjEf99v++R/jXMMZRT8R/32/wC+R/jRiP8Avt/3yP8AGgBlFPxH/fb/AL5H+NGI/wC+3/fI/wAaAA/6lf8AeP8AIUypiI/JX5mxuP8AD9PemYj/AL7f98j/ABoAZRT8R/32/wC+R/jRiP8Avt/3yP8AGgBlFPxH/fb/AL5H+NGI/wC+3/fI/wAaAGU+H/XJ/vD+dGI/77f98j/GnxCPzkwzZ3D+H/69AENFPxH/AH2/75H+NGI/77f98j/GgBlFPxH/AH2/75H+NGI/77f98j/GgBlFPxH/AH2/75H+NGI/77f98j/GgBlPf7kf+7/U0Yj/AL7f98j/ABp7iPamWb7vHy+596AIaKfiP++3/fI/xoxH/fb/AL5H+NADKKfiP++3/fI/xoxH/fb/AL5H+NADKKfiP++3/fI/xoxH/fb/AL5H+NAAn3JP93+oplTII9r4Zvu8/L7j3pmI/wC+3/fI/wAaAGUU/Ef99v8Avkf40Yj/AL7f98j/ABoAZRT8R/32/wC+R/jRiP8Avt/3yP8AGgBlFPxH/fb/AL5H+NGI/wC+3/fI/wAaACb/AFz/AO8f50yppRH5z5Zs7j/D/wDXpmI/77f98j/GgBlFPxH/AH2/75H+NGI/77f98j/GgBlFPxH/AH2/75H+NGI/77f98j/GgDn/ABd8+lWcKfNLLqtj5cY5Z9t1HI2B3wiOx9FVj0BroD/qV/3j/IVg+IRH/bnhbDN/yFXz8v8A05XPvXQkR+SvzNjcf4fp7101Pdo0497v73b/ANtEt2Q0U/Ef99v++R/jRiP++3/fI/xrmGMop+I/77f98j/GjEf99v8Avkf40AMqzZf64/7v9ahxH/fb/vkf41YswnnHazE7e64/rQBJdfeg/wCun/srUUXX3oP+un/srUUxFiiiikMKy7Xw5plkZzaQyRGdShK3En7tSclY/m/djJzhNo6egrUooAzpNB06bVV1GSAm5Uqc+a4RmX7rMmdrMM8MQSOMHgU6PRLCLVG1BIn89mLYMzmNWIwWWMnYrEdWABOTzyav0UAQ3X/Hs/4fzrOrRuv+PZ/w/nWdQAUUUUAFFFFABWL4++XwP4hkHEkNlPNE46xyIhdHU9mVlDAjkEAjkVtVHqllb6la3ljex+bbXSPDMm4jcjAhhkcjgnpW1Cap1Yzeyaf4ieqJKKyfCl7cal4N0W+vZPNubqwgmmfaBudo1LHA4HJPStaoqQdObg907AndXCiiioGFFFFADz/qV/3j/IUynn/Ur/vH+QplABRRRQAUUUUAFPh/1yf7w/nTKfD/AK5P94fzoAZRRRQAUUUUAFFFFABT3+5H/u/1NMp7/cj/AN3+poAZRRRQAUUUUAFFFFAD0+5J/u/1FMp6fck/3f6imUAFFFFABRRRQAUUUUAPm/1z/wC8f50ynzf65/8AeP8AOmUAFFFFABRRRQBhX37zx9o0b/NGlhezKh5CyB7dA4H94LJIueuHYdCa6A/6lf8AeP8AIVz8P7/4h3nm/N9i0qD7P22edLL5v1z9ni65xt4xk56A/wCpX/eP8hXTX0UIdkvxvL8mSuoyiiiuYoKKKKACrNl/rj/u/wBarVZsv9cf93+tAE1196D/AK6f+ytRRdfeg/66f+ytRTEWKKKKQwooooAKKKKAIbr/AI9n/D+dZ1aN1/x7P+H86zqACiiigAooooAKfN/rn/3j/OmU+b/XP/vH+dAHP+Cv3fg+ys+v9neZp2//AJ6fZ5Gg347bvL3Y5xnGTjNbtYXhX9xBqlg/Mtnqtz5jD7p85/tK4+iToD/tBuowTu104v8Ajzfdt/J6r8CY7BRRRXMUFFFFADz/AKlf94/yFMp5/wBSv+8f5CmUAFFFFABRRRQAU+H/AFyf7w/nTKfD/rk/3h/OgBlFFFABRRRQAUUUUAFPf7kf+7/U0ynv9yP/AHf6mgBlFFFABRRRQAUUUUAPT7kn+7/UUynp9yT/AHf6imUAFFFFABRRRQAUUUUAPm/1z/7x/nTKfN/rn/3j/OmUAFFFFABRRRQBhaT/AKV4w8QXn3fI+zads67tkZn359/tW3H+xnPOB0B/1K/7x/kK5/wz+/n12/TiK81WTy1P3h5KJbNn6vA5H+yV6HIHQH/Ur/vH+QrpxX8S3ZJfNJJ/iKOwyiiiuYYUUUUAFWbL/XH/AHf61WqzZf64/wC7/WgCa6+9B/10/wDZWoouvvQf9dP/AGVqKYixRRRSGFFFFABRRRQBFcjdbsBjt1OO9UPKb1X/AL7H+NXrr/j2f8P51nUAP8pvVf8Avsf40eU3qv8A32P8aZRQA/ym9V/77H+NHlN6r/32P8aZRQA/ym9V/wC+x/jT5Y2MznK/eP8AEKhp83+uf/eP86AMHQY2TxD4nicqsjahFMqMwBaM2kChwO6lo5Fz0yjDqDW95Teq/wDfY/xrn7T/AJKHq/8A2CrH/wBG3dbtdOJ/iL/DH/0lCjsP8pvVf++x/jR5Teq/99j/ABplFcwx/lN6r/32P8aPKb1X/vsf40yigCYxt5KjK/eP8Q9qZ5Teq/8AfY/xoP8AqV/3j/IUygB/lN6r/wB9j/Gjym9V/wC+x/jTKKAH+U3qv/fY/wAaPKb1X/vsf40yigB/lN6r/wB9j/GnxRsJkOV+8P4hUNPh/wBcn+8P50AHlN6r/wB9j/Gjym9V/wC+x/jTKKAH+U3qv/fY/wAaPKb1X/vsf40yigB/lN6r/wB9j/Gjym9V/wC+x/jTKKAH+U3qv/fY/wAae8bbU5X7v94epqGnv9yP/d/qaADym9V/77H+NHlN6r/32P8AGmUUAP8AKb1X/vsf40eU3qv/AH2P8aZRQA/ym9V/77H+NHlN6r/32P8AGmUUATJG21+V+7/eHqKZ5Teq/wDfY/xoT7kn+7/UUygB/lN6r/32P8aPKb1X/vsf40yigB/lN6r/AN9j/Gjym9V/77H+NMooAf5Teq/99j/Gjym9V/77H+NMooAmljYzOcr94/xCmeU3qv8A32P8aJv9c/8AvH+dMoAf5Teq/wDfY/xo8pvVf++x/jTKKAH+U3qv/fY/xo8pvVf++x/jTKKAMTwbGzeHnlUqY5tQvpon3DEkb3crI6nurKwYEcEEEcGuhMbeSoyv3j/EPauc8Df8k88Of9gq1/8ARS10B/1K/wC8f5CunF/7xU9X+ZMdkHlN6r/32P8AGjym9V/77H+NMormKH+U3qv/AH2P8aPKb1X/AL7H+NMooAf5Teq/99j/ABqxZoVmJO37vZgaqVZsv9cf93+tAE1196D/AK6f+ytRRdfeg/66f+ytRTEWKKKKQwooooAKKKKAIbr/AI9n/D+dZ1aN1/x7P+H86zqACiiigAooooAKfN/rn/3j/OmU+b/XP/vH+dAHP3f/ACUPSP8AsFX3/o20rdrC17934h8MSJ8sj6hLCzjgtGbSdyhP90tHG2OmUU9QK3a6a3wU/T/26RK3YUUUVzFBRRRQA8/6lf8AeP8AIUynn/Ur/vH+QplABRRRQAUUUUAFPh/1yf7w/nTKfD/rk/3h/OgBlFFFABRRRQAUUUUAFPf7kf8Au/1NMp7/AHI/93+poAZRRRQAUUUUAFFFFAD0+5J/u/1FMp6fck/3f6imUAFFFFABRRRQAUUUUAPm/wBc/wDvH+dMp83+uf8A3j/OmUAFFFFABWF45/5J54j/AOwVdf8Aopq3awvGXzeHkjPMc2oWMMqHpJG93Ejow7qysVIPBBIPBrpwn+8U/wDEvzFLZm7Tz/qV/wB4/wAhTKef9Sv+8f5CuYYyiiigAooooAKs2X+uP+7/AFqtVmy/1x/3f60ATXX3oP8Arp/7K1FF196D/rp/7K1FMRYrgNa8Q6p4R8VajLean4aXT9Q8uSzh1nxA1nJHtQK+1DCw2k4PB65JPOB39cRHHqdr458Q3XhmPS9WlnNul7FfXUttJaOsQ2orrDIHQqwbHG0s3XdxPUrodZpVxd3elwz6hFaxTyLuK2dybiLB+6VkKIWBGD90de/WrdYnhDQn8NeFrXTJpkmkiLu5iXbGhd2coi9kXdtUdgBUul+IrbVbpYY7e4g82Iz2zzKoW5iBALphiQOV4YKfmHFU7XsiehrUVkXHiO2t9UNm8FwY0lSCW6Cr5UUr42Ictuydy8hSBuGSKfaa217qMlvBpd4YI5Xha8LRCLcvXjzN/UY+71/OluPYvXX/AB7P+H86zq0br/j2f8P51nUAFFFFABRRRQAU+b/XP/vH+dMp83+uf/eP86AOf8VfuINLv05ls9VtvLU/dPnP9mbP0SdyP9oL1GQd2sLxr+78H3t51/s7y9R2f89Ps8iz7M9t3l7c84znBxit2umetCDfeS+Wj/NsXUKKKK5hhRRRQA8/6lf94/yFMp5/1K/7x/kKZQAUUUUAFFFFABT4f9cn+8P50ynw/wCuT/eH86AGUUUUAFFFFABRRRQAU9/uR/7v9TTKe/3I/wDd/qaAGUUUUAFFFFABRRRQA9PuSf7v9RTKen3JP93+oplABRRRQAUUUUAFFFFAD5v9c/8AvH+dMp83+uf/AHj/ADplABRRRQAVheJv38+hWD8RXmqx+Yw+8PJR7lcfV4EB/wBkt0OCN2sLVv8ASvGHh+z+75H2nUd/XdsjEGzHv9q3Z/2MY5yOnC/xL9k380m1+JMtjdp5/wBSv+8f5CmU8/6lf94/yFcxQyiiigAooooAKs2X+uP+7/Wq1WbL/XH/AHf60ATXX3oP+un/ALK1FF196D/rp/7K1FMRYrzPUY9IXx/r0muab4mgdhbiG80cat5dwgj+6xtzsyrFugA+bud2PTK8v8XXGu2Xj60ubr+3n00X0XkrpUVxLCLT7O4m8xIAcv5xT74zjbs6PU9UV0Z3mhJZyeH4k07+0fsrBwv9pfaPP6nO77R+965xu7YxxisbR9P1S3m097zTpEGjafJaqEljb7W5KAGP5uBiP+PacsPQmr/glNWTwfZLr/nfbBvx9pYGYRb28oSEdZPL2bvfNb1U9JP+v63JWxyd9pOozX95Yx2bG1vr+3vftnmrtiVPLLIyk7t2YuMAj5hkjBotdDWPXo5bTw8NNnW7knuNREkb/aEbdld27zDuLA7WUAY9hnrKKS0t/Xb/ACHujMudE0pdQbV10yzGpcf6aLdfO6bfv43fd469OKTzpP8Ano3/AH0avXX/AB7P+H86zqAH+dJ/z0b/AL6NHnSf89G/76NMooAf50n/AD0b/vo0edJ/z0b/AL6NMooAf50n/PRv++jT5ZZBM4DsBuPeoafN/rn/AN4/zoAyfFlvean4M1qws90txdafPDFHvxvdo2UDJOBknvV+x1NNS062vrK4aW2uolmhfkbkYAqcHkcEdakrC8D/AC+AdCjPEkNhDDKh6xyIgR0YdmVlKkHkEEHkV0/Fh3fo/wA1r/6SvxJ6nQedJ/z0b/vo0edJ/wA9G/76NMormKH+dJ/z0b/vo0edJ/z0b/vo0yigCYyyeSp3tnce/wBKZ50n/PRv++jQf9Sv+8f5CmUAP86T/no3/fRo86T/AJ6N/wB9GmUUAP8AOk/56N/30aPOk/56N/30aZRQA/zpP+ejf99GnxSyGZAXYjcO9Q0+H/XJ/vD+dAB50n/PRv8Avo0edJ/z0b/vo0yigB/nSf8APRv++jR50n/PRv8Avo0yigB/nSf89G/76NHnSf8APRv++jTKKAH+dJ/z0b/vo095ZAqYduV559zUNPf7kf8Au/1NAB50n/PRv++jR50n/PRv++jTKKAH+dJ/z0b/AL6NHnSf89G/76NMooAf50n/AD0b/vo0edJ/z0b/AL6NMooAmSWQq+XbheOfcUzzpP8Ano3/AH0aE+5J/u/1FMoAf50n/PRv++jR50n/AD0b/vo0yigB/nSf89G/76NHnSf89G/76NMooAf50n/PRv8Avo0edJ/z0b/vo0yigCaWWQTOA7Abj3pnnSf89G/76NE3+uf/AHj/ADplAD/Ok/56N/30aPOk/wCejf8AfRplFAD/ADpP+ejf99GsGaWSf4iWZidmNlpU/n842efLD5f13fZ5enTZzjIzt1hWP7zx9rMifNGlhZQs45CyB7hyhP8AeCyRtjrh1PQiumhopz7Rf42j+TEzoPOk/wCejf8AfRp5lk8lTvbO49/pUNPP+pX/AHj/ACFcww86T/no3/fRo86T/no3/fRplFAD/Ok/56N/30aPOk/56N/30aZRQA/zpP8Ano3/AH0asWcjtMQzMRt7mqlWbL/XH/d/rQBNdfeg/wCun/srUUXX3oP+un/srUUxFiiiikMKKKKACiiigCG6/wCPZ/w/nWdWjdf8ez/h/Os6gAooooAKKKKACnzf65/94/zplPm/1z/7x/nQAysLwf8A8gO4/wCwrqP/AKWzVu1heHfk1XxLCnyxRaqPLjHCputYJGwO2Xd2PqzMepNdNP3qM49rP7tP/bhPdG7RRRXMMKKKKAHn/Ur/ALx/kKZTz/qV/wB4/wAhTKACiiigAooooAKfD/rk/wB4fzplPh/1yf7w/nQAyiiigAooooAKKKKACnv9yP8A3f6mmU9/uR/7v9TQAyiiigAooooAKKKKAHp9yT/d/qKZT0+5J/u/1FMoAKKKKACiiigAooooAfN/rn/3j/OmU+b/AFz/AO8f50ygAooooAKwvD//ACHPFP8A2FU/9Irat2sLwj8+lXkz/NLLqt95kh5Z9t1JGuT3wiIo9FVR0Arpp+7RqS72X3u//tonujdp5/1K/wC8f5CmU8/6lf8AeP8AIVzDGUUUUAFFFFABVmy/1x/3f61WqzZf64/7v9aAJrr70H/XT/2VqKLr70H/AF0/9laimIsUUUUhhRRRQAUUUUAQ3X/Hs/4fzrOrSucfZ23AkcdDjvVDMf8Acb/vof4UAMop+Y/7jf8AfQ/wozH/AHG/76H+FADKKfmP+43/AH0P8KMx/wBxv++h/hQAynzf65/94/zozH/cb/vof4U+Ux+c+VbO4/xf/WoAhrC079x461y3i+WKW1s7x165mYzRM2fdIIhjp8ucZJJ6DMf9xv8Avof4VguY7b4iQ+WrEajpUnnbm+79nlTZt44z9qkznOcLjGDnpoaqcerj+TT/ACTEzbop+Y/7jf8AfQ/wozH/AHG/76H+FcwxlFPzH/cb/vof4UZj/uN/30P8KAA/6lf94/yFMqYmPyV+Vsbj/F9PamZj/uN/30P8KAGUU/Mf9xv++h/hRmP+43/fQ/woAZRT8x/3G/76H+FGY/7jf99D/CgBlPh/1yf7w/nRmP8AuN/30P8ACnxGPzkwrZ3D+L/61AENFPzH/cb/AL6H+FGY/wC43/fQ/wAKAGUU/Mf9xv8Avof4UZj/ALjf99D/AAoAZRT8x/3G/wC+h/hRmP8AuN/30P8ACgBlPf7kf+7/AFNGY/7jf99D/CnuY9qZVvu8fN7n2oAhop+Y/wC43/fQ/wAKMx/3G/76H+FADKKfmP8AuN/30P8ACjMf9xv++h/hQAyin5j/ALjf99D/AAozH/cb/vof4UACfck/3f6imVMhj2vhW+7z83uPamZj/uN/30P8KAGUU/Mf9xv++h/hRmP+43/fQ/woAZRT8x/3G/76H+FGY/7jf99D/CgBlFPzH/cb/vof4UZj/uN/30P8KACb/XP/ALx/nTKmlMfnPlWzuP8AF/8AWpmY/wC43/fQ/wAKAGUU/Mf9xv8Avof4UZj/ALjf99D/AAoAZWF4I+fwLo9w3Mt5apeTt/fmmHmyNjtl3Y4HAzgADirviTUm0fwpq2p2sYaeyspriNZDlSyIWAIGDjI9RVjStPtdH0ay0y285obK3jt42kcFiqKFBOABnA9K6Vph3fq1+Cd//SkT1LFPP+pX/eP8hRmP+43/AH0P8KeTH5K/K2Nx/i+ntXMUQ0U/Mf8Acb/vof4UZj/uN/30P8KAGUU/Mf8Acb/vof4UZj/uN/30P8KAGVZsv9cf93+tQ5j/ALjf99D/AAqxZlPOO1WB292z/SgCS6+9B/10/wDZWoouvvQf9dP/AGVqKYixRRRSGFFFFABRRRQBDdf8ez/h/Os6tG6/49n/AA/nWdQAUUUUAFFFFABT5v8AXP8A7x/nTKfN/rn/AN4/zoAZWFqf+jeNNBu35jmiutPUDqJHCTAn/Z22sgz1yV4wSRu1heJP3V94evJOILbVV81/7vmwywJx1OZJo146bsnABI6cL/Et3Ul98XYmWxu0UUVzFBRRRQA8/wCpX/eP8hTKef8AUr/vH+QplABRRRQAUUUUAFPh/wBcn+8P50ynw/65P94fzoAZRRRQAUUUUAFFFFABT3+5H/u/1NMp7/cj/wB3+poAZRRRQAUUUUAFFFFAD0+5J/u/1FMp6fck/wB3+oplABRRRQAUUUUAFFFFAD5v9c/+8f50ynzf65/94/zplABRRRQBheNv3ngvU7Qf6zUIv7PiJ6LJcEQoW/2Q0gJIycZwCeK3awvFn72x0+zj5nudVs/KT+95Uyzvz0GI4ZG567cDJIB3a6Z6YeC85P8A9J/yf3C6hTz/AKlf94/yFMp5/wBSv+8f5CuYYyiiigAooooAKs2X+uP+7/Wq1WbL/XH/AHf60ATXX3oP+un/ALK1FF196D/rp/7K1FMRYooopDCiiigAooooAhuv+PZ/w/nWdWjdf8ez/h/Os6gAooooAKKKKACnzf65/wDeP86ZT5v9c/8AvH+dADKwvGH/ACA7f/sK6d/6Ww1u1heOf+SeeI/+wVdf+imrpwn+8U/8S/MUtmbtFFFcwwooooAef9Sv+8f5CmU8/wCpX/eP8hTKACiiigAooooAKfD/AK5P94fzplPh/wBcn+8P50AMooooAKKKKACiiigAp7/cj/3f6mmU9/uR/wC7/U0AMooooAKKKKACiiigB6fck/3f6imU9PuSf7v9RTKACiiigAooooAKKKKAHzf65/8AeP8AOmU+b/XP/vH+dMoAKKKKAMLxB/yHPC3/AGFX/wDSK5rdrCu/+Sh6R/2Cr7/0baVu101vgp+n/t0iVuwp5/1K/wC8f5CmU8/6lf8AeP8AIVzFDKKKKACiiigAqzZf64/7v9arVZsv9cf93+tAE1196D/rp/7K1FF196D/AK6f+ytRTEWKKKKQxsjiONnOcKCTiuY0HU9Re+0v7fdm5TV7F7vyzGqi3ZSh2pgAlcSY+YsflHPWuprFsfDEGnMzW97eFkha3tS5RvscZOdseV56L9/cflAoW+v9b/8AADoZ1/q2oRX15fRXbLa2OoW9kbPy12yq/lhmJI3bgZeMED5RkHJqf+27u58aWlpbFRphSdGbAJmlTbkg9lUnHHU7vQVdn8N21xqpvHuLkI8sc0tqGXypZY8bHPy7sjC8AgHaMg0weENCTWrfVINMtYLqAuwaK3Rd7Nj5m+XJIxwc9zQul/60/wCHBk9zf3J1BrI6TeC34/08vD5PTPTzPM6/L9zr7c0mxf8Anqv5H/Cr11/x7P8Ah/Os6gB+xf8Anqv5H/CjYv8Az1X8j/hTKKAH7F/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wp8qKZn/eKPmPGD/hUNPm/wBc/wDvH+dABsX/AJ6r+R/wqOe1gureS3ufJmhlQpJHIhZXUjBBBGCCO1LRTTad0BkeDJJLrwHoFxdXJlnm023eSSRmZnYxKSST1JPetrYv/PVfyP8AhXP+C/3fhS3tB/q9Pln0+Inq0dvM8KFv9orGCSMDOcADit2t8UksRNLu/wAxR2Q/Yv8Az1X8j/hRsX/nqv5H/CmUVzjJii+Sv7xfvHnB9vambF/56r+R/wAKD/qV/wB4/wAhTKAH7F/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wo2L/AM9V/I/4UyigB+xf+eq/kf8ACnxIomT94p+YcYP+FQ0+H/XJ/vD+dABsX/nqv5H/AAo2L/z1X8j/AIUyigB+xf8Anqv5H/CjYv8Az1X8j/hTKKAH7F/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wp7ou1P3i/d9D6n2qGnv9yP8A3f6mgA2L/wA9V/I/4UbF/wCeq/kf8KZRQA/Yv/PVfyP+FGxf+eq/kf8ACmUUAP2L/wA9V/I/4UbF/wCeq/kf8KZRQBMiLtf94v3fQ+o9qZsX/nqv5H/ChPuSf7v9RTKAH7F/56r+R/wo2L/z1X8j/hTKKAH7F/56r+R/wo2L/wA9V/I/4UyigB+xf+eq/kf8KNi/89V/I/4UyigCaVFMz/vFHzHjB/wpmxf+eq/kf8KJv9c/+8f50ygB+xf+eq/kf8KNi/8APVfyP+FMooAxLZFk+ImpeZIreRpVp5RYE+X5ktxv28cbvLjzjrsXPQY3ti/89V/I/wCFc/o/+k+K/EV2/EkMsGnqB0MaQrMCf9rddSDPTAXjIJO7XTifjS/ux/8ASUKOw/Yv/PVfyP8AhTyi+Sv7xfvHnB9vaoaef9Sv+8f5CuYYbF/56r+R/wAKNi/89V/I/wCFMooAfsX/AJ6r+R/wo2L/AM9V/I/4UyigB+xf+eq/kf8ACrFmoExw6t8vQZqpVmy/1x/3f60ATXX3oP8Arp/7K1FF196D/rp/7K1FMRYooopDCiiigAooooAhuv8Aj2f8P51nVo3X/Hs/4fzrOoAKKKKACiiigAp83+uf/eP86ZT5v9c/+8f50AMooooAwvC/7j+2NO+99i1Wf9503+dtuunbH2jZ3ztzxnA3awtH/wBG8V+IrR+ZJpYNQUjoI3hWEA/7W61kOOmCvOSQN2unFfxb90n82k3+LFHYKKKK5hjz/qV/3j/IUynn/Ur/ALx/kKZQAUUUUAFFFFABT4f9cn+8P50ynw/65P8AeH86AGUUUUAFFFFABRRRQAU9/uR/7v8AU0ynv9yP/d/qaAGUUUUAFFFFABRRRQA9PuSf7v8AUUynp9yT/d/qKZQAUUUUAFFFFABRRRQA+b/XP/vH+dMp83+uf/eP86ZQAUUUUAYXhf8Af/2xqP3ftuqz/u+uzydtr175+z7+2N2OcZO7WF4L/eeFLe7H+r1CWfUIgeqx3EzzIG/2gsgBAyM5wSOa3a6cV/Hmuzt8lovwRMdgp5/1K/7x/kKZTz/qV/3j/IVzFDKKKKACiiigAqzZf64/7v8AWq1WbL/XH/d/rQBNdfeg/wCun/srUUXX3oP+un/srUUxFiiiikMKKKKACiiigCG6/wCPZ/w/nWdWjdf8ez/h/Os6gAooooAKKKKACnzf65/94/zplPm/1z/7x/nQAyiiigDCtv3fxD1HzPl8/SrTyt3HmbJbjft9dvmR5x03rnqK3awrv/koekf9gq+/9G2lbtdOI15J90vw939BIKKKK5hjz/qV/wB4/wAhTKef9Sv+8f5CmUAFFFFABRRRQAU+H/XJ/vD+dMp8P+uT/eH86AGUUUUAFFFFABRRRQAU9/uR/wC7/U0ynv8Acj/3f6mgBlFFFABRRRQAUUUUAPT7kn+7/UUynp9yT/d/qKZQAUUUUAFFFFABRRRQA+b/AFz/AO8f50ynzf65/wDeP86ZQAUyeeK1t5Li5lSGGJC8kkjBVRQMkkngADvT6wvHP/JPPEf/AGCrr/0U1a0aaqVYwfVpfeJuyuSeDYJrXwJoNvcxPDNFptukkcilWRhEoIIPIIPatmiilVqOpUlN9W394JWVgp5/1K/7x/kKZTz/AKlf94/yFZjGUUUUAFFFFABVmy/1x/3f61WqzZf64/7v9aAJrr70H/XT/wBlaii6+9B/10/9laimIsUUUUhhRRRQAUUUUARXJK27FSQeOR9aoedJ/wA9G/76NXrr/j2f8P51nUAP86T/AJ6N/wB9GjzpP+ejf99GmUUAP86T/no3/fRo86T/AJ6N/wB9GmUUAP8AOk/56N/30afLLIJnAdgNx71DT5v9c/8AvH+dAB50n/PRv++jR50n/PRv++jTKKAMTxDLIdc8LZduNVfHP/Tlc1vedJ/z0b/vo1z/AIuDxaZaX9vDNLPYahbzJ5ELSuqGQRzEIoJb9zJKOhxnI5AIP+Ew0z/n21r/AMEV7/8AGq7nRqVqUJU4t2utF53/AF/Mm6TdzoPOk/56N/30aPOk/wCejf8AfRrn/wDhMNM/59ta/wDBFe//ABqj/hMNM/59ta/8EV7/APGqy+qYj/n3L7mPmXc6MyyeSp3tnce/0pnnSf8APRv++jWCfGOmeSo+za194/8AMCvfb/plTf8AhMNM/wCfbWv/AARXv/xqj6piP+fcvuYcy7nQedJ/z0b/AL6NHnSf89G/76Nc/wD8Jhpn/PtrX/givf8A41R/wmGmf8+2tf8Agivf/jVH1TEf8+5fcw5l3Og86T/no3/fRo86T/no3/fRrn/+Ew0z/n21r/wRXv8A8ao/4TDTP+fbWv8AwRXv/wAao+qYj/n3L7mHMu50HnSf89G/76NPilkMyAuxG4d65z/hMNM/59ta/wDBFe//ABqnReMdMEyH7NrX3h/zAr3/AONUfVMR/wA+5fcw5l3N7zpP+ejf99GjzpP+ejf99Guf/wCEw0z/AJ9ta/8ABFe//GqP+Ew0z/n21r/wRXv/AMao+qYj/n3L7mHMu50HnSf89G/76NHnSf8APRv++jXP/wDCYaZ/z7a1/wCCK9/+NUf8Jhpn/PtrX/givf8A41R9UxH/AD7l9zDmXc6DzpP+ejf99GjzpP8Ano3/AH0a5/8A4TDTP+fbWv8AwRXv/wAao/4TDTP+fbWv/BFe/wDxqj6piP8An3L7mHMu50HnSf8APRv++jT3lkCph25Xnn3Nc5/wmGmf8+2tf+CK9/8AjVOfxjpm1P8ARta+7/0Ar31P/TKj6piP+fcvuYcy7m950n/PRv8Avo0edJ/z0b/vo1z/APwmGmf8+2tf+CK9/wDjVH/CYaZ/z7a1/wCCK9/+NUfVMR/z7l9zDmXc6DzpP+ejf99GjzpP+ejf99Guf/4TDTP+fbWv/BFe/wDxqj/hMNM/59ta/wDBFe//ABqj6piP+fcvuYcy7nQedJ/z0b/vo0edJ/z0b/vo1z//AAmGmf8APtrX/givf/jVH/CYaZ/z7a1/4Ir3/wCNUfVMR/z7l9zDmXc6NJZCr5duF459xTPOk/56N/30awU8Y6Ztf/Rta+7/ANAK99R/0ypv/CYaZ/z7a1/4Ir3/AONUfVMR/wA+5fcw5l3Og86T/no3/fRo86T/AJ6N/wB9Guf/AOEw0z/n21r/AMEV7/8AGqP+Ew0z/n21r/wRXv8A8ao+qYj/AJ9y+5hzLudB50n/AD0b/vo0edJ/z0b/AL6Nc/8A8Jhpn/PtrX/givf/AI1R/wAJhpn/AD7a1/4Ir3/41R9UxH/PuX3MOZdzoPOk/wCejf8AfRo86T/no3/fRrn/APhMNM/59ta/8EV7/wDGqP8AhMNM/wCfbWv/AARXv/xqj6piP+fcvuYcy7nRyyyCZwHYDce9M86T/no3/fRrBl8Y6YZnP2bWvvH/AJgV7/8AGqb/AMJhpn/PtrX/AIIr3/41R9UxH/PuX3MOZdzoPOk/56N/30awfGMsh0O3y7f8hXTu/wD0+w03/hMNM/59ta/8EV7/APGqoX+rw6/qei2FpaamYDqCzXfn6XcwIEijkkQl3jUDEyQng84xyCRW+Hw9anVjUnBpR1ej6a/poS2mrHX+dJ/z0b/vo0edJ/z0b/vo0yivPLH+dJ/z0b/vo08yyeSp3tnce/0qGnn/AFK/7x/kKADzpP8Ano3/AH0aPOk/56N/30aZRQA/zpP+ejf99GjzpP8Ano3/AH0aZRQA/wA6T/no3/fRqxZyO0xDMxG3uaqVZsv9cf8Ad/rQBNdfeg/66f8AsrUUXX3oP+un/srUUxFiiiikMKKKKACiiigCG6/49n/D+dZ1aksfmxlM4z3qv9g/6af+O0AU6KufYP8App/47R9g/wCmn/jtAFOirn2D/pp/47R9g/6af+O0AU6fN/rn/wB4/wA6s/YP+mn/AI7SvZb3ZvMxk5+7QBSoq59g/wCmn/jtH2D/AKaf+O0AU6KufYP+mn/jtH2D/pp/47QBToq59g/6af8AjtH2D/pp/wCO0AVj/qV/3j/IUykim87XrrSduPsttDc+bn73mtKu3HbHk5znnd2xzd+wf9NP/HaAKdFXPsH/AE0/8do+wf8ATT/x2gCnRVz7B/00/wDHaPsH/TT/AMdoAp0+H/XJ/vD+dWfsH/TT/wAdpUstjq3mZwc/doApUVc+wf8ATT/x2j7B/wBNP/HaAKdFXPsH/TT/AMdo+wf9NP8Ax2gCnRVz7B/00/8AHaPsH/TT/wAdoAp09/uR/wC7/U1Z+wf9NP8Ax2qVjN/aF5qVtt8v+zbkW27OfMzDHLux2/1uMc/dz3wABaKufYP+mn/jtH2D/pp/47QBToq59g/6af8AjtH2D/pp/wCO0AU6KufYP+mn/jtH2D/pp/47QBWT7kn+7/UUyrq2WAw8z7wx933pPsH/AE0/8doAp0Vc+wf9NP8Ax2j7B/00/wDHaAKdFXPsH/TT/wAdo+wf9NP/AB2gCnRVz7B/00/8do+wf9NP/HaAK03+uf8A3j/OmUmizf25oNhq23yPt9tHc+Vnd5e9Q23PGcZxnAq79g/6af8AjtAFOirn2D/pp/47R9g/6af+O0AU6KufYP8App/47R9g/wCmn/jtAFOnn/Ur/vH+Qqz9g/6af+O0pssoF8zoSfu/T/CgClRVz7B/00/8do+wf9NP/HaAKdFXPsH/AE0/8do+wf8ATT/x2gCnVmy/1x/3f60/7B/00/8AHakgtvJctv3cY6UAJdfeg/66f+ytRRdfeg/66f8AsrUUxFiiiikMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooprhjGwjYK5B2sRnB9cd6AKMGtWlzr1zpMJZrm1iWWUgfKu4nC59e+PQitCuT0Dw/rGleJWmu7q1ubU2YjeaO2MbSyeYzEnMrfNlsk4wc4GMV1lHRf11DqwooooAKKKKACiiigAooooAKKKKACiiigCG8u4bCxnu7ptkMEbSSNgnCgZPA61U0vWV1KaeCSzurG5hVXaC5CbijZ2sCjMpBKsOuQQcgU/W7a5vNBvrax8r7RNA6R+coZCxBAyCCCPqCPasjwtpt1Z397PJZXNlbSxRIsd7cLPMzru3NvDOdmCoCluMHAXPIuoPY6WiiigAooooAKKKKACiiigAooooAKKKKACsu58Rafa67aaO0hkvbliBHGN3lfIzguf4chTjuewwCRqVlavZXF1quiTQR7o7W7aSY7gNqmGRc89eWA49aOodGRxeJYJdQjgFndrbyztbxXpVPJkkXOVGG3DlWGSoBI4PIzs1y9odUvvEgn1rRbyOKCVlswssBgiGCPNbEm9nIJ/h+UHAHVj1FC2DqFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAV7r70H/AF0/9laii6+9B/10/wDZWopiLFFFFIYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVn65rVp4e0ebUb/zmijwojgiaWSRmICoqKCWYkgAf0rQqO4Ba1lCjJKEADvxUzbUW0OO+pk+H/EttrXhbR9ZufLsP7VijeKCWYZ3uu4RgnG5uvQdqqL41tJviEvhS1t5pZVtpZp7ooyxxsnl/u1JGHbEoJwfl4zyeI/AYk0n4b+GrXULa5guPscMDRG3ctG+zo4AygGOS2AO5pdRtLl/iloV2lvK1tFpl6kkwQlEZngKgt0BO04HfB9K1kl7Sy21/LT+v6cr4R9lr+t6prt7Bp+kWDaZZXv2SS7m1F0lYhVLssQhYHBYjBcZKnpXS15Zd6Jp/22WHRvCs2l+Kjq6zjUVs5ZR5ZuA8kgvWQKFeLeTHu/iZNp6H1OoXwp/1shv4mFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAFe6+9B/wBdP/ZWoouvvQf9dP8A2VqKYixRRRSGFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAFe6+9B/10/9laiiimI//9k=)

Figure Error plot of PCA

### **Confusion Matrix**

#Confusion Matrix

iris\_pred <- knn(train = iris.train[,1:4], test = iris.test[,1:4], cl = iris.train$Species, k=5)

table(iris.test$Species,iris\_pred)

![A picture containing text

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDuRXhpZgAATU0AKgAAAAgABAE7AAIAAAAMAAAISodpAAQAAAABAAAIVpydAAEAAAAYAAAQzuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG1hcmlhIGphdmVkAAAFkAMAAgAAABQAABCkkAQAAgAAABQAABC4kpEAAgAAAAMxNwAAkpIAAgAAAAMxNwAA6hwABwAACAwAAAiYAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMTowNCAyMjoxNzowMAAyMDIyOjAxOjA0IDIyOjE3OjAwAAAAbQBhAHIAaQBhACAAagBhAHYAZQBkAAAA/+ELHmh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDEtMDRUMjI6MTc6MDAuMTY5PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm1hcmlhIGphdmVkPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAE0BXQMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKACiiigAooooARtxU7CA2OCRkA1x+gvfafN4rmvzYz6hDKrvPa28kKTEW6lco8smMdOCM+ma7Gqg0uzDXrCHm//AOPn5j8/yhPXj5QBxigDH8L3fiTU7G21HV5NKW2vLJJo4LWGTfBIQDguzYdeSfuoR0561W8LpfQal4l+3CxudRW4j3y2kMlus58hCuVeWTae2QQPaumtLWGxsobS1Ty4II1jjTJO1QMAZPPSohpdoGvWWIhr/wD4+CHYF/lCevHygDjFAGB4T1vVdQvJ7XxDcW0V8kSyNpy6ZLbSQZ6/vGldJ1B43x/Lnvziui1C4a0026uIwC8MLuoboSATzWXa+E7HTo7g6bc6jDdzx+WL2a9kvJoh1+Q3BkCjPOMYPcGq58MaoIpRJ4v1e9DxOn2e6is1jcspA3GO3VsZOeCOlAGVp3irXkSwl1j+zXGqaXJewQ2sUim3dEVirMznzFO7qFQjGOetafh3UfEN1pUWsa42m/Y7iwW5W3s4ZBJE+0EjezEOCM/wqRwOetO8OeC9O0XTIY5YmluzZJaTO1zLKqrtAZYw7fu1JGcIFHTjit61tILKxhs7ZNkEEYjjTJOFAwBk8nigDhvCfjvU9cvYZbuzlNhdWbXSldHu7YWmMEI08vyTZB6oF5HQg1JYX+rarr3hbU9QeyNrfLNPbxQROjwK0OQrsWIkOD1ATGOh7dHpvhbS9IvWudPF5FkFRb/2hO1ugPULAXMa+2FGO1R6d4N0LS7+G9s7SQT25fyGkuZZfIVxhkjDsQiHj5FwvA44FAG5RRRQAUUVEl1by3MtvHPG80ODLErgtHnkZHUZ7ZoAloopCQqksQABkk9qAForP0rX9H11ZW0TVbHURC22U2dykvln0O0nB+taFABRRRQAUUVEl1byXUttHPE08IVpIlcFkDZwSOozg49cUAS0UUUAFFRJdW8l1LbRzxNPCFaSJXBZA2cEjqM4OPXFS0AFFRLd27Xj2izxNcxoJHhDjeqkkBivUAkHn2NS0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVHcM620rRsiOEJVpPug46n2qSmyRpNE8UyLJG6lWRhkMD1BHcUAcd4cvtXsry7sfEV3qdzqqWn2gQTLbG2kxwxgaKNX27iFxLhunHU1meDtU8W+IhBdXf8Aa1rYalZNI9zILDy7SU4KfZwhdyOWGJg3QZxyK7XSfDui6Asq6Fo9hpizEGQWdqkO/HTO0DNNtvDWhWWry6rZ6Lp9vqM2fMvIrVFmfPXLgZOe/NAHM+Dhq1h4NudVvdb1TWZkS5KW14ISAySPjBSNXyduMFiPQDijS9S1e1u9GMuuNqq61ZSXDLcRQrFalUVwyeWit5eW2neWP3ec5z1VroOj2OqT6lZaVY29/c/6+6htkSWXv8zgZb8TTLLw3oemyXcmnaNp9o97n7U0FqiG4znO8gfN1PXPU0AYHhm/1Kyv7qx8VajqT6glqLhluFtjalRw7wNDGrlQTjEuGxjjvVDwnr+qXfjNbWa41ifTLzT3u7dtVitE3gSKFeIQAOFKv0lAbp3zXU6DpHhzS1uV8MafpdmvmeXcDToI4xvX+F9gHIz0PIzVXRdP8GNfT/8ACO2mhG7sp2af7DFD5kErDBLbBlWIBBzyaAN6ZHkgkSKQxOykLIACVOODzxx71zGia3qGpGytJnAvLJJDqgRB8zoTGqgHoHYFxjsvvXVVDDZ21vNPNb28UUtwwaZ0QK0pAwCxHU4AHNAHn3hLX/FmsTQanc2uojT7qGV5/tH2IW1uQDsEPluZicjaRJnv93pW34M/tu90PTtb1XX3uvtdgryWrW0UcSuQCHBUBhxnILEHOQF6Vsx+GdBh1iTVotE05NSlz5l4tpGJnyMHL43HI96vQ2tvb2q2sEEcVuibFhRAEVemABxj2oA5Lwzd6tba++meJr/Upb+a3M0YdLU2cgBG4wNGgkAXcoxLg88bsE1a8Ow3Fl4k8QQ3F7NqToIHWaeGBJSCrfKTFGm4DHG7JHrWrpHhrQtAaVtB0XTtMaYASmytEhLgdM7QM4yevrV9IIY55JkiRZZcCRwoDPjpk98ZoA5Pwpcanqeix+JLnXbm7M8LyHS4ooFt4m5/dgiPzdykYOX6547Croeraus3hu8udWm1JPECFpbVooljtf3RkzEVRXwCAp3l+o7108XhvQ7fWn1eDRdPi1OTO+9S1QTNng5cDcc/Wn2WgaPpl/cX2naTY2l3dHNxcQWyRyTc5+ZgMtzzzQBkac5j8deJXVS5W2tSFHf5ZOKyNJ1nWFTw9qM+qTXy68WEtk0USx2n7ppMxlUD/KVCnezdfWu6S2gjuJJ44Y1mlAEkioAzgdMnqcZOKp2mgaPYahcX9jpNjbXl1/x8XMNsiSTc5+ZgMtz60AYfgj+29S0fTNb1XXpLoXVmGks/ssSRhjgqwIXcDjIPJBzkBeldVIpeNlRzGxBAcAEqfXniqGm6jorXE2kaReWBm08BJbK1lTdbDsGRTlPxArRoA5XQ9Z1HUnsdPuJgt9ZmQaoyovzFCUXj+HeSHGB0FLocFxZeLNfhuL+W/YQW8iz3EECSAHzPk3RRpuUY43ZIyeea6OK0toLiaeC3ijmuCDNIiANIQMAsRycDjmnC3hWeSZYYxLKoWSQKNzgZwCe4GT+ZoA5XwY2t32hadruq65LeC4st8lkLWJI9xwVZSq7g2Mg8kEngL0rN0PWtUub7w3d3OvtMNcEskummOELCqxs2IyED4U4DbixzjkdD3lvbwWlvHb2kMcEMa7UjiUKqj0AHAFcvpXgt7PxOdXu5NJXbJJKkemaV9kaSRgV3zOZHMjBSQPu/eJ+gBL4ft57Pxhrlvc30t+3lW8gnuIIEkAbzPk3RRpuUY43ZIyeawtJ1PxB/Z2g61fa9Lci+1D7JJZLbQpCY2d1BJCl94wOQwU4+7XoC28KXDzpEizSAK8gUBmAzgE98ZP51EunWSQQwLZ26xQP5kUYiXbG2SdyjHByTyPWgDn9Gt57Px9q0Vxfy3++zglWS4ggWSMGSX92GjjUlBjgNkjJ55pnhSXUdd3a1c6/cbBczRNpUMUAhh2OVCMTGZNwABPzjk9AOK6gW8K3LXCxRid1CNKFG5lBJAJ64GTx7mqDeGtCbWxrLaLpx1RTkXxtE88cY/wBZjd0469KAOQ0/xFqU/j3T1trvV7jR9QkuUVr2KzW2fYpP7nYBPwVIzIMEevBr0KudtdP8FzeIbyGytNBk1mORbi7jijhNwjjlZHAG4N82Qx55966KgAooooAKKKKAKWsuI9EvWa+GnAQP/pjAYt+PvnPHHXn0rhvCeqg6Vr9v4duP7WurW2DwX0GtzanBPJtbaMys3lSZGTGCRhl5NejUUAeXeAriXWry4tbnXLOaOex/020tvE1xd3azbhl9pWNrYjLAqmADgYGKm8Diw0zwff22gai914jtbacSadNq0ty8Lh32gwvIwjJOOijOfevS6KAPNtE1Oy+3QDw/4jnvInsJn1iabUHuxZyhV2syuzCFgxf5BtHB4+XifwNqtkk2pw2l82ufZ7ZZJNRsdan1GOYjORsdmEEhOT5ak5GOeK9CqpaX/wBruryD7JdQfZJRH5k0e1JsqG3Rn+JecZ9QRQB5x4D1+O68bFYL+P7FfWTGOA+IpdSJmVgdrCTiKUI3zRoTgdegNepUU2RikTusbSMqkhFxlvYZIGfqRQA6isfQPEI11r6J9MvdMuLGYQzQXhiLZKK4IMTupGGHetigAooooAKKKKACoL77J/Z9x/aXk/Y/Lbz/ALRjy9mPm3Z4xjrnip6KAPNvCmsaJfab4q0nwlq2lvdNPcNZW1lcRnCeUiqyqp+6DgZAxV3w/eabqGueHo9CeF303TpIb9Il+a1BWMLDJj7j7gTtbn5TxXdkhVJYgADJJ7VlaX4n0nWbt7bT7l3lVd6iSCSISpnG+MuoEidPmTI5HPIoA1qKKKACiiigAooooAKKKKACo5xI1tKITtkKEIfQ44qSigDzjw7dWlzL4R06wkifVtKRxqcKDMlqDCwcSjqm6TaQGxuxkZxmvR6yLDxTpGpao2n2dy7TgMyFreRI5gpwxjkZQkmCedhOO9a9ABRRRQAUUUUAFFFFABSNkqdvBxxS0hIVSWIAAySe1AHm2hXNrMnhfSIJYn17Tbt31GBBmW3yknmtIOqh2YEE4DbgRmvSqzdJ8Q6Trslwuj30V79mKiR4TuT5hkYb7rfgT6VpUAFFFFABRRRQBU1XTodX0i60+6B8q5iaNsdRkdR7jrXL2MGt6rpV3PPFJbanZ2D2Nq8qFN1xj55lz1ViEw3sfWuvuLiC0t3nupo4IUGXkkYKqj3J4FNnvLW1/wCPm5hh+Rn/AHkgX5VGWbnsM8ntQB5X4U0aa3s9W2IYLqTSJYbizt/DVzY+fNj77zSO6TyZyNykltxOSK6/QPC+k6L4bS7h06S1vptMjiu54VY3UmE/iPLM47E5YdPatLQ/Edrrlne31vNZvYW87JFd297HPHKiqCXLKcLySCCcjGe9W7LXNJ1K8mtNO1Syu7m3VWmhguEd4wwypZQcgEdM9aAOO8AafZWd7f2um6JDHp7QIpvpNCk02eYjI2TCRV844JYuqheSMZNafh/Qhow8TWmh6fDpcMlxus0htxFFk26DcoAAxuzkjvmtmz8SaHqE00NhrWn3UtuWEyQ3SO0e3724A8YzznpVfQ/E9nrseo3VpcWMunWkuyO9tr6OeOVQgZmJU/JgkjBPbPQ0Acr4cstNi0S5ttG0C50vxY2nyJPe3OlSRu82MEtdlNkhL4OQ5z17cSeFNPtIvEGnyeHdFuNJjitZF1dpdPktfPlIXbuLKvnNuDneNw68/Nz19t4j0O8vJ7Sz1nT7i5t4/NmhiukZ4kwDuZQcgYIOT61D4f8AEVt4jN9Lp0tnc2VvOIoLq0vY7hZxsUk/ITsIJI2nnjPegDKt7LU/tHjT7Eklvc3UoNlK6lQzfZUUMpPUBhjPqK5uy0u3Mbf8IvoN1pm3SrmPVQ+myWxuZjGAgJZV89924713d+fm57+08SaHqGpT6dYazp91e2+fOtobpHkiwcHcoORg+tGl+I9E1yWaLRdZ0/UZLfHnJaXSSmPOcbgpOOh6+lAGd4R8L6Xomm2d3a6atrqM1jDFdTMD5su1RxITyxB4y2SOldHRRQAUUUUAFFFFAFPWLSW/0O+tLd/LluLeSNH/ALrMpAP61zGjPPqWs6II9PvrMaRZyRXbXNs0SiRlRRGjMAJBlSdyZXgc812MsiQxPLKwVEUszHsB1NYuk+KYNVvUtjYX1kZ4jPaSXSIFuohjLptYkfeX5XCtz060AblFFFABRRRQAUUUUAFFFFABSEBlIPQjBpaCcDJ4FAHnGkafe3PijR7G2nvJdL0CaR0afSZrPYvltGqGSXic/Nw0ahcAk5JWvR6wdN8W22pahFbrY3tvDdBmsryZEEV4FGTswxYcc4dVJHIzW9QAUUUUAFFFFABRRRQAUhO1STngZ4GaCdqknPAzwM1laN4jtNcu723tILyJrMoHN1btCW3jIIVsMOn8QH4jmgDA8O63Bc+Otb22WrxJemAQS3Gj3UMbbIyGy7xhV59SM9s12tYFl4utb3U47YWV7Db3DtHaX8qJ5N06glgmGLj7rYLqoO07Sa36ACiiigAooooAgvbOHULCezukDwXEbRSKe6sMEfkaw/C+nalCTNriYntYVsoGLKxkjQ8y8dN/ynBOflFdHWVZa39s1ZrL7Ps2iY79+f8AVyBOmO+c1cYSkm10C5nppN6NM8UxGH57+aZrYb1/eBoFUd+OQRziprPQPs/gmHTbSCGxvF0wWiNGijyTsxgFewbnit+kZQ6lXAZWGCCMgioA8/0B7r/hM9Cs7zQm0qSw0eaEh5opGYBoRlfLLYjyDgsQSc/KMc7h0m9MPixfJ51FibX51/ef6MievHzAjnFamk+HdF0BZV0LR7DTFmIMgs7VId+OmdoGa0aAOSsPD09hN4RW1so7eDTLWSK4SLYqxFolGMDrlgemfWr1ppV2LnxLvzANQmBt5QwPHkIm7jphgevpW/RQBynhiXV7HQ4dEk8MzafLZWnlR3Jmga0ldRgbdsnmYY88xjvnnrleF7DxKvjCHVdettUcSWT2shuzZBYH3K/7sQnd5R5A3Fn45x1PoFFABRSOGKMIyFbHylhkA/TvWH4ev9Vn1DVbHWZrO4ksZY1SW0tmgVgyBuVaR+efWtI03KMpJ7f52Fc3aKKKzGFFFFAFTVbEano95YFtguoHh3DtuUjP61zukWer3er6U+paW+nx6PbPC0jzo4uZGVVzGEYnZhScuFbkfLXW0UAFFFFABRRRQAUUUUAFFFFABTJ4hPbyRMSBIpUkdsjFPooA4nRdJ1bzdA02902S1t/D6/NetPGUuyImiXy1Vi2MNk7wuMYAPWu2oooAKKKKACiiigAooooAQnCkgE8dB3rjtCm1dvGOrzXvhfVLK01HyglxNNaMqbEKncEmZuT0wD74rsqKAOH0jRtWjXQ9EuNNkgtdCm8w6g08ZjuVVGVBGqtvydw3blUDBA3cV3FFFABRRRQAUUUUAf/Z)

### **Conclusion**

End has been given an accuracy for every variation of our data. It has an overall accuracy of eighty-seven percent to one hundred percent and an overall accuracy of 96.6 percent. I would say that it is very good in the future. ۔ We can use this whole process to make sure that whenever we follow a model that we see fit for the future, we have a good measure of success. We can create a KNN rating that gives a prediction accuracy of 96.67% on the test data set.

## Experimental Result of Random Forest

#Load required libraries #

library(stats)

library(dplyr)

library(randomForest)

summary(iris)

Text

Description automatically generated

# Load data into mydata object #

mydata = iris

Graphical user interface, text, application

Description automatically generated

# Inspect mydata #

View(mydata)

A picture containing text, indoor, white

Description automatically generated

# Variable selection

str(mydata)

A picture containing text

Description automatically generated

### **Splitting Data in Training and Testing**

# Splitting Data in Training and Testing #

# A vector that has random sample of training values #

index = sample(2,nrow(mydata),replace = TRUE,prob=c(0.7,0.3))



# Training data #

Training = mydata[index==1,]

# Testing data #

Testing = mydata[index==2,]

# Random Forest Model #

RFM = randomForest(Species~.,data = Training)

Graphical user interface, text, application

Description automatically generated

# Evaluating Model Accuracy #

Species\_Pred = predict(RFM,Testing)

Testing$Species\_Pred = Species\_Pred

View(Testing)

Graphical user interface, text, application

Description automatically generated

### **Confusion Matrix**

# Building Confusion Matrix #

CFM = table(Testing$Species,Testing$Species\_Pred)

CFM

Table

Description automatically generated with low confidence

So,16 Sentosa are correctly classified as Setosa. 12 Versicolor are correctly classified as Versicolor and 1 Versicolor is classified as Virginca. 13 virginica are correctly classified as Virginica.

### **Random Forest model**

# print Random Forest model #

print(RFM)

Text

Description automatically generated

The number of variables tried at each split is 2. The OOB estimate of error rate is 7.41%. where Setosa having error is about 0.0000000, versicolor having class error 0.1052632 and virginica having class error 0.1111111.

### **Plot Random Forest Model**

# Plotting #

plot(RFM)

Chart, histogram

Description automatically generated

Figure : Random Forest Model Plot

# see the importance features

importance(RFM)

Text

Description automatically generated

varImpPlot(RFM)

Table

Description automatically generated

Figure : Plot of RFM between petal, sepal, and mean decrease Gini

### **Model Evaluation and visualization**

# Try to see the margin, positive or negative, if positive it means correct classification #

plot(margin(RFM,Testing$Species))

Chart, scatter chart

Description automatically generated

Figure : Plot to see the margin between RFM, Testing and species

# Try to tune Random Forest #

tune.rf <- tuneRF(iris[,-5],iris[,5], stepFactor=0.5)

Chart, line chart

Description automatically generated

Figure : OOB Error in RFM

# Try to tune Random Forest #

tune.rf <- tuneRF(iris[,-5],iris[,5], stepFactor=0.5)

A picture containing table

Description automatically generated

print(tune.rf)

Text

Description automatically generated

### **classification Accuracy**

classification\_Accuracy = sum(diag(CFM)/sum(CFM))

classification\_Accuracy

Graphical user interface, text, application

Description automatically generated with medium confidence



### **Conclusion**

The accuracy of the random forest model designed to predict species using input variables such as sapling length, sapling width, petal length and petal width is approximately 97% which is very good so basic Because we have a high degree of accuracy that we do not need. Go and look at the predictors again or change the predictors or see how we change the variables that we have already achieved high accuracy we can only leave this model.

## Result of Decision Tree:

The accuracy of the model is better when you cut down the tree. Depending on the model both pre-pruning and subsequent pruning may be required to fit more, prevent less fitting, and fix the model.

## Experimental Result of Naïve Bayes:

We have shown the high accuracy that the Naive Bayes algorithm has for classifying text base data, and that it is less accurate on numerical data. The reason I chose the Iris dataset was because I really like working with it and I wanted to try to model a second time with numeric values.

# **References**

* Published in Towards Data Science. Peter Nistrup. Jan 29, 2019

From: <https://towardsdatascience.com/principal-component-analysis-pca-101-using-r-361f4c53a9ff>

* Published in Towards Data Science. Rina Buoy. Jul 28, 2019

From: <https://towardsdatascience.com/introduction-to-principle-component-analysis-d705d27b88b6>

* Published in Learn Data Science. [Andrea Trevino](https://blogs.oracle.com/ai-and-datascience/authors/Blog-Author/CORE8A8CC6DA78AF4C89BEE5D934BFB4C0F4/andrea-trevino) | December 6, 2016

From: <https://blogs.oracle.com/ai-and-datascience/post/introduction-to-k-means-clustering>

* Published in Wikipedia, the free encyclopedia 24 November 2021, at 12:52 (UTC).

From: <https://en.wikipedia.org/wiki/K-means_clustering>

* Published in JavaTpoint 2011-2021 www.javatpoint.com. All rights reserved. Developed by JavaTpoint.
* From: <https://www.javatpoint.com/k-means-clustering-algorithm-in-machine-learning>
* Published in Wikipedia, the free encyclopedia 20 November 2021, at 15:01 (UTC).

From: <https://en.wikipedia.org/wiki/RStudio>

* Published in R Foundation

From: <https://www.r-project.org/about.html>

* Published in Builtin. Zakaria Jaadi. April 1, 2021 Updated: December 1, 2021

From: <https://builtin.com/data-science/step-step-explanation-principal-component-analysis>

* Published in JavaTpoint 2011-2021 www.javatpoint.com. All rights reserved. Developed by JavaTpoint.

From: <https://www.javatpoint.com/principal-component-analysis>

* Published in Towards Data Science. Imad Dabbura. Sep 17, 2018

From: <https://towardsdatascience.com/k-means-clustering-algorithm-applications-evaluation-methods-and-drawbacks-aa03e644b48a>

* Published in Kaggle. UCI Machine Learning. updated 5 years ago

From: https://www.kaggle.com/uciml/iris

* Published in  [Data Science Blogathon](https://datahack.analyticsvidhya.com/contest/data-science-blogathon-9/). [Sruthi E R](https://www.analyticsvidhya.com/blog/author/sruthi94/) — June 17, 2021

From: <https://www.analyticsvidhya.com/blog/2021/06/understanding-random-forest/>

* Published in geeksforgeeks. Last Updated : 05 Jun, 2020

From: <https://www.geeksforgeeks.org/random-forest-approach-in-r-programming/>

* Published in Wikipedia, the free encyclopedia 12 December 2021, at 03:08 (UTC).

From: <https://en.wikipedia.org/wiki/Random_forest>

* Published in Decision Tree Analysis

From: <https://www.omnisci.com/technical-glossary/decision-tree-analysis>

* Published in JavaTpoint 2011-2021 www.javatpoint.com. All rights reserved. Developed by JavaTpoint.

From: <https://www.javatpoint.com/machine-learning-decision-tree-classification-algorithm>

* Published in machine learning plus. [November 4, 2018](https://www.machinelearningplus.com/2018/11/04/). [Selva Prabhakaran](https://www.machinelearningplus.com/author/selva86/)

From: <https://www.machinelearningplus.com/predictive-modeling/how-naive-bayes-algorithm-works-with-example-and-full-code/>

* Published in geeksforgeeks. Last Updated : 13 Jul, 2021

From: <https://www.geeksforgeeks.org/naive-bayes-classifier-in-r-programming/>

* Published in R · [Iris Flower Data Set Cleaned](https://www.kaggle.com/larsen0966/decision-tree-with-the-iris-dataset/data)

From: <https://www.kaggle.com/larsen0966/decision-tree-with-the-iris-dataset>

* Published in edureka. Zulaikha Lateef. Last updated on May 26,2020

From: <https://www.edureka.co/blog/naive-bayes-in-r/>

* Published in  Data Science Enthusiast. [Nagesh Singh Chauhan](https://www.kdnuggets.com/author/nagesh-chauhan).

From: <https://www.kdnuggets.com/2020/06/naive-bayes-algorithm-everything.html>

* Published in Analytics Vidhya. [Sunil Ray](https://www.analyticsvidhya.com/blog/author/sunil-ray/) — Sep 13th, 2015 and updated on Sept 11th, 2017

From: <https://www.analyticsvidhya.com/blog/2017/09/naive-bayes-explained/>