1. **Introduction**

Population in cities is growing at an alarming rate and with that number of vehicles on roads is also growing. This has led to several problems like traffic jams, accidents, and even illnesses due to the frustration and stress of the drivers. One of the many causes of traffic jams and accidents is poor traffic management.

Even though present-day traffic signaling system works well when the traffic load on the different lanes of the junction is evenly distributed, it becomes inefficient when that’s not the case. This is because today’s traffic signaling system is fixed time based and does not take density of traffic on the different lanes into consideration.

This shortcoming of today’s methods is highly pronounced when there is a large density in one of the lanes and little to no traffic on the other lanes. When this occurs today’s method of traffic signaling still would give equal green light time to all the lanes when it should have given the lane with the higher traffic density more time.

* 1. **Statement of the problem**

In modern cities, ineffective traffic flow is one of the issues faced. Specially, in a third world country like Ethiopia, where the development of infrastructures is minimal, and this issue is double fold. The city is usually crowded, and people waste significant amount of their time on the road. One of the reasons for this, besides the lack of sufficient amount of infrastructure or the miss match between available roads and number of cars, is the poor traffic light control.

These traffic light control systems assign fixed amount of time for the streets coming into the crossroad. But these streets have varying number of cars; the numbers vary with time, day and other factors. To tackle this issue, a real time system that can count cars from all directions and decide accordingly can be employed.

* 1. **Objective**
     1. **Main Objective**

The main objective of the project is to build an adaptive traffic control system. The system will be responsive to traffic densities on the different lanes of a junction. The proposed system will overcome the shortcomings of today’s fixed-time based traffic signaling method and in doing so the proposed system is intended to replace the today’s system.

* + 1. **Specific Objective**

The specific objective of this project is to implement vehicle detection algorithm using computer vision to detect density of traffic on the different roads of a junction. This way the system can make better decision on how much green light time to allocate for each road than today’s existing system.

* 1. **Scope and Limitation**

1. **Literature Review**
   1. **Literature Review**
   2. **Theoretical Background**
      1. **Raspberry Pi**

The Raspberry Pi is a low cost, **credit-card sized microcontroller. This microcontroller can connect a computer monitor or TV, standard keyboard and mouse.** It’s capable of doing everything you would expect a personal computer to do, from browsing the internet and playing high-definition video, to making spreadsheets, word-processing, and playing games. Moreover, it is a capable of performing computing in high level programming languages like Scratch and Python. Raspberry Pi SBCs feature a [Broadcom](https://en.wikipedia.org/wiki/Broadcom) system on chip with an integrated ARM-compatible CPU and on-chip GPU.

Developed in the [United Kingdom](https://en.wikipedia.org/wiki/United_Kingdom) by the [Raspberry Pi Foundation](https://en.wikipedia.org/wiki/Raspberry_Pi_Foundation), in association with [Broadcom](https://en.wikipedia.org/wiki/Broadcom_Inc.), the Raspberry Pi has evolved over different generation.

[1] The *Raspberry Pi Model B* was released in February 2012, followed by the simpler and cheaper *Model**A* in 2014. These first-generation boards feature ARM11 processors, are approximately credit-card sized and represent the standard mainline form-factor. Improved A+ and B+ models were released a year later. A "Compute Module” was released in April 2014 for embedded applications.

The *Raspberry Pi 2* was released in February 2015 and initially featured a 900 MHz 32-bit quad-core ARM Cortex-A7 processor with 1 GB RAM. Revision 1.2 featured a 900 MHz 64-bit quad-core ARM Cortex-A53 processor. This processor model is also used by *Raspberry Pi 3 Model B* but has an improved clock speed of 1.2 GHz.

A *Raspberry Pi Zero* with smaller size and reduced I/O and GPIO capabilities was released in November 2015. On 28 February 2017, the *Raspberry Pi Zero**W* was launched, a version of the Zero with Wi-Fi and Bluetooth capabilities. On 12 January 2018, the *Raspberry Pi Zero WH* was launched, a version of the Zero W with pre-soldered GPIO headers.

*Raspberry Pi 3 Model B* was released in February 2016 with a 1.2 GHz 64-bit quad core ARM Cortex-A53 processor, on-board 802.11n Wi-Fi, Bluetooth, and USB boot capabilities. In 2018, the *Raspberry Pi 3 Model B****+*** was launched, on Pi Day. It has a faster 1.4 GHz processor, a three-times faster gigabit Ethernet (throughput limited to ca. 300 Mbps by the internal USB 2.0 connection), and 2.4 / 5 GHz dual-band 802.11ac Wi-Fi (100 Mbps). Other features are POE, USB boot and network boot.

*Raspberry Pi 4 Model B* was released in June 2019 with a 1.5 GHz 64-bit quad core ARM Cortex A-72 processor, on-board 802.11ac Wi-Fi, Bluetooth 5, full gigabit Ethernet, two USB 2.0 ports, two USB 3.0 ports, and dual-monitor support via a pair of micro–HDMI Type D ports for up to 4K resolution. The Pi 4 is also powered via a USB-C port, enabling additional power to be provided to downstream peripherals, when used with an appropriate PSU. The initial Raspberry Pi 4 board has a design flaw where third-party e-marked USB cables, such as those used on Apple MacBooks, incorrectly identify it and refuse to provide power.

*Raspberry Pi 400* was released in November 2020. It features a custom board that is derived from the existing Raspberry Pi 4, specifically remodeled with a keyboard attached. The case was derived from that of the Raspberry Pi Keyboard. A robust cooling solution like the one found in Commodore 64 allows the Raspberry Pi 400's Broadcom BCM2711C0 processor to be clocked at 1.8 GHz, which is slightly higher than the Raspberry Pi 4 it's based on. The keyboard-computer features 4 GB of LPDDR4 RAM.

*Raspberry Pi Pico* was released in January 2021. It was Raspberry Pi's first board based upon a single microcontroller chip; the RP2040, which was designed by Raspberry Pi in the UK. The Pico has 264 KB of RAM and 2 MB of flash memory. It is programmable in MicroPython, CircuitPython and C. It has partnered with Vilros, Adafruit,Pimoroni,Arduino and SparkFun to build Accessories for Raspberry Pi Pico and variety of other boards using RP2040 Silicon Platform. Rather than perform the role of general-purpose computer like the others in the range it is designed for physical computing, similar in concept to an Arduino. [1]

* + 1. **Computer Vision**

[3] Computer vision is a field of artificial intelligence that enables computers and systems to derive meaningful information from digital images, videos and other visual inputs and take actions or make recommendations based on that information. If AI enables computers to think, computer vision enables them to see, observe and understand.

Computer vision works much the same as human vision, except humans have a head start. Human sight has the advantage of lifetimes of context to train how to tell objects apart, how far away they are, whether they are moving and whether there is something wrong in an image.

Computer vision trains machines to perform these functions, but it has to do it in much less time with cameras, data and algorithms rather than retinas, optic nerves and a visual cortex. Because a system trained to inspect products or watch a production asset can analyze thousands of products or processes a minute, noticing imperceptible defects or issues, it can quickly surpass human capabilities.

Computer vision is used in industries ranging from energy and utilities to manufacturing and automotive – and the market is continuing to grow. It is expected to reach USD 48.6 billion by 2022

*How it works*

Computer vision needs lots of data. It runs analyses of data over and over until it discerns distinctions and ultimately recognize images. For example, to train a computer to recognize automobile tires, it needs to be fed vast quantities of tire images and tire-related items to learn the differences and recognize a tire, especially one with no defects.

Two essential technologies are used to accomplish this:

1. Deep learning

[4] A subset of machine learning in artificial intelligence that has networks capable of learning unsupervised from data that is unstructured or unlabeled. It imitates the workings of the human brain in processing data and creating patterns for use in decision making. Also known as deep neural learning or deep neural network.[4]

1. Convolutional neural network

[5] A Deep Learning algorithm which can take in an input image, assign importance to various aspects/objects in the image and be able to differentiate one from the other.

The pre-processing required in a Convolutional neural network is much lower as compared to other classification algorithms. [5]

Machine learning uses algorithmic models that enable a computer to teach itself about the context of visual data. If enough data is fed through the model, the computer will “look” at the data and teach itself to tell one image from another. Algorithms enable the machine to learn by itself, rather than someone programming it to recognize an image.

A CNN helps a machine learning or deep learning model “look” by breaking images down into pixels that are given tags or labels. It uses the labels to perform convolutions (a mathematical operation on two functions to produce a third function) and makes predictions about what it is “seeing”. The neural network runs convolutions and checks the accuracy of its predictions in a series of iterations until the predictions start to come true. It then starts recognizing or seeing images in a way like humans.

Much like a human making out an image at a distance, a CNN first discerns hard edges and simple shapes, then fills in information as it runs iterations of its predictions. A CNN is used to understand single images. A recurrent neural network (RNN) is used in a similar way for video applications to help computers understand how pictures in a series of frames are related to one another.

*Common Application Areas*

The following are some of the classes of application areas where computer vision is used.

* ***Image classification*** sees an image and can accurately predict that a given image belongs to a certain class. For example, a social media company might want to use it to automatically identify and take the appropriate action if a user uploads objectionable images.
* ***Object detection*** can use image classification to identify a certain class of image and then detect and tabulate their appearance in an image or video. Examples include detecting damages on an assembly line or identifying machinery that requires maintenance. This projects vehicle detection algorithm belongs to this class.
* ***Object tracking*** follows or tracks an object once it is detected. This task is often executed with images captured in sequence or real-time video feeds. Autonomous vehicles, for example, need to not only classify and detect objects such as pedestrians, cars and road infrastructure, they need to track them in motion to avoid collisions and obey traffic laws.
* ***Content-based image retrieval*** uses computer vision to browse, search and retrieve images from large data stores, based on the content of the images rather than metadata tags associated with them. This task can incorporate automatic image annotation that replaces manual image tagging. These tasks can be used for digital asset management systems and can increase the accuracy of search and retrieval. [3]

***OpenCV***

[6] OpenCV is an open source computer vision and machine learning software library. OpenCV was built to provide a common infrastructure for computer vision applications and to accelerate the use of machine perception in the commercial products. Being a BSD-licensed product, OpenCV makes it easy for businesses to utilize and modify the code.

The library has more than 2500 optimized algorithms, which includes a comprehensive set of both classic and state-of-the-art computer vision and machine learning algorithms. These algorithms can be used to detect and recognize faces, identify objects, classify human actions in videos, track camera movements, track moving objects, extract 3D models of objects, produce 3D point clouds from stereo cameras, stitch images together to produce a high resolution image of an entire scene, find similar images from an image database, remove red eyes from images taken using flash, follow eye movements, recognize scenery and establish markers to overlay it with augmented reality, etc.

OpenCV has more than 47 thousand people of user community and estimated number of downloads exceeding 18 million. The library is used extensively in companies, research groups and by governmental bodies.

Along with well-established companies like Google, Yahoo, Microsoft, Intel, IBM, Sony, Honda, Toyota that employ the library, there are many startups such as Applied Minds, VideoSurf, and Zeitera, that make extensive use of OpenCV. OpenCV’s deployed uses span the range from stitching streetview images together, detecting intrusions in surveillance video in Israel, monitoring mine equipment in China, helping robots navigate and pick up objects at Willow Garage, detection of swimming pool drowning accidents in Europe, running interactive art in Spain and New York, checking runways for debris in Turkey, inspecting labels on products in factories around the world on to rapid face detection in Japan.

It has C++, Python, Java and MATLAB interfaces and supports Windows, Linux, Android and Mac OS. OpenCV leans mostly towards real-time vision applications and takes advantage of MMX and SSE instructions when available. A full-featured CUDA and OpenCL interfaces are being actively developed right now. There are over 500 algorithms and about 10 times as many functions that compose or support those algorithms. OpenCV is written natively in C++ and has a templated interface that works seamlessly with STL containers. [6]

OpenCV uses an algorithm called Haar cascade classifier to perform detection of different objects. A classifier, in machine learning, is the algorithm used by the machine to categorize data into one or more of set of classes. For example, an email classifier is used to scan emails to filter the spams from the useful emails. Haar cascade classifier is then a classifier that is used to detect object from an image or video. A short abstraction of how this algorithm works is presented in the section to follow.

***Haar cascade classifier***

A Haar cascade classifier, or a Haar classifier, is a machine learning object detection program that identifies objects in an image or video. This is algorithm is described in detail in a paper prepared by Paul Viola and Michael Jones, titled “Rapid Object Detection using a Boosted Cascade of Simple Features”. This article goes into the details of Haar Cascade classifier using mathematics to elaborate the technical details of how it works. Here we have presented a highlight instead.

The algorithm can be explained in three basic stages. We explain each one in detail. The following are the three stages:

* Calculating Haar Features
* Creating Integral Images
* Using Adaboost

1. *Calculating Haar Features*

Owing their name to their intuitive similarity with the mathematical Haar wavelets, Haar features were used in the first real-time face detector. Essentially, a Haar feature is a series of calculations that are performed on adjacent rectangular regions at a specific location in a detection window. The calculation involves summing of the intensities of the pixels in each region and looking for the difference between the sums.

There are several types of Haar features. Three of these are the basic ones and are listed below:

1. Edge Features
2. Line Features
3. Four-rectangle Features

The picture below shows these three basics Haar Features in the order they are presented above.

A picture containing diagram

Description automatically generated

Figure 1 - Basic Haar Features

The first two are edge features. As their name indicates, they are used to detect edges in an image. The third one is a line feature used to detect a vertical line. The last one is a four-rectangle feature most likely used to detect a slanted line.

In each of these features, the white bars represent pixels that contain parts of an image that are closer to the light source and would therefore be whiter on a grayscale image (A grayscale image is an image where all the pixels carry only light intensity information). The black bars are the opposite, they are pixels whose image features are farther away from the light source or are obstructed by another object. An example of this could be eyebrows casting slight shadows over the eyes below. Similarly, these features would appear blacker on a grayscale image. The most important reason behind transforming the image to grayscale is this comparison between white and black pixels.

Note that Haar like features are scalable but they cannot be a one-by-one pixel. This is because each cell of the frame represents a single pixel, which can only contain the value for a single color. Since the entire function of these frames is to compare the “white-ness” and “black-ness” of neighboring pixels it cannot be scaled down to a single pixel. The smallest scale for the basic features is:

* Edge Features: 1x2 or 2x1.
* Line Features: 1x3 or 3x1.
* Four-Rectangle Features: 2x2

To explain these basic features. Consider a face detection algorithm.

**a) [7] Edge features**: Think of the forehead and the eyebrows or eyes. The forehead is an exposed, flat surface of the face. This allows it to reflect more light, so it is often “lighter”. Eyebrows and the eye area are generally darker. The algorithm would read the lighter shade of the forehead and the transition to the darker eyebrows as an “edge” boundary. Which means it would place the inverted version of the second feature from the image above.

**b) Line features**: In a line feature, the pattern can go white-black-white just like the third feature in the image above or black-white-black. Think about a nose. The top edge of your nose that stretches from the bridge to the nose tip, while not as flat as the forehead, is still reflective and the closest point on the face to a light source that might be in front of the subject, so it will naturally be brighter and stand out. The area around the nostrils typically bends away from the light making them darker. This pattern would be picked up as a line feature, opposite of the one given in the picture above. Another interesting way that line features are being utilized is in eye-tracking technology. A **darker** iris sandwiched between the **white** space of your eye on either side of it.

**c) Four-Rectangle Features**: This is good for finding diagonal lines and highlights in an image. This is used best on a micro scale. Depending on the lighting, it can pick out the edges of the jaw, chin, wrinkles, etc… These typically are features that aren’t as important in general face-detection as there are so many of them, as well as so many variations in every individual’s face, that it would lead to an algorithm that was too slow and might only detect the faces of certain people. In other words, too specialized.[7]

The following image shows an image transformed to greyscale with few Haar features placed. Note that, the contrast of the images to the right have been turned up to make the difference clear.

![A picture containing text

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADMTQAAJKSAAIAAAADMTQAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTIgMjE6NDU6MTkAMjAyMTowODoxMiAyMTo0NToxOQAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTJUMjE6NDU6MTkuMTQwPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCADkAY8DASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD0a7vL+PUr1Te3WBdSbFEzYVdxGB7VJFe37Lu+23OP+urUl5H/AMTS/wCc5uH69vmNPihPlqAPw9a+elKbm1c9qMY8idgOoX5bi8uCo7iVv8aT7dqW7m7uMHp+9b/GrKwkEBVAHela3OTkcevpR7/cPd7IpHUL8Md15eZ7DzW/xqSPULzdhry66Z5lb/GnSQ7eDkn19BTVjVec/TdU3l3Y7R7IbLfXm35by5AJ5Imbj9apPeaiiKy6jeHnj/SH5/WtHylJOeuMiqiW4jVTjByc0m5dGyoqPVIpvqmopMP+Jlebe+bhv8ahk1fUWUlNSvMr6ztz+tSXNqu8yL8/cg1AsY2dScnPT7orLnmurNlCHZFkanqbxD/iY3asw5/fvx+tRTalqnlbl1C9z04nYfpmpFg3ouD8pHWmyW4DKx5IGM/1pOc+7HGNNdEVRqOsGZT/AGpeKQvI898E/TNTJquqiQCTUbznr/pDf40ksAWRQ/GDwaYqpuwRhjUc8+7NHGD6I0oL7UJGwdQvPf8A0h/8arX15qiW5Cardr5jEIwuH4/WrNoNnI/EHvSX0ayRKqOsY35GRmumPNy/Ezmlyp/CjW8U6fr+tfB1LPw3dzw63cQWgjuo7lonUl4zIxcEH7u4n15rtNOhmt9LtYbqbz5o4USSXJO9goBbJ9TzWO1pe3ng+xg0y/FlchLZhcCPf8ishdcf7SBlz/tV0A4619DD4UeFL4mOAoxRRVkhijFFFABXN+MvC8virS1tbbXNU0SeNt0d1pty8TDkZBCkbgR69K6SmlAaAPI/Efwl8QXGsWMvh/4h+ItN01VxfJPq08j4H8SEtjJHUHgcY9K8jvte1DRF8SaZqXi/xZc3OnTGSz1Cx14OjwH5I9y+bySzISFyQDz0r6znhjkRopFDoylWU9CDxj6Gvmnx98J9D0XxPZaDpMFvYWPiCdh/a+obpBYTDLJBGQwADAYAfJIPXpQB5rB4r8bXl5p9tp3jbxDfTXSq0sdve3JaBi5XYctyfunjj5h3r2b4n6D4z0vwVNe6R44vp5fDixxzJY3UsdxPAwzvnWM4Drwdx6oCScjm7pvgrS/BnxJbVvFmp2unxCC3ttLnM6RSajIhUs0kYGAwIVRtAGAOpyT6nq3hPStdvbS5uxIot7lbp0hfy0uWCbVEpAy6jOcE4PQ5HFAHyB4i1n4jeHNXu7G48Y6/cCzWFpbi31K5aJfNjEiZYnjII/WqOn+LfiHqkN7LZeK/EUiWNubm5I1aUeXGGVS3LjPLAYHrX0zefA7SLrWNUnt7++sLXUgTPHbSZdyww6MZAymMAAr8uVLNg4IA8+8WfDP4f6Dq2sHVPEEGmSMkf2bR7G7Fqwh6neZfMLsQM9ACRgYzwAc98KLbxr8QNWxL8QtVjjsp0e8spdUu1kkgyNzIwOOeQOete+3vw4hayuFsde8TJcmM+SZPEF0VVyCASA54zjtXM/DHR/AmqWUeqfDiXUNKWzmSK7kXCtebQrbJRIGBHIyUA57161hQpUZ57Y6UAfK97H468EfGzwxoWqeLdbvrK7vrEhpNSlaO5VnQSDbu+7u3qA3UY9a908a2euTeK/DFxpF7NbadatPJqASdkWUYTYhUEZJO7B7fjWL428MR6v8AE3RdVHiay00Wn2Iz2E0Id7kLd7owrE/Luc7QR1J7iut8QRXEmsafcJebLWGKdZrcrkyu3l7Hz2K4PH+1ntyAQm8uQebiXOT0kOO1AvLn/n4m/wC/hqEggf5696BQBP8Aa7n/AJ+Jv+/ho+13P/PxN/38NQ0UAS/a7k/8vEv18w0fbLnqLmUemXOKio60AYmq+H5dS1iC+HiDXrSGMHzrODUpFjn5zyQ3yfhXJap4R8T2J1W7HxB1eOzSMtYJJqMiM0n8KSM7BQCeAQa9I6YI4I6YGMVma7olj4i0W40zVIfNt5xyBjKkcgjtkHkZoA8Jv/GWrDw/YT2/iXxLbXz4t7jfqrNCzqf3kgAfeOox64Nb/wAO9U8Vat4lvpW8Yai9vpcTSx3FxPK9rOQcYkDnIUjnPLAc470um+BLab4gT6TbvBpX9it5sDtHvuNViK8O27KEDlcgYx2rsfh1olv4fsdQ0m8ktE1W5lNze6ZbTebHbIflQAf3SvHzZPY8UAclq2lePB44TSbHxhqbRahA99bTG9nEbLkbo1KnkqWz8v8ADjNcJ/wm3jLyoZD4l15UnBMRa+mxIAcEqd3IB4JHQ19A3fgzR786l9tSeU6hIjuftDJ5QTG1Y9pGxeOg655zxjBtvhPpCW6QTyy3cMbFobRgfs7Ns2q7jO/J6sAwBPOBQB5EfFfjddNi1BvEmt/ZZZngSUajLy6gMVxnjhhz716R8OtM1/XrddW1Xxjql/p88TIsFvqd1HJFMCBg84JHeufl8OeAdCFpJrOvvqpimY3dvZTfu1k6ACH7xXjafmyu0Zr1HwtpWmW2n2954cluINJu4BJBp5AESb+TJgguHOOQTjp0oAzvEXhPWJ7RD4b8S6/bTRrI7I2sTyNOwX92oy2AN3U+npXO/AbxHrmrePL621nWr+9SHT5C0VzdySqjiWNejHGeSMivVB94YGa5D4W+Gv7G8VC5Piax1SOTT5ktYIIdjbDLES2f4gMKMn1BoA3LzP8Aa18OP9e3H/AjUsQzt3E+tRTfNrWoH/ps44P+0anjyFyOT6V8/K3tGezH4EWolIbIPU1KU3MQeeKiQfLz271MJAT6epzVohlaSENnb0zzmopIsqRtHA4qzPIqvweMdPWmbgc5B57Y6UtLjTdiuY/lBPX2p00QRRvHykZz6U9wPlIHfg0kr7oyv8JGCaLIpMyJo4zKGHPvniqSKmGjbcEZ+VNaExVGCqrFO5Aqg/zyALncDu5rkludMb2NCAIV2KoxjC5pkg+bHUDg8VFDINoJDLtPPFIzPLMCh2/N82fT1pt6CS1FuACo5C7By3WqkqhHAOC3ZvWpbqZRA0Ybnpn3qkXaONBKOQTnBzWTeptCOmpfgmEbgvySOBTLqbbAxb5VY7qgimQgEn5gKhvptyBAfvEY+lXGTsRKOp6xoQVvDunFMqptoyAPTYKv45qjozgaDYbRx9njwP8AgIrQzX09P4EfOy+JgKKKKskKKKKACiiigBrruriviHougv4R1c6ppV5eR6hJbi5i01f9IuXWRFjAOex28+ma7eq19cC1tJpzHLL5MbSeXChd3wOgUdSewoAw7Tw9oM81pff2bbve2dulsk1wivNAq4YRk5OGHB69ee9dAvsOhzx0P+f6V5hrNprPgvWLnxd4R0u61W21kibV9OmfY0ARVO6KMD75UODnPO0V6Hpmowazo9nqViZGt7yBJ4S64ba65GR2OD0oAtg7vukEY+uaxPENndTo/kX8MKSQNGtq9okzTvkNgbiAcorrt/2s9uZLH+3v+En1FdQWzfRmSN7J4twkDchkYEkHopyMdTXl/wAbNWuNR8QeG/DWgX9sNUjvftzWpdoXRY0c7zNnbGu3eOhJz6A5AIvhp4ittW+ImvWfhDQE06006KC3FteHY8I80+cF2blQA7yIwSC25twzivaLee3niEttKksTYKtGwKnP046YNfIaePNHl+Mj+IRJd+G4zqcc1yLCUTQywwquY9sYXf5kiEk52kPnBOc+peBfGHw48EaVO3hzxBeX0msXqCOwuGXfHKynaNoA2IchSx4yAKANL4meJdPs/il4R0XUdPGoPeXdpJBkCI2kouMLKJRy3PBjxjHOc9fRtd/5dz/vYz+FfLOq+NNX8Y/tC+GzrlnbWM2ma3BYrDbMzBAt0MqzEkMwJxkYB9K+pteA/wBHJP8Ae6dO1AGOBn69z606kA/wNLQAUUUUAFFFFABSA4II4+lGaUdRjk/TNAHM6lpmkx+I/DUP9m3hnsjLLZyWpxBagcu0pP8ADkggZ78VtWWm2Fi081haQQPdv500ka4MzED5iec/WpbmRUiSJopZUmbyP3Sb/LDK3zP/AHRyeT04rl9B3+ENVtvCjQ3EmmTKRpN8x3ksF3PE4AwmMEr225FAHXdeBznpSevHPf8AGkcF0ZUbYWOQT2qnpB1U6aq66LZr1ZJButclXTOEbkkgkc4ycetAGP4pa2tdLurjXIYtW0u2bz5dPS0jZ40IGyQnOcI25tx67sY4ql8N9Xn1TwnHfNbwW9pNdXJd2mJfeHAXcSMOSPvPxkgYBrlNY8SqnxG1jW4JLbVNI0zTvsd1B9o8kSly2E+fImYNnoPbGeTyHhPVNASC/wBO17VdTs9OvbVYDbRjzB5xdXM46KgBVcZBPXmgD6OI/ebW6jrnj6j6j0rz/wCFPiHT/EHxP1No9JSO7Sym8zUQdhux5sQy0A4U5APHv61Hr/xJttI0W7j8JzR6rc6WsST3Msh8tEc4DAjBck+nT3rnv2ef3vxJ1KRlKmTTJWfA4yZojx+tAHqdwvl6teZHBuHOf+BGp1w2cfhUV5zql56i4f8AmakgyTkV89L42ezH4ESopAG4k09WBOKekXzbmOSegNSvERwqjPrirUWQ2ivNHu2ZwQKj3Mp+dvpVoQ92K5FVpkKvnKlPT3pscWV1nxJt53Zz+FSltyFQeDzmqLoJLhXJO4fdxxTg5aM9ic9+9ZKVma8ot1HlQ8TfdHPNZwibztz5BxWvBE0kR6HHqKbKihNrDIHORSlDm1GpW0KGT5bErjjp61H5rGIyB93H0qzLtRsgckVCyIMjAGBWLRaaK7EMmOgJyCR0NULpAdrICCp+YZ61dlRfLBL4BOAPWqc8XmRlclccjPesmmdEGit5gb7mSR1PoKN26eIyHcp4x0xVUqyyZAIbvSCT5wXOTxgnjBpRZq0mey2tvczeGbCOxultZRHAfMMW/wCUFSy4yOqgrntnPOMVqg4AqloWW8PacW6m2jJx/uir+0V9ZT+BHys/iYooooqyAooooARnC9f1piybwCAcEf5/yKcyBxz+lZ9voVpa61d6pG1ybm7VVlD3MjR8DA2xltq9OwoA0VORUF7DNPaTJaTi3naNhHKybxG2DtbbkA4POO9TgYpaAMfw34fh8NeHrTSbWaSZLcMfNkJLOzMXY/Qsx47DA7U7Xr2HSdBnmnvl09AgiS6aPcsLOQqsVHYMQT0GByQOa1qjngjuYXhnRZIpFKujjKsp6gjuD6UAY97rkejWOmvdie9a8uILMTWsIZS8nAkIB4TPU5OKp+KvDemazAZ9SitUgWOSO9klthI0lsVy0e7qnzKjZ5+7jHOa6BYY4IUihQIiKFREGAqgdB6ccV498QLfSrXX7wy+JtcvvETAXlpollchfMhVtotxEPlZTuDEH5yqMR0NAHytriWUGvX8WlMZLFbiRbaQ5y8W47CcjuuDVASFc44zWz4kjjm1OS7/AHMFzcyzSXNhDbtEti/mt+65AyAOeM4HHasUrgf/AFqAPTfgLp+m6z8VbCDVbWa4ljcXdvLHOV8qSI+YCQAd4JUcZHrz0r6015JjeWkgmCwhZBJCYxmQ/LtO7qAOeOc7u2K+JvhlczW3xU8MNBLJGX1W2jYxuVJVpVBHHYg4I9K+6dR0+S8MeyRV25yWGc0Ac7z35OKWtT+wJv8AnvH/AN8mj+wJv+e8f/fJoAy6K1P7Am/57x/98mj+wJv+e8f/AHyaAMuk5PAGTWr/AGBN/wA94/8Avk1HP4ae5t5IJZ12SKVbYWVsH0IOQfcUAZxBVsMNrejEAn8OtGfpV2w8Jf2ZZra2k5MS9POkeRugH3mOT0qx/YM3/PeP8jQBzesaWus6abCaZkt5WUXAUfNJGDnYrfwkkDkdMVf6tkjPOcADj6elav8AYM3/AD3j/I0f2BN/z3j/AO+TQBz7XKHWYbUXcYeOIyy2jIczqQApDdiCCSACcEZxSm/QasNOMcpka2a5Mmz92AHCbd397J6enNbp8OO00crPCZIs+W+w7o8jB2ntkcE96JNAuWiZYrtYnZSFcLnYecHB44J/GgDzH4maHpSeEdUv9TWOFSqyWpSExsbw8K28fe3qAuOmF618+/NjH0/z6Hv1r6T1T4N3UunypZ+IZ7u4mtmt5f7UZpIXZyS0+0HiQZ+XGAuO9cf/AMM3a5/0H9N/8B5P8aAPHOgwMgegyBXvP7PWnaa8l1qkNlLDfxWv2eSYzlklDScnbgbTmIHHPesk/s264f8AmP6b/wB+JP8AGu1+Fvwr1jwH4hury91m3u7We1aL7PCjKA5dWDYJ7YYf8CNAGnOSdWvMjg3D/oxq5b7F4PB7Zqlfy/Zr2/mncJGk8h3E9PmP+NYM3j3SrVGM14h24Mg2Z2+leEouU2etzWgjukYFegB9TSeem7bkE5xivOD8XvCzKFivizlsZaIgD86qj4oaO4d5tRVYA+IwAMn8M1vyO2xlzK56ZIw3Z/rUMhGASflrgovidoUiLi7IVhwzJ/8AXq3b+K4dQgBtLhWXJBHpWU00aw12OnhVZIgwYHBIzVNgY2JY5QE8dKi0zUElk/eMFyOOKTUpBbpKTwrHkHtXO7ctzdXvY1tNdDaHdng9RVeSdHJG4Bd3Ss7Q7+P7DcF5DkH5R2xisnUdXijVzHKNy8n6VXtbpWF7N3ZsXF2gmI3qOcjNUJ9SjHOQT054rzTWPGcrbyLlY5EfgIOorltQ8cagrlYJmKBfmIT/AOvW0cPOZnKrGGh7W2qWoAWWdQFOCW6CrCzWoVh5gZOgZ2r5qvPEuqSqpWdyh+Y7uQaqJ4g1NSfLvJ0/uqrHFa/UW+pl9bS6H0jdxojDEmIm5DZ+8fas6c7GP+ye/avG9L8d61p7gG6aa3z88cg3cd8V6D4e8Swa5ayfvYw+OIzgMPwzXHVwk6bujuo4mNRWPpXw4d3hfS2znNpEcj/cFaG85A2/X2rL8MtjwnpIIP8Ax5Q9v9gVzvxC+JeheALHGp3aG9lj8yG0UBpJBuC5AyMDrySBwfSvfh8KPAn8TO2D8DI+tJ5o3YxXjsH7SHg0+Ibm3nu5o9ORA0V19jf942Blcfe4ORyo6Vm+I/2l9AtNQij8PrNqFuUDPIbYjD7jlcF1PAAPT8ask91VtwBHQ+nNOz/nFfM2mftSSw6XbR6pYGe8WMCaVLcYdsckfvR/IVb/AOGqbf8A6BUn/gOP/j1AH0YWx2oDZ7V803f7UMss1m1jYtEiT7rgNbj549rcD96edxU9uhr3zwt4jsPE2gWuoafeW1x5kaNKtvKr+U7KGKNgnDDPTNAGw8oTGf4jgc9fanB89QR9a8E/aW8ZHTbHR9GsftVvem4F8l2iMnl7PlGx8j5vmORg44zjIz1Vt8UtC8LfCPw7qmuawLi9vNLjMeCZZLidY/mzj/bypJIAPBNAHqBlUckgD1JwK43xT8WvCHhEXCarqkTXduFL2cDB5sNjGF6HqD16Zr5k1r47eK28Uate6LqM0NlqIVRa3KCRYl2AHarFguTk8GvLt+ew+lAH1L45/aY0/TrqbTvCNgupMYBs1CSXEaSsMgbMfPjjuOeO1czqvxE8DeJIIrTU9R1m90/TbeS+M96yxXtzch1WOFZUGfLKvJkYGMA54rwEsN3fGf0/xpN/Jxx7UAe/+MLH4aeOidS0rUBY6vbaBJeTWdswMczRwNsi3nrIhUZGPmUfjXgMgAwB+OaUSAeuAOPr6/59qazArgdck47CgDovhzx8UvCv/YZtP/RyV9/V8A/DkZ+KXhX/ALDNn/6OSvtXxl8RvDXgP7H/AMJPfSWv23f5BSB5N2zG77oOMbhQB1OPr+dGPr+deX/8NE/Db/oOT/8AgFN/8TR/w0T8Nv8AoOT/APgFN/8AE0AeoY+v50Y+v515f/w0T8Nv+g5P/wCAU3/xNH/DRPw2/wCg5P8A+AU3/wATQB6hj6/nRj/Oa8v/AOGifht/0HJ//AKb/wCJo/4aI+G3/Qcn/wDAKb/4mgD1DH+c0Y+v515ef2iPhsP+Y3OfpZTf/E0D9oj4bnprdx/4Azf/ABNAHqGPr+dGPr+deX/8NE/Db/oNz/8AgFN/8TR/w0T8Nv8AoOT/APgFN/8AE0AeoY+v50Y+v515f/w0T8Nv+g5P/wCAU3/xNH/DRPw2/wCg5P8A+AU3/wATQB6dsp1eX/8ADRPw2/6Dk/8A4BTf/E0f8NE/Db/oOT/+AU3/AMTQB6hj6/nSYyMZrzD/AIaJ+G3/AEHJ/wDwCm/+Jrd8IfFbwl451aXTPDeoy3N1FAZ3RraSPCAqCcsB3YUAeDfEXx3q9x4r1bTLO6aCK3v5oCI0+baJGGf0rkTp97druMVzMzOPL5+8fU/4V61rvhmwsfEmr6jezIolvp5nkYD5MueOfr+dcvq3jSy06DdY20ckX8N3MNpf3VRz+leaqy5moI9D2L5U5M4WTQtVEkjCKQSgcrtxn25rIn0q+WVt8ckXH3WXp9K6+TxD4r1rWrTToIvsk92m+J7zEalOu7LdOh/zxXF32r6u2oT29xeLK0EjIWU/KSOuCK6Y+0a1MH7NaIki0q6WQMPMJPQbvu+9dhosOpxqixxs0hxkxntniuWsRfmOK6DsgY/ezlffiuz8Pa7cxXttE6gzSY8tk6SH0+vtXLiJTtoduGjDc9S8LwXKqj3aNu2jCsOlbes2sktq/fOM5qLSboXKRsRtZRhgeoNbV6d1jg4yR6V5UfeizsnpJHmt5fPp8bKS24f3eK40313d3rj70UzcgnpXV+Jot8hAzjHP5iuEubia1m3wFCYzkZ6HPrV0ldG7WlzVuPBDXtuZjOyM/LMB92sP/hADIrr9vg2qcEqfTOQfcYq5qGrTm2hl1W5lmMg3R2EDbfl/vO3UA+mDXZwfDC31nwXqN5c6la3msvb+dZ2lhOFhhA+bGByznkc967qKq3s5Hn4j2cVflOHsvhwLkqt/rNpDEoGFjlUkj/PrTZfAemJ8sOrWzRAZbZXLeLZtAmvLNfCtheWKRWypdrdOSzTj7xq3pej2WtaoU0l7qG0ii3STyno+fl5zjFdkoTSvzHDGUG/hLF94OdVLWdypjHBZQO3rWVFZalot9Fdwq0bRsD5ijnHfP61qnU77Rb2S3e4WQxEglRlJPrnpW7p95b67Cvm4SQD51bgE+vpWDqzive1R0xowltoz3fxZ4qvvD/7OaeIdJKJdrpdm0bOu7b5piQn6gOSPevj7V9d1HX9Tk1HWLya8vZMb5pWyzYGAOOwr7A8XeHLvxF+zvDoOl+WJ5rGwRWkfaiKrwlnYnoqqpY98Dp2r4+jt7Gy8QPaatNK1pBM8U0tkA7MFyAU3EAgn3HFehHWKPNlo2UGbBPOe3XqKPM9yewz2pY4ZJ5VSFGkdzhEUZLE8AAdzV+z8PajfW9/NbxR7dPQvcrLMkbIBnPysQWPB4AJqiTNY5bIpKCMHHX6UoQkZHPtmgB8MbysFjUsxPAUZP6c19ffs5+F9W8O/D2aXV7f7M2pXP2qCNuHEewKCwxxnGR7Yr5Y8I6/c+FfFVhrVk22Wzl35CBiUIKuMHjlSRz61966FrFrr2h2ep6eweC5iEqgMCRkfdOCRkdCM8EGgDwn9qrTby4sfDl7DbyyWtu9wssqglYy2wqD6Z2nn2r5se4ZkVGZiFXaozwB/nn3r7i+MgB+EPiTrj7EenruFfDEmRIc8H6YoARjk5oCk9KSrmk2R1HVrSyV44jczpCJJW2ou5gMsew5z+FAFTYePekIwa928YfC3wd4U8L6RrUN/HrNvp9yia6bS7DSTK5+XYo4TocZIyK8a1t9On1q6fQ4JrewaZvs0M7ZdE7AnuaAM6igjGKKAOk+HGP8AhaXhYHvrFp/6OSvbf2tvl/4RLHGTe9P+2FeJfDgZ+KXhX/sM2n/o5K+gP2pPD2qazpvh+/0628210/7V9pkMiqI9/k7RyRkna3Az0oA+XNzep/Ojc3qfzqaexuLaMPPGVVjgHPeoKAF3N6n86Nzep/OkoAyaAF3N6n86VXO4fMfzqeGwuLgZhTeO2CKilhe3l2Sja46j0oA9i+Bvws0L4jWOsy67NfRvYyRJH9mmVAdwYnOVP90VL8cPhRoHw50PS7vQp7+WS7uHicXcyuAAuRjCiuw/ZN/5Bfif/r4t/wCT1P8AtX/8iv4f/wCvyT/0WKAPl7efU/nRub1P51JBbS3MmyBC7YzgVP8A2Rff8+7fmKAKm5vU/nRub1P50+aCSCUxyjDKeRmo6AF3N6n86Nzep/OkpVXcwA70AG5vU/nXtn7LB8z4pakDyP7GlwDyP9dDXj39kXvH7g/mK9p/Zcsbm1+KGovcRFFOjyrkkdfOh/woA3PiDY6lruvX8dsT5MN3KQhUhCd5wT61zej+C7y2voNQldpNQiIeN5U3op7AL7V7Vq1kh1e73Lw08hP4tmqEltLBIJIQCo6DHSvnp1pxk0j3qcYSirnmXjyzufFFvb/8JBbxwXFopWO5giYM2eqn/PFedy+EobaRd0sxUDIXyz37V9CXesXkUJCWKynsNpPP5VzGp6Hq2tQieZ4rRFGSFQlsfXAreGInYl0Kbex5Z9n/ANHS0lmMUC9FPeuogN9q1tJdXNytwsap5MkcYiaB0GAR9QAD61Zl8JwxXJaSR7hupLDv04rd0vRfKhBZjtkHMeMCoq10ka06Ouh0fhSeR7dC+WOOSTyeOtdZqkrDSlPAH61y9l+5UeXhe3StmRjLa7W7DA9q8+nPc3qQ1TOJ1a5M0VwkicYO1wa4q7si0iq0e9C2GU9K67VV8nUJEB4zkCoYdPScDHBPoKcZ8h1qEXHUqaJpWlzPLcX9t5rucFz1jHZRXVx2ukPbrb6dp1vbqGHnNkqQPYr1b3pLDSmhVbqJVJUYdCOG960m061mtVaNMAksMHoR2966I1G1c5KihzWOI1fwfpuo3TTrp0P3v9YzHLfXHr3NRW3g6GKORJJI7e16tbx/dc11TaQkqErOw/2PT8Kavh1JEJE8kadx/wDXqFWqXtcHGmcFrejWZP2a3VfKz3GKp2+kfZmjNoxi2kZYAMG/CvQH8OwK24AyN13MSRWdPZfZJlBUYbkKFxV+1lazElBu6O3+J88sH7MFw8Uro/2CxUsrYJBkhB59wSPoa+Oyh45HPvX3/YaNYa94B0/TtXtIbyzms4PMgmXcrYVSOPqB+VZj/CPwPtYJ4V0hSRwTbA49OM//AK6+hh8KPm5/Ez488C6n4m0TVpr/AMJ2bXUtnELi5C2a3CrErBiWyp2j/aGD71n+JtcufFPia91i6tra3nvGDNDax7UB2gfKvbOM+5JPevpW10bxL8E7HX7zTNJs/EdldXCXAFqslvKN2FKJCsbqFBbpu6CuD8XfEzxf4t8L6jotz8OXjjupt0UhspXNsm0cKNg+bIJ3cdcYqyDwxvvc1b0/U7jTXle1ZVeWF4WLRq/yOpVh8wOMgkZHIrpfEnwz1zwv4T0/xBq8lrFDqDKsVsWcTjKlssrKOBgA4JwSK4/acZoAehzjrgHjvX1x+zNNqknwxZL/AM77HFdutjvTC+WeW2nuPML/AI8V8ig7D79QRXuv7Ovj7XR4q07wc1wsujuJ3EcibmiwhfCnPygsOnqT60AekftIazqmmfDdIdPhxbXk4gu5t6jamM+XjHO71HTbXyE/3vXjr619pfHvQ01v4Sag73AiGnOL0ALnzNgI257fePr0r4sf7x5z70AJXReC7/w/pmstd+KtJuNXtI4zttIpxErsf75wSQOuBjkDtmueVdx6gfWvWvD3w0fQLTRtW8bQWtx4Z8QiKOSe33edZiRQ8b72VVj+baGOTwWHNACeJZfAeq2d5d+G4o9A0q3tnRIob0tdXt3tDIHhZj+5ViRuA/vH0A8pddpI7jrzn9a96+Lfwa8NeGvCJ1bwlcXUtxbMr3Fq0onJhckCXjG1BtY7sEHPtXlV94D1ew07QL9xBLaa7tFtLGXZEYkYSQ7cB+egJ6GgDDvoLWKzsnt7vzppUZp4vKK+SwYgDPfIAP41Sru/HHwl8ReBbS0n1V7W4W5ZwiWhkdgEXczEMg4C9T2FcfeaVf6cEOoWdxaeYu6MTxMnmD1XI5FAG18OOPil4W/7DNn/AOj0r6E/aWdtvhqPcSrG6Yx7uGx5WCR6jJwfc+tfPfw6XHxS8Kcg51mz6f8AXZK+0vGegaTrf2P+2NNt77yt/l+em7bnGcfkKAPinWYZJraJYVaRt/IVTk8GsY6feL1tJ/8Av03+FfcfhTwl4e03VJZ9P0WxtpPLxvjhAOCRx+grsRbQj+CM/wDARQB+df2C8/59J/8Av2aUafeZ5s7jH/XM/wCFfop9mgP/ACzjP/ARTWtrdV/1MZ/4AP8ACgD4N0ie4j0mWxkGyN5xK6Og3FgMA+o4J9qw9W41OYfT+Qr3P4928Nt8QozbxKpltEMnljqeecdK8M1cf8TacehA/IAUAfR37Jv/ACC/E/8A18W/8nqf9q//AJFfQP8Ar8k/9Fiof2Tf+QX4n/6+Lf8Ak9TftX/8itoH/X5J/wCixQB836H/AMhA/wC4a6Aj6flXP6H/AMhIgnHyNzXYaDo1x4i1y20myaOO4uc+WZSQOF3HoCeAKAOK1Qf8TSbPy/N1xntVKvtPwV8JfDcXg3TU8SeHdKvtTWMi4nNvu3ncccsM9CO3at//AIVP4C7+EtJH/bqtAHwbT4/9Yv1r7w/4VP4C/wChS0j/AMBVqre/CrwNHp9w8fhLSt6xsVxbDOdv+NAHyOPurwPr6163+zmP+LiX/wD2CpOP+20VeUzqqXc0fygpKyMoP3Mdc+npXq/7Of8AyUS//wCwVJ/6NioA9fv7XfqEwKs+6VuegHJqJtP3Z65HUetad3gXcmd2TI2APrUEkgjzke5Ga8ScY8zbPUjKVlYpG1jhw20ZHX1rP1C2F0pj2kBhhsHoK1XnBz8vB6Gqk7sJUVeEYdvXuTWUnpobxT6mCNFtICAUJUDIzzg55qrPFt4GMA8D2reuX2o6gfMBmsW5DICGP3ua4Kx3USCKUfaMsB83FaduVk3BhwB0zWHGf9Icn5lHTH61rRSKkeVXHTrUU3ZmlRaHNeJLfNysoGRjr0xyKm0pVMYUHrTNb8wyBSPlYdTUmlBQwZuNvQHvTZ0L+GdlpUSmHbnH96prvS1VR5Ee5HBUgHHP94e9U9Mn+dsbdhwTk9D6VuxyqXEeQMLuKnqPpXfSSlGx5FRuMjmbW0iSYwS7vMxknHNaK6eW4Vfk7gchqvXUYMnm7FDKMZI5pYpQo3FQDjpmqjSUXqTKo5aoyprd03IUXA9Biub1KFWkIAyVXOD1A9jXa3OHjyhwwGTzXG6y3lNtfduz8jKOmfWs6kUnoaUnc9g8OY/4RfS8EkfZIsE/7grSNZnhsAeFdKC8j7HFg/8AABWnX0MPhR4M/iYwqd2RSbcEVJTTVknD/EL4WaH8RoLRNXNzby2jfu57ZgHCkcp8wIweDn2FcH4j+AfhPRfBk0mk2Ml5f2lvNtnvL8Qq+8ECSVuFCxAhvlAzjmvaIbt5tUurY2txGkATE8igJMWGfkIOfl75A5NYHjzS9b13w7LouhPZxx6gDa3txdbiYIGGJCiAHc5U4AJH60AfEHiDTLHTtU+z6XqqavCIwTdRxNGpJ6j5vTjmu6+EHjfTPClzG2oW6vd2t0ZbDaywmZ5kELrLM3Cxqo3jOOcmuS8WSQ208Ok2Gq3eoafZZMDXFuICrPhnwgZsDp39eBWZo7WA1ez/ALYEz6f56falgOHaLcN4XPAO3PP0oA+1PMh+IXwnvLfUL2xla6geO7fSLkTRROPm2q3fjbn618OPy3XNfVXj74iWfhXwvB4d8JWbQ2epaSW0uewVxNDIThFaMqMBgG5BLEg8Dgn5WflsgfrQB6F8HfBuu+K/EUs3h+4trb+zzFJPNcxrIoUvnGxgc/cz+GO9fZ8um2VxY/Y5bO3ktAoj+ztGrR7R0XaeMDHTtXxd8IfiAPAWvXBuS62WoeXFcNFEHkQBuqnI24DN0yc444r668F6wNR8P25LMyAMtpJJdCeS7t0O1LgngkuMMeOC2DzQBm/EL4cWPjbw/JaRyHTb0ReVBdW+V+Uc+W6jG+P/AGT07VlfDTwX4Ii0Nbjw9p10xt3NrcDURIHE6EbmaFztWTgfMFBGcDFejrLFO0ixOrtGdrhSDtPXBpyIsfAAG454HU96AIJ7G3uSDcW0MxAZQZIw2AwwRz2I4PrXP+NfD1hrmiCx1HQ01O1mzHMwIEltHtLbo+NxO5VAVeTkehrqcjGe1VdTjmn0q6hspPLuJIWWJ8kbGIIByORg80AfDnhO3itPjdoVtbi4WGHxHbxxi5TbIFFyoG9ezeo9a+1df/5dvo39K+LPC8N5b/HLRINUl868i8SQJcS7t2+QXIDHPfJyc+9faevfdt/+Bf0oAq6RcR2tw7TNtBTArX/tW0/56/pXNUnT/wDVQB039qWn/Pb9KQ6rZkcTZ+grmuvGQD2471DbTNcW6SvbzW7bj+7nADgA45xxyeR7UAef/HHRLC+MWsM8cY3Kk19K+7ygqtiJIurliQc9sE9q+Y9XBGpS5GORx6cCvqL4o6dfX+jSXM91FZ6LpCrerNAnnXElwDhBtPCKCeozXzBrszz6zdTTuXllfe7Hksx5JP8AOgD6L/ZM/wCQX4n/AOviD+T1N+1f/wAitoH/AF+Sf+ixUH7Jv/IL8T/9fFv/ACep/wBq/wD5FbQP+vyT/wBFigD5v0XnUj6bGr6G+Ceh3cFjca1cG3FncErbx+WpkEinDSBsZXj5dvfOa+edDJGoEjqEbHOPTvXunwv8YfZtMh0M+a95b3Qewto3ES3EchAkDsfvlclwpx04JPFAH0Np99bQafFHLIA6g5yM/wCetF/4gsNOsZrueRjFChd/LjLEKO+BzisEvHtJR1eMZw4IxgNt6/p9RjrQjJLGGjdJEYZBUhlYH0PQj26UAdLFrNhLCksdwGjkUOrdiCMj9KG1K1KHEvODj8q5zpwBgDgY4AGMYx04Ao6df5UAeVfGPRdPOiSaqdNe2u7e4WKC4thujnRuSZMfcOScE8kjrVH9nP8A5KJf/wDYKk/9GxVv/GmC8bwRHLbziK1huR9rhLbTMrDagx3w3/1qwP2c/wDkol9/2CpP/RsVAHtl0wW7mz/z0b+dUjk7vmAHZjTr5mW/uAx4Mpx7c0w7FY55bHBrxZ/Ez1aeyKbMwdssSo59jUTSuiYyDk5zirMqZJXaMn14rM1e7Fra4OA2OvrXPPRXOqCu7EdzqEdupaUqXLYUdM1zF/qzXN/5MPK9Xb1qSK2n1e9eRsiNOFHr75q7HoPkpu25Lc8964panbBRhuRWEJbLMpA69K17WMGR43TcCMrV3RFtWhIkYFmGAG6Y9qURxxTtsx8uTmtadJctzGpV1aMW/wBPjmVzJnA4FYzwPblzGCWXlSe1dVcXlpbMZrpx5aDcVP8AFWTFcx61dMYECK5wFqZU+xvSqSt72xgytqPnQ3tpdSR+WMNEACHB6n613Xh3WbfVbdJAf36rgjHJqO70iNbMY2qAMNjvXASvPoWsSTWLnZG+cDpg9P5GnGUqbsyuSGIi0tz1ufhQMEgnGW7VlzTMwD+UyDpg1oafdDUdMimZCCy5+b1qG9t8qUPPcEGu6Sco8yPKXuy5WZUs8n2aRGco2fmI/hx3rGv7zEKF280sCrEDqPWtC73iT5WJOMMrdH9q5/UjsdVReAccfw/hXNJ23OqKT2PbvDhJ8L6WT1+yRZ4/2BWlWZ4aGPCulD/pzi/9AFadfRw+FHzs/iYU1uOTTqaSAeTVkkUkiRBpJCqKqklnOAAOc5PbmvD/AIs/HjSdLtdR8P8AhmU31/NbGP7dbTZity4wdrg8uAcgjgHjqDWd+0r47vLNbLwxo2oRqt0pe/SBj5qgEbFJHQHk468V5h4c+BXjfxJpq38FhFaQvgxi9k8lpFIDBlGDlcEc8c0AecSO80m52LMepJyf1r2H4YfB6y8R+GrXXNcTUZmup5TY2VqF8u8SIZZXk/5ZZZWXLFe2K1Lv4DxeBLrSNc1/Vn1DTVv40vIrK1wYFO4LJvZiCu/YDx/FX09bQww2qx20aJEoO1Y1AX1PA46/rQByXh7S08Q+AotL1zT7ixntC0EkTzStLbSLnBjmclmwrAb1ODkgHAxXyx8UPho/gDVxYwC6u08t7g3J2sphMm1GIXlDyqksAC3SvttdoHHJ9jXjnxn+K/h/w7Z3Wgi0i1TUr20eCVUkVfsqOvBZtrZ5Kttx2B9KAPkgKTnjvzjtXW+D/iHrfhPUtMa2u5hZ2lxvaFVVmaJv9ZECwPysCTt6bsN1AI7j4FfCpfF7ya9qot5NLtZ1hFvKpJmdSrt9BtOM99x9K9A+PHwr0W70CfxTYT2ek31qo87zSIo7pRwFHpJgDBA56d80Aer+Ddd0LxHoA1vw41uYL5/MmMSBG83aARIB/GAFHPUAY4xWtqVxcW9i8tlZvezKVCwI6oWBYA8sQBgEnr2r4t+EHjy+8HeN7NVvlt9Mvp4479ZgTGU3YL+oIHf3r7ZjO77p47H1oAzdWn1aG5sG02ziu7czhbtGk2SKhOA6E8Hb94g9RwMniuA+LHiTUtH0ODUBeN4aNhqSNbXE+biPUD5c37rZFlgCAD84A6dxx6k4PGec8D3r5R8WTpa6TqmiRjUNb0W2lNzcWGroYNQ08jdGs0DnIMYO1GJDc9huyADlbTxDaeKv2gtB1qxsI9PjvNa092t41ACvvjEh49XDN68819ha9923/wCBf0r4e+HhB+KXhT1/tq0/9HpX3Dr33bf/AIF/SgDHpDS0hoATqcf0zUVzeW1lAbi9uYraNThppnChT2BJPXjpUvTPTjrk8Cvn34ka7feLPGsmj6fN9usLaYQ2cNsNyu+OWPZnySATwKALnxI+JUHiixGkaLFPHaJMWe5ZsG4AGBhf7hPY9xXiusrjVJzxncOB9K9i0v4NeJL1raS+Nrp1vMA0hkkDSQcHgxjHOQMjPGa80+IOgf8ACL+NtQ0f7ULo2xQGZU2htyK3TPvQB7r+yb/yC/E//Xxb/wAnqf8Aav8A+RW0D/r8k/8ARYqD9k3/AJBfif8A6+Lf+T1P+1f/AMitoH/X5J/6LFAHzfon/H+3b923fHp3rolkaJg8bvEysGR1OxlbPBGOhz0INc7op237EjOI2yMZzX0x8L/AUWneHJL3V7a2urjVYgQrRl/LtyPuEn+91PcYxQBynw7+I8Vnd3dj4suwLC5/eRMYF8mF/wCLKqOjYGMYG4E45r2yDyBbQraCMW4RfKEX+r2Hptx1HvXzr8RvCFt4Q8QpFYXaS21wDJFbswM0Azyreoz0bqemK6v4LeKLk303hy+u1NqITLZxSZLB8/Mq+23nHQUAevvLItxDGkDPG4bfNuAERAyMjqdxyOM471CZL9dQlQWYltvI3wyRt8+8dY2B/vdj09SKtf5NZXiq2iuvCuoxT/bhH5WS2npumTBDbkXvgjJHoKAPNPG/i5tK1jXNLvpUvbbUrcB9JkQl9Ml8oBHDkbDhuuM+3NM/Zy4+IN6vppMnP/bWKuJ8Y6hNql5BfahFBNeXCq66laNtjv4sBQxT/noCMN+WK7f9nP8A5KJf/wDYKk/9GxUAewXcga+uMY4mcHP1qI/Nkjbmm3kijUbnPG2eQ8d+aYHbq569Norw5P3mevBe6guJjEpc4ftg8Ee9cjfyy6pqaW0BZhuwT6VtaxfCG1eeZwqhTuI9B/nFR+EtHmUNqt+MPNzBEf4EPf64rCXvuy2OuLUI83URrePQLDzJV/dhNzsFzg4ri734jzyl49M0O+uMH5X27QPcDFesTwRzqRIodMcAisWHRpLS/MlhcBEJwy4zkfWnGmk9SVVTV3uch4U8Rz6w8qz2M+nXMR3GKVcKw/2Sf1rffUhBkuVI/izW7rEQktFccOn8QHP/ANeucj0aLV5ZFjcR3AIy+cg/hRODUrRHCpFrmkcdrusTNvmll2QIvCA/f+nr/wDXqLwtqniR5hcwadawWjHgz53D3ru5/BNhb5mkT7XJnO+T+H6D0pknh4SKuE/dnoc46VPLKKtbU6PbQnZJ6EtzextFiPUGunK4KIOQ30qha+HGuPMm1JN3mYIj/uYzW7Y6fBaIsdvF5ZDDLBeSPxq/LETvyq4bBQAVPs3LWRn7bk0gWdEjQWAt+MxYHpx60+9TjdGNoA5z2rMluJbOdbxF3NH/AK5F6sh9P93tV+S7tr+0E9lOs0fOHDZ575rrjJcnL2OKUXz876nMX6S+aPLYNnoOmD9a5zUH/es4YZ3Dcx7+1b+qMySGINtK/OG9awLiHzpNo6ZySR1Oa4JP3j0Ka0Pb/DX/ACKmk4GP9Dh4/wCACtSs7w8CPDOmA9RaRf8AoArQNfTw+FHzM/iYuax/E+tR+HfDuoaxNFJPHY27zvHGQGZVBJAJ4H1rWJx14rwr9o/WfttjpXhXR7i4n1TUJv8AjztJwA69AJEAy2TnHI6GrJPMfBOg6h8avixe6pqbPDaK32udtjSIihhsgUnj1AB/hDV7d8RfjNonw4J0eCwmudUhh/dW625ihjBT5CGIAKZwMLnGMdq2/hV8P7fwF4Tht/K2aldIj6hJ5gffIAeAR2GTj2rQ8c/D7Q/iBpiWeuwyZjcPFPAwWWM55Ckg8EdRj8jQB80+Nfjv4l8Y+EZ9NTSrawsXlRJ7m2V2B6sI9zD5SSu7jB+Q9s16R8JvGOvNoS6s+tyar4Ts4ZRqT6iCbvTnSPzGbcATMrMTgDJClR2rrvh38L73wNb3GmXOr22raM58yG1m08B4Zf728scjG7jGeRgjvb8f+DY5tCvNR0a6tdIuYLV1n84bbS7txlmhnAxhGGcsuCPcUAeXeLf2mY2uNSsfC9s4tjaslnqIXEnn54fYwxsxngjdnmvnu+v7vVL1rrU7ue8uGADzXEhkd8DAyxOTwPXtXvnhX4F+EvH+iaVr+h6pfWlpKzjUbUyJMyP/AM80fA2kerA5BFdFdfsyeGTdSW9tLqyRNasyXkl5G2yYHCqYxHkjndnd2xQBwHwi8fagunw+F08V6Z4UtrebzvtTWMbyXYYquzcy7ARz87c8jstdd8T4dT8YaJY+DfDvis+MdXubv7VItv5EaRQIhB8xosIBuK/ewc4xWf4W/Zcunu2m8W6qkcEM3y29mNxlQFTuLHpn5hjHHBzXv2heF9H8NWgtdC023sYRzthTBOTk5PU9TwTQB494C/ZwstLjivfFc0d3qEd1FNFFEu6FUQ5aNlbh9xyDkdAMc5r3eIbeOMcAYqrp8N5FZIupTQzXQLbngjMaY3HGASTwuB165rip9Tj8BeNpv7TllTQ9fmBglOfJs7rqysT083JIPQbMd6AO51CKW5sJYbS6NrNJGypOihjESOHAPXFfGfj7SfGX/CXa3/aGorf3FpZPJfzWrCEG3+0FSGUY3DzCCVGe3pX2TfXItdOnuRFLP5cbSeXAu53wOijoW6Yr4X+IHiz/AISvxdfanBbSWKzF0aFpNxwZGfDY47jjpxQBD8O/+Sp+FOn/ACGrPp/12SvuLXvu2/8AwL+lfDnw6JPxT8KE9f7as/8A0clfcevfdt/+Bf0oAx6M46fjSHpTSVClmxhe5IGPxJ/x+lAHKfEfxQ3hTwoZoITJPeu1pCwfaImK53E9+M4x3xXDfBrwc0858TX24hC0dtFJGT5jkDM2T1wfukZOd3rSeNLWfx38Vk0bSJp7q3sVVbqRJx5UC7vnKD+FhyMtuy54wDivXdN0yz0fS4NN02HyrO2QJFHk8L3ye5PUn1oA858UfGiz02d4NCsWvJ43HmzXimJB1LKV+8GBA5IxjNeC/EDWLrX/ABrfanf2a2c9wI2aFQQAPLXBGfUYP0NfTHjH4c6b4qnbUY5nsNWVRtuY0BWRgchpE43EAYGPxzWTqvwX0jxJqD6l4n1S9uNTmCrcTWe2KOQqoUMEIOPlAz75xjigCl+ydxpfifPH+kW/8nqf9q/nwtoGP+fyT/0WKtWtjafBHT3v/D9zHLp15cxx6hDqk2JGxkAwsqhRgMSVIY4FbvjLwlF8SfLXXNQVtKjImsV09dj5ZeSztkMpHTAHrQB8k6LxqRJ4+U4JXI6+nevozwd4ovPEWjvNd+MbTQXtwkK2MNvCoTCkbyXxkHOcLlRnrxWbefAXT4dPupNAnu479ZCtut5cIyXEX+1tUbGPv0x71t+EPhDp2kYvPEog1W9+RkiKfu7d/vEj++cgDPT2oA5bUvB2r/EXxpfarpVyr6O0hit9SvCwRgigNtUfNtL7uV4zn1Fd94O+G2neFbmC9VzdaitsYpZGQEFy2Syd1wPlH94da6m7iufsgj0t7W2dWAHnW++PZzxsUjvjpU80Uc8MkMyeZDICskecBlPUZ9T+lAD17+2f8Kx/FUGp3Hhu8XRdSGn3SxO/mNGHV12NuQ55UEZww5BxVPQNWFtqEvhfVZpG1CzXdBNMu0X0H8Lxn/ZHykf7IPepfGuur4e8IX161pLdARGMRxniPeCoZj/Cue4oA+ap7a9h03TJLneLaeBpLJS+7bGGw2B/D8/59uK9R/Zz/wCSiX//AGCpP/RsVeSAkRIjOWES4XccgDPOB29cepr1v9nP/kol/wD9gqT/ANGxUAep37H+1rsDqJX6/U1BI48s5OAFyxz0qbVF/wCJtdY43Svg/iaoahmLSp5T0WMk5PpXzlR2lI92krqKMa3U+IfEDWy82VqQ1zKDncw/hx9K7FZdx2xhVjUYX6f/AKq43wm/2HwGtzIcS3TNPIw6nJ4/DFalvcvJbqXcHdhwUOcDFOFolVW29DoWuAq4yM9M5qsLhFcKGOcc1QMrPtSM7mbqaJJ7ezUNdXEUQ6kuwrdSRhytl29J+zEs2QBmsnRABqRdTjccN7VVvda0+6iNvY32ZW6kLwKo2yNbKbk3caxRSZkYtWU2/aJm8Kb9m0dxeE+WM9CPmA61nQ3MRmw0n3iSAf4a5bU/HdmWWNIjccYLMcKfw9Kz18TWzTZmE0a9CF5NE6jb0Lp4V8up6GJIvMYKynJwMcmpXlVsAAZ6AZ6CuMtvFenA7VvPLY4RmdPvD+lTtrECSGO2uYZlHOA2ePrS9ppsQ8PJPU1725EMwaJsqpwV/uj+tZtzeJoms29wjBNOv2EU4A4il6I/sMYBqnY6rHc3E28gEEbhu6UeIV+2+F71VaNhDiRD3Vl5/DpWbbeprGNnysvahY5vmDkqpXoKyjbgEqv8PeuoYfbdEsL0j55LdJCR3JUGudnYNO+0gPu544xWM42ZcJPU9f0D/kXNOx0+yx/+gitCs7QOPDmnZ/59Y+n+4K0DX09P4EfNT+JnP+M/FFj4P8NX2s6hPDELeImFJD/rZMfKgxzycD2HNeLfAT4ejUryfx9rlhBsuLhpdLUyl/LO85fHTgnaCeQVJ9K0/wBqr/kRdI4/5iYBP/bJziui8T+Nx8P/AAB4ah0tNOjv9Qjhjto7weXbgbVMjMwICAbs5J5ya0JPUkwVBzTsVj+GNWi1jw/bXcWo6fqL7Qks+mvugMg+8E5JAz2JzWtuwe3vzQA7gdTXA/Gi+msPhRrkltewWpe3MLtMhcMr/KUAGcM2doOOCau6z8VPBOi2s0934k05/JALwQXCSynOOiKcnrmvnv4z/EvSviDqVtY6L4gmi0WCzeWSNrZ1WW5XcVUjGTnCgE8Dk0Aeufs4abd6d8JY/ttu0Iu7yS5hJIO+MqgDcdPun06V6vnFfLnw9uLn4SXlrrXjvXnXSb2zkTS7W0ma8jn5UsV2Ham3I69dx9KxfiH8fb3xjay2GnaaNMt1YPb3K3Mi3KNj5jlGCkEZXBB4PtQB9cw3MM8IlglSSI5+dGBXg4PPsQaIbm3uQ7W08cwR2jcxuG2spwynHQg8Edq+JvA3ju08NW4kvdV8TRXMUpaKPT7yMW+3IbBSRW5LZJPv09ff/Dfxz8EahqlrBb6jZ6RBcQtJJbXFs0Pl3DfMxab/AFePvA5HLYweaAPXicDnp3rgPFfiPT9Y1rTfB01mmp6d4ktLgfabcrKsTJtwzdRjJ69mC+teK69+014oka/stNtdKgUtJHDdwq7Oq5IDjLYz0PTHtWl8Gfidp1t4Wu9DeTQdC1OzhDWF1f7xHMWYecXfcOThTtUjOM44oA9A8HXF3r3hrxD8OPEU/wBn1PS7d9N81Y8SSWrx7YpyB8oJQj5c9sk187a18Mr3SdF8Q3TXEd1PoF5FFciHGzynMqGUljnO+MDb/te1e4R2Bsv2ntEv4L8zNrujm6uFt3xbylYSi7OeUOwMM5/Wuv8AiRosFl4d1fxBZrafaI9Nkt3gvWWO1mDyIS8mcZdcNtyerY6mgD5H+HYx8UvCn/YbtB0/6bpX3Fr33bf/AIF/Svh34ef8lU8Kc/8AMasxyOuJkr7i177tv/wL+lAGMeOeOvevL/jJ4strLTYNAgMVxeXbfvQJirwAqyq3puO4nafQV6e/CnBwex968ZMEEv7RmopPEkkf2iMlJFDDGYccH6t+dAHbfDjwUvhLQlN7bRrrFyCbl1JYoucrGM9O2cdTzXf6RGk16UkUONvQjIrz7WvGpsPHFvoMF1pdrDFEJdRuNSJQRA4ICf3mK4PHTr2rW8UfEC1+H+hprk9nLqEMjrGFhlCn5gSDk9RigD0f7Dbf8+8X/fAo+wW3e2i/74FeDf8ADWGkf9Cxe/8AgUn+FH/DWGkf9Cxe/wDgUn+FAHtmo+G9I1e1Fvqul2l5EsnmBLiFZAGxjODVmDTLSGGOGK0hRI1CqqxgBQOAAO3FeFf8NYaR/wBCxe/+BSf4Uf8ADWGkf9Cxe/8AgUn+FAHvP2C2/wCfeL/vij7Bbf8APvF/3wK8G/4aw0j/AKFi9/8AApP8KP8AhrDSP+hYvf8AwKT/AAoA95+wWv8Azwj/AO+ax9fFpY2yTMYbaNT88jEIo7ck149/w1hpH/QsXv8A4FJ/hXM+N/jjD4+0eLSrDSZrS3EyyXaTyq63CDkJwMjnvQB3et3cvim51qx0qz26x4XukudOuvLWRZ32hgoY/dZs4YdMAHvVbxFCPib8J4r+znjt5oN140Z3GNZYlbzIieuBycjjOKs+EvG1vrulaUtteaNp95LL5N9YShw7nG0CAZ+Y7QPmbI4qn8KrFdJ1TxfpEcstxbWGopFGtwc/Lg9R057+tAHj3iTQZfD19aRuWeG8s4ry3kfAMiOgLEAdACWX3xXon7Of/JRL/wD7BUn/AKNiqp8YbT+ybfRtMiMMtuplmWWRwbgF3OI8dRCAQF+lW/2c/wDkol//ANgqT/0bFQB6leyB9Quyeq3Dj/x41XvY/O0e7QdShAp+sQtp+uz5O5J5HlRvqeRUccyrMVJ+SZcDvXzlW/O0z3KXwpo5QSR23w6ticlcbWCjkHd0xWPYfECN9TNrFo93N5EYEpjUHZ7mumisgfP06VQI45d6Z759qvW2jQWA3268vw2RyfrRFpI1lY4rU/iM8++xtrdrbJ4MmQR+RrHN/bgCW7nllYknZsJH616JqXhay1llaRfKn7SIOayP7AvbL91cxCRBwsiDt6n3rWDTK5ly6aHEnxNp8MpjAnC+vlHBH09K07jUYrvw9Itu4Ac7iqjaTj2Ndr/Y8VzpSMkaGTGdrLyT6VS/sa1N1EJLeNFIPmEp37nmtGklcUajbtc8iTVpBiOG0mmKsQpRCQfyrRh1vVhbNGNH3FujO+CK9JvbNLVovskaCJh2x61mzaS73BVo2Ln5VX0qHKKWxtBSl1ONm1G9+xBZNKWNlOTtcHNZNnZ67qt9ssVMQ6eZvIH6V6XbeFBdEy3j7lU52p610NhokMARYolVF6MP5modW2yHKMftSOB8K+DbzStQlN/NK6ypxtGef73Pau51NEi0G7jHDSL5a5P3mYgD8s1qvCqWrZ+R1PRv4v8A61ZMbi/13ToCAYkl8+RT2x0rGU3Jrm6iila8eh1N6g0zw/axZGYIEQ/gAK4551d2A65OTV/xXrJu9TWwszkQ8yMD/F2FZEcJllW3t13yP97H9fpWVWXNUsiqUHGnzSPbdAOfDenZ6/ZYv/QBWhXK6hoV7qnw6i0i21OfT7/7PB5V7AfmSWPa4OO4JXBHdc+tX/Derx6vpAZZzPc2zfZ7otEYmWZQN2Y+q54YA9mHrX1FP4EfMT+Jnk/7U0MkvgPTHjiZli1EM7KpIUeWwBP44Fch8YPFI0DxL4DuEEl02n6bBeNYzDFu+QRnOep2kEbegHJ6V7J49hsPG/g/xV4Xglunu7CBGmjhQ7jJtE0agkYbdtUY968m8NeAE+Nuj6Xq/iDULyzudGR9HvgEQNKYzvRlGMLjzNpyOwqyDlfB3x4uvBseo2un6FbyWNzdNPBbNclVtQ2cquFAI57AVzXj/wCKms+P9SM9yDZWoZWjtYZ3KxkIF4yccnJ6DrX1H4S+DXhHwno9xYJp6am1yczT36K8hHOFBAAXAJ6Y615n43/ZlRbSS68D3M0ty0xIsrt1CbCeArYGNoPcknBFAHzaWyMUq8dfXvXUTeBfEOl6lZR+IdE1DTre5uo7fzpbdlUs3ZSRgtjJx7V6N8WfgTdeGI7nXfDW2fR4ETzLddzSQKqKHkYn7wLBmOOmaAPFmlZo1RncqudqlshfUAds8VC33vrXp/hD4RpqWvarZ+LdbtdCg0iaCG5ZpFO9pVYoEY/Lk479j7GuC8R6Q/h/xNqOjyyiaTT7qS2aRQQHKMVyAeg4oAzKBV+x0u+v7S6ubO0mngs13zyJGxWMYJG4jpwrdfQ12+g/BrxLrGjwapPaXVpa3yYs2W1eZpnP3AyLzGhGT5jfKOKAOAtIJbq4SG2jeWaRgsaIpZmY8AADvXefCnwzZeIfECNf21xcWto/m3eRGLZIdjAbnc4Ehk2BVI5BJyMV7R8OPgePCXh++1TxDp/9qa9NC6w2cV0IxCP7qyZG12/vjp2xXQfEhdO8B6XD4jtbC0Fpn7He6eghiSdWwyyIjDa8yNGu3IPy+ZxigChZxJfftA+Ho9JtWii0DQRDfW8gANkZEYxowGATgr93I5p37Rfiy20P4dNo2Fmu9Zk2KkoOUjX5mccYOCEGP9quf+COu6VZeHfF/jrxDeyCb7c6y393JukeLaGRCBhSSWGFXqcAcV4V468YX3jbX5NQv3GFdxHHGzlEBcngMcg8/oPSgBvw7P8AxdTwr761acf9t0r7i177tv8A8C/pXx78EfB994n+JGm3Nm8ccOj3MN9cPIc/KkgYKB6kjA+ue1fVHjq3lS70vWIb65gj08ym5t4U3/aYG2712/3htBB7Dd60AKxwpOM8d68cjjki/aQuwyOokmjKeYMBxuh5B9K9amvrWLS5NReZXso4WuDLF8ytGATuHqMA9K8w+KzX+maloPjLQZLkyrGqSsIsxpAuJVJOPlJyTntg0Ach4i8RwWvjbxUktqdWS/Q2Ja/GHgKN94Zzjaw49hxisTxn8RL3Xfh5ZeHb20hZ7ZkzeeaWkkCjABBzx+NeoxfCjSfEs03iCfUb+2h1XF7DCgTdD5g3MrHGG5PBHOBXVXnw88N3XhddCbTo4oEUIkyIvnIw6OGxkknJwetAHxvg+ho2n0Ne6+L/AIO32j/6V4cjbVLFYt0qOB56PnGAo+9ntjpzVLwH4Ci1/Wta07W7d7W7s7LdFHcR7QkjEqruBzgfe9+lAHi+0+howfQ169rvww1vQ9VtbFoYrpbsOILlFKI5UFiDn7rbVJAPXkU/SfANnqXgl9ak1i0huprOW7tdP24dkjJ8zI6kYHBHAPWgDx7B9DRtPoa64Rxnny1JPIwvPpV2y0S+1G6tILOweV74sLfbHxMAcMynuAep7UAcJtPofyra0KJ/9Ifa+yNFZzj5VG7GWPYZ4r05fhH4gkkEUFvEbuIn7VHIhjihyONkp+WYnvt6V6v4b+H2leGtPs7SOwTUJZJS15dsQBnbwTGfvJngL269RQBwfwk8PWctzFrE+nXF1+8iNqzpGoWUMd7xBslo1XaSy4612Xw3BvNZ8Xaxagy2OpaqTZTjpKFyG2r1GD61hfEbVx4TW9023Vo11SIzWkttLGJbNiNskYXqkDADlcEnNWY9esPBHwV057Mxx3+oWe+CByxMs0n+sk9QO+egOKAOF+LHiCDXfG7rZiNodNj+yJMgIMhDbn3DsQ2R+FdL+zn/AMlEv/8AsFSf+jYq8lJdnJdnkYnlnOSf9o+9e6/AHwhqFhqL+JbpohaX2nslvGrbmcGRTuz2wE6f7XtQB6T4ttzPYs6jDxzZU/ia5CORpImV8h1PX+7XoGqw+dbXSHuDjj0JNcReWm5Uu4ciRVCyqO4rxcfTtNNHqYOfu2ZUhnLXHmSKPMxsx6+9alpcCVdmPmXqKyyA2yeMgHPI9KlBZZfPU7T91lrz1Kx3NXNcgJhjyOw9KbMONyjIFZrao8bBHQhSPve9IdQHlsA2B1O6tVVRHs2yWa6mgmHlvEVI+YSJ938aqNds7EywiV0Bxj09BTlvY2YSZ4PqeKlMkB4iATHJbb1q1VTHyNGRbwXN3l3CqgGAuckDmrUGk7XzI5ZX5JZv0p638Fpvj80Lzyacl9FKjMBhQVDN6n1FYyqJnQuexdt7NUiMxwmDhQT2qczx2ww7fMpxkDiqxl8yPcMFOPkXvUbRyLKePu8ZzwKTnbYi19zN1q83XHyfK0g59xWb9oextmNsw86X5RIekY9q0r1IY7kZ5ZQTuPOay9qMoIG0DoPU1yyk7nbTS5UhtusdtbsWbLk9R1J966zwnpBhJup1xJJ90ei+v41m6Jo63UovbxAyZzGn9a7KyIWMuflI4x/drswtFykpM5MZXtFxR2VqP9BhHT92v8q8G+M2j+K/D/jKx8X+E7QS6XYr9ru4IyxU3G4BpZEBGcoIhnnHl9Bjn3mzObGA4xmNePTiklRXJ8xVK8g7hnI/zxX0y2PmXueS3/iefxB4C0/4neD7JodQs1xcWUigm7hDbZYN2R8oOXDYJ+UfKOlZnwf8c6ZbeH9fu7i2WNp77+07iDTUMkdhFIPL+f8AiBUxMz4zwwPcga11ZWvw08WBLqGQeB9XlVzHJGsltpd95odGweY0JGQR8qvj0rNWGTwP8fryTRU3WPiTTTei2VI4ku7hCdsMUh+Xcc7jyM7/AHFMR7FpOp2Wr6ZBfaXcx3VrOgeKWNshlPervavLraHUvhtqOp2mkwjU7HUvOvtN0u2s3V4pyQZIzIB5aR8kjcc8YFcpov7T2lube08SaNeWF4ZfKuniw0UHzEbiCd+AMEjrwce4B7pcRJLjzFDgEEAgHBz157/SvDfFnj3x5o/9r39vqfh3+wo55IbOa8tZUkvNoJeONFLZKnKbjgEr7mr037TXg1NIW5ih1Ke584p9kESq4XbneSTtxnjAOepxWhoPx48EeLby20W4W4ik1NPJ8i7t96s7uYxCwGVOQQTxtIbBOc0AeZePvFFn4l+Gcutad4Ka3h1iZGvtRguShS9iBxuXad8eHODkZOemK5vwT8C/EfjjR4Nbiu7K1sblZSjyuxkLDIXK46MwAzngZOD3998U+JfA2o/DTW9GGs2uk20UUlpJbCHyJoGHO1YGAbqQBgY54rg/C/7Rei6V4U0fTmsbhX0uzhhuFfGZ9iBCIccA7sN8+BsU98UAS+E/gPa+GdCkvfGel3GuaitzuitNMm3RvGEBUMCFychgef4vxr1/wR4Yh8M6J9ngE8EcxE32Frozw2jMMtHCSB+7BP6Vytn8cPDzzvDrkNzpS+THKkmVu42V92AzQM4jOFJw5HHPSuxvJfEP2Ge3hggS9uHnSC6ibMVqNjGGSQNjPO0FVDcn0yQAO1XxZpem376aZXuNTFo14lhbrumliBPzDJAAJBHJFfEfjHWJb3WrixhnjOlWt1M9lawXDTW8AZskIzAEg4HJAr6PsNI1rxpp10/i/Tv7A0qYK+r6jLdlJb7yXKtEgJzFbkKWIbbguSowa+YfFQ0hfFGojw0c6SLmQWZO4nys/Lndz09eaAJL7xVql94c03QZpVXTtO3tFCihdzsxYu/qecZ9AKzLO2mvLuK2to3lllbaiKMlyeMAd6n0PRr7X9Wg03SbWS7u7iQJHDGOWJ9T0A9SeB16Zr62+FHwRsfAVwdW1R47/WGUCNth2WuQNwTPU5yN/oOOpoA6T4TeCovBHgPT7FolW/mj869fygjNI/zbW5PKAhOv8Nb3iEAiAMMqQ4YYJyOARx7VroAD8vTHFZGv/wDLv16v0/CgDw/T9Z1LwB8Qp9I1q1L6Tq9wqWEsXziFFOyJVzwQo+Up2684o+IGsXvg97zRjp1tfaNqQZrRbhP3VhIwKsh5yVyS3tuYfT0fXdCsfEWlvYakrbCd8csZxJA45EiHsw/+t3rB8NXsGpi60HxPBE/iC3iNtd/aol3XkGWEcsfZhhscfxM1AB4b8U6RaeEtFW5utlsIhZJfPkwSzIQm1W65PUZAyP16/HX1Bx6j8K8x8C2LNpHiLwRqUb3dna3klqokjQSRQspYXDIeWy/3cdDirmoeK9a8H+FZYJrRNavdLkSGe5SB4oUg6I7EgAtt4OzKgrzQB6CDjpWT4kurqw0C6utMkhjvwEEBktzL575wseMg5J4ySAM57Vxtt8b/AA9OHMtjf25VAUL7GEhJAKjH13ZPUA45qaf41eGotYFrAl7NbFwn29QFTBxk7T8x20AY2rePvE/hi5gXxS2g3kBfy7uwsY3E4ByG5wBuGGGQTnpnnNcp8RzGl1plvbeHX0iKG3/0JoZiyT27ncMJgbHy3zDJ5yO1ep6f4/8ACniuxm86OSX+z1+2Nay2jTNGqYAkUIOoLduRtrK+IviPw/Jp2g6smqxXUtlqMd5Bb2rKxnGPn3f3flORuxycUAcfF8E/EcmnvKbvTknbY0UfmkKyFckscfKV4GMc+tdrpnwx0vT7exsnsbprt0Wa51RLog2ci9Rbt6lsHbj7uWzTLX4z6Ze6hHDDp1w5uZNkULyxxyIwzlpHchArduQcqd3auh0Txla+JElt9KUR6jEWL212SyGNJAjusiDa45wNpIzQB0qBjsTLyEDje2SSBjJ9TiuP8Z6/pN14L1mOPyb+OJmtLjc5jjtpguR5jdcg9AM84BxVnxfq+t6VAt7pmnSXltDctDPaZxLdqV+SWNk5TawIIPUfhXM+I9DtG8KT33jW3/sq2sY5o9N09btpCZjys0pH35j3xkYZiaAPFbq8udQuftOoTy3NwwXfLMcs2wALn8lqzrWtXviDVZdQ1SQSzyBVGBhY1HRVHYD0rOGdg3ddvP8AvVv+E/CWo+L9YFlp6+XCvM90w+WFfX3PoKALnw98Lv4p8WW8EkJeytj5125j3R7R0jb/AHjxX1NoKql2UjCoqxHYirjaMiub0DQNP8NaNFp2lQ+XCnLufvSt3Zj3P8uldNoP/H8//XI/zFAFm4G6R1PQuQfoTg1yCIUkmiZcNG5GD+lX/FXiePR9T07S7fZNqerXoggt9wJCZJkc46YUHr3o1iNYvEEhA4mUHg9COP8AGuPGQ5oJnVhZWlY5K+jazuiTkRvzjrzU9oTjn/VkcCtK9s1uUMbjI681m2sTxStDPwyj5T2NeHKFmespaDbmEtE2OQelY0sJldI5NywIPvDrn0rqRF8gBIwepNVZ7RG3NsymOw/Wp9m3sXGoluc/HpuXzHuVP4fm6VBdLIkTqbpvkYbl3dB+VaBtnivm2bl8zlsk49sCoWsCztI/yrJzgnAIHc/4UuVmyqRMAwGRgq7nCnq1bum7m8vA3GE7SV71YjtGMeTGHY9ulX9O09Ybcx4bex+Vvr1/Ko5G2aSrKxoWcW5WG3DDkVFqkm2Py425q8o8uMMvIA2b+59/pWNeyLJgIgDZ5JOa1qWjCxzU/encoTxp5YY9cY61FZWpmmCyBTg520srb59oDHbx7GtC3gMLbg6ySvxnHQVyx3OyTaVjZt2H8LD5eAPQVo2Qe6u4LYDduPmS4/hQfyz1rOh3RIkUKeZcycqg7+5PYV1+j6SNNidn+a4mOZZPU+n0HYdq93B0m3c8PF1EtEbSDEaj0FLmoHnSCEvLKsaIpZ2Y4AA75PQVx2gePG8S+NNV03TbZZNK0zykbUEcuk0jozMEdflwMJ1ORk16x5Z0+uaXDrej3um3ihra8geGTgZAYEZGQRx1r5M1K51P4d+ILnwT4333WhSzpcwzE+bNbx5KrPbvwVbCgdMZU8V9gqCVBOc+9cB8UvhZp3xD01OEtNXtl/0S92dO+x8csvt2PTvQBs+EbXxN/wAIfHaeMLuE6sqtE1zaMCSuMI+SMb+54xnnFfPf7SmgS6fr2hXSws1sbAQSXzBQZ5wzFi5AGXIwxOB1r3/4f65fax4bWHXYXg1rTz9m1CF1VT5qjBdQvGxsZUjggZrc1XQdJ1yKOPWtLs9RSJsxrdwLKFb1G4HFAH57NFJAds8bI/UKy4PftXRab4K8QzXFyy2/2P8As+zGoSSyyiPEezepVs8s3AAHOcDivpf40/COy8W6Jea7pNvO/iGCJfKVJSRMinlNp46Hdkc5GO9fMlt4Y8V6/pU8lnp2oX1po37l1Cs32cs/KKnUHcxJCjjJJ60AYFzPNc3DTXMjzSvy0kjFmb3JPWo1z079sV0GqeC9b0O9ubXWbMWdxbSxRyRTSoHYyZ2FRn5h8pyRkDviu50j9n7xXfeLk0u5gW2s4hEby+3ZSHfHvKr08xhnb8uRu6nvQB2H7M02owWmqW97pV1c6LdyIYZ47ZDEko+VyzHB+6y+o4NfSRO0DGFXGcgdPesSy0KTTbHSbPRr4afY6fHskt4raMrOuRxn+DOG5H971FaeoXDWWn3NyIxMYY3k8veqb8DONxIA9MkgDvQB84/tJeM71r+Lw/purWn2BFxd2kLHzxLwcS9tmCMAepz2r58x8wz0PX1FenfF7xND438RX19ottpiadp5QSXMQjjnuZHXlmOd0mCu35cgbcjhgTxng/w4fFPie20v7THaQuS091LkRwRgZLsew6AZ4yRQB7J+zH4Zja/vvFN9HCFhb7NZyPJtKSt97A9Crbf0r6ZJ/dgqSeMjA46VwfhCS0un/wCEc0zR7S48NaHBbi21LCNHc3S4ffGo+U4yCXB4fNW7zX5fFk0mj+EbsxwRttv9VjXiEcgxRE8NK394ZCrznJXIB1VjfLdXV5ClvcRC2kCCSQDZL8oOUIJyASVPTkH61S1//l3+r/0q3pGlWeiaZDp+mQrDBCCFHdiSSWY9SxOSWPJJJrO8VXttYW8M99PHBEof55XCA8A4BPfjj3oAzOx69Oo7VyHxE8GTeLtLt20+dYNQtC/2d/M8vfx90tg5+bbxkVreFNdfxL4cg1aWzazFw8hiicHPlhsKTnuR6cVtc5OBnPXJoA8C8O6zrura9Z6Vxb+JdNVoNOvJSA5KN89vcPk7o9obAIzuHWvdZYZLq1tkmlaEfu3nSMAow6vHgggo3THU461xHivwdNZa9B418KQ41C1cyXlqirm6j/jKAjAkK5GO/XrXc2l1De2cV1bENFModeQSuQCQSONwOQffNAHzV4+sZrD4gazBNbmAzXTywRBQC0bY2sAP4SAfyrgdSv7qG+kjjnZVByADxjAIIr7Mn0fTbi5a6nsLZ7pozF9o2KJApBXAbqOCR+NfMPxG8AahZePdStvDHh7VJdLj8sQPFbyTKw8tcncBzzmgDjI9a1OFy0N9LGWUgtEdm4HscYyPaoRqV4MkTnOckgc/jxWj/wAIT4p/6FrWf/BfL/hR/wAIV4pHJ8Naz/4L5f8ACgCraX91PeRxST7kZsEMOD7V9W/DBr1vAllFqVlcQXNupETzQqgeFjlAuOSoHXI+8B9a8C+HHg/Wo/iRob6t4dv0s1u0MzXNi/lqPVsrjHfmvqdY5VnmeadpIpCvlRsoAhAU5+b+LPXnoeBxQBKZI4FMkkhjiUndIDz1wP1r5s+IfiKbxD4qmYajb3thBkWP2U5iSNujf7xP3j+Ax0r3nxL4k0/w1ZxTavgQTFkDNyu4FeNuCzDk9M4IyeCK+bdauJtSuhqstrZ2kd6GaG3s9ixxorbcbQcr9TyetAGb05bGB1A719D/AAp0IaJ4JglmRFvNSY3UhDcvHj5MjjkAkfj1ryn4ceH7HVteF7rN5a2thYOH2XW0C7cEnyhuO04P3h1wRXumk6mb3Sf7e1rTV0pgJBE1wP3qWucru9CwHKjvigDWuZvs9pJOInlMa7kjT7z4HCjkfOemK1tB5ugxDDdCSQ3Y5FcnBay63dRahqkTR2sZElnYyDnOcieX1fuqdE4z8xNdZoQzfSE9TGcn15FAHgfhK3a5/amu2kZn8rUb9wXYttUM4AGegr3PxNb7JYLrHyk7GHpXkXw3thc/tMeKpAOLR7tjx3a4YfyNe56xZfb9KntwQHZT5bf3W7H86ipHmg0XTlyzRzPlCVSf1qC5sBMq7Dh85T/69O0i8+36bG7r5cqExTRnqkg6qf8AGrrLyBj7wryHTvoz0ee2qMJHMM7W90NjjkDsw9QasxusaHcBljweoIrSuLGC+hEc6/c5VgPmX8azJbC7tItqjzlXPK9QPehRcdg5k9xWSB/3rgK2OSB92qTwxygABf3jAlT/ADpP7RUBt3DNxsK8moN6ErsBAJzyc81nPXQ0iXbe3+ViwQ88+1WXMVvC7MGKdB259aZBcRrGdqsGbrUFzBPccfMyv2x93HtUtNR0Q003qyhf6i8gwpEe0YZvUe1ZPnmR/LjJkduhHatJtIknOJGKoAQQpyzn2Hap4tLisYleMq7umV3dI/ct1Ncc4SesjupzjHRFGC3aJABhn57cgdz9fStSytG+0Dy0Mkz8Rpjp7nHapdI0e51eTdADFbbstcuv3mH90d/Y12umaNZ6Sp+zIS8n3pZG3Mw9M9a68Ng5TfM9Ec2KxkYrlWrK+i6JHYZuZsSXkg2vIo4Uf3V9MVr52gADA9BS+h9qYfl9z2B619BGKgrI8KUnN3Zwnx7keL4F6+8TsjbbcblODg3EYI/EEj8a5n9lzn4Yaj6DV5D+PlRV0fx9OfgRr3OfltufX/SYqp/s76L/AGR8JLO4SVpf7Tne7cMoHlHiPHv/AKvP40xHpb6hajVBp32hBdtCZlgB+YpkKWx6ZNWwVZcg8N0PrXH/ABAfVbLR7bWdIu2tv7LuI7i7iIUpLb5Am35/hVCz8Z5X1ArqrK5hvrOK6tnEsE6CSJx0ZSMg/kaAMO80YaZrd3r2i2rTajdRRwXFv9oWKO5wyhGYlSQyLu24wDkg8kGtaw1Oz1KAz2NzHPEGZC6MDgqxUg+4YEEdiDV0gFcEZHvXK33gm1Pi0eJdHuZdN1STYly0XMV1GCMiSPoxKgqG6jj0oA6faOjAH8KZDa21tv8As8EcPmOZH8tAu5j1Y46n3rL1/XofDlil5fRXBtfMxNLEhk+zrj77AfMVzgcZOWHGMkVZfHXhqLVIdOl1q3gvJ4BcrFISu2MjKsxPCZGMBsH2oAvX/h3SNR1S31G9023uLq2iaKKWSIMVViCRz/ujHpzWmozyQCeR/jWDp3i/TdS1qXSY/OW6VTNFuj3Rzw9PNSRcqVJyByDlTwOK09Stpb3SLy0t7uSzmuIJI0uYhl4WK4Dj/aHUfSgCh4l8WaN4Vt1l1vUrWxMiOYVuJgnnMoBKjPXqOnrXy38SfjrrXie/jTw/dyWGkGKJ2tQgy0oCuwckfNtcY44KjkV7v4z+HWq6olpfeH9Yjh1uGzSzlu7xMtPGm4/K/JiYuclgCc4P8Iz5npf7NeNVaTxDMyW11JKkFvpbmZLVDG5UySPtY4O0YUHcfQZNAHjPh7wv4g8c61Mui2Ul7M8oNzIqBUj3k/M54CrwT+H0r2H4e+BbeO2GiHULCfStUG29vSRJFqFwI3aO1gZSCVjYGR2B5KL079Nq/gjSvhX8P1061mtZYdUm8rV55ci7v4yf+Pe2QZ+YgnAz8p5zzmuh0XwbceIbl73UtNuvDOnQxm2s9NhuQJmgBxhtuREjAfNGpIc4JwVFAB4Q0EjwxY+ENDupn8OacGjv9TVtr38hZmlhhx92PeWDMOeqqQQWr0HQ9E03QdOWx0e1jtbdMARISQuABjJ9gBVuytYLKzis7WGOG3t0WOKJBgIoGAAOwGMfhVjAHQUAHTt3rwb9pokweHYySY3F0zJn5WK+VtJHqMnH1Ne8MdoBJxzXhP7SieY/haLds3tcpnGSMmEZx360Add4SJfwboeSSTp8Az/wAVo21zBe2yXFpKk8L52yIcg4OD+o/Q1HpmnjSdHs9OWRpVs7dIVkK4LBRjOB9P1rJgubjTPGt7aarfsbHUkWfT0aMDy5shJIkI6qMoc+rUAdAG2uHJIIIOfTFZVtBB4ct/LhGzTFaWeRpJgFs84baqgZZWZiSeoJz3Fao5J4wR1Hpnn8aQ8/Lxg/LyMj8qAFRgcbSCOCGUggg9Pr1rpNJGdMgzk8Hv71wmj+HbbQbmcaRLNBYzM8r2BO9ElZh80ZPKDrlehJzwa17fxjbWF8NHuYmgmVDJE8pKpNHjczhsbQo5HzEdO9AHY7f85o2j1P/fRritP+Jmi6vDNJpl5BceUxUKZfKMjY4CbwA+eANpI5HPermleM4dXt5JLaGQNC/kzxyhkaKXqUbKgEgdduRnAzQBval8umznnhD715d4u8faZ4SbyJZY5r3LI0SNuaA+WWRmQclScDrmu9m1lp4mj8lRu75zXkHi34YXuqTXC6HNaLbXDG4MdzKyeXclstIWUEyDGVAbbtGKAPJNZ8U634hMh1m+a480KpjO3CYy21T/CBnqOTwDU2j+EdS1e0a/Pk6dpinMup3sgjgT5tpwerEH+HrivSbb4I2UtrsudSvoZ4pmDymJds6bQQI8E8An7xAJx0rW1WCy0TXdI8PW2jw6nbWELXWl6RavvmecD/AF1wGwFTqAf4mwRzQBj2ngy21bw0LHxBeQ6bp+l+XPbQuAbiK23nfcORwGlwAM8hVX1rvDpn/CSlZ9dtpFsFKvaWEpKsSOVnmA53fKMJ0GcncSKh0XwzsZNR1kyvdySfaGtfPMkUchAKlyw/eyKM4c4IXAAwM10mf55oAUksxLEknOSe+etaeg/8fz/9cj/MVl1p6EGF656jyz0+ooANI8FeH9D8RahrWl6eIdR1Ms93P5rt5hLbjwWIHJJ4AreZAFOOM+lFFHQDOi0HToLq4uIrfbJdMHmw5wzDvjOAfpU/9lWf/PH/AMfP+NFFZWRd2L/ZdoORF/48f8aDp1r/AM8v/Hj/AI0UUrIV2QnQtNZizWqknqSSf60z/hH9LwcWijPoxH9aKKnlXYfM+5Gvh7S0zttiMdD5r/41L/Ymn8/uDznP7xuf1ooqbIq7E/sDTgoAg4HI+c9fWmN4d0x23PbbjkMQWJB+o6Y9qKKOWPYfNLuai28SKAiBQBgAcYpfJT+7RRXStjHqHkp6frUcttFJGyODtdSrAMRkH3FFFUBkax4X0jV/Ch8OapatdaWY40MDzPlljwyAuG3HBRec5OOc1Pomhad4a0aDS9Ft/s1lZKRBD5jPtDEk8sSTyT1NFFIC/Lbw3UM1vcRrJC6lHRlyGUjBBHcEUzTNNttJ06OysEZLeMtsV5GcjLE4yxJxk8DPAwBwAKKKALdGB6UUUAIQM9Ko3GhaReC6F3pdlOLwKLnzbdG8/b93fkfNjHGelFFADbjRbCXRzpawfZ7LaFENo5gCgHI2mMgryO1X0Hy+v1oooAXA9BTHAByAM4JoooAz20HTbjWk1W5tVnvIVEcUkpL+UASQUB4U/MckAE8ZzgY0lUAdOlFFADgAOgxRRRQBU1GzivbeNJ/MxHKkq+XK0Z3IdwyVIyMjkHgjIIIrJ8Q+DNB8XXFqfEFj9rawJe3bzpEKFiCfusM/cXr6UUUAaEel2bYJh5Of4j249aq6h4U0bVUijvbMt5L74nSV0eNvUMpBH/1h6UUUAWYtNs32gwDGBjDNx+tSnSLH/nh/4+3+NFFACf2RYn/lh/4+3+NJJo1hJC8UluHikGHjZiVYe4JwaKKAKkvhXQZYYkl0izdLZcQK0QIiAxgL/d6Dp6CnPo1jcXNvPLE5khXKYnkA+bg5G7B9s5x2oooAt/2RY/8APD/x9v8AGj+yLH/nh/4+3+NFFAANJshj9z/48f8AGs208NaRY3Mz29koluDvlmZ2aR9zZwWJyVHYdB2xRRQBo/2RY/8APD/x9v8AGj+yLH/nh/4+3+NFFMA/six/54f+Pt/jUcWj2VtqRvoI3SfYYifNcqQdpPy525+Uc4z155OSikB//9k=)

Figure 2 - Haar Features on a Face

In the above right most picture, we can see that the algorithm uses edge and line features to classify different transitions on a person’s face. The transition from forehead to the eyebrow, eyes to chicks, upper lip to mouth and the jaw to the chin are classified using edge features. The nose on the other hand is classified using a line feature that uses black-white-black pattern.

As stated above, a picture transformed to gray scale would not look like the picture in figure 8. This is not a transformation that happens in the process. Instead, it would look for features on an image like this figure 9 below.

![A picture containing person, hair, staring, close

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADNTMAAJKSAAIAAAADNTMAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTQ6Mjg6MzAAMjAyMTowODoxMyAxNDoyODozMAAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTQ6Mjg6MzAuNTI5PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAHBAp4DASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6Icysx8uYDnpiqztfR8+arD/dFRTyGOSQh8HceKpHUmLEMfxoAmm1C/BO11H/AAEVW/tbUVPMi+3yCplnBGRtNNadf4lX8BQBEdY1AH/WL/3wKfDrN4zfPIv/AHyKcqxv2GaetrEzYyvvQAf2tcFseaB9VFPGpXJx++XP+6Kl/s2Fx8rr+NDaSpHDAYoAQanL0LjP0p/9oS4/1i/lVCW2WMkOTx71UkNuODIw9qANj+0ZscOv5CmnVJR1lUfXFc7I0GDtmYVXbyif9bQB1R1SUD/Wp+lRy600cJYzoPyrlx5ef9YaoanKBGUjb8aANLUvGl9BGxt7hMnO0bAa5u7+I+vwzJCl5GWxlj5K1QvGWIB3OcetchJd79SPmtwzc+460AbepfF3xZBdqkWoRKMOSv2dCeMYqpH8ZPGBHz6jCCMkn7MnSuF1WXdq7zD7pJGM9iRVKQtJLKkfPAGT/KgD0MfGbxn5igajCd3/AE7J0q9a/FzxdJBltQiducYt0Ga82ijCktKDtHXtv/8ArVrWqb1LDMSFdpyOo9qAOzHxZ8Yg7pNRh56IlsnFSL8VvGL8/boQv/XutchHGu3922/3QfzNSY2/JyT7dqAO0h+KHix/vX8eP+vdauD4keKSv/H9Hk/9MFri7aPCjPJ9KuogDA5+6cc0AdanxF8TEfNex5HUCBakX4h+JDybyMDt+4WuWQKxGPx9qkUg5A5OOKAOtT4ha+Qc3cfA6+UtEfxB17f+8u0Az/zxWuWUhQeceuaaWG0En5qAO0fx7rZBKXCDnA/dinf8J1rbPGq3EYJPP7ta4+OTcRuJJ+lXEDeahIwBjkigDqx4z1sA5uF68fulqQeMtYKf69Sf+uYrmvNJBG1yc54HSk3nJJVsY7DpQB0MnjXWliYi5jBAz/qxUUHjfW2tw8t4gOC5xCvA7CueuHV7WXYDymP8aBIgBjyAGIAz6Z6UAa174+8QW0albxSTwf3K9c4/nUzeNvEEe4NfRNjv5K8VyU7iW6gDcgESEZ6jJNWZyfNEZ6vgsR/n1oA3j498Q4yLuMDr/qVqrefEXxJHYs0N3GJfnwfJU9Bx+tZE7rtJUEVjX8hXZHuwV4PvkE/1oA1rr4q+LIbhNuoReW/O37OuQOPar3/Cy/FQVHN5GVxlwIF5HqK4mSITW0xQfvUYEH0A5/rV/SmWe2VJTyoxg8celAHYp8QvE0mNt/GCRwPIUhvpVy38f6/In7y6j3gcgRL8x9q4uJTbyiM/cc5Rs9DWnGnC78R5YFSeAce/agDrf+Ez19SA1yhOOcRLz61IfGeuBQTcrgjtEtYELLuAkLI2M4Izn8aVpI4wQzYP9wck/hQBu/8ACZ64VO26j47+UtVm8da6rA/alI/u+SvPtWPsml5aJEXnC5P+T9KiMOeWfcx68YoA2X8deIkkKrdxsAc7vJXBFNk8eeIklB+1xlG5H7lelY0kbGMcfKowMdhVcIXQgHlDkA+negDoF8e+IjyLuM+g8leaWXx54hGCl4m1uV/cr+Vc0eG4454FOBLMR2YZHsaAN0/ELxEOl7H9PJWoJfiJ4m+byr5OP+mCnFc/ImfugjjvUbnbyVyenWgDWm+J/itQdt7GHHYwLg/4VnTfF3xdCxV72NT6/Z1xVOaNZOVwePusMH8+9Y93bRHPXHoRQBuj40eKo2AlvY2HHIgToe/Tmo7n40+LDHvt9QjTHJBtFY4rirq0VlZfMRRg/KAWNVWhMS+c3RRkD1PagDvLT4zeMf7Rhhm1BZFcHraooOBmult/id4nlKBruPLYx+4WvH5VMEkEjNlo5Nh55J2hj/M11lg6pqBVlJELJtweoPT9DQB6db+OPEU8GRdRgsmQfKXqOo/CqSfEDxLHMsNxeR+YcYxAuH9xWed1tO8SEYXEqFeeD1p97p32m3iuYsZAJI9KANh/HfiARq4uo+TyPJH5VZh8d6zLN5ZuUVj9wGIc+1cq1y0ZR2UOGGHQjgn1/Gp5I4Z7XfGWxnIbHKH3oA7W38X6k3MsyjsQYxwa27TxDM6gysGHqBXnVnfb2EFxhZR0fs1dFplwY2AI+U9R2oA7NdZUrnBP4Ux9XlJ+QAD3rLUso4VSDzT1mweABQBcOrXHd1H4Cl/tS6IyHH/fNUiob7yjNAG0YHSgC7/alz/eH/fNL/alyf4h+VUelRyz+SOR196ANL+07n++P++aT+07r++P++ao28yTY3A/hVp4kxlHOfQ0ATpqs4/1mD9BSNqlwz/I20emKqbCBzxRigC1/aV0ejj/AL5FOW+vH+6wP/ARVMHFXIJYgOWwe9AEklxfx9WBHqFFQ/2jdno3/jtXW+aLkgiq6yBXx5Y2+woAj/tC8PQ5z/s083Ooqu49OvQVI0qvwhxSOrlPvYoArnUrsdXA/wCAij+0bzrvH/fIqtcIpBww496zJpgjbVcj6GgDb/tS6H/LRf8AvkVasL6aecpI4IC54HuK5PzwG5kY1saBMsl64UniM9fqKANKRd08gZNw3Gm/ZIM7njGPpUk4/eOdrZ3HoaYjYHLNj/aoAPJgPCRD8eKU2ELDmPJ9jTyFYcv+tGFQArIfyoAp3Flbp0LqfTNVPsLFsiQj1yat3k+wkkqxx61TF8/Q8D0xQBOliVxmU/g1WCmVwJWP41V+3ADmQj6LSfaoD83nNn0AxQA+ezZvmaYn6mqr6dEwG5xn61bS9i2/JIXPoRVeS7AmwQq/WgCs2lRN3xUD6Wo6Gtc38cca5jiP0NL/AGhbMCJIwufTmgDBa1CVl3sG45P3Ryc10V3NaLna+efSsXVZIVt/kkBL9hQBxGuXK7iFICJ6dzXn9/cSm6drc4AOAa7bXkRVKg/r1NcXflY9/ueMUAY0jF55BjnG7n17irCBWgzCuZiMhfX61QG+S5BU8k5IzUouGEhhiYmU/MFB7e/+FAFt7oRTRrIn2i42ghU+6P8AGrcJ+0BvOmzICG2bs4/pUccMYgEaFYpM5JJwsmew/wAKs2kLxkqsGD3OMUAW1bYu0AgehqWFmkAAOBSC3VEVnkMSnotTwooHyuPyP9aALMGd3cgd/SrKjDAlvfnpVVGxIqgZPYCraRqAS5Dv1x2oAkTLsfKRn9x0qUQyJgvIqk+lIJGwEBwB36U5XBOclvbtQBKIkJ+di49uAKehVWCJHjJ7UxJMHOPoScVKZFfGDz7d6AJjGIxvR8nvUsTn1IHrioo9gOXJGOxNSCVc8dT0oAspKd33mxUse48rk4PZqhjcBDnA9M1IZk4wc+pAoAikdipXO0sCOlQySCW3iHylt/IxyKsDypHO489iaqyRL5p7Kehz0NAFDaDqB2/KFQICeecZq0m43hl8xQN20E9qjMZV5S2fvAqc98cVOsDZMT9cf/roAhubefb8oVgQR8prA1CQm6ywIDyckjpkYFdDIHEhWQ8qMj3rB1GM4OPu9qAGWp8mYl+Qy5K+vYj9amg2W92Y2Pyycxk+v/16LUF49p2+YpyMnGTjp+PI/KrixRXEYEmVAHBIwVP+IoAlU7w0cynB457GrljIYmWKVg6E4QsOvsaZFIx/cXAG9eAw6MPUeo/UVeS3Uw/KBIjcFH9fY0ATta2jYHlqoxzhiMGpEiig+5CBnoy45qv89tsW4j3xnhXI5HsT/jUqCIquVZM85JI4oAnBWRs45XpzUYUEHcM4JwDTWWJScOyjt71G6/7ROfQZoAZMAmQM7c+tQ7cfdU4BzTip3Aoc+xGKYyyorF0bA5ypzigBm3coBDDHTiokA3Y9eueMU9JvLVMdxzmpmAZchQVPfPSgCpJyMr64NV5UDJuUcGrxi3uQMAYzUarycDjNAGZKPkPr/KqFyhZRn06+lbMsHUeveqVxFtGcHHegDm57ZlmLY6cjmoHhy7OSDGgyBite5jyDjms+4ULGxfhVBwB3PagDGhAkmWJ2VnjfzShzk5U//WrqdMZnh3h1M1r5cTqP4sHg/lx+FYljaiC585zuxl5GPf0UVP4eun23LE5ZysnPfnNAHdfayq/Jw8IGPdCMY/lWro1+CT8oZJxyjdAe4z2/+vXLpdKmoo4yY5AymP2NTafeiOZo5G4V9pI/hPY/j/WgDqbzTFLeUu0KRlD65/zj61nWztZ3DRzZaFhyQe1a9pcPdqY5Y8uFBQ+pHUfiKp38KSxC5gwSP9YB1B9xQBHcWsQuAqvgMMxuehHpWlYXEsBAfnHBrOtZkmhMLquM5TP8J9K0LTBh+bIweM9qAOr0++Uw4dcge9El4XYrGAvpVfTY7eeHAYqw6irpsMjMeGoAznuJkY5kb86WO/mUghzkdKnlsJMnIx9aSGwx9+gBf7TuDwzZz6jpTyHugN/8qGtUHAzmpoUYL0IwaALFrFHBGMH5vcVYeRW+6KhUnHNAPNAEqluoyQKcEdudpxnsKYJAOKnW6O0qOPSgCKSCRRnacVGcg81Y+1nG1huY9OKn8vMXzKOR6UAVFklOFBPNXY7dwv7wjn0OaqMGXpgD6037eVBUNyKALcm2AZ3VVa9iEbhm57VRmeW4PBJH1pn2RsfN1oAr3N1vY7M1S+Zn56VrCwON23j1IqJ7ZVHJGfYUAZ8u0AYHNafhcn+05B/0xP8A6EKqmAEE9a0fD0ezUXP/AEyP8xQBLd6tMl5NGrABXIGR71ENVnK/MVJ/3aqahIq6jcY/56N/Ooku9vRf1oAuPfzdSv8A47Uf9qTDt+lQveSPy2B6VVllJ6kUAXJtVaQYMaj3FQi/Iwdp/OqRb3phPvQBpnUQ6kGNfrTHukboAD61nZ/Ol3e9AF0TKB79jTjIHHLc1RyTSbjQBoSRlo/lYGqrNKnAbI71GJWA4NN809+aAHTTZUDHI61lXsvBLDPYYq+3zGs7URlgq9BQBy2pQKd0hPyivPtZuU+0vlyT0woruvENx5duyr0UZY+przXUm5Ury7H9TQAkDQ26F3HLHHJppvCiE2sSoucBxyW/Gs/UJGaaOyt8FuAxq9a6eLp4xGG8uM/gQP8AGgDQsRd3EAlu/mLHCqRkr71sB2gBWIMzDr6LVGUiHAjyo6ZHBJ9B/jUsCvK2WB2emePxoAvRj5cs4Zj19B9T3P0qdXGMDp64pIV2QkrtI6ZPanR5OGwD9aALUbMvIGXNSpkMAD9feq/mBeenofWpkR5MHO0enU0ASByDgvk+1WlR3jA27VHZjVeN0iICLj3PWpRMx5C0AWVg4AaTj0A4NWkhgHTLe1U41ZyC+TxVqE4OQn60AXY44xgKgY9/apSArBhtA9MdagikJOcYHtVl9rgEEe/NAEqNuH3FPvin5wOmB6YpIiAo/rU6uExjGc80AV2SJhl4+Pbiq7Wak8OR9RWkypLySDUDw85GCO4xQBlm2ZSRkENgEVMouU5VFkIGCT1IqyYQWGMqRSiCTgZ47HFAGVOHYMzxMBjpjis24VZFKsMKe2K6dlLxkPx+FZlzb7zg4J+lAGBEvlTEZ5Pc960odhYlzgE8g9VPoaZLar0ZcDHBFJDE6N034HH0oAvKoKBHPRsgE4I/H+tXIOuGOf8Aaxgj6+v1FU4FDqB1GeRu+YD6Vejt12gByM9sUAT/AL3bhm3xkdQM5pyMAoBOUJ754psdqeolZam+xyA/KwY/zoAcwA+VjlTyDUTWzMw2ADnoDU2ZlGHQ5xjPWkD4UjByepoAiaJo1B28D36VBIn7s7G+8cYxV5MPjvjjrTTCWbeh2kdKAM6WEtgrg5OSuM0w225SYyVPetJox0cL65FQvEWwVOD3FAGdsljwzAlRxuFToqyAEHGTUxLxnj7uenrSvCjL5kZ2nuBQBTnt2xkDODzVae1CryO3StMSsg2OAwPRhQ0auvz9BQByV7AdjbRzisieAuy+Zkj0HQV2V3ZqVwRyeh9awri2KSE4x6kigDEuBsthGgIduT/n6VW09JLbUXVBkGAHaT/ntWhPGwcmQYPQD1+lVI18u6lKtwUwh/pQBoxyGe1kRW/ex4aNvpSS3ADx3CNhJkCvn+8KzobkxzJIANyyYZT0P/660BHEss1szZjZsx7vQ8j/AAoA6jRNWkubMbD+9tsY56it+OSG5Pn28i75MLKh4yf/AK9cFpwltZhPDIityrgNw3+FdVp09pJJvMi+XIu1tnQkUAWp7VbZzLCeFOHB6r/iK2LALdR7cAhuQfes+43FUOVZtpXP94dvxxUWkXphuNhbjdkDHegDprA+VdbT9K6eMBYuD1rk5SDc71yC3P0NbljMzwgN1FAF1jl8Pk/SpktI5OQWqubgoowmT60iXrKSxyT2FAFxbBA3zSgCkktUVflkFVTdtLwUFWoljVdzHJxmgBvlx/xv+OKa8cIxtkz7YqcPCWyP5UkmzA8sA89qAKpQDoadFDuYZ4pzbiwUDBHtVmzQbgzfeoAelmAuR19TU7rhKHbbnFVZLlyxUIaAI5BvJycCq720agndn2qUAuuR94HmlyCvzkDHY0AQKY0wNnFTPdoExGn51IVWWL7o+oqqkJkkK7gKAIJWkkPJNVpAccknHrWp9jIXhgT9apyqUYhgCaAMqSdlOBwK0/DTmTUpCT/yyP8AMVXljRx82MVd8PRLHqEm0Y/dH+YoAxtUc/2rdD/pq386q7j2NS6oT/a93/12b+dVsmgCTJPejHrUfNG40APxSAU3J9aMn1oAd0pM0nWkoAdvx0oL00j0oxQAu6mbhTsUwjFADgeap3q9W9qtgVVvhiNj7UAef+KGIRVH8TV5/qLgXgC8bTke5rvvELFssf4MmvNdTy18NpwSOT6UAQ2ltIZpJcZZuB9TxXVK39n2iW0GAcZdsc/Ss6whBkTaufLG4nsW7VouBNcYfjHVqAI41Z5Q8jYxyxY/dX/GtANGBxlV7Rkcn3P+FVmj/eBzsK/wgtx/vGnrNEuCp8yTse1AF5Q+0HGB6dhU6x5xngVTidmIMjZHpV4fdx0zQA0HDZ7dhVpWIXhqhADNj7qj9akSMsMj5QehPegB6lQcn8jU8cgJAVScdqiWNUPzDJHc96sRb2yBxnr7UASp5rMBjBx3OMVbijfu6iq6Lt/HvirEedwAOaAL0MCFeZDzU0cMW7buYe4qiOG+Zs89qsxOCMYoAtKke3jJ9eafH5IOQp54qurAOSehqcSYIIwBnrQBbEcYX5WOad5BLcMwyOOaS2lGQCFJqzM8Y56MOw70AQC2Z87Wzj+9SFJl+XAOD61Yi+UcDJI796VGVmwRtIoAov5ucMmV9Kruic5GD6EVtsCT+7HTrmmyxJIpDJ83rigDmpYELnHTtTPs3PyqfrW5GihTlVJ7Cnbcr8sajnqaAMmG3YnO1ifpVyKIk8q/0xmtIQtG2E27gOTSlXTawwCTzQBFCsY++jg+pWkULuwDgevSrwiL/NuJZRUXmqI+VGQeCRQBFleVJIPqKCqoPfv70rMhj6DPqKiJYqNsg+hFACC0iY8cZ7g1G1t5bEI/zDsalIIGedw7A1AzfMWbJNAFYs0alXQ/hSK6kAH9TjFWJOPmByO+KhZ/M4ZN3vQA19rMG4/OmEMDkD5enBpTA3Plnn0NRlypxIuPSgBQFOMj2xUTLt3FTkDqM9qkJUY2nryKaZdrevbpQBE43KO9Z97bFkO39K0mVQDtzjsPSoGBKlX4b3oA5W9gMTYK5Vu2cZ/wNZl3ahQku/hxgkDHPTkdj610t9b7WIlXcrH7o6N9DWZd28f2cgEyQufl4wyN6GgDAkt5GgbJ5B59T7itmyaO4ijS8KGXbtR3GM+nNRRocbo1UsG4OOD2IPvU8Fuk8CxqNwOXVSSGRvr6A0AJJFc2FyHZVK9Q+QQ1altc20OLi2jjg3nE8b5I3evsD61HBEmpWKuAsL9JFByFI4IA7jvWYVSEvE7SIFPyyIM9f/r9qAO+tybnTZUjYGVVDx/UVVix9ojmjyQ/3h6HvVHwtqsT3n2J5WBPClxgKfT6GtaaE291PEqnY58xD796AOgtVM0WB1Q9/StyyBMYZT2rFtIwfInB+/HhwK2rAFAyHGAaALZNJwKD1pmeaAHZqUMQuDUSjJ5p/SgB+6neYRyCRUJyeF61ItlPINpYqPc0AWrXyZuHPzfXrV2OFFbCMeKz4dNVAdzkn1HGDVu2haKbltwPBoAtsFRfmNZ93crEDtOatXZfb8grCupWVTuABoAP7V8onKkgnk02PVomkI2g5ORu7VmzXLMNuBVRyBk5xQB1n2wi3yzxxtjOM9qypNUEcjHjn0NYDTSZxuJHuaheQ+tAHQPrqIv7pRkjkk1SfWsybmX681jM5NMLmgDa/tr95zGNn15Fa/hq/wDtOryqvQQk/wDjy1xhY10Xgo51mb/r3P8A6EtAEeqf8he7/wCuzfzqrVrVP+Qxd/8AXZv51VoAM0Zx2paXrQAnWgCnUYoAQCjFO/GjFADTxRT8UgFADcU0r3qXBoxQBEoqpqPFucVf281n6qdsdAHnniI7IJPXFefRReYkssvJJOK7/wARENIVPpjFcs8IQQxBMAnJ+goAs2dt5doiKMfLuY1XuJPLh28CRmz/APWq87GC1/eH5pPugelZN0sasZbpnBYYWMfeP+FADEle6l2x5ZVOGbHDVoWtuzNls5PYcAVRhuZNoWFFjTPCgZx/9ete0UtjcCfqc5oAtxQKCP3g69BV2JCe1QQoBxjmriHbACO/WgBqqEPIyewqVQVPPXt7VEJYowZbh1jUfxM2B9Kki1DTycte2xY9AZlwP1oAsRQM/wB8HHbNWVi2Zyw68moF1Czf72oWir7TL/jU0V3pYbi+tG5/inX/ABoAm3KWARS2PTnNTLFMwwIgnf5jimHVdOAxHqFpkekygD9aVdT0zndf2pJ7m4X/ABoAkMD9XdUGOg5pYvmcLvbJ9qg/tHSsZbUbY+3nr/jQuoWO4Yv7RB73C/40AaS2zAjEo9sinrGzMQ8q5Ht1rOXVNLBw+p27H2mUf1pW1HTgONRtSx7eevH60Aasf3gBIAPWrqklRukBUdxXODVbBX2/b7Xgdp1/xrSjm+YBiSBzjNAGruOAFfj3HSrCxy7ctCHHtWYbhAq9jU8V/jjcTj3oAnTZvwwdT7dqsIG/gcOO/tVF7wlSQAPc06KcxlWzuz1FABkrI4C5wewqUNIwx5O7uKi+0L5zsT97ninJcEc5we1ADwlxuPAHH8R7U5o7gYyATnIw1QTzb5EPPTvSiZ3hO3qnP1oAtB7hc5iqIyyqT+7PzdeKat2WQfMRmo3nYZGTjPFADhPIuT5RP4VG10C3zDb+FJ9pcfdbFNWc7/mXf7UANNx12HAJ6UecF43AgjuKJNhPzQflxUOyEn+JD9aAJGfooH4jsKhYbWwCfril8soQySj8RQS6Y8xPl9V5xQAM7Ko3Y9RjvTS/ZwGX3FG7jruA7UzPHH60ARlNvKncPTvSBl5H86eQfz6DNRS/Mcr1xyPWgALbV74POKglbfzHgt3BPUU9nPTPFV34wwGTmgCpduw4dRIjfwHof8DVWYJcQt5JBZgFKMceZ7fUdqtTgPGWRsx98jofQ/41mzER5ZFyuOecnH9frQBnXC+TdfL88Uh/eK/y8HjPsQafBM0sM0ToyXMX8Yb5iKiuiW3FmLKvO4dCMdcfSo1lV5I50/1hG1lHG8dMZ9aANHTpPLunH/PRQ3A7/wD6uKmurcOrSgDBOHwehrNmmEU0Ukef3T7Hx19fyINaQuNqOB90fK3up5FAEmmRC3vkl2biMbgOuPUV2yMd6vCVkXyjnj7w9frXNWNvvaLHEvTGPvGtu3la1WMBTg/xdx60AbWhzedCUIA6rit21ymAeexrG0eJEkbvk7gRXQQrCRnLDPXIoAczc03NSmOMxnZJ847HuKjUUAOHFP2sTxyfapYrfzH2pyccn0qfyhZKXmwxxwAOlADYrOUfOCowO5pVMxlAO0H1JrOvNek2GOJNvuetYMt3O8m4yNn1zQB1cszR5QuhyezUxp7iIAgjHYg5zXJ+fJydxpRdygffbH1oA6Y313uG9XK59OtQXVx5ik+UwPrWQNYnRVCuRj3qrNeySMSzn86ALrvGvXmqUz5zg1AZSeSSacmWoAiZjmoyT3q29s+3IG4e1QmM/wB2gCAmmE1O8R9KgKHNACV0ngn/AJDE3/Xuf/QlrnAhrpvBS41eb/rgf/QloAh1Qf8AE2u/+uzfzqrirmqD/ibXf/XZv51VwcUAJtpQKXFKBQAmMUU/bShaAGAGlANPC0oWgBmKAKk20u32oAZijFPCmnbaAIguRWTrPC+2K2wtZGuqBH9RQB5vri+Zdr2BIJrAvI92obScc4HsK3tXJa4IHXcPyrLKCfViGxsUcmgCtdySRqJI4ywA2rWEqNNK0jqxwcZbv/8AWrU1K5eS48u2+VDwc/zqoy7nCvuUL0GaALdjBvbGOnatuC32MBVPTrYbAyitQHoeoPHFAD0QANuH41MV2xqCcgDgepqF8KpPYnip4ArS85+UZoAztctYZbSwiuIlljk1W0RlYZVlMmCDX0H/AMKw8DHk+FdJ6/8APqtfOPj28ls/C32i2cxzQ3cMkbgfdZWJB/OuV/4Xj8Rf+hmuf++E/wAKAPrj/hV/gX/oVdI/8BVo/wCFX+Bf+hV0j/wFWvkf/hePxE/6Ga5/74T/AAo/4Xj8RP8AoZrn/vhP8KAPrj/hV/gX/oVdI/8AAVaP+FX+Bf8AoVdI/wDAVa+R/wDhePxE/wChmuf++E/wo/4Xj8RP+hmuf++E/wAKAPrj/hV/gX/oVdI/8BVo/wCFX+Bf+hV0j/wFWvkf/hePxE/6Ga5/74T/AAo/4Xj8RP8AoZrn/vhP8KAPrj/hV/gX/oVdI/8AAVaP+FX+Bf8AoVdI/wDAVa+R/wDhePxE/wChmuf++E/wo/4Xj8RP+hmuf++E/wAKAPffjT4D8J6N8INdvtK8P6baXcSReXNDbqrLmeMHB+hIrJEmXOOfevCda+K3jTxFo8+lazrs91ZXAAlhZVw2GDDoPUCvZF1ANlUx83Q+1AGwj5fJPHTmrkbQyDDjbjuKxvtcaqoB6VPDcHcM/WgC+7Is+FJKjnBqyhgk5AYHrkGskXKxyyB+SegzU0V2A3U49M0AaBdIpzsO4erdqZJODyOPxquXEvMOSw6+4qu021lJHHSgC60xZlJ6Y4JqZNrDIlx36Vmz3CMFIGOaj+0CNhuYAHpk0AaLF4pSqkN3UjuKmhum2nepx34yKzxdxlQkjoO6vuHFSpeJByJo2U9fmFAFwzRqQcblPt0qTbC5DMBtI7HGKp/bbY/xqPbcMGka6hVSYZEIzypYcUAWHRA+I2IA79aPKkIJG2Tsarx6hAG5aP3+YVP9ttSdyyKD1B3CgBPKb+4AMc4oQAH5fyNTC9t258xff5hR5kLjIljI9dwoAiKq5xjn16EVA6kHD84GDVh/LjbiSNh6hxUbFCw2zRt7bxmgCqVBGc/l2qMkPuwcH196sSx9cfKynkVC6A/doArSDDZBOD61A42sQ3pxViTAyT0JqBzlzkYGKAKbSBWJKgZG1ge9ZN5mBzt+6efY+h9q17iPcpxWRdhlUqeh5A7GgCjK8UseSWG7jcByR6EetRNATbs6DzNgyEHRgOv+FVXmks5TIq70ByyH071o2RjV2Ech+y3C79w7Hv8AQ96AM+G53WwMi8Z2H/d6j8jWjbyI0UKPn98uCfoaptFuFxBd4jmiO0ygZDc8Ej0PqKvMBBYxMQDtKjepyMGgDqLNRHEUDZdSNp75H/1q1Zpd6H+Ij5h/n8axodxhlI6qqSD8sGtWzG5VfuU5+o4/ligDodLO24jxyGAAx24roEXZH14zXKadMwZCOGUjdiugGo+XHtK7sdc0AXsHsKna22KDJLGmegzWUNSaY4QbT0wKheXMh3Fh65oA1HuWtCHTa3PUNmqlxqM1237xyF9BVB3THJOc9qVDGhDhyCPWgCcWwbLZPXoakFpB5Z3MMnpVOe7dmJ3Z7UwTSMBgUAOktAgyGqs6Ad6mb7RIMBTjtUPlS7vmBFAEZhJ+6M1G0DjrU5LL0zmnJDLKQBmgCBLd/TNSeVKOiEfhV+GF7Vt0xAHbPeku7sMeGGcdjQBWgd4WyabNPgk4qEy5bk01jxgmgAa5yMYFRM27k0xhzTCxFAEwYV0Xg7H9qy+vkH/0Ja5ffXS+CjnV5f8Argf/AEJaAG6mP+Jrdf8AXVv51X21c1IZ1S6/66t/Oq2KAGgUuM08LShaAGbacBTgtOC0AN20oWpAtOC0ARhKUJUu2nBKAIdlHl56VPspQlAEKpXO+JW2ED2rqduBnFcj4qfJ6e1AHnGqzYvc9ec4rOVynnNkDcam1SQfahjrmoVhLR4dsZPOOw9aAKUcHlwPcyKXdjtjHqaLewfO6XJYnmtqKJZGWOGMKAPvN/CB1NVmPmzAQDEa9M9/egCzZ/ucAjjvVyKM7SE5A5qGNMICVxmpFfYcYwGoAdOwdcLyD2FNa7S3zjlj26gUGJknQF8KeQQOgqnqGyJWMZyo6E8ZoAy/Esb63pT2TzCBWdXyV3HjPYY9a4pvBm3/AJiC4HUmLH9a6W4uu2/knms+aUtnacDPU0AYn/CKLn/j/X6+Vx/Oj/hFP7t7u+kX/wBetMzbernP1qSHz5/9RE75PXFAGO3hXZ968x9Yv/sqjPhrHJusfWP/AOvXWQaTqEnPkY99w4qz/wAI7Pj95Ko79aAOHbw9tI/0oEHuE/8Ar0Dw8N2Guse/l8fzrtpfDClCROPoDWfcaC8P3Z8j60Ac3/wjY7XmfpH/APXqRfC6n/l9x/2y/wDr1pPZ3ERyr5Apv2iaP74Bx3oArJ4ODHnUAP8Atj/9lXoMOp9Oe3p3rjEvgOvGauwXvIoA7aHUASCTkVpwXuTjOK4q0vOQCc+9a8N70APOeT6UAdIlxvdupOcVZEx6YwO/FZFlOrKvH1PrWqpDgZoAnWSSLBU8ZqK4n3R5Awy8n3pz7gpI+Zf5VQmutnutAFlboFdo6EetVLbTdN8R/EbwhpWr2yXdpPcXQmhfO1wLdmGce4B/Cs+S52MQpwD09q5jxP4n1Hw1qWj6zos4hvrSWUxSMgYDcm08HjoxoA+lv+FMfDz/AKFay/8AHv8AGj/hTHw8/wChWsv/AB7/ABr5l/4aK+I//QYh/wDAOL/Cj/hor4j/APQYh/8AAOL/AAoA+mv+FMfD3/oVrL/x7/Gj/hTHw9/6Fay/8e/xr5l/4aK+I/8A0GIf/AOL/Cj/AIaK+I//AEGIf/AOL/CgD6a/4Ux8PP8AoVrL/wAe/wAaP+FMfD3/AKFay/8AHv8AGvmX/hor4j/9BiH/AMA4v8KP+GiviP8A9BiH/wAA4v8ACgD6b/4Ux8Pf+hWsv/Hv8aP+FM/D3/oVrL/x7/GvmT/hor4j/wDQYh/8A4v8KP8Ahor4j/8AQYh/8A4v8KAPpv8A4Uz8Pf8AoVrL/wAe/wAa4f4vfDbwh4b+HN1qWh6FbWV7Fc2wSePduXMyA9/QmvHP+GiviP8A9BiH/wAA4v8ACqOsfGXxp4tsBo+u6jFPZTzRNIi2yITtcMOQM9QKAPfJ2/ePuGSrnnPvVd1LZKH6VG1wsrMUJ5JzntzTDMo6dfQ0AV5RhiAc96hYB8544q1KAMsBkZqoDnGBzmgBki7vu9ayb1SQ3png+lbRAI65yeKpXkO5Gxjjp70AcZeOY3YN1JwQR1qK0ne1uI/KJ2E7Svb1FWtUUDcJeB1Df3ayUyXEUjbZVbGD37g0AdbdRRXM1tOmPLuo/Lf1BByKzIZFaGVXHy/Nu9gGxmtDTZMJAkuCvm5z6e/51BNabDcoynguoB9+aAOo0IrfRiMH5jb7PrxxV+0PlqFBwrJxn1zg1n+GoxDdROBkgKCPTIqzqIaCSKIZwGyuO2SaAN7S2jF9LCWH3Qc1ulIWX769PWuR0CUvrNwJF2/J1z1NbZf5M0ATmRIZDsG4+pNHneaxLccetZzyHNJ5hHegDQaVY+nB9arvdMTVYuT1NITQBN9ob1py30ydG/Sq9AGepoAupq06jGQfqKUakzNlz+VUWGD1BpucUAaK3wZx5pyB7VK2pRIpEYOf71ZGaQmgDQ+27wfOJY9jTd8TrwcH3qhmjfQBYc/N1zTS9Rb6buNAEm+mls1GSaSgB+6ul8EHOsTf9e5/9CWuXrpPAx/4nU3/AF7t/wChLQBe1FR/adz/ANdW/nVfZ7Vcv1zqNx/11b+dQBKAGBaeFp2zFOC56UAMCU4LUojp4SgCIL7U8R1IEp4SgCIJTtlSiOniOgCAJShKn8unBKAK3l+1cX4yYQnJx0rvCuOK888fq5IK/SgDzZlSa/3HnbnI96iVvMjeTAzkKB+NI3mRTu4XJJ7GrdrCsixKw8sFt7e/tQBduTDY6bukB3SDAUdW/wDrVlQvuZflySfyq1q8v2i4Cx9M7foBVa2Bi56kcKKANWLYvyvyjfpSyoqfK/KdVNJDIAuJhwe9SgfKVOGQ+/SgCrLKBAFHJByGNYOo3BlUsG5HBFbNyrW+Rg7W71iXATdnH1oAwJiQCcMR16VDHG03ROv4VsTWsb8xthj2PSkgt/s4Mjg5X+GgCC30yGFlkuRgdTurRF8I1H2WHC/3m+UVUuJ/Lj8+cb3/AIUxwP8A69Rrm4w9z+8cnhB91f8AGgCy2q3krFInz2+QcD8aaovpm/fT7B9c1WkvorcSMQT5eNwQdPYVlSeJZZF3QxGKDtnqKAN/7HIzYlvWAPoOlVLqGaFSUkilAH8Y5rEg1tpHWI3cUb5IDkEA/U9K0lg1SbTZNRs/s2oWsUmyQW8uZE4zkoece9AEb3zquWtVIPdWxUIninfBJjP9x6sw38E8KExsinuR0qO5tYphxtKnoRQBBLb55CjHrnrUIcxH5eBTdj23Y7e9DSrIM5x9aAL9te8jJOK3LGbzGGTkE9BXIRS4fGcgnqK6DSXJcLjdzkHNAHb6dhsZ6VuxAADjv3FZ+h28jKNuBn9K6iGzmC/NsYZ6Z60AZjcLgqBWLqKYJxwa62WyYL/qiD6gg1zmqWxXPb60AcjdXTxMVfp2Ncv4itH1eKFUkVPLYsd2ecgf4VvasCjnJGB3rBkn/XpQBz7eHJV/5eYvwBqP+wZu0qfka6QAY3Njn1NRz3lvByQSe2OtAHPf2FN/z1T8jT08OXD/AHZYyPoa1Bqpz+7tCfq1XbfWFDAPp8hz6EUAZMfg29kUFZofpzUg8D3x6TRe/Df4V0VvfW82T5E8eD/d71q2c8R+UXux/wC7LQBw/wDwhN4Gw9xCv1Df4VIPA1wR/wAf1v8Ak3+Feh7ii/v4llT+/Gdw/wAad/Z0M6+ZbSDn+HrQB58vgC5b/l/twOx2vg/pVi0+Ht0LiN/7RtflYMAVbnB+ldf88LtGflIHSolvJI2xIFZR2PUfjQB2NpflWfk4JJxmri3YdeoI/lXJxXRKo6E4PU/56Vpw3C8buvr60AdAZtw4Oe1NDjAJHIGPpVaBg6DYeMeveppOZF+nIFADwQd2eR61DKu5Cw+6vAzUkUW+TaPuD7xpZiC20D5F9KAOM12IkNxXO7+I5cAsvyE/yNdfrkaPkE7VPAb0+tcbc7o/MDLtOdpHuKAOw0z99pwYAERHBB/P/GtS+AzCAoYyuSrd2G3gGsfwu/mR3SP90qpxW/Batc28fA/dy5UjspoAt2ACWjvnDRtHn3qa58y4uBuBJHPHbFVrxhEw8nhd2D7gVdhLSMsucHYc/XFAE2hvi9uMjBUcZ962EfMPXJrNt0Vd0y/xIuMVcThSPU0AMY5ajNB60lABmkzRRQAZoyaKKAEJoo70UAFIaCaSgApKWgigBKSlpKADFJijFLigBMV0ngYf8Tqb/r3b/wBCWucxXS+Bx/xOpv8Ar3b/ANCWgDTvh/xMbj/ro386hAq3epnUJ/8Aro386iEdADQtPVaeEp6pQA0LTwlSBKeqe1AEYSnhKlCVIsdAEISnBKnEdPEdAFcIaUJVnZRs4oAqMnBrzX4oS+RaJ6N1r1GRcLXlfxWiMunsc42jNAHk0Dl5HUc5Oa1tNJlug0fJXj6Vj6Wzykq44HQ9K6PRFi814owAqgs7Z+8aAIb9VSURr/DyzetQREmRQVxxwo7CrV6u2Y5+ZmPAz0+tV4RvY855xQBqJ5TRBZOcdqbJEoXMbEH0qOONcH5jmns6REBPmPfNAFaZ2CnzBke9Zs9oGO6Mg+xrXaRnIyuV+lRPBC/P3PpQBzr2uJDklP61PFG0sipNwijJx39K1DblPuESr3Bqpcuqrjbsx7UAc9q8jGcBR8oOcDvWcXvnuowkDxxKcl1XrXSW2mPfPJKW2gH5eOvFaUSxx5VuT0BK4waAMCbTv+JDdeQvzGMkHqSa5e1tnudMYQk5Vcvlc59q9N+zxt80fG4c7RwfwrNPg7ZcSTWF21sZOWUrlSfpQB5bJp83nqrYXccDdxXW6HoixaVdzyMysw2q5yAT36dfxrpV8E6hJMLj7RaOwPURZAP4mtS58K3EjKL2ceVkAoDtBPfgdPzNAGd4X8PQXHhci5TfvdirN1IrA1PTZ9FuG8tTLbZ9Pu16YEa3tkhhRI40+RVVhxWHqNhFdkrJtbdkcsevpQBw5WO5h8yL5h3ArLu7KRGzGhCnqK6hvCrW7sbGTyz97AbINPTSdQif96ibdvJHJoA41UcAErjntXY6HaH90/XcKbPo6tGW2BTXQaLYZjiAXGAM4NAHXeH7UbFzgc12MNsNq5IYDnOaw9HtdqKRniumt4h5YOOvtQBSurYbSyCuW1iH5D9K7SaPCsCMiua1eLLNt4AoA8u8RRGJc9c9K5ErKXOTn3xgV6Nr9kJGSPG7d+lYEukJC37wcZ596AOWcOVG0c+ppsdgWYO3Q9Se1a09xbRM2xCdvGAtVvOkubkRGMwoeobj9KAGpEiMBHHuYnjAzVi5huIE824i8qPGQT1I+ldXoemWsYVlUO3941H4009poLMQMqgvghuh9qAONt9WaK180xojbuFaQfOPTHrUsesi92sNOljUvsZlUsue/NZfiKymt5ooSjgYztZeN1Y1ot6JF8qSWMK2UIYjafagDu7W5nhcNbykDBOx+jYPI9q2ILuG7f8Adbre5HJXsf8APrXG3V3ewyLcPLulUAliBg4HcVtIJZIIpnwnmqHVl4MZPXHqPagDqAyXiFJUHmqMEHr/APXqhcWwjbaU3D1xSWE3nsYJ3C3Uf3HH8XvWgxecBQQZFOGBFAGZEphIEbHHoDj+dadvcBVA5BHXI61We0YttRfmB5q1b2xKgkcd6ANe1mGd7rx6qaviQsFCnlu57CqFrGD+7UcLyT61ox2rMpZ+M0ASrMsamOM49TTZHBjKR+mS1KtmowXfimSbWciM7YwPzoA5zW+Y2IB2gc+9c9JAsyRux4UgNn07fr/Oup1hB5RK8gnkDtXPrDthuI/4Qgb8uaANzwdZMuk3k2fmZ+AewFdHpEy/2fOrn7j7Tz1B9PzqhpjC2tHiMZUmAvg+pFGluI7RAfmO4M2e+eKALOq7GaJNwUbnUE/pVqzeNZFj38mEkgjqfaquqxxiGJ1LMGlJyeg5qOzYxXZJG4bSOewoA27Di2dDksAKvK2VqjYt/pMme+OKugYU0ANJ5oxTsUlACUmKdRQA00UtFADaKdSUAJRS4o60AMpcUuKcAKAIzS7T6VJn2qVJ1GMoDigCvsPpS+U3ofyq011FuBSED6mnf2gNv+pUH1oAq+Q+OldD4KjK6zMSP+Xc/wDoS1iG7y2WjB9s10Pg+583VpVEaoBAen+8tAGrdr/ps3++f51GEq7cxg3Up77zTFQUAQKlSqlTiIN0qYWvy53D6ZoArBKkVDUyw1KiIPvUAQBKkCVKIwfanBKAIwlPCVIFFOC0ARBKXZ61NtzS7aAKcq/Ka8s+Jqk2Mq47V61Ivy15j8RYswyD1WgDxWwhKROzcDoMd62NNlS2tnkUcseW9KpBfKtTkdSaNPukO63Zgu45BNAF28X/AEkvjlkJB+tRWTL29TU1ySIlj4LxjAIPUdqrWKgEtnOSePSgDVzHs5XJpY4VA3OMDtTFwMH3qdF805c4UdaAE2l84cAY6elMNnv5MmPQCpyUXiPn3p6wSy9BhfegCg9h0Im/A1A9pAWAbLHpya2vssY+/wDvG9B0pZLHzFG7CDsAMUAYLJ9mIEXPeoJmXeZUGWHWtefTpYlbyzuB9ayZrGVBkdR1FADlvCxEjcEcYq3Hdp0PJPr2rHMcmOQ34VJtP94n2oA2hKsu2FXZRkAc+/FStKGj2uwbnkHjP1rDjLBsk1Ksjqx5yD60AaUkv7kCNiFwQQD1+lZ80uMKMtgdc9Kf5u4ADnFL5ZcDcuAeAw7UAUzI4wSNw7461SfxNpkTNFJqMKsmVIJ5Hsfet42UfDLvYDqc8j/PpXiOtca9f85/0mT/ANCNAHpSeINGlmAl1K3Cjkksea39O8UeG4T8+sWi/wDAz/hXhGaMn1oA+n7Hx34QiI8zxFZDjqWP+FbEXxI8HBQv/CTaeB7uf8K7b4YaZYzfCvw1JLZ27u2mwks0Kkn5R7V1X9j6d/z4Wv8A34X/AAoA8hk+JHgr+DxLYEn/AGz/AIVi6h478JSuxj8QWLfRz/hXWftB6fZ23wX1aS3tYInEtvhkiUEfvk7gV8aZPrQB71qHivw3K6tHrVo2OOGPT8qjtvEOg6ldJaw3cE8z8KqN1wM8flXhOT610PgNfM8baerZIJfof+mbUAep3NjpzSMfLUerAVVTT7ZGLRADnrjrV+SwMckjFGKse7VW+YfKeOetAFyK2VIx5UhDeoFSahptzqunNapKpLfcbGSCO4qLBcIY8gr1GauR3UsUm5DzjGTQBzp0rWotPNtfadDqHZZEYbvrzzWJH4fuoJlUaTMEVfUHB+tehLfFQCWztJHPqRQl0Ru42qeenQ0Aeey+G9S1G8Tz7TyIcjcc8kDsBWtqGk3c9uI7ePygowBjkV2gI4PTgfN61Mfsxj5y7nsRwKAPK5l1KzmthdsC0T4WTbgkHsa6eBvMRLgbhInDj1rU1LToLofOihAOAOcms7TVaBvKkBbHr6UAaUbxOu9Rhvr1pywl3JHyg9c96kjgJf5IwoI4NWvsr4yxFADrURxLjB9zVtpmkGEUke1Qw2jNzxUrebEcdPpQAgRmxvOBnpTmjGMtyB2polkP3UJ+lL9ndjul446ZoAxNXcFWUDAbp9apWFm8rpKyZUxFWwepJIA/IVo38PmzrEOS4OB6HtSxyLb7I4zlo4y7sOm7oAP1/OgC0ThrmQDiQ+UuB/CvWmWC+blV4Cgj6Y6VemhWDTEjHOICSR+dZtjL5chbO0rwQeh4oAtzETWzAj5YcADPtSwndIX7FQKqG6zDM0fWUjH9aSwmZrh19CFFAHTWowxOc1fzlahtoQIRtHPc1PtIoAZ9aO3FPx7UmKAG4oxTsUbaAGYNIRUmKQ0AM20badjNGKAG7aMU7A7ml+UdjQAzaT0o21MlwE6Rrj3pGmDNkqBQBFijIHanllPak+U0ANz7UmacRTSvNABuro/BJzrM3/Xuf/Qlrm8V0fgkY1qb/r3P/oS0AdTOp+1Sf7xpoSrskeZn/wB40ghoAgVCKkCVKIqcI8UARKmKkVakEdOCUAMVaeFpwWnAUAIFpwFKBS4oATFLilxiigCCUcV518Q4CbIuPSvR5OhrhPH+F0WRqAPC9QfYgUjGKwzP5TNtGWPAPpW9qab1OK5qZGDmgDbguCYYpckhl2sxqzaqI5GUcc81T0w+ZDHATlVAYf1FaKqAxAFAFyEbmBPPt2q/DGrckbs9Af51mxMSQo79fpWim5I9oHJGT7UAW1MaDG0Z9cVJGJJPu4UdyarRTIOCPrU/2jIx09qAJQFj5GWb19KQLJM42N16k9qWCPf8znA7DuatqVBAReB6d6AKhsZW4aXI9hUM2kCT+Ns+9ayqzN83yj2qXywx4TIx1oA5NtHbJCnv34zUEujEEn51/UV172rFsY698dKT+zV9T75NAHHro7DAOfwNTDSFGCSWFdT9j4woyB04o+z4OCP0oAwYdLSM5KZA6EHipmsypVkUAHqB/Ot8Wy7QNvQd6QwYG0jnPJ9qAMA22E5A+vrXzzrwx4j1Iel1L/6Ga+mbqHGVHAzXzR4h/wCRm1P/AK+5f/QzQBnUUUUAfe/ws/5JP4Y/7BkH/oIrrK5P4Wf8kn8Mf9gyD/0EV1lAHl/7RX/JEtW/6623/o5K+LK+0/2iv+SJat/11tv/AEclfFlABXTfDobviBpgH96T/wBFtXM11Pw1GfiJpY/2pP8A0U1AHts1mZS3GCDxmqNzpbD5ljOe5ArqEt/MBA6rzmni3DLgr9KAOFKSw8Hp9Kd5pbG75q6+fSklTlM1lXGhIuduQe1AGOJW6Yyp9RU6StsK8EEdKmk0mdM4OR2qIWkwb/V7ueoNAD42boDxj1qRcZHP196fFp0zkKV2fU1o22ld3+b3PFAFBIZp5CVwT6mnx6YgkJmB39a2YYoYMjqc+lOZVLeW/I7GgCgLCLd8rMpHrzTmspFxgbh7Gr3klPlPIPTFPMMq8x8j0oAzfJmi7HFIJij/AD81obmyBIMfUVFLGknDDk9xQBW3b/mQ7SKimSUqSWGPY0SQOrEI34GoMyhW4496AMy4kdrorkLgcn296SAKqSFmyTgvx2J4/TFVbtnV5y2duDkjvVm3UR2xd1IMigkEen+NAG6WEmmXHJ3JBg59656zkYWLLKcMF2rn2ratHkudOnSNP3kmF59hk1mG0Lde2PzoAfZW/mKGJ5A4FOiZIbxYud5+Y/WrunxbHGRTYLPzfEQTH3mAoA7CwtpDZxcEllBNWfsFw7YWJvyrorezigjRR8oUAZzTZ5VQfLLKfQBaAMNdJuiPufrTJNOni++uKuzXkqnHzj6mq0k7N98k/wDAqAKxtnHX+dM8lumKmMhPapVikdMquKAKXlkGl8vjrUrwyr1XFRfMOCaAGlTTChqTB9aaaAIytJipCPrTTQAzFGKfSGgBMCiijFACUduKXaaNpoAbXReCf+Q1L/17n/0Ja57aa6LwUCNZmz/z7n/0JaAO6Nxb+YysQGBwc8U9TE/3cH6Gs2a8YXEilEIViOVpUu89Y0/AYoA1NqelG1fSqqXS7eE/WpBcg/w0AT7V9KXaKiWbPapAwI4oAXFLtoHNFABiigc0uKAACg0tIaAIZehriPHcZl0KYAZIGa7eX7prkvFK79MmU/3TQB4LeL8nPHFYM8WWPFdXcxbw4I6VhTw4c4oAl0e2EULSOPmbpVsffZmxgdKZGdsSKPSlLf8A66ALFvzJ838XWrb3ByVTqe/rVKKTCEkc/wAqfE/V+/agC8GCjnlqmTKkOe/QVRhYvKBnjqavxyFm9unFAFlJS2M8A+tW43UL8vJPqapE4wPTpViABiGfpQBoo+cZ7e9WEfAA/Piqa8EbfrVmIn+L9aALYZSSDjHrTjB6HIxUYGOD0NWBgLgc+tADViAYZIFOEYJyFGfWnrgklevvQF+Xg0AM8nbjP/66iuEAwRxxVoHavzHiqN1JlfloAzrnqSepr5j8Rf8AIz6p/wBfkv8A6Ga+mrhsqT3r5l8QnPifVD/0+S/+hmgDOooooA+9/hZ/ySfwx/2DIP8A0EV1lcn8LP8Akk/hj/sGQf8AoIrrKAPL/wBor/kiWrf9dbb/ANHJXxZX2n+0V/yRLVv+utt/6OSviygArqvhn/yUbSv96T/0U9crXV/DDn4kaTj+9J/6KegD6RhXbFju3ergt8pt4I7GoU5UAjp6VaVlx3x1oAgMBz1yO4xUUltu/wDr1olVPI+tI8XpQBkSWoDcJ071Cunjr09TW2UBUZGaY8YJCJ0oAyfspY/Kx645qwLL5vvHb3q8IVWbHY1KyKFwOM0AZp06NhlSfr60psFXhu3Ib0rTjAChSMf40SqNoZhwDQBm+TJHgKocdiKjJP8AENpHSr7qEwQflI6VBJIAAjYPoTQBXfY6jzAOaqXEJVdynKj9KsTIFb5e/b1qMsAuf4T1oAyJZCJOfXGaYz7BwcrU10q7OOoPWqPmZYp1JPHvQBTe086aV24QgKue5Pb8qlNn5TyCRm2KoyxHJ9cU3zhJewwsed27A9KnjaS6LhS7CNipAGfpQBetWVLZW4VFBbj8qy1ud0jA9e5FXdVkWOxWONH3RDaR0yTznHeuYtLlg2Se9AHUWM6Nnd1zwK0tKgJ8SRMBnLAiubsJC0wKjjPSux0xH+3RyJkHb1FAHcCQNw77Dj6VUmty3zNcgDPGWrO2ynO7d+NRNG57GgDR+z2mf3txn/gVRvFp4f8A1hI+tZ5RhSbG96AL7PZxEeSAx9SKcdSWNQIwrf3siqKWsknRTSvaSIMsMUAOlu1kHKgH2qsSpOacYiKTyz6UAJvFJuXPK07yT6UojGOQc0ARtIMfdA+gqMkdhUxQelN8v2oAizzSZ9ql8s0nlmgCPPtSZqXymPQfpR5L/wB0/lQBFmkJqXyW/un8qDE3900AQ5NdF4K/5DE3/Xuf/QlrBKEdjXQeDBjWJf8Argf/AEJaAOjluWW7lUqrAORyPejz9/8AAo+gqWWxL3EjCSPlicE9KUWDL/y0j/OgBqMetSqaaIzEw5VvoasLOTwVT8qAHo7Yx/SpFamrKx6gflTxlvf8KAJFb2p2aYAfSnUAOBpaaadQAUhpaaaAIJj8tcj4oYpp8x/2TXWzdK5TxVGX0+YD+4aAPFCzGZ1x941SvbdV5/OtxoBAjSuOScCsyf8Ae5oAzVfYPXA4ozhVPdqWZPKnVTyrCm4xtHWgCbzMRsPUgUu/sKhPJC++aWNt0oFAGhBlV+bqwq3G4Ve9Zvm55PX+VWopPxHQUAXhL8q5654q7byZ+9zzWajbzyatwnHJPHtQBrRN83zc1ZDgNk8+g9Kzo5Bxzyato4DDByaALyOCQc1Oj9Oaz/MGQePpU0UoxgnHpQBeBGQSeKk3qEODzVRJexwSD0qB7n5zngZ4FAFsyBo2LDg8ZrPu7lIztUDOOKjuL3ZAUbjvWHfXuRw2aAJLy8bdyc187a6c+ItRJ73Uv/oRr3qFGmYM2cE14Nr67fEmpL6Xco/8fNAGfRRRQB97/Cz/AJJP4Y/7BkH/AKCK6yuT+Fn/ACSfwx/2DIP/AEEV1lAHl/7RX/JEtW/6623/AKOSviyvtP8AaJ/5Ilq3/XW2/wDRyV8WUAFdX8MM/wDCyNJx13Sf+inrlK6n4anb8RNLP+1J/wCimoA+l4ckj1NX1QDpzxWPa3gSQFjnj1rWhkWUEhgCTmgBd/A/zincsOucU1mGenPr60wHn5TigCbdmPB6iml8j3pDlvu/jRgk9PrQAmc8jkrSbs456dqcQg+736g1GVw3yk+1AEgdmQg8Ae1NaT93tbvwaUOOVJ5quzFjx1oAiaZh8jHI/lTJz5kOVI3DmmSSZjYEYI6GqazbWJLcelADzMJMBzg44IqBZ/lZTySOPrUU0gWYlTgZ4qORlMysACG4P1oAZO5ZM5x2INVWKK/05qxdKFkOTwe4qgfunJ5B4zQBAcxXTPE0bMBg7zjg+1ammSld0sCljjJBPH5elZjW+bktJz6D/Gte0QxwO+ArkgcUAcrf392+ryPcHcOVKdBj2qvboR1HetjXrVftglUY3jJqCzhDcOKALemRtv4Fd3ovykNwCF71zOm2gDDiurs49kXHegDZW5TaNzjPfApXuIXOVb8xWcDijNAF1pITj+L6LSefCG+6R7kVRJ9zRn6mgC+dQRPu5/AUw6kh6qfyql+FNLA9aAL39oRZyYgfwpft1uesa5+lZppM0AaTXsBwMH8BUbzwHuR7Yqj/ACpM0AW/Pt16K7fhimG7T/niPxNVjSEUAWTeD+GJRTTeZ6RoD9Kr4pMUAWRfOOir+VL/AGjN0G0D6VUxRQBYa/nZcbvyFRG5lPVjTKQ0AOMznqa3/BzltXlB/wCeB/8AQlrnTXQ+DP8AkMS/9cD/AOhLQB0U8am7lwf4zUq2pCgs3BpZJwlzINgPzHrThco3VCD9aAJksj3PHqKkW2weDx702K4Xocge5qx5ybc7vyoAEjC981LuAWo/OQj71HmL2JNAD91Lmo1NPFADuopRTc0oNADqaaXNNb7tAEMnLVzfiHDWk3+6a6N+hrlfFEvlaZK3tQB5XqpVYto9a5x32k1o6xdE8g9TXPzTNnrQBJcSb5EA/hpoGefU1DE2ZeasKM9OB2zQA3Py7s8HPWlhwqc96SY4jUD60nSHrQBIknHHXNTxSEMKoqctjtU6NjHPAoA04pG4Aq9C52+1Y8UrbuDge1XYZumf50Aa8b4wR196sLJgdeazIZMnjpVkSYXnmgC8shB61Kj7TknK1QWbg08ykx9e9AFx7jOcHB9ailnXYcngiqrTZ4Jx71RnuCDycYoAW7uyVIJ7VmQh7q4EY5z156VHczFshc1qaLbgqJD/ABc5oA17K2WKJd2CV9a871X4QxX2qXd9/bbILiZ5dv2UHbuJOM7+etei+eFG1z+VVbi4CA5II9KAPM0+EEDNg66w/wC3Qf8AxdSr8GoGPGvv/wCAg/8Ai66ia+KSgqeCasWl9v6vyvvQBu6I3jnR9Fs9M03xusVpaRLDCn9kRMVVRgDJbJrRXUPiG33fHq/+CWH/AOKrLtL1gM5/WtCLUBzyODQBm+KNK8YeK9Dm0bxB41E9lOyl410mJCSrBhyGBHIFcEfgZAFJ/wCEjb/wCHP/AJEr1GS/EmQRg+tZ0t0VY4OaAOEg+AsU2MeI3A/68h/8crX8O/BkeHPEFtqi6y10bcsfK+yhd2VK9d59fSut07UiJMFsV1dtLDcIPmGaAON80wzNFKcNnGK2LK8AAUkcdDTPE2mhYzcRj5ozyR6ViWd3zzQB2cLiT+IUkyKrErg/jWRb3ZGCpwKt/aGPGaALIbbggU5nI5HANVPNKnsRmpllWQEHrjigBxxnk9/zpC+z3qNmDAjtTHkHAHQigCQyhmyeGB/Oo5ZTuz0BpnHqCR+tRTThhwOM/lQAkmCxz3FZd1iKT2q7uJznt0qheNvh3dwcEelAEUvMJI6gAiod+YWx1XkUqtuU9xt4xVWOXY3P8QINAE80pmhGRjaOPeqzsQw44pRIEZB2K4NM+8wx36j0oAnjIfD44q2jbYQcYy1VI8nhR8tW3IEaD3oAh1ZVliiJHNVreNRgVPcxtMwVT0q7ZaW+5TIpxQBfsEwoOK3YVxGtZkKiPCKK11GFA9qAEowadSUAJ9aQinU3NABTGXNONITQAwim4p5NIRQAyilxQaAEpPpS0mKAENJTqQ0ANopaSgBM0lLRQA2uh8Gf8hiX/rgf/Qlrn66DwZ/yGJf+uB/9CWgDduHxezf75/nQrVHcn/TZ/wDrof50KaALKtUyNmqyVPGD7fnQBOpqZTUCnmpUyelAE6mpQahAYc4p6n1oAkzS5poNKDQA6msaWkPIoAik+4a5TxXD5ukSgD3rrHHymsnUbYTwMjDhhigDwDUYyzFcVh3EW0muy13Tns9QmRhxk7fpXNXUPegCjaxEsT2qfAB9KUAQqoPBJpB8zA9s0ARXIxyOgFQtkr7VPPyPqeKgb7oPfNACRjJIqXdtUVEuByfXtSF8nBoAsRzbfarkU3yk9azeo+hqxE21cUAbFtKSAw4NWvMLLWTDKytirkcnPJoAuKxHPTFK03y8HNV2l44NMMuFx0zQA9pSB/jVOeYnOTTpJM55qJU3NlhkUAVjlMk5zWvaX6W9igTAGM81WaEsu0Dg9KyL93s1IO7bng46UAa11q+X4YVnzapwQzZH1rmLvUJMN5bZPY5rmdQlvrlmVrl8dNqnAoA7S61q2il2vcRIx7FxVuxvhvT5lKt0IOc15M9pIHIPJ75rb0C9uNPlVJNzwE8r/d9xQB62l35MeA/PY0Jqx835T9cVzkV6XXhsqRkH2ojkIlO3uelAHXLfFsZb8axvEfiq20Ozy5MlzJxHED19z6Cqr3/2SxeZ/nKjhc/ePpXl+qyX19fS3NwWZpDnB7UAeneHfGEF/gJIEm7xMefw9a9A0vW0baVavmmy8+3mV48qynIIr1HQNVmaCJ2J3EcmgD2WS5jvLd8nqmCDXGMwhuCrY9sVasNQbyMk9ulUpUMqnI+brmgC/Bc4XG7jFaEdzyOefaubhlZeD1Har8U+MD170Abgk3DI6ml83GCeCOuKzknKnBOPxqUSfxfw/WgDREoK5JFMkbcQUIwetVVl9D+JpskvB9qALO4rznqf0qCWQsCOmKjaYKox09M1BLMc8d6AJ1kZVw3frUFwwaGQ47VH52YwSc881CJcgg8ZPegCvFNj6VVDkyrj1pA+GIH97FRoN0xAagCw+N645A4NIxCY255605fu8/Q1Ec+Zt7ZxzQBchGOQeg6GnSMWljUd6jRf3oY8Dp9atwR4vlYjhTxQBYgs384bvXiultUURhW61SQKQG4qa3DNdKSeBQBKlttuee5q8aSVR5ykelBPFACE0mabmgmgBc0hpM0maACkJozSE0ABNJnmkooAKKTOKQnmgBaSik6UAKabS0UANpKXtSUAJRRRQAV0Pgz/AJDEv/XA/wDoS1ztdD4MP/E4l/64H/0JaANu4QG+myCPnP8AOpI1C1Xuj/p0/wD10P8AOkVz6mgDQQjPXj6VJlS3IB/CqCt71Kr+hxQBd3Y6CpFlbsP0qkr4PPNTpL6CgC0sp75qUPmqqyE+lShuOQKALANGfpUHmU4NQBNmio93tShqAHEVXmiDKanzmmtigDzPx5pmALhEz64rzmaIZyy8DmvfNX05L21eNhnI4ryXxBoslrJIu0jnjjrQBwF9ODdKB61KAc55qrfwtHdruB++KvFdqnHrQBXm4K8dzVdjzg8YqzJzIB7VA4+Y98UAR8heewyKYe59OBUzj5eKhx8tADlPHNTx5xkmoQBkc/WplGSOOKALSNhlJ59cVaV+OTWeuVP8qnVzQBa80hetRtJ+VRF8Z64p0UZkyx6DpzQA+JDJyx4Hb1rQih7ngU22iHAwMtWnHAu4DtigCuiYfI6D2qhqNmJUZduQRit5oNi84P0qpPAWySPmoA801PQCG3wOUYnoORWHJpl0hOCCc88V6dd2v3jtJPpWNcacjk5+U0AcG+nSM2WGG+lNCSwE4TOB6V2Emngfd5GO9U5tMzn5cfhQBnWOqiMBJBj2HatFNRg4LMwyeAByaoHSwJGIGOvNOgtVW4G88FRigC9cSPebeNiDovc1FPpPmLwOnrWvY2oODnP9K0ls8jIXIPXtQBwz6WFbKx5HfArZ0kPuSKKNsg+ldOmlhhkR5PfPFbenadFGN5QBsdxnFADtL09vJXzzgnHFXri02MfK6Due9WERxgrxx2p0iktjop6j1oA526jZW8wDHrimRzcZJrSuouSBwPese4jNu2QflJ7dqANBJ/X86sRzZx6VjxzEEc1bjmBHFAGl5h/h5FAlJBU/lVNZiT6DHNOEv4EDg0ATPOeR6/pUTSnNRO56kdaid8UATiUYI9e2aTdvIHTng1TMwxlqesv7sbeuaAK2SJGBPc0RLiQ88CldcT+2aci/I1AE4Bzx3FBBDE9xUkfRTjqPyppXfjHHH50ATW6lplz0HSrkjeXll6VBaD94MnpV+W2zGSKAJrS5LIATWvDKqoPXrXOQkqw9q0kdgmT3oA3YpPMbOe1PbpVbTzuQsPSrLGgCPtSGnE0m72oAbmkJpT9KQ0AGaTNJ2pKAFpKQ+9ITQAuaSkzSUAOpM0maTNAC5ozSZpM0ALmikzSUAKetJRSZoACa6LwZ/wAhiX/rgf8A0Ja53NdD4L/5DEv/AFwP/oS0Aa12f9Pn/wCuh/nTAabeyhdQuP8Aro386YsuaALKnNSoaqq9PV6ALatUqvjrVQSCpFegC2JOakWSqivT1koAtiSniTPtVRXFPDUAWw+O9KJKq76Xf70AWfMo8yq+/wB6PMoAmc7qydS0m3v4ysyAn1rQ8ymO3FAHDXnw90pnMkiMzdRk8V5tq9iLS4mixwrECvdbpvlrx/xhGItWuO2TkUAcfIPmP0qFuGPrU0rDPfNV8/vMnpQASHA/ColIyc/gKVjk+1LGm5SfegBq/e6VKoz3xznFR7TyR09aUH1oAmU56VKG+bHSolbjAHNOHJCg5ZulAFiJPNf/AGR1NXo4gsvyikt4VRACQTmrgTDKxxtFAE0EfyAgfMB3q4pG0Bfbdmq8RCyHPQjGamU7R6nHPrQBZV90YGM7e3eopF3c54J49KdHKcjaAOaa/fHTuMUAU5EHI+UnniqM1qpY4HFajRlpOF69KaLUnlzz6GgDBls852iqstliPO3FdO9mQRx16Cq1xY7h8y4xzxQBxrwYfkAqD2qD7KHA45UnrXTzacSCVGeOM8UJpZ5ypOBnAFAFSwj/AHakgZArXhhSRRxxjOKZBZGNM7eB3q1Eu1hhcc80AWorYtHxnPrWjaQZb5jkCqcJwSF+uK0bdyEGeQOp9aAJkTDbSMDGKJkQKFbk5wDUgXcc84Xn0qJwd46cfpQBRuIMg5HSse7i3ZU429K350LKQo/4ET0rMuYwchf5UAc26tbyDP3T0qWOQtjnHvVqeFZFKEcZ4IrNBaKQxv1H60AaaOex61MrZqjE+GHJq6kw8znqRQAu35D6+lV3Oflq++I48Z4xWbOTvGeBigCDdk1LbZMgBPeocYJPpUkHyt75oAlYEtnHaplQFcetAHqc5OKfGPm2t2zQA7YSFx0A5pV+9g9jSrz07Cn7OueMAGgCFrxIJo1ZuWOcV0FviaIHrxXEXsudcI7IABXV6XdbFUPxQBKYQkh9jVktmMe9JdkcMv8AFVjTbf7RKJHH7uP9TQBqWKfZ7NVb7zcmnO/NKzcVBu5oAfvpN9MzRmgB++jf6VHuo3UAPL0m6mbqN1ADiabnNJmjNAC0E03PrRmgAJpDRnFBagAzSUmaM0ALSUZpCaAFzRnim5pCaAFzXReCj/xOZv8Ar3P/AKEtc5urovBJ/wCJ1N/17n/0JaALt+3/ABMrj/rq386iVjUmoH/iZXP/AF1b+dQKaAJ1fmpVeq6mpAaALAenh6rg+tOVqALSyU8SVVBp6tzQBaElPElVg1KGoAtCSlElVw1KGoAsebR5lV91LmgCx5lNaTiod1NLUAMuGyK8u8cRY1Fm/vKDXp0xytcB44hzskA/hIoA80m+9/KoCcNzyKmuMh8VXdulADW+9149qdCSMgc8/wBKjLd8fjSRnG7npQBMwBbHPTmnrGN1Rxkjnr2qzCpfAXrQAmznCjNWLaM+YSRz0zUqQbI8ntz9aW3XA+vWgC/CiZLZyT/OpUYA7j0I71TJO0Y59T60rzKoz39KALqvg/Ocg+9KJSzE5rPW5+YL1q208MSZLDpyCaANGBCyljwe2asExJ1YZHWuau9ZCgCF/lA7Hlaz5tfYE7jnPcGgDrzexqOCAc8D0qr/AGmu47h8uevqK5BtYJfcrk/WpY9Q83POMj1oA7GPVYJLhVU8AZ5qVrmKX7mDjr9a5CF+N+7DKCfrUkV5slbbIRu9DQB1hjWSPO3HrinW6RhhjB96xY9S8+ONTIV+bYQO49ahN+9vM8ZP3Wx1oA6AwI0hQFcE5FS/YoyMZGR6Vgm9VkDByHxyT3pYdUkicqCTz1PegDYW2cTEJzjuKmVyhxjpVEa1ErgPg5wCQeKvRSxXIBjcLz3oAuQ3DBcY68Zz0pxKOhVTyTyTVLeRn6YGaFmfdg9aALGF2FTjOeAapvEArk5P681YMoYZx8wqKYkqRwtAGRPAP4l69KxdQi8vEoGNvDe4rpH2/wC8QOxrI1FA8bqR94c0AZccu0jnNXEbcm7PIrNtzlVH4VoQH8x2oAnWYkAE8Ukg3AHv609I1bnB57UFSikY6UAVyPlb3p8K/vKQqQoJz1pYfc9QaALZwAKcoUsMdTnNMC/MBT4zlQe9AFiFcnIHercVv5jDK/e4qC2XLenrWrZp82fQUAYPiLS0S5W6hXBPBxTLJ2woPaurkto7iLZMMqarR6LbxvkMxHpQBFbRSXjqo4UdSe1bkW2KIRxjCrUKKsUYSMBVHanbuOKAHvJk0zdTaTPNAD91Jmm5pM0APzRmmZpM0APLUm6mZozQA8tSbqZmg0AO3UbqZSZoAfuo3UzNJmgB+6k3UygmgB+6k3UzNGaAH7qN1R5ozQA/NdJ4IP8AxOpv+vc/+hLXL5rpfA3/ACG5v+vdv/QloAv6h/yFLn/rq386gWptQ/5Cdz/11b+dQrxQBKKcKYKeKAJAc04UwU4UASCnUwU4e9AEimnA1GDTwaAJM0vSmdxTh1oAWlpKKAFzSGig0ARSfdrkfF8G+wDY6GuvcVieIIRLpc2RnaMigDxK9GLggDvVBzlsf3etamqKVuXwMc1kyD5ievqaAEOee9CcOc91pykc5oxhgw9aAJkxg/yq/Zpu5A78+9UkGfarluxTgfWgDQ2eXG2Bk4/KoYgfKU1NFl4WJHFMgG5cdM9qADnHT8KglDcg8DFNmk1GTWrPStE0ibVLy6jkkWKKVY/lTGfvcd/Wrsnhb4guuB4FvVHf/ToP8aAMW4nEKZ38DjFYN7rb7iA/A6V0N58PfiJcqfL8GXiN2JvID/7NWBcfB74nzk/8UxcKPQTw/wDxdAGb/bD7/kbd70kmpEqcsAD71ei+C3xMSQGTwzcsvcfaIRn/AMfq8PhB4/8Alz4NuuD/AM/UH/xVAGLFLK4yqsQfSrEE8hkKANkDJGK7GDwD45hiCnwHekjv9tg/xqxD4J8bRTNIPh/ffMBx9ut/8aAOVS8kCgHOB0qKS7lWVXUE4ruR4T8ZAf8AJO77/wAD7f8Axph8HeMXzv8Ah1e4PcX9uD/OgDkotVPlr8uGBzU0uoh3ZiCxJBBrcj8B+M0Zs/D++OTkf6fb8frVuPwd4wjXB+HN631v7f8AxoA5Zr4iTIb5QOKDqJOMtgD1rrpfCXi2W32f8K3vlbGNw1C3/wAaoR+A/GKwhW+H1+xHf+0IP8aAMBdV3TYBCgdST1rQt9cKkKsh/OnXvw38czg/ZvA19EccE3sBx/49VOP4ZfEqPGPCV2R73UH/AMVQB1Njq6TFV347cmt2OaMxZTr39a4e38B/Em3YMPBt2f8At7g/+KrXtvD3xHgUA+B71j6/bYOf/HqANt5cH+YzUTShuGKgY9c1U/sf4gMMP4Bvvwv7f/Gs8XWq2uuS6TrehzaVeJbrcCOadJSyElQfl46g0AarSIFwPu99tZ9zlkJx9anJYjnPPoKRocx5HUde9AGBGgDuo/hY1ciH90H2NRqmZpB331aVNvK8HoQaALUeFUfrmkl+aM4FOQZjYZoYYh+poAqyc7R6ck0sSgYPcdKGBMpx24qTaUJI68UASqdwz9afbx8jNRq22T0qeLAIJ6UAWoRiQKBwDya2LVNsWf71ZtrGWYe5yK2FXaoA6DpQA8dqcKbTqAFzmikzQaAFNNNKaKAEpKKKACkooNACUUGkoAKM5opKACgnAozSUAJmij0pKACg0UnFAC0hPNB6UmaAF70maKSgArpfAv8AyGpv+vdv/Qlrms10vgX/AJDc3/Xu3/oS0AX9Q/5Cdz/11b+dQrU2of8AITuf+urfzqEUASCnCmCnCgCRT2p4qMdaeKAHinioxTwaAHCng8UzNKKAJKcKYDS5oAcKXNNooAcDzSGjPNJmgBGNZ2op5lrKvqpFaLdKrTLlaAPEtch2TuCO9c/IM4XPPSu+8W6b5WoSFRw3IriJ0wzcYx3oAqKDyW9eBTj09weaQgjGe360HLLxQBZj5Y7ulWoCN39apRMNnPpUsblevWgDagIKnB7dKRozG4I6N6dqq29wMY71Z3Mwxj8qALXhfWtO0b4taDeazfW9jarZXima5lEaAkDAyeOa9t/4Wf4E/wChv0T/AMDo/wDGvkX4pAiTSsnJ2S/zFcBQB98/8LP8Cf8AQ36J/wCB0f8AjR/ws/wJ/wBDfon/AIHR/wCNfA1FAH3z/wALP8Cf9Dfon/gdH/jR/wALP8Cf9Dfon/gdH/jXwNRQB98/8LP8Cf8AQ36J/wCB0f8AjR/ws/wJ/wBDfon/AIHR/wCNfA1FAH3z/wALP8Cf9Dfon/gdH/jR/wALP8Cf9Dfon/gdH/jXwNRQB98/8LP8Cf8AQ36J/wCB0f8AjR/ws/wJ/wBDfon/AIHR/wCNfA1FAH3z/wALP8Cf9Dfon/gdH/jR/wALP8Cf9Dfon/gdH/jXwNRQB98/8LP8Cf8AQ36J/wCB0f8AjR/ws/wJ/wBDfon/AIHR/wCNfA1FAH3z/wALP8Cf9Dfon/gdH/jR/wALP8Cf9Dfon/gdH/jXwNRQB98/8LP8Cf8AQ36J/wCB0f8AjXj/AIw1zTNe+MFzdaFf2uo2/wDZEMZltZldQwkc4yOM8jivmavQ/hChfVdSA2/6hfvf71AHqD/Lndjn0NAOF+Y4H8qcy7cZQZ/3s0wJuk+bgDsaAKJtt0byqMkNk/Snquec8d6uwhVXA6dDVR1EbkDp2+lACqMcY5pzt8vPQHvTQ2MGo5SRnHrQA3Ock8c9akVTuIyTnnNRFcN1qQHByP8A9VAEgXMhz2qeP5mwc5HpTYl+c5q3BCA2cckUAaWnRd+yitCoLdPLgUYwTyanoAUUd6PSigBaKKM0AIaDSUZoADSUUUAH0pDRnmkoAKKBSGgA7UUfSjOKAEpKOtFAB0pDRR2oAQ0UUhoAKM0Un6UALSGiigBK6bwL/wAhub/r3b/0Ja5mum8C/wDIcm/69z/6EtAF/UP+Qnc/9dW/nUAqbUP+Qpc/9dW/nUAoAlU06oxTx1oAeDTgfWmCnLQBIDTxUYpwNADxThTc0ooAeCadmmA4pQaAH0E0maKAFzRQKSgAqNxkU8mmOaAOX8T2Ant/MA5Xr9K8w1GzMcrAjjNezX6LJCyt0Iwa8y12IRyyIeoPFAHHumGP61E3A47datTkbiKqOeP8KAER/k5PQ1KJs1W3YY46kZpdxyKAL8Mvr1q/DMxwCrE9sd6yY25FaVvcFG96AK2t+GbPxEYH1DzlFuCqCJsZzzzkH0rMX4Z6E3/LS8P/AG1H/wATXVrPleSSD1pom2N8pPvQBzn/AAq7QNufMvf+/q//ABNRv8MdDABV7z/v6vH/AI7XVrOccU52yuM/LQBxb/DjRFHEl3n/AK6D/wCJpsfw90J8bnvAf+uo/wDia65yo68jpVKThiF4oAxv+FaaBtz5l5/39X/4mph8MvDRH+svs4/57L/8TWrHdELtY+3JpzznZxkUAZA+Gnhor/rL4n/rsv8A8TVhPhf4W2je+oEnsJ1/+Jq6t23JzzS/bzwc0AVB8LvCPV5NQAPbz1/+Jqx/wqnwawG2TUwfe4X/AOJqUajxz60q6o24c8CgCL/hU3hAxg+ZqQz3M6//ABNMPwk8LbcrLf8A/f8AX/4mtFNRJQc5qRL4lj8350AYb/CrwwD8sl/+My//ABNRn4VeHcnEl9x/02X/AOJrpvtPzdevrViAmRjnpQBySfCfQGYZkvsH/pqv/wATVmP4P+HGGWlvh9Jl/wDia7SMIRgjaeoqeNwh2rwBQBwsnwf8OJHvEt+QDz++X/4mtLQfBml+GJZ7jS3nczIFcTOGwAc5GAK6eRycheQP1qm4YZMecHkr/hQBXk4YccHjrTN3zEg4U9806ZwV2g/MD0NVSxBIBAPWgB/m43duarySbmzkU2R+cVXZiOnPNAFgPlgOcd6JDlgByaZGeG64xSlgWBHQcCgB7EAAfjQnYHJNNYmQHAwPeiP5tzDrmgC7Epdj6Vs2UAZgG7cms+yjz15+tbtrF5cXPU0ATAYpaOtLQAUnelNJQAtFFJ3oADSUppDQAUhozRQAGkopDQAUUUE0AFJRSGgANJSmkoAPrSUUUAFJRSZoAKKKKADOaT60uaSgArpvAv8AyG5v+vdv/QlrmK6bwJ/yHJv+vY/+hLQBf1D/AJCdz/11b+dQDpU2o/8AIUuf+urfzqEdKAHr2pwpgpwNADx0p68UwdKcDQBJThTBTwaAHLTgaYDThQA+iiigBc0pPSm0UAOBoJpuaKAFzmo3bAOabPcJAhZ2AFcP4m8cwafG6QuC2OxoA2Nc1y10+JjNIq4968x1TWl1VWuof9WSVH4VwvirxnNfSOXlJz0GaueF7prjwyjP3Zh+tAFySbef50wktnknPTNQOxWYg9KcJP8A9dADjjjnH0oR8c/lTW5HHekB7UATo2Sc+tXInII3GqcXJA6VfhjQkc89fpQBcicsQFGc9asrDnOQQRwcmm27IuEjA29yavooODhffmgCmqkdBx35p7sSpxz2z6Vaa2U9c474FQtAyfdOVPBJGKAK7KOcHmqs8WTwa0fKPPHHqahli9BigDGdCGzzR5jdqvNCxPSoWtCSeKAKe/5uetAYsBtqw1lg9/xpPsp7c0AQYLN1IpduCP1q19n2kbxj3pxtuOelAFdCy4wKnQvnmpI7c56fhVxYRgDH40AR2pYsOeema1YTs9Q386rxwAL0xVhIiQDkjNAE5f5eOpqwkpwMnIxVbZhDjkDkZpVLD5udvr2oAsvN3GMdKhMpPTH4mlxnLKcgdTTTGOSoz60ARSssi7XA68MOorNmYoxVjz7VoTIejd/1qhOhZeBkjrQBVZiT1pAcsMmkbjBzx/KosEgY45oAsiQqmAOD1xThzgenWoozhtuOB+tSOWAP9KAJN6ngnipbVN0nAxk/nVRRkdsn1rU0+LODQBsWMOX5HArV7VXtI9sQ461Y7UAKKKQ8UUALSUUUALSUZpKAFPFJQaSgANJmlNJ3oAO9JRQaACk6GlppoAXNNpaSgAo780ZpKACjtRSGgApKKPSgApKU8UlABSUUUAFdN4E/5Dk3/Xs3/oS1zFdP4D/5Dk3/AF7N/wChLQBe1H/kKXP/AF1b+dQCp9R/5Cl1/wBdW/nUAoAcKeDTKUHmgCQHinCmA04UASg0opgp2aAHing1GDTgaAHg04UwUoPFADs0ZptBOOaAFziqN/qcNlGWdgMVU1jW4rGFsuMgeteReK/GLzF1STC+uaANbxf48xvjgk/I141rviSW5d8OWP1qlruuPPKUjY+5zXPlmJJJPPWgB0szzOWc5Nei+DZPM8NKpOSrED8683r0fwN/yAQMdXagDRulBQMM5Hp3qFWPCnPTFWZRnjtVI/upMHjB6etAEyuSuMUAYbtzUXnEZBz1604N831oAuQfdJ79hVyNypG7pWcjn8qnWXPTjNAG1buFxgg5q/HIvyg8mseCQYGeMdKuRyFnFAGykqn5eenPvUnlbxhTge9VbYHcCauxrt5B79u1AEflbWKt09cUx7fstaKoGz/Fnp7U14dhORx9aAMk2u7qvPsOlMFrtPrWsEKtwBjrxTzGrcbAD3oAx3tA/TaTUP2IgjIwfWt37IQQXXjsaYbb5ztGVI4zQBjGzJ4PFOjg2Hld3NaxtOOeD2zSm1Odu3IHfpQBnfY/myAG9h2qZbfdGABg+9aEdqN204z6Crn2KNQM457igDHSLa3SpQmOwq+YxnA+YduKaYwzEYx74oAohG3kEfiak+zuBuHHtmr3kABTwR60jRhU+UZHWgCgQI2yBj2pCML5kYz6ip3OBniqsr7CdgwD1FAEchD5xnHcVRkjKg9SvvU7TAMcZz29qY+SeGB3DrQBmvH+7LMe/So16jvU4+ZSrdzTEiBUgN27igBihkbOcjPHvUo5fnnsBSOTgs/f0FRM3AKnBAoAcflce5wK3tLGfSueBDzAjHpx29a6PSVAIVeR60AdDGNqCpBTV6U6gBP50lLSUALSUtJ2oAWkoNFAB1pDS0ntQAdetJRSUALSUUGgBDSZ5oNFACf40UUYoATtR/Kg0YoASg0UUAJRRSUAFH1opKACik6UGgAJrpvAf/Icm/692/8AQlrmDXT+Az/xPJv+vZv/AEJaAL+o/wDITuf+urfzqAVNqP8AyFLr/rq386gWgBwNKOtNFOBoAkGKcDUY7U8c0APFOBpgp9ADxSg03vSg0APpaYDS7qAHE4FYeua1HYQN8w3Y9as6xqken2rM7DOOK8Y8WeJZLqZo4369eegoAj8UeKXuZXVZPlHU5ryzW9Ze4kMUZ4z61Y1jVDJIYYiT6mufmATJ6k0AQMSWJPWkAJ6U6ONpWwozVwQiJeaAKTLivQ/A7/8AEkwOodsV59K25/pXd+Bz/wASh/aQ0AbtyxVuBwaqXCB4w3O4c1cueOg6DNUycHoeRzQBVEjbTuOQOuacsvzDFRzLsJz0NQbisgyf/rigDSSTg4/WrEUvA+n5VlifHCnJ7ZqxBNlsZ6igDZt5MgdzWjBIeMHntx1rDhc7sg8YrTtJCG6cigDbt5SuCW5rTgkD8jGe9c6khDE7q07ScKvJIGORQBtrJsCgAc96SViyYHLDr9Kpx3KtgEkY6UrThWGTkeuaALaNnaGAOfSnBymPT0qn5wGFXJHY+tTo/nLgjB+tAFwSj5VIzx+FSIFJwwxzwapqrd8rxxjmplACgO+D70ASeQQ7FefQU1kIAYcdvp9adHMTkHJ9GpruFyBg0APDBh8vUdTUybQMMahjZQMpGMd6eXQ7SVxg/pQBMuGBGMKPXqackMBJIzn271E8qspHelXhdwPHrQArqFUkZHtVWdsRgrxU08v7v5mwfbvWfNcE/T2oAjkdcbexH5VTlcAYB+bpj1qWaQnAGAfWs+eUr+PFADZCDkjOe3tTVk2sQx7VA9xlhx2wc1E0uJTjJ9PegCV2BLNnjNQeYxzt+uSajaXcwJxtHY0x37Ajj9aAHtKTy3I789qRnBBwDkngdfwqEH93ye9WYIxIwlIx6f40APto9vLD5m6+3tXRaMp3D25rAXJc+oNblhdx2qr5rBQxwCTQB0i9KXPSo4ZFeMFTkHuKkoAQ9KDRRQAGiikFAC96TNLRQAlITS0lABSH2opKACjNHrRQAlFBpD1oAKKPrSUALTaU0lABSZoooASiiigApOtFFACUGiigBK6bwH/yHJv+vZv/AEJa5k10/gP/AJDs3/Xs3/oS0AX9R/5Cdz/11b+dVxU+o/8AIUuf+urfzquKAHilHFNFKKAHA08GmU4HigB4NOFNB7Uo60ASClBpmaCaAHZqO4nW3hZ3OABmhpAq5bgDmvOvG/iwRh4Ld/lHBwetAGX428UefM0cD8Dgc15LrWq43RxPukbqaua1qjbWctmR+grm1jJzLL95qAK+3ahZjlz1rPkYvJgfSrV3KV4FJp1v5s29uimgC1aW/kxZI571Ddv1xxV+YhUwtZFyxzQBWJya7nwK+dPnXPSTp+FcNXb+CY3ispXONrtxQB07jdC204Zexqi6ncec8Vezht3r1qpcRlZP9k96AKsgMkROOlU3G5c+nr2q+flyAODVR4zGTnp3oApGTa+M8Z61YifDDtzUEqBCc9D39KZuKkZP49qAN23lwB3q9BclG+o5rnrefZjnHbrV+G43NycUAdCk+Uz3NWrafPBPtzWHFOSo56Vajl54bnrQBuxXBVsH8ateaD756ZrCjuCc4OamS7x16igDXSRlcBs1aEpHI/TrWHHdl85496mhuwrEFqANwXbbMZ5qVJw5+bOcdax1u14LYA71MlyqnOePQ0AaazlGIPXHam/ayxBBGc84qkblGYFHA4pkkir1cH6GgDRW7xx60/7VnC55zWR52OVPGODU0EynJblvegDVWTOQX/GlN5wEboO3rWf9oAPXHHFMacdcigC7LcZJ54qmZsMTVd7jtmonuAq896AJZpsNg+nWsy4nIQDORT7ifzGwM4FUbiQHnrx+FAA8xK56c96jacF+DyarPMGPH/6qgeb5uOMDjFAF9pdqEnvUXm5TcepqoknTnnvnvVmCMuAc55zQBat03n587R+taS8AAcjHNQQqFUKanAG4g9PWgCSFN8nyjn3rlvHGsSWHlQwZBzk110Mfl4z35zXn/jaWKXUGDPuwOKANnwn4+eFlhu23xnjntXqdnfQX1ustu4ZSO3avmqJBw0RwR6V1/hnxZcaXOqSsdvueDQB7bR3rN0jW7XVYFaJxuxyua0+KAENJTsUlABSUtJmgAzSUGigBKSlpKAD3oopKAA0lLmkNABSUtJQAGkoo70AJRRQaAEzRRSUAFBopKADvSdaWkNAAa6bwH/yHJv8Ar2b/ANCWuZJ4rpvAX/Idm/69m/8AQloAv6j/AMhS5/66t/Oq9WNS/wCQpc/9dW/nVegBRTgaQUooAWnLTRz3pwoAf3pRSClzQA7PFNzSH0qlquox6dYvK5AwOKAMXxhr6aZYsiOPMYdj0rw7WdWM8ryyvlR69zWn4s8QPqF7Jl+p9egrgrudry48tP8AVqec96AEk3XcpmcnHYVXuJdq4qxI4RNqjGKybyU5wDz3oAryMZZfXnArctYhb2oAHOMmsvTIfNugT0WtydgFwOlAFC4k64+lZc5y3Wr1w2M5rOc5bNABGhkkVB1Jr0vw5ZG20oL681w2h2vn3ikjoa9KswEjVO2MUARk5U1G4Z4sE8J/KlkHlzFfQ03IDnB60AV2BC8c1DKoZRjvU8oKuSeBmozgt1wPSgCjMNyEEdsE1TYbW2np1rSdF3f7NUGG8MO6n9KAGA4PXirST91+9+lU84605Tg5HWgDUhuSCefqKuR3IZeuD6isRZO4qcTfLnPPpQBupcFQMfhipPPY4PWsJLsjg9qtR3oxz19aANmO6K8VKtwS+VOcdKxRdgtnirUd4uOAM9qANQ3YIJ798UC6Zoxg49c9qoJKpUt3NOEwH3fxoA0kusnqR2qWOcM2etZRlBXmpY5lIJBwRQBqrcLn5jj2pftewcHislZ8k5prXAB4PFAGz9rJUndUZus96zBdALgtTkmBIJPFAGoJiVHPPrUM02Ce+BVMz9cHHpVeW53HC8DuaALn2kjrjJ7VUnnwpz19qgab58jpUDyF356DrQA4ybXJznr0FQqzO/IPXtR2ye/Q1NFEdu49DwooAkhhMhyenetiCDCoWHHUCq1rFnbgY7ZrVVFjHPTFADRxjp1qWMZkAP3ev1qJSWIwOPWrAQxgE9+1AE6nLNj0ryLxkWOqSgNnB7V7EoVbWSQ/3TXi3iCYTaxP3G6gDJtLoo+GrZgljmABxWBPFsOR0qS0uDGw5oA7jSNSudLnVopDtB9a9S8PeJ4dSjWOVgJP514pZ3oOAxre026aCVZYHwQc0Ae4ZzSVz/h3xDHqEQhmbEoGOe9dBmgBKDxRRQAlFHWj1oAQ0lLSUAHWkoooAKSlpKAEooo7UAJmkpaKAEooooATNFHpSd6ACg+1BooAQ0hpaQ0AIa6fwF/yHZ/+vZv/AEJa5iun8B/8h2b/AK9m/wDQloAv6l/yFLr/AK6t/Oq46VY1H/kKXX/XVv51XoAUU4U0UooAcKcKbSigCTpRSCjNACSOEQsT0ryv4geI9xa3ifhfQ9TXYeK9cTT7F1VsMRivBvEGsGWaSVjkZ4oAxdUuWLlM/O5ySO1VY8RR8ck1FGrmRpZDkscgelEjkHigCO4f1NZU7bpOuauXTAL1qnChmuFX1PNAGzpUGyAOR15p90+KtKgihAX0qhOxOc80AUpzkVTPzNxViU9c1BGMyCgDqPDlvsYN+NdkhIK7euK5bRRgge1dQnGAfSgB16ASsqjjofaq7Y6npVzHybSMg1nyB1ZkcY9KAGzDeuD1BqFjlSFGalR9rBep96jYYYjvmgCE4kBPRl46dqpyL5bHI47Y9KubSshzgg9xUMy7jg8HHFAFKWPGOOvQ03p25qcqeQ3QdD7VEV+Yj09aAEOR0o3GlVTj/GkK4NAC+Zwec0nmkdDSEYJpuKAJo5/Wp0uWU9fzqlg4pQTmgDYju+PvDFSrKNuQ/wCFYyOc+tTLIce3tQBref78Hr7UqzYOQ34VmLKQMVIJiBnHNAF43JGeeKVJs9etURL3PBp6OSKAL4kGeDTlucHFUS7eo/GlEuOg/GgC61wQuP4j0xUQkB4B4qEAtyeh5yasRxZUEde/FACbtycd6auWfA4HU1K0Z2jNOSIK3qMUAJ5ZwB29Ktwx7skjI6U2KP58449KvQQliFHAPegC5aRgRZPXORU5bkDOB70RhVIOOAMcVC+55OBwDzQBYRcZIGQP1pYm8xuc9aQMNuF/GrNvsZuRjFAE00ZXTZQP7p614dqaFdWm3kcua9t1aUxaJcOP4VNeAT3bTX8juc5Y0AW3izHx0rNlBik46VqwuCKhurcOpZRQBFa3W0jNbljfYI54rlsmN6vW1x0oA7/TtRaGZJI32kHrmvTNC1+O+jWOZsSY6nvXh9ldkYGa6bTdTaNlIYgg9aAPaOtFYGga8l7EIp2/eDofWt+gBKKM0UAJSGlpp60AFFHeigApDQetFACUGiigBKKKKAE/nSUtJQAUlLSUAFIaWkoASig0UAJXT+Ax/wATyb/r2b/0Ja5jvXT+Az/xPZv+vZv/AEJaAL+o/wDIUuf+urfzqvVnUY3OqXOEYjzWxx71B5Un9xv++TQAgpRS+VJ/cb/vk0oik/uN+VAAKUUojk/uN/3yaXy3H8DfkaAEzVDVNRSytmZmAOKtSl1Qny2/75NeZ+ONXumZoYbeZgO6xsaAOY8W+IWvrp1DfKOvPavO7qUXdyWRvkU1p6pFfsrIlrcmRuT+5b/CqA0u+SL/AI8bgZ5P7lv8KAK0hAAC1AxBGTx71c/s6/4P2O4I/wCuLf4VBLYX2w4srnP/AFxb/CgDIujluvGasaTHm43noOKjfTNQLH/Qrk/9sW/wrb0rSL2OAFrK4+bn/Ut/hQA+ZvlAHpWZcHH19RWzcafe7QBZ3OP+uLf4VmTaZqH/AD43GP8Ari3+FAGVN+lMh5mH1q4+l3//AD5XP/flv8KS20q/80Zsbn/vy3+FAHR6Pxhu2ea6hDuA2+lc/pOnXohZTaXAB5/1Tf4V0tpZXQjBNtNj/rm3+FACruzxk0y5QyLwMutXlsbof8u83/fs/wCFNeyujz5Ew+kTf4UAYrIG+4PnxyKbGgfPJDKP1rVn0q4b94LefPfEZ4/Sqjaddq3/AB7TnntE3+FAGcyccn7vb0qBTywbJHatGXT7uXLG0uN/f903P6VAbC9OP9FnAx/zyb/CgCk6FU59cVC6kTA4JDVp/wBnXRT/AI9bgNn/AJ5N/hSDTLqSD5ra4B7fum/woAzNmGzj65pSmMD2rQTTbth81pcH38pv8KU6ZdkDNrOQP+mTf4UAZhiwOe1N2Z/xrUGm3n/PpOR/1yb/AApn9m3gbAtJ/oYm/wAKAKGzGBineXWiml3n8VpPj/rk3+FOXTLr/n1n/wC/Tf4UAZyxUvl1pDTLsH/j0n/79N/hThpl4TzaT/8Afpv8KAMzbgcc0oBz6VojTbpsj7LOCD/zyb/Cmtpd2ScWk34RN/hQBSUGnhT61ZXT7zP/AB7T9P8Ani3+FPOnXZAxaT/9+m/woArLGSwzz+NWY4ckZzj6VNFp90CM2s//AH6b/Cr6addKOLWb/v2f8KAKQTOQOBVuCNgh+XvU50u7GCLWYYPP7s1agsLonm2m6f8APM/4UAZ5gJbceg/WiFCWGQOBn6VqPpl0y7lt5un/ADzPWli0q6EmWtpcEc/uzxQBXjiJXCrjircEAVh6AYArQtNLmyxMMvA4+Q06PT7jB/0eXJP9w0AU925duCOetEa4OT0rQGnzpH8tvIfqhpBY3BP/AB7y49kNAFbyguTkZPTFWbVPlx1zT49PlMm4wS4HQbDViCznEnEEmPXYaAKHiIiPw9cA9Np/lXzzPt+0Ps6bjX0T4osrqXw/cIsEpO08BDXz/JpOoCVh9huep/5Yt/hQAtrN0zWkjBlxWbFpuoo3/Hjc/wDflv8ACtK3sb7vZXP/AH5b/CgCneWm4FlFUFzG1dQum3jLg2Vx/wB+W/wrMvdFv423LY3JB64hb/CgCO1mxjBrZtL3DAViQaffhhiyuR/2xb/CtOLT79cH7Fcf9+W/woA67TNTKSKysQQa9L0HWUvYAsjfP9a8btLW+GP9EuB/2yb/AArpdKmv7dlIt7gY6Hy2/wAKAPWaSqGi3Vxe2YMsEiuOuUPNaRhl/wCeUn/fBoAjoNP8mX/nlJ/3waQxS/8APKT/AL5NADO9Jin+VL/zyk/75NHkzf8APGT/AL5NADKKcYZv+eUn/fBo8mb/AJ4yf98mgBlJT/Jm/wCeMn/fJpPIn/55Sf8AfJoAbRTvIn/55Sf98mk+zz4/1Un/AHyaAG5pKd5E2P8AVSf98Gg283H7qT/vk0AMzRmn/Zpv+eUn/fBpPs82f9VJ/wB8GgBmaTNP+zTcfuZP++TSfZpif9VJ/wB8GgBm6kLin/Zpv+eMn/fBpPs0xP8AqZP++DQAzdXT+AT/AMT6b/r2b/0Ja5sW03P7mT/vg103gOGRNcmLxso+zMOVI/iWgD0uiiigAooooAKKKKAENRtRRQAw0tFFACUhoooAKUdKKKAA0UUUAJQKKKAFFOoooAWg0UUAJ2ooooAKSiigAooooAKKKKACiiigA7UUUUALRRRQAneloooASloooAKKKKAFooooAWgUUUAFKKKKAEooooAKUUUUAB6VDRRQAUCiigBaDRRQAlLRRQACnCiigBy040UUAFFFFABRRRQAUUUUAFFFFABRRRQAUlFFAC0lFFABRRRQAUUUUAFOXrRRQB//2Q==)

Figure 3 - Grayscale Image vs Haar Features

To classify part of an image as black and white and assign the appropriate feature, the algorithm does the evaluation as follows. Consider an image with intensity values ranging from 0 to 1. The algorithm is taught that, in a Haar-like feature, if the difference between the means of the light and dark areas is above some threshold value, treat them as black and white. Let’s look at an example using a 6x5 pixels dimension segment of an image.

![Table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADODIAAJKSAAIAAAADODIAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTQ6NTk6MTcAMjAyMTowODoxMyAxNDo1OToxNwAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTQ6NTk6MTcuODE5PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAG/Af4DASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwDc8M2c2oeEtIvbzWvEElxc2MMsr/29eDc7Rgk4EuBye1an9jj/AKC3iD/wf3v/AMdqr4M/5EPQP+wbbf8Aopa2qAM/+xx/0FvEH/g/vf8A47R/Y4/6C3iD/wAH97/8drQooAz/AOxx/wBBbxB/4P73/wCO0f2OP+gt4g/8H97/APHa0KKAM/8Ascf9BbxB/wCD+9/+O0f2OP8AoLeIP/B/e/8Ax2tCigDP/scf9BbxB/4P73/47R/Y4/6C3iD/AMH97/8AHa0KKAMK90+SHVdDhj1nxAI7q/aGYf29e/MgtZ3x/rePmjU8en1re/4R2D/oJ+IP/Cgvv/j1Zmpf8hzw1/2FG/8ASK6rqaAMn/hHYP8AoJ+IP/Cgvv8A49R/wjsH/QT8Qf8AhQX3/wAerWooAyf+Edg/6CfiD/woL7/49R/wjsH/AEE/EH/hQX3/AMerWooAyf8AhHYP+gn4g/8ACgvv/j1H/COwf9BPxB/4UF9/8erWooAyf+Edg/6CfiD/AMKC+/8Aj1H/AAjsH/QT8Qf+FBff/Hq1qKAMn/hHYP8AoJ+IP/Cgvv8A49Vbwnocep6HJcXuq+IJZVv72EN/wkF8PkjupY0HE3ZVUe+Oea36p+Bf+Ral/wCwpqP/AKWz0AT/APCJ2X/QQ8Qf+FFf/wDx6j/hE7L/AKCHiD/wor//AOPVuUUAYf8Awidl/wBBDxB/4UV//wDHqP8AhE7L/oIeIP8Awor/AP8Aj1blFAGH/wAInZf9BDxB/wCFFf8A/wAeo/4ROy/6CHiD/wAKK/8A/j1blFAGH/widl/0EPEH/hRX/wD8eo/4ROy/6CHiD/wor/8A+PVuUUAYf/CJ2X/QQ8Qf+FFf/wDx6vm74nQvYfHyG3t7y/IhmtBFLNfTSzR5Cn5ZXYuOSSMHjtivq2vlb4ucftCgngedZnJ/3UoA9M8q6/6DniD/AMHt5/8AHaPKuv8AoOeIP/B7ef8Ax2pqKAIfKuv+g54g/wDB7ef/AB2jyrr/AKDniD/we3n/AMdqaigCHyrr/oOeIP8Awe3n/wAdo8q6/wCg54g/8Ht5/wDHamooAh8q6/6DniD/AMHt5/8AHaPKuv8AoOeIP/B7ef8Ax2pqKAIfKuv+g54g/wDB7ef/AB2jyrr/AKDniD/we3n/AMdqaigDjF1bWjq2qwnxJ4g8u3u/LiH9tXXyr5aHH+s55J61N/aWsf8AQx+IP/B1df8Axys9P+Q7rn/X/wD+0o6sUAWP7S1j/oY/EH/g6uv/AI5R/aWsf9DH4g/8HV1/8cqvRQBY/tLWP+hj8Qf+Dq6/+OUf2lrH/Qx+IP8AwdXX/wAcqvRQBY/tLWP+hj8Qf+Dq6/8AjlH9pax/0MfiD/wdXX/xyq9FAFj+0tY/6GPxB/4Orr/45R/aWsf9DH4g/wDB1df/AByq9FAEGs63rtppjS2/iXxAjiWJc/2zdHgyKD1k9Caz/wDhJfEf/Q0eIP8AwcXP/wAXUniL/kCt/wBd4P8A0alZNAGl/wAJL4j/AOho8Qf+Di5/+Lo/4SXxH/0NHiD/AMHFz/8AF1m0UAaX/CS+I/8AoaPEH/g4uf8A4uj/AISXxH/0NHiD/wAHFz/8XWbRQBpf8JL4j/6GjxB/4OLn/wCLo/4SXxH/ANDR4g/8HFz/APF1m0UAaX/CS+I/+ho8Qf8Ag4uf/i6P+El8R/8AQ0eIP/Bxc/8AxdZtFAGl/wAJL4j/AOho8Qf+Di5/+Lr1z9n7V9U1LUPEsWqarqGoJDFZtEL28kn8ssZ923exxnaucegrxGvY/wBnL/kLeKv+uFj/AOhXNAFrwZ/yIegf9g22/wDRS1tVi+DP+RD0D/sG23/opa2qACiiigAooooAKKKKACiiigDN1L/kOeGv+wo3/pFdV1NctqX/ACHPDX/YUb/0iuq6mgAooooAKKKKACiiigAooooAKp+Bf+Ral/7Cmo/+ls9XKp+Bf+Ral/7Cmo/+ls9AHR0UUUAFFFFABRRRQAUUUUAFfLHxj/5L8n+9afyWvqevlj4x/wDJfk/3rT+S0AeoUUUUAFFFFABRRRQAUUUUAFFFFAHBJ/yHdc/6/wD/ANpR1Yqun/Id1z/r/wD/AGlHVigAooooAKKKKACiiigAooooAzPEX/IFb/rvB/6NSsmtbxF/yBW/67wf+jUrJoAKKKKACiiigAooooAKKKKACvY/2cv+Qt4q/wCuFj/6Fc145Xsf7OX/ACFvFX/XCx/9CuaALXgz/kQ9A/7Btt/6KWtqsXwZ/wAiHoH/AGDbb/0UtbVABRRRQAUVwMuta7eeEdR8WWOpNDHayTSW+n+RGYnhhcqQ5Kl9zBGOVYAZHHHPcWlyt5ZQXMfCTRrIv0Iz/WgCaiuF0/xNqmp/ECy8m4VdBvYbgW0IjGZvKKjztxGcMWOADjCg967qgAooooAzdS/5Dnhr/sKN/wCkV1XU1y2pf8hzw1/2FG/9IrqupoAKKKKACiud8U6reW99o2j6XN9mudXuWjNzsDmGNI2kcqDxuwuBkEc5wcYqDQ9R1G18Zal4c1S9fUFjtYr21uZY0STYxZGVtiqpwy8EAde+KAOporifFmvPY+NdL0658R/2Bp89lPNJNmBd8isgUbpkYdC3Arq9Mx/Zduyag+pI6B0u3MZMynkNmNVUjBGCB0xQBbooooAKp+Bf+Ral/wCwpqP/AKWz1cqn4F/5FqX/ALCmo/8ApbPQB0dFFFABRRXDC817xRf+Izo+sy6VFpFw1jaRQ28UnnTLGrs0u9WJXLgAKV4B5yeADuaKxfB+vN4n8G6XrLxrFJeW6ySImdqv0YDPbINcp4e8WR+KLxbu58Zw6Sbi6ZLHRreS1EkkSuVUuJEaQs+M/Lt4IxzzQB6LRRRQAV8sfGP/AJL8n+9afyWvqevlj4x/8l+T/etP5LQB6hRRRQAUUVk+I9Sn03TIzZ7Rc3VxFaws4yqNIwXcR3xycUAa1Fc9Dc32meKrXTLu+kvre+t5HjeaNFeOSMjIyiqCCG7jIx1rQ1mQQ2ySS6wukwBvnmPlgtxwA0gKj8iT7UAaNFYvha9u77TZ5LyU3Ma3MiW10UCG4hGNr4AA7kZAAOM962qACiiigDgk/wCQ7rn/AF//APtKOrFV0/5Duuf9f/8A7SjqxQAUUUUAFFYwlvtSn1A2l21qtrIYYlSNW3uFBJbcDxkgYGKu6TenUtItrxlCtNGGYDoD3/WgC5RWNfyXunTWkovmn8+6WJrdo0ClWP8ADgbgQOeSelbNABRRRQBmeIv+QK3/AF3g/wDRqVk1reIv+QK3/XeD/wBGpWTQAUUUUAFFQX1z9jsZrjG4xqSB6ntVVnubO4tfOuDMs7+W6lQArEZBXA9u+aANGio5/O8o/ZtnmdvMzgflVfSppprHdcSeZIJHUttAzhiOgoAuUUUUAFex/s5f8hbxV/1wsf8A0K5rxyvY/wBnL/kLeKv+uFj/AOhXNAFrwZ/yIegf9g22/wDRS1tVi+DP+RD0D/sG23/opa2qACiiigDgv7G1208J6l4TtdOaRLmSeK31Hzo/JWCZixLgtv3AOwwFIJA5546KeyubmKbw+baa30xrARLqMFwquG+6UC4JBC87unNbdFAHEt4R1K38X6FPbarfS2FjbTRs7Lar5I+TbGFWMfKwUg8EjHBFdtRRQAUUUUAZupf8hzw1/wBhRv8A0iuq6muW1L/kOeGv+wo3/pFdV1NABRRRQBzfirS72fUNE1jS4PtVxpN00jWwdVaWKRDG4UsQu4BsgEgHGMiqtpa6wdc1nxRLpLLcGxS0sNNlnjEsgQu53upZF3O+BycAZPoOuooAxp9X1W38gnw3d3IlgR3FrcwEwyHO6NvMdM44wwJzzwMc1vBGiXOg+HDbXqRQSzXM1z9lgbdHaiRywiU4GQoOOnXNdFRQAUUUUAFU/Av/ACLUv/YU1H/0tnq5VPwL/wAi1L/2FNR/9LZ6AOjooooAK4aG01/wxqniNNJ0aTU4tWuft1nPFPEiwzPGqMsodgwUFFOVD5BPGRg9zRQBy/hrTdQ8KaT4e8OQWC3lpDaMl5qCzqghkVQRiM/MwZi3TpjmuS/4RDWx4Bk8BJoxWP7YfK1lZohCkPneaJdu7zPNA+XGzG4Z3Y5r1WigAooooAK+WPjH/wAl+T/etP5LX1PXyx8aB5fx4jYdT9kbn8P8KAPUKKKKACsjxLp1xqOlp9hCtdWtxFdQo7bQ7RsG2k9s8jNa9FAGBHb32peJbfU7mxksoLG3kjiimdDJJI5XJ+RmAACgdc5PSrS6jqi2NrPNocplkDedbw3MbPCe3LFVYH1B444PONWigDD8OabcWc+qXc8As0v7rzo7QMD5Y2hSzbeNzEZOCR05NblFFABRRRQBwSf8h3XP+v8A/wDaUdWKrp/yHdc/6/8A/wBpR1YoAKKKKAMZIr7TbnUBa2jXK3UnnROrqAjlQCGyQcZAPAPBqfTrefTLWw09IBLEkRWWcOAEYD+71OTn6VpUUAYMP26TVmvb/S7lmjJS2RJIisSngty/3j344HFb1FFABRRRQBmeIv8AkCt/13g/9GpWTWt4i/5Arf8AXeD/ANGpWTQAUUUUAV762N5YTW4O0yKQCexquUubya186AwrC3mOWZTubBAAwTxyeuK0KKAIFmm8p2e1bcrkKiOpLDseSAPpVfSkmhgaKe3eI73cMWUg5YnHBPrV+igAooooAK9j/Zy/5C3ir/rhY/8AoVzXjlex/s5f8hbxV/1wsf8A0K5oAteDP+RD0D/sG23/AKKWtqsXwZ/yIegf9g22/wDRS1tUAFFFFABRRRQAUUUUAFFFFAGbqX/Ic8Nf9hRv/SK6rqa5bUv+Q54a/wCwo3/pFdV1NABRRRQAUUUUAFFFFABRRRQAVT8C/wDItS/9hTUf/S2erlU/Av8AyLUv/YU1H/0tnoA6OiiigAooooAKKKKACiiigAr5Z+Nn/JdYv921/pX1NXyz8bP+S6xf7tr/AEoA9PooooAKKKKACiiigAooooAKKKKAOCT/AJDuuf8AX/8A+0o6sVXT/kO65/1//wDtKOrFABRRRQAUUUUAFFFFABRRRQBmeIv+QK3/AF3g/wDRqVk1reIv+QK3/XeD/wBGpWTQAUUUUAFFFFABRRRQAUUUUAFex/s5f8hbxV/1wsf/AEK5rxyvY/2cv+Qt4q/64WP/AKFc0AWvBn/Ih6B/2Dbb/wBFLW1XOeDrLxU/gbQmtdN0d4DptuY2k1SVGZfKXBKi3IBx2yceprZ+weMP+gVof/g3m/8AkagC1RVX7B4w/wCgVof/AIN5v/kaj7B4w/6BWh/+Deb/AORqALVFVfsHjD/oFaH/AODeb/5Go+weMP8AoFaH/wCDeb/5GoAtUVV+weMP+gVof/g3m/8Akaj7B4w/6BWh/wDg3m/+RqALVFVfsHjD/oFaH/4N5v8A5Go+weMP+gVof/g3m/8AkagCvqX/ACHPDX/YUb/0iuq6muJ1a38VQaz4c87S9H3tqb+UF1WUhm+x3PDH7OMDbuORnkAY5yOgx4w/6A2h/wDg5m/+RaANaisnHjD/AKA2h/8Ag5m/+RaMeMP+gNof/g5m/wDkWgDWorJx4w/6A2h/+Dmb/wCRaMeMP+gNof8A4OZv/kWgDWorJx4w/wCgNof/AIOZv/kWjHjD/oDaH/4OZv8A5FoA1qKyceMP+gNof/g5m/8AkWjHjD/oDaH/AODmb/5FoA1qp+Bf+Ral/wCwpqP/AKWz1Vx4w/6A2h/+Dmb/AORazvB114qi0GZLbRtHkQanf5aTV5UO77ZNuGBbHgNkA55ABwM4AB31Fc99u8Yf9ALQ/wDwdTf/ACLR9u8Yf9ALQ/8AwdTf/ItAHQ0Vz327xh/0AtD/APB1N/8AItH27xh/0AtD/wDB1N/8i0AdDRXPfbvGH/QC0P8A8HU3/wAi0fbvGH/QC0P/AMHU3/yLQB0NFc99u8Yf9ALQ/wDwdTf/ACLR9u8Yf9ALQ/8AwdTf/ItAHQ18s/Gz/kusX+7a/wBK+hft3jD/AKAWh/8Ag6m/+Ra+bvi9LqMnxmjfUbW1t7vFtiKC5aWPtj5zGp/8d496APW6KyvtHiD/AKBmm/8Agxk/+MUfaPEH/QM03/wYyf8AxigDVorK+0eIP+gZpv8A4MZP/jFH2jxB/wBAzTf/AAYyf/GKANWisr7R4g/6Bmm/+DGT/wCMUfaPEH/QM03/AMGMn/xigDVorK+0eIP+gZpv/gxk/wDjFH2jxB/0DNN/8GMn/wAYoA1aKyvtHiD/AKBmm/8Agxk/+MUfaPEH/QM03/wYyf8AxigDl0/5Duuf9f8A/wC0o6sU2C4SDWNYW80RpZmu1Z/K1nYqkwRZAzaknnJzxjOOcbja+3Wn/QvTf+D4f/IdAFeirH260/6F6b/wfD/5Do+3Wn/QvTf+D4f/ACHQBXoqx9utP+hem/8AB8P/AJDo+3Wn/QvTf+D4f/IdAFeirH260/6F6b/wfD/5Do+3Wn/QvTf+D4f/ACHQBXoqx9utP+hem/8AB8P/AJDo+3Wn/QvTf+D4f/IdAGJ4i/5Arf8AXeD/ANGpWTWz4pu4pPD0q22jPbTGWHZLJq4mVT5qdUFshPp94Y684weWzrP92x/76f8AwoA0KKz86z/dsf8Avp/8KM6z/dsf++n/AMKANCis/Os/3bH/AL6f/CjOs/3bH/vp/wDCgDQorPzrP92x/wC+n/wozrP92x/76f8AwoA0KKz86z/dsf8Avp/8KM6z/dsf++n/AMKANCvY/wBnL/kLeKv+uFj/AOhXNeGZ1n+7Y/8AfT/4V7b+zT9p/tHxX9tEQk8qxx5RJGM3Hr+NAHbeAf8Akm/hr/sE2v8A6JWt+sDwD/yTfw1/2CbX/wBErW/QAUUUUAFFFFABRRRQAUUUUAYHiP8A5D3hP/sLSf8ApDdVv1geI/8AkPeE/wDsLSf+kN1W/QAUUUUAFFFFABRRRQAUUUUAFYHgv/kA3P8A2FtS/wDS6et+sDwX/wAgG5/7C2pf+l09AG/RRRQAUUUUAFFFFABRRRQAV8t/Gr/kukX+7a/0r6kr5c+Of/Ja4P8ArjbfzNAHp9FFFABRRRQAUUUUAFFFFABRRRQBxNx/yMetf9fSf+k8VLSXH/Ix61/19J/6TxUtABRRRQAUUUUAFFFFABRRRQBmeIv+QK3/AF3g/wDRqVk1reIv+QK3/XeD/wBGpWTQAUUUUAFFFFABRRRQAUUUUAFex/s5f8hbxV/1wsf/AEK5rxyvY/2cv+Qt4q/64WP/AKFc0Adh4B/5Jv4a/wCwTa/+iVrfrA8A/wDJN/DX/YJtf/RK1v0AFFFFABRRRQAUUUUAFFFFAGB4j/5D3hP/ALC0n/pDdVv1geI/+Q94T/7C0n/pDdVv0AFFFFABRRRQAUUUUAFFFFABWB4L/wCQDc/9hbUv/S6et+sDwX/yAbn/ALC2pf8ApdPQBv0UUUAFFFFABRRRQAUUUUAFfLnxz/5LXB/1xtv5mvqOvlz45/8AJa4P+uNt/M0Aen0UUUAFFFFABRRRQAUUUUAFFFFAHE3H/Ix61/19J/6TxUtJcf8AIx61/wBfSf8ApPFS0AFFFFABRRRQAUUUUAFFFFAGZ4i/5Arf9d4P/RqVk1reIv8AkCt/13g/9GpWTQAUUUUAFFFFABRRRQAUUUUAFex/s5f8hbxV/wBcLH/0K5rxyvY/2cv+Qt4q/wCuFj/6Fc0Adh4B/wCSb+Gv+wTa/wDola36wPAP/JN/DX/YJtf/AEStb9ABRRRQB5rNr/iK/wDBGq+NdP1ZreOzkuJbXTPs8TQyQQSMrCQlTJuYRscqygZHHHPdvrFvF4bbWpMi2W0N23qECb/5Vwn9g+I7HwTqvgqz0ppI7uW5httU8+IQJbzuzFnUt5m9RI4wEIJA5546q6sbu6trrwx/Z5j0h9JMCal568uwMZj8vqMLht3TtQBieD9eOvyWV1f+Mof7Suk89tAtJLXbCpXIjKlDMSo5Y7hzngDiu7rze10DXNQ0zwnol7on9m/2BcwTz6gJojFIIBtxCEYv+877lXCls84FekUAFFFFAGB4j/5D3hP/ALC0n/pDdVv1geI/+Q94T/7C0n/pDdVv0AFFFFAHNeLNXvbbUND0XSp/st1rN08RutgcwxRxtI5UNxuwuBkEDOcHGKg0DUtStPG+qeGdVvn1FIrSG+tLqaJElMblkZG8tVU4ZMghR15zipvF2k39xqWg63pNv9ruNHu2ka1DqjTRSRtG4UsQu4BsgEgHGMiqdnaa2df1vxZLo7JctYR2enaZLcRrLIIy7ne6lkXc74HzHAGT6AAb4t8UfY/E9loP9tW+gwPbNeXeozNErIgcKkaGXKbmO7kg8KcDPI6TQ3jl0iGW31htaikyyXrNE3mDPYxKqEDpwK5u+sNVt/GmmeLItEe8eTSzY3llBNF51sxYSAqzsqsAdynDDqCAe1/wNol3o2m6hJqES202p6jNf/ZEcMLUSYxHkcE/Lk443FsZHNAHS0UUUAFYHgv/AJANz/2FtS/9Lp636wPBf/IBuf8AsLal/wCl09AG/RRRQAVw4vNe8UX/AIjOj6zLpUWkXDWNpHDbxSedMsauzS71YlcuAApXgHnJ47iuIhtNf8Map4jTStGk1OLVrn7dZzxzxIsMzxqjLKHYMFBRTlQ+QTxkYIBveD9dbxN4N0vWXjWKS8t1kkRM7VfowGe2Qa5Tw/4rj8T3i3dz4zh0k3F0yWOj28lqJJIlcqpcSIzlnxn5dvBGOea3fDem6h4V0nw94dgsFu7SG0ZLzUFnVBDIoBGIz8zBmLdOmOa5L/hENaHgGTwEmjFI/tZ8rWVmiEKQ+d5ol27vM80D5cbMbhndjmgD1SiiigAr5c+Of/Ja4P8ArjbfzNfUdfLnxz/5LXB/1xtv5mgD0+iiigArJ8R6lPpumRmz2i5uriK1hZxlUaRgu4jvjk4rWrI8S6dcajpafYQrXVrcRXUKO20O0bBtpPbPIzQBVhub7TPFVrpl3fSX1vfW8jxvNGivHJGRkZRVBBDdxkY61oazIIbZJJdYXSYA3zzHywW44AaQFR+RJ9qox299qXiW31O5sZLKCxt5I4opnQySSOVyfkZgAAoHXOT0q0uo6otjazzaHKZZA3nW8NzGzwntyxVWB9QeOODzgAi8LXt3fabPJeSm5jW5kS2uigQ3EIxtfAAHcjIABxnvW1WH4c024s59Uu54BZpf3XnR2gYHyxtClm28bmIycEjpya3KACiiigDibj/kY9a/6+k/9J4qWkuP+Rj1r/r6T/0nipaACiiigDGEt9qU+oG0u2tVtZDDEqRq29woJLbgeMkDAxV3Sb06lpFteMoVpowzAdAe/wCtUkivtNudQFraNcrdSedE6uoCOVAIbJBxkA8A8Gp9Ot59MtbDT0gEsSRFZZw4ARgP7vU5OfpQBBfyXunTWkovmn8+6WJrdo0ClWP8OBuBA55J6Vs1gw/bpNWa9v8AS7lmjJS2RJIisSngty/3j344HFb1ABRRRQBmeIv+QK3/AF3g/wDRqVk1reIv+QK3/XeD/wBGpWTQAUUUUAQX1z9jsZrjG4xqSB6ntVVnubO4tfOuDMs7+W6lQArEZBXA9u+as31sbywmtwdpkUgE9jVcpc3k1r50BhWFvMcsync2CABgnjk9cUAXJ/O8o/ZtnmdvMzgflVfSppprHdcSeZIJHUttAzhiOgqVZpvKdntW3K5CojqSw7HkgD6VX0pJoYGint3iO93DFlIOWJxwT60AX6KKKACvY/2cv+Qt4q/64WP/AKFc145Xsf7OX/IW8Vf9cLH/ANCuaAOw8A/8k38Nf9gm1/8ARK1v1geAf+Sb+Gv+wTa/+iVrfoAKKKKACiiigAooooAKKKKAMDxH/wAh7wn/ANhaT/0huq36wPEf/Ie8J/8AYWk/9Ibqt+gAooooAKKKKACiiigAooooAKwPBf8AyAbn/sLal/6XT1v1geC/+QDc/wDYW1L/ANLp6AN+iiigAooooAKKKKACiiigAr5d+OvyfGm3ZuB5Fsfw3GvqKvl349/8litv+vW3/wDQmoA9OooooAKKKKACiiigAooooAKKKKAOJuP+Rj1r/r6T/wBJ4qWkuP8AkY9a/wCvpP8A0nipaACiiigAooooAKKKKACiiigDM8Rf8gVv+u8H/o1Kya1vEX/IFb/rvB/6NSsmgAooooAKKKKACiiigAooooAK9j/Zy/5C3ir/AK4WP/oVzXjlex/s5f8AIW8Vf9cLH/0K5oA7DwD/AMk38Nf9gm1/9ErW/WB4B/5Jv4a/7BNr/wCiVrfoAKKKKACiiigAooooAKKKKAMDxH/yHvCf/YWk/wDSG6rfrA8R/wDIe8J/9haT/wBIbqt+gAooooAKKKKACiiigAooooAKwPBf/IBuf+wtqX/pdPW/WB4L/wCQDc/9hbUv/S6egDfooooAKKKKACiiigAooooAK+Xfj3/yWK2/69bf/wBCavqKvl349/8AJYrb/r1t/wD0JqAPTqKKKACiiigAooooAKKKKACiiigDibj/AJGPWv8Ar6T/ANJ4qWkuP+Rj1r/r6T/0nipaACiiigAooooAKKKKACiiigDM8Rf8gVv+u8H/AKNSsmtbxF/yBW/67wf+jUrJoAKKKKACiiigAooooAKKKKACvY/2cv8AkLeKv+uFj/6Fc145Xsf7OX/IW8Vf9cLH/wBCuaANjwR4ZtJ/h94eme+1xWk0u2YrFrt7GgJiU4VVlCqPQAADtW5/will/wBBHxB/4UN//wDHqj8A/wDJN/DX/YJtf/RK1v0AYn/CKWX/AEEfEH/hQ3//AMeo/wCEUsv+gj4g/wDChv8A/wCPVt0UAYn/AAill/0EfEH/AIUN/wD/AB6j/hFLL/oI+IP/AAob/wD+PVt0UAYn/CKWX/QR8Qf+FDf/APx6j/hFLL/oI+IP/Chv/wD49W3RQBif8IpZf9BHxB/4UN//APHqP+EUsv8AoI+IP/Chv/8A49W3RQBw/iHwvZDWfDEZvdbdZdUdW8zXb1yB9juWypMpKnKjkYOMjoSDs/8ACF6X/wA/Wuf+D++/+PUeI/8AkPeE/wDsLSf+kN1W/QBgf8IXpf8Az9a5/wCD++/+PUf8IXpf/P1rn/g/vv8A49W/RQBgf8IXpf8Az9a5/wCD++/+PUf8IXpf/P1rn/g/vv8A49W/RQBgf8IXpf8Az9a5/wCD++/+PUf8IXpf/P1rn/g/vv8A49W/RQBgf8IXpf8Az9a5/wCD++/+PUf8IXpf/P1rn/g/vv8A49W/RQBgf8IXpf8Az9a5/wCD++/+PVn+A/COn3Ph+7d7vW1K6tqCARa7exjC3cqjhZQCcDk9Sckkkk119Znw8/5Fy8/7DOpf+ls1AFr/AIQrTP8An+8Qf+FHf/8Ax6j/AIQrTP8An+8Qf+FHf/8Ax6ugooA5/wD4QrTP+f7xB/4Ud/8A/HqP+EK0z/n+8Qf+FHf/APx6ugooA5//AIQrTP8An+8Qf+FHf/8Ax6j/AIQrTP8An+8Qf+FHf/8Ax6ugooA5/wD4QrTP+f7xB/4Ud/8A/HqP+EK0z/n+8Qf+FHf/APx6ugooA5//AIQrTP8An+8Qf+FHf/8Ax6vmP466XBp3xgtrSCW7kja2tyWur2a4flm/jkZmx7Z4r68r5Q/aE/5Ldaf9ett/6G1AHp3/AAhWj+upf+De7/8AjlH/AAhWj+upf+De7/8Ajlb9FAGB/wAIVo/rqX/g3u//AI5R/wAIVo/rqX/g3u//AI5W/RQBgf8ACFaP66l/4N7v/wCOUf8ACFaP66l/4N7v/wCOVv0UAYH/AAhWj+upf+De7/8AjlH/AAhWj+upf+De7/8Ajlb9FAGB/wAIVo/rqX/g3u//AI5R/wAIVo/rqX/g3u//AI5W/RQB5knhTSn8Qa7GwvSsN4iJnULjOPs0Lcnfk8seTnsOgFWP+EP0j+7e/wDgxuP/AIutGL/kZfEX/X/H/wCkkFW6AMP/AIQ/SP7t7/4Mbj/4uj/hD9I/u3v/AIMbj/4utyigDD/4Q/SP7t7/AODG4/8Ai6P+EP0j+7e/+DG4/wDi63KKAMP/AIQ/SP7t7/4Mbj/4uj/hD9I/u3v/AIMbj/4utyigDD/4Q/SP7t7/AODG4/8Ai6P+EP0j+7e/+DG4/wDi63KKAOM8UeF9LttBaSJbvd9pt1+a+nYYM6A8FyOh/DrWV/wjunf3bj/wLl/+KrrPGH/IuN/19Wv/AKUR1jUAZn/CO6d/duP/AALl/wDiqP8AhHdO/u3H/gXL/wDFVp0UAZn/AAjunf3bj/wLl/8AiqP+Ed07+7cf+Bcv/wAVWnRQBmf8I7p3924/8C5f/iqP+Ed07+7cf+Bcv/xVadFAGZ/wjunf3bj/AMC5f/iqP+Ed07+7cf8AgXL/APFVp0UAZn/CO6d/duP/AALl/wDiq9V/Z/sobHXPFEVsHCm2sWO+RnOd1z3Yk9q89r0n4Ff8jD4n/wCvWw/9DuqAOh8A/wDJN/DX/YJtf/RK1v1geAf+Sb+Gv+wTa/8Aola36ACiiigAooooAKKKKACiiigDA8R/8h7wn/2FpP8A0huq36wPEf8AyHvCf/YWk/8ASG6rfoAKKKKACiiigAooooAKKKKACsz4ef8AIuXn/YZ1L/0tmrTrM+Hn/IuXn/YZ1L/0tmoA6qiiigAooooAKKKKACiiigAr5Q/aM+T4zWTLwTY25z7+Y/8AhX1fXyj+0d/yWSy/68IP/Rj0Ae2UUUUAFFFFABRRRQAUUUUAFFFFAHFxf8jL4i/6/wCP/wBJIKt1Ui/5GXxF/wBf8f8A6SQVboAKKKKACiiigAooooAKKKKAMPxh/wAi43/X1a/+lEdY1bPjD/kXG/6+rX/0ojrGoAKKKKACiiigAooooAKKKKACvSfgV/yMPif/AK9bD/0O6rzavSfgV/yMPif/AK9bD/0O6oA6HwD/AMk38Nf9gm1/9ErW/WB4B/5Jv4a/7BNr/wCiVrfoAKKKKACivNZtf8RX/gjVfGun6s1vHZyXEtrpn2eJoZIIJGVhISpk3MI2OVZQMjjjnu31i3i8NtrUmRbLaG7b1CBN/wDKgC/RXCeD9eOvyWV1f+Mof7Suk89tAtJLXbCpXIjKlDMSo5Y7hzngDiu7oAKKKKAMDxH/AMh7wn/2FpP/AEhuq36wPEf/ACHvCf8A2FpP/SG6rfoAKKKKACiua8Wave22oaHoulT/AGW61m6eI3WwOYYo42kcqG43YXAyCBnODjFQaBqWpWnjfVPDOq3z6ikVpDfWl1NEiSmNyyMjeWqqcMmQQo685xQB1lFcX4t8UfY/E9loP9tW+gwPbNeXeozNErIgcKkaGXKbmO7kg8KcDPI6TQ3jl0iGW31htaikyyXrNE3mDPYxKqEDpwKANCiiigArM+Hn/IuXn/YZ1L/0tmrTrM+Hn/IuXn/YZ1L/ANLZqAOqooooAKKK4IXviHxXqHiY6LrcukRaNctYWkUNtDJ586xK7NL5isSuXAAQqcA85PAB3tFYfgvxA3irwTpOtyRrFJe2yySImdqv0YDPOMg1y/iyPxBo8ukWGkeM9Ym1PVr5LeFJ7ayZEjHzzSELbgkLGD3HJWgD0SiiigAr5R/aO/5LJZf9eEH/AKMevq6vlH9o7/ksll/14Qf+jHoA9sooooAKKKxPFmr3GkaPEbDYLu8uobOBpF3KjyOF3EcZwCTj2oA26K5e3u9S0fxpZ6RfalLqVrqNrJJFJcRRrJHLEV3AGNVBUq46jII681qeIdXOj6UZYIxNeTusFpAT/rZm+6Pp1J9ACe1AGpRXM+A7/Ur/AECf+27wXt3b309s04iWPeEcqDtUADpXTUAFFFFAHFxf8jL4i/6/4/8A0kgq3VSL/kZfEX/X/H/6SQVboAKKKKACiuaFxqmt3WrnT9QexSwlNtAkcSN5kgQMS+4EkZYABdvAPPPGp4f1Q614estRZAjXEIdlXoG7ge2c0AaNFcnc6jdW+t2dvZa6uo3b3gS609Ei2xRHO5sKN6bRg5ZjkjHeusoAKKKKAMPxh/yLjf8AX1a/+lEdY1bPjD/kXG/6+rX/ANKI6xqACiiigAoqpq19/Zuk3N4F3mGMsFPc9v1qg8t9pt5p/wBpvGuY7qTyZVaNVCOVJBXaAcZBGCTQBtUVFcRyyw7IJzAxIy6qGIHfGeM/UGqGmXFydUv7Kec3KW/llJWVQw3AkqdoA4xnp3oA1KKKKACvSfgV/wAjD4n/AOvWw/8AQ7qvNq9J+BX/ACMPif8A69bD/wBDuqAOh8A/8k38Nf8AYJtf/RK1v1geAf8Akm/hr/sE2v8A6JWt+gAooooA81/sHxHY+CdV8FWelNJHdy3MNtqnnxCBLed2Ys6lvM3qJHGAhBIHPPHVXVjd3VtdeGP7PMekPpJgTUvPXl2BjMfl9RhcNu6dq6CigDze10DXNQ0zwnol7on9m/2BcwTz6gJojFIIBtxCEYv+877lXCls84FekUUUAFFFFAGB4j/5D3hP/sLSf+kN1W/WB4j/AOQ94T/7C0n/AKQ3Vb9ABRRRQBzPi7Sb+41LQdb0m3+13Gj3bSNah1RpopI2jcKWIXcA2QCQDjGRVOztNbOv634sl0dkuWsI7PTtMluI1lkEZdzvdSyLud8D5jgDJ9B2VFAHF31hqtv400zxZFoj3jyaWbG8soJovOtmLCQFWdlVgDuU4YdQQD2v+BtEu9G03UJNQiW2m1PUZr/7IjhhaiTGI8jgn5cnHG4tjI5rpaKACiiigArM+Hn/ACLl5/2GdS/9LZq06zPh5/yLl5/2GdS/9LZqAOqooooAK4KCz8ReFNW8TJpGiSarDrF0b+yuIriFFgmeNUdZhIysFDRq2UD5BPGRg97RQByvhfTNS8I6R4b8NQaet7ZwWbR3uorOqCCRVBGIz8zh2LdOmOabZaJqF58T9Q1/VrfyrSytUsdJUurbg3zzS4BO3JCqM84U8DNdZRQAUUUUAFfKP7R3/JZLL/rwg/8ARj19XV8o/tHf8lksv+vCD/0Y9AHtlFFFABWF4u0m61XRY/7OCPeWV1DewRu21ZGicNsJ7ZAIz61u0UAczDa6jq3i611i806XT7bTrWWOCG4kjaSWSQruP7tmAUBAOTnJ6esh0i819dN1XUJL3QtRtkkAtreWGcRluCctGyk4HUYwCR3NdFRQBy/gfQ9R0Sz1BdTuLhzNfzyxxymIja0hIk+RRywOSCcDsBXUUUUAFFFFAHFxf8jL4i/6/wCP/wBJIKt1Ui/5GXxF/wBf8f8A6SQVboAKKKKAOajg1XRb3V1sdPe9jv5vtNvKksaiORkCsJNxBABUHKhuD0q3o9nd6HY6TpEdqLiCOArcXYlCiNgBjCnltxJ+lbVFAHL6xBqWv29tZto8lnLHdRTG8kmjZIdjZLRlWLkkDAyq/e5xXUUUUAFFFFAGH4w/5Fxv+vq1/wDSiOsatnxh/wAi43/X1a/+lEdY1ABRRRQBT1axOpaRc2asFaaMqrHoD2/WqTR32pXWnm6s2tUtX86Uu6NvcKQAu0njJJycfStmigDNurrVP7Ona20/FyJCkS+apyvaTkge+2jRojawGA2dzCSTJJNO0ZMrnqTtY8/4VpUUAFFFFABXpPwK/wCRh8T/APXrYf8Aod1Xm1ek/Ar/AJGHxP8A9eth/wCh3VAHQ+Af+Sb+Gv8AsE2v/ola36wPAP8AyTfw1/2CbX/0Stb9ABRRRQAUUUUAFFFFABRRRQBgeI/+Q94T/wCwtJ/6Q3Vb9YHiP/kPeE/+wtJ/6Q3Vb9ABRRRQAUUUUAFFFFABRRRQAVmfDz/kXLz/ALDOpf8ApbNWnWZ8PP8AkXLz/sM6l/6WzUAdVRRRQAUUUUAFFFFABRRRQAV8o/tMf8lZsP8AsFw/+jZa+rq+Uf2mP+Ss2H/YLh/9Gy0Ae2UUUUAFFFFABRRRQAUUUUAFFFFAHFxf8jL4i/6/4/8A0kgq3VSL/kZfEX/X/H/6SQVboAKKKKACiiigAooooAKKKKAMPxh/yLjf9fVr/wClEdY1bPjD/kXG/wCvq1/9KI6xqACiiigAooooAKKKKACiiigAr0n4Ff8AIw+J/wDr1sP/AEO6rzavSfgV/wAjD4n/AOvWw/8AQ7qgDofAP/JN/DX/AGCbX/0Stb9ee+C9V8Tx+AtAS20TSZYV0y2EbyatKjMvlLglRbEA47ZOPU1t/wBseLP+gDov/g6l/wDkWgDp6K5j+2PFn/QB0X/wdS//ACLR/bHiz/oA6L/4Opf/AJFoA6eiuY/tjxZ/0AdF/wDB1L/8i0f2x4s/6AOi/wDg6l/+RaAOnormP7Y8Wf8AQB0X/wAHUv8A8i0f2x4s/wCgDov/AIOpf/kWgDp6K5j+2PFn/QB0X/wdS/8AyLR/bHiz/oA6L/4Opf8A5FoAseI/+Q94T/7C0n/pDdVv15/rWpeKJtc8MiTRdIR11NzEF1eVg7fY7kYY/ZhtG0scgHkAY5yOh+2eMP8AoBaH/wCDqb/5FoA36KwPtnjD/oBaH/4Opv8A5Fo+2eMP+gFof/g6m/8AkWgDforA+2eMP+gFof8A4Opv/kWj7Z4w/wCgFof/AIOpv/kWgDforA+2eMP+gFof/g6m/wDkWj7Z4w/6AWh/+Dqb/wCRaAN+isD7Z4w/6AWh/wDg6m/+RaPtnjD/AKAWh/8Ag6m/+RaAN+sz4ef8i5ef9hnUv/S2aqf2zxh/0AtD/wDB1N/8i1U8ByeLV8OXBtdE0WWN9V1Bi0mtSxkN9sm3DAtW4DAgHPIwcDOAAeg0Vh+f40/6F/Qf/B9N/wDIdHn+NP8AoX9B/wDB9N/8h0AblFYfn+NP+hf0H/wfTf8AyHR5/jT/AKF/Qf8AwfTf/IdAG5RWH5/jT/oX9B/8H03/AMh0ef40/wChf0H/AMH03/yHQBuUVh+f40/6F/Qf/B9N/wDIdHn+NP8AoX9B/wDB9N/8h0AblfKP7TH/ACVmw/7BcP8A6Nlr6S8/xp/0L+g/+D6b/wCQ6+Y/2iW1N/ihYnWbO0tLj+zYtsdrdtcIV82TBLNHGQc542/jzwAe7UVm7PFn/QJ0X/wbS/8AyNRs8Wf9AnRf/BtL/wDI1AGlRWbs8Wf9AnRf/BtL/wDI1GzxZ/0CdF/8G0v/AMjUAaVFZuzxZ/0CdF/8G0v/AMjUbPFn/QJ0X/wbS/8AyNQBpUVm7PFn/QJ0X/wbS/8AyNRs8Wf9AnRf/BtL/wDI1AGlRWbs8Wf9AnRf/BtL/wDI1GzxZ/0CdF/8G0v/AMjUAc7F/wAjL4i/6/4//SSCrdZ8Vh4lPiLX8WGk+Z9siMg/tGTCk2luQAfI5G0rzgckjHGTa/s/xR/0D9I/8Gcv/wAj0ATUVD/Z/ij/AKB+kf8Agzl/+R6P7P8AFH/QP0j/AMGcv/yPQBNRUP8AZ/ij/oH6R/4M5f8A5Ho/s/xR/wBA/SP/AAZy/wDyPQBNRUP9n+KP+gfpH/gzl/8Akej+z/FH/QP0j/wZy/8AyPQBNRUP9n+KP+gfpH/gzl/+R6P7P8Uf9A/SP/BnL/8AI9AGT4w/5Fxv+vq1/wDSiOsatjxNY68ujIdQ0/Tvs/220DiDUpN5zcRgAZgwMnAzzjrg4wX/ANnD/oAn/wAKD/7ioAxKK2/7OH/QBP8A4UH/ANxUf2cP+gCf/Cg/+4qAMSitv+zh/wBAE/8AhQf/AHFR/Zw/6AJ/8KD/AO4qAMSitv8As4f9AE/+FB/9xUf2cP8AoAn/AMKD/wC4qAMSitv+zh/0AT/4UH/3FR/Zw/6AJ/8ACg/+4qAMSvSfgV/yMPif/r1sP/Q7quR/s4f9AE/+FB/9xV3Hwah8jxT4mUWn2TNlYHZ9s+05+e653eVHj6bT0684ABL4G/5J54d/7Bdt/wCilrdrC8Df8k88O/8AYLtv/RS1u0AFFFFABRRRQAUUUUAFFFFAGPq//IyeFP8AsKSf+kV1XWVyer/8jJ4U/wCwpJ/6RXVdZQAUUUUAFFFFABRRRQAUUUUAFQ/Dv/kU5f8AsLan/wCl89TVD8O/+RTl/wCwtqf/AKXz0AdTRRRQAUUUUAFFFFABRRRQAV8lftP/APJXdP8A+wVD/wCjpa+ta+S/2o/3fxZ0526HSYW4/wCu03+FAHvtFFFABRRRQAUUUUAFFFFABRRRQBzcH/I0+Jf+v23/APSC1q7VKD/kafEv/X7b/wDpBa1doAKKKKACiiigAooooAKKKKAMDxr/AMi0P+v+y/8ASuKqtWvGv/ItD/r/ALL/ANK4qq0AFFFFABRRRQAUUUUAFFFFABXUfCn/AJHDxJ/14af/AOjLuuXrqPhT/wAjh4k/68NP/wDRl3QBF4G/5J54d/7Bdt/6KWt2sLwN/wAk88O/9gu2/wDRS1u0AFFFFABRRRQAUUUUAFFFFAGPq/8AyMnhT/sKSf8ApFdV1lcnq/8AyMnhT/sKSf8ApFdV1lABRRRQAUUUUAFFFFABRRRQAVD8O/8AkU5f+wtqf/pfPU1Q/Dv/AJFOX/sLan/6Xz0AdTRRRQAUUUUAFFFFABRRRQAV8l/tU/8AJUtN/wCwLF/6Pnr60r5L/ap/5Klpv/YFi/8AR89AHvtFFFABRRRQAUUUUAFFFFABRRRQBzcH/I0+Jf8Ar9t//SC1q7VKD/kafEv/AF+2/wD6QWtXaACiiigAooooAKKKKACiiigDA8a/8i0P+v8Asv8A0riqrVrxr/yLQ/6/7L/0riqrQAUUUUAFFFFABRRRQAUUUUAFdR8Kf+Rw8Sf9eGn/APoy7rl66j4U/wDI4eJP+vDT/wD0Zd0AReBv+SeeHf8AsF23/opa3awvA3/JPPDv/YLtv/RS1u0AFFFFAHMXnjuws/tU5sb+bTbKf7PdalFGhhhcEK2QWDsFJwWVSBzzwcdHLOkVq9wTmNELkrzkAZ4rzC0ngtfgPr9pdkC4gOoWksf8QneWTYuPU+YmPXIruraeyt9FTS9Rv4I7iHTla5R5lDxxhdrSEE8LkH5jxxQBFoHiiTxBBaXVvoOp29ldxiWO7uGt9m0jIJVZS/P+735xW9XCJBd+CdT8MaRpms3Go2N3I1mLC7SEskSxlvNRo0Vvk2gHduBD9jg13dABRRRQBj6v/wAjJ4U/7Ckn/pFdV1lcnq//ACMnhT/sKSf+kV1XWUAFFFFAGbrmu2ug2sMlyk08tzMsFtbW6hpJ5DkhVBIHQEkkgAAkkCodE8S2+tXl7YtaXWn6hYlPPs7sJvVXGVcFGZWU88hjyCDisTxkRb+N/BF5OdtqmoTwu56CSS3dYx9S3A9zUdvc2yfF7XtQNxHDZ2Gi28N5M7hY45PMkk+ZicDCEE56A0AdDrXiK20ae1tfs9xfX94WFvZWiqZJAuNzZZlVVAIyWYDkDqQKu6fdTXlms1xYXGnyEkGC5aMuPfMbsvP1rhtUhl1H4x6e9rrEthDdaA/2S5tVicykTKzhDIrrypQngkgcEVteA9Xv9W0vURqVwL37Fqc9pb3oRV+1RIRhyFAXOSykqADsoA6iiiigAqH4d/8AIpy/9hbU/wD0vnqaofh3/wAinL/2FtT/APS+egDqaKKKACuW1bx3babfahbWmkapq50qMSahJYRxlbXK7gp3updtvzbUDEAjjkZ6mvO/B97aaRe/EVdYkSH7NrEl7cCQgbbZ7eMoxz/CQj47cH0oA7vTtQtdW0y21DTpluLS6iWWGVejowyD+Vcv/wALJ07Yt4NL1Q6K12LMaz5cX2bzC/l5x5nm7fM+Tdsxnvjmq/wsmi0j4Y+FNL1S5jh1CfTxJDayuBLIoG47UPzHarDOBxXmSW99F4Fj8bxXcM3hZtVGoJ4NYsVVzNt2LKGyX8zL+SR5e8kbcigD6GooooAK+S/2qf8AkqWm/wDYFi/9Hz19aV8l/tU/8lS03/sCxf8Ao+egD32iiigAqlq+rWmiaXLf6g7LDFgEIpZmYkBVVRySSQAPU1drkPiQRFoemXcp221nrNlcXLnokSzDcx9hkUAamm+J4r7WG0q70+90u/8AI+0RwXgj/ex5wWVo3ZTg4yMgjI4qTXfEUWhS2ELWV1e3GoTmCCG18vcWCljku6qBhT3rH1QrcfFrQVgb95Z6ddy3WD91HMapn6srY+h9Ku6pYaX4qbSbm01toZbeR7qynsJoXMmF2MRuV1YDfg8cEigDX067nvbYy3OnXOnuGK+VctEzEev7t2GPxzx0q3XMeD9Uvry61ywvbsajHpd8beG/2KhmG0MUYKAu9C2wkADjpnNdPQAUUUUAc3B/yNPiX/r9t/8A0gtau1Sg/wCRp8S/9ftv/wCkFrV2gAooooAwdQ8VwWV1eQ2+n3+ofYED3j2iIVgyN2DuZSzbecKGOMeorYs7y31CxhvLOVZredBJHIvRlIyDXKeHLm30658ZLqLrH5GpPdTBzjELQoVb6EK35GpvAsq6d4E0GxvJUW+lst8VtJIFkkAG7ABOTgEfSgC/qXi3T9L8R6fokqTy3d82FMSApDnO3eSRjdtbGMn5TW5XlV6dTs7zQrnVNB1Aalda2Lm4bzbdldvKkCxRkS9FXAG7aDgk8nFeqA5UEggkdD2oAWiiigDA8a/8i0P+v+y/9K4qq1a8a/8AItD/AK/7L/0riqrQAUUUUARXNxFaWstzcyCOGFC7u3RVAyTWZa+JIZ7y1t57K8svtilrWS4RQs2BnAwxKnHOGAPWofG8Mk/gfVUhUs/2cnA6kDk/oDVfXZob6/8ADAsnDtLei5jKHrCImJPHb5l/OgDevbo2dv5i289yxYKsUCgsxP1IAHuSBVbTNZi1K4urY289rdWjKJoLgLuAYZVgVJUg89D2NSyXdtd27R22opEzSGASwyIzLIOSoyCNwAPBB71i6Er2fjDV7FpftrNDDPJduB5oJ3ARvjC9BlQAvBPBzmgDpqKKKACuo+FP/I4eJP8Arw0//wBGXdcvXUfCn/kcPEn/AF4af/6Mu6AIvA3/ACTzw7/2C7b/ANFLW7WF4G/5J54d/wCwXbf+ilrdoAKKKKAKEmg6RLqq6nLpVk+oKQVu2t0MowMDD4z0461M2n2T3b3T2cDXEkXkPMYlLtHnOwnGSuT06VZooAztN8P6No8ryaRpFhYSSLtd7W2SIsPQlQMitGiigAooooAx9X/5GTwp/wBhST/0iuq6yuT1f/kZPCn/AGFJP/SK6rrKACiiigCG8srXUbOS01C2huraUYkhnjDo4znlTwear2+h6TaaU+mWul2cNhIGD2kduixMG+8CgGDnvxzV6igChe6DpGpWMNlqOlWV3aQYMVvPbo8ceBgbVIwMDjjtVu2toLO1itrSGOCCFQkcUSBVRRwAAOAB6VJRQAUUUUAFQ/Dv/kU5f+wtqf8A6Xz1NUPw7/5FOX/sLan/AOl89AHU0UUUAFZmo+GtC1e9hvNW0XT766gAEM9zapI8eDkbWYEjnnitOigCtLp9lPf299PaQSXdsGWC4eJTJEG4YKxGVzgZx1qkvhTw6us/2uug6Yup7zJ9tFnH5248Ft+N2ffNa1FABRRRQAV8l/tU/wDJUtN/7AsX/o+evrSvkv8Aap/5Klpv/YFi/wDR89AHvtFFFABTJYo54XinjWSORSro65VgeCCD1FPooApado2l6RDJFpOm2djHIcultAsYc9MkKBmoZvDWhXNhBY3Gi6fLaW5Jht5LVGjiJ67VIwPwrTooAhtLS2sLWO2sbeK2t4xhIoUCIg9ABwKmoooAKKKKAObg/wCRp8S/9ftv/wCkFrV2qUH/ACNPiX/r9t//AEgtau0AFFFFAFG80TStRuo7nUNMs7qeLAjlnt1dkwcjBIyOeasSWdtLdw3UtvE9xAGEUzIC8Yb7wU9RnvjrU1FAEU1rb3LxNcQRStC/mRF0DGNsEblz0OCRketS0UUAFFFFAGB41/5Fof8AX/Zf+lcVVateNf8AkWh/1/2X/pXFVWgAooooAKqWeladp8jyWFha2ryffaGFULfUgc1booAqPpWnyWsltJYWrwSuZJImhUq7k5LEYwTnvUlnY2mnweTYWsNrFnd5cMYRc+uBU9FABRRRQAV1Hwp/5HDxJ/14af8A+jLuuXrqPhT/AMjh4k/68NP/APRl3QBF4G/5J54d/wCwXbf+ilrdrC8Df8k88O/9gu2/9FLW7QAUUUUAFFFFABRRRQAUUUUAY+r/APIyeFP+wpJ/6RXVdZXJ6v8A8jJ4U/7Ckn/pFdV1lABRRRQAUUUUAFFFFABRRRQAVD8O/wDkU5f+wtqf/pfPU1Q/Dv8A5FOX/sLan/6Xz0AdTRRRQAUUUUAFFFFABRRRQAV8l/tU/wDJUtN/7AsX/o+evrSvkv8Aap/5Klpv/YFi/wDR89AHvtFFFABRRRQAUUUUAFFFFABRRRQBzcH/ACNPiX/r9t//AEgtau1Sg/5GnxL/ANftv/6QWtXaACiiigAooooAKKKKACiiigDA8a/8i0P+v+y/9K4qq1a8a/8AItD/AK/7L/0riqrQAUUUUAFFFFABRRRQAUUUUAFdR8Kf+Rw8Sf8AXhp//oy7rl66j4U/8jh4k/68NP8A/Rl3QBgeDfGXhi18C6Db3PiPSYZotNt0kjkvolZGESgggtkEHtW1/wAJz4T/AOho0X/wYRf/ABVHgb/knnh3/sF23/opa3aAML/hOfCf/Q0aL/4MIv8A4qj/AITnwn/0NGi/+DCL/wCKrdooAwv+E58J/wDQ0aL/AODCL/4qj/hOfCf/AENGi/8Agwi/+KrdooAwv+E58J/9DRov/gwi/wDiqP8AhOfCf/Q0aL/4MIv/AIqt2igDC/4Tnwn/ANDRov8A4MIv/iqP+E58J/8AQ0aL/wCDCL/4qt2igDjtS8Y+GJvEPhl4vEmjskOpSPK/9oRbY1+x3C5Y7sAbmUZPcgd66r/hNvCX/Q2+H/8AwbW//wAXWT4g/wCQ54X/AOwo/wD6RXNbtAEH/CbeEv8AobfD/wD4Nrf/AOLo/wCE28Jf9Db4f/8ABtb/APxdT0UAQf8ACbeEv+ht8P8A/g2t/wD4uj/hNvCX/Q2+H/8AwbW//wAXU9FAEH/CbeEv+ht8P/8Ag2t//i6P+E28Jf8AQ2+H/wDwbW//AMXU9FAEH/CbeEv+ht8P/wDg2t//AIuj/hNvCX/Q2+H/APwbW/8A8XU9FAEH/CbeEv8AobfD/wD4Nrf/AOLqt4F8d+ELLw1LDeeK9Dgk/tTUX2SalCpKtezMrct0KkEHuCCOtaFP+Hn/ACKT/wDYU1L/ANLp6AND/hYvgj/ocfD/AP4NIP8A4qj/AIWL4I/6HHw//wCDSD/4qtiigDH/AOFi+CP+hx8P/wDg0g/+Ko/4WL4I/wChx8P/APg0g/8Aiq2KKAMf/hYvgj/ocfD/AP4NIP8A4qj/AIWL4I/6HHw//wCDSD/4qtiigDH/AOFi+CP+hx8P/wDg0g/+Ko/4WL4I/wChx8P/APg0g/8Aiq2KKAMf/hYvgj/ocfD/AP4NIP8A4qvmL9pTWtL134kafc6HqdnqVumkxxtLZ3CzIrCaYlSVJGcEHHuK+ta+VP2pP+Sm6Z/2BY//AEfPQB7V/wAJb4X/AOhq8P8A/g3t/wD4uj/hLfC//Q1eH/8Awb2//wAXSUUAL/wlvhf/AKGrw/8A+De3/wDi6P8AhLfC/wD0NXh//wAG9v8A/F0lFAC/8Jb4X/6Grw//AODe3/8Ai6P+Et8L/wDQ1eH/APwb2/8A8XSUUAL/AMJb4X/6Grw//wCDe3/+Lo/4S3wv/wBDV4f/APBvb/8AxdJRQAv/AAlvhf8A6Grw/wD+De3/APi6P+Et8L/9DV4f/wDBvb//ABdJRQBzUfi7w0nibxC7eItJ2SXkBjcX0RVwLK2UlTuwRuVhkdwR2q3/AMJn4X/6GTSP/A6L/wCKrFi/5GXxF/1/x/8ApJBVugC//wAJn4X/AOhk0j/wOi/+Ko/4TPwv/wBDJpH/AIHRf/FVQooAv/8ACZ+F/wDoZNI/8Dov/iqP+Ez8L/8AQyaR/wCB0X/xVUKKAL//AAmfhf8A6GTSP/A6L/4qj/hM/C//AEMmkf8AgdF/8VVCigC//wAJn4X/AOhk0j/wOi/+Ko/4TPwv/wBDJpH/AIHRf/FVQooAo+MvF3hybw2RBr2mzMt5aSFIrtHbatzGzHaCScAE/QVl/wDCfeF/+gzB+Tf4VN4w/wCRcb/r6tf/AEojrGoA0/8AhPvC/wD0GYPyb/Cj/hPvC/8A0GYPyb/CsyigDT/4T7wv/wBBmD8m/wAKP+E+8L/9BmD8m/wrMooA0/8AhPvC/wD0GYPyb/Cj/hPvC/8A0GYPyb/CsyigDT/4T7wv/wBBmD8m/wAKP+E+8L/9BmD8m/wrMooA0/8AhPvC/wD0GYPyb/Cu9+Cur2GteJ/E1xpdylzCtnYRs6ZwGD3Rxz7EV5fXpPwK/wCRh8T/APXrYf8Aod1QBf8AA3/JPPDv/YLtv/RS1u1heBv+SeeHf+wXbf8Aopa3aACiiigAooooAKKKKACiiigDC8Qf8hzwv/2FH/8ASK5rdrC8Qf8AIc8L/wDYUf8A9Irmt2gAooooAKKKKACiiigAooooAKf8PP8AkUn/AOwpqX/pdPTKf8PP+RSf/sKal/6XT0AdRRRRQAUUUUAFFFFABRRRQAV8q/tSA/8ACzNLOOP7Gj5/7bz19VV8sftTf8lE0j/sEL/6OloA9lByMjkUUyH/AFKf7o/lT6ACiiigAooooAKKKKACiiigDi4v+Rl8Rf8AX/H/AOkkFW6qRf8AIy+Iv+v+P/0kgq3QAUUUUAFFFFABRRRQAUUUUAYfjD/kXG/6+rX/ANKI6xq2fGH/ACLjf9fVr/6UR1jUAFFFFABRRRQAUUUUAFFFFABXpPwK/wCRh8T/APXrYf8Aod1Xm1ek/Ar/AJGHxP8A9eth/wCh3VAF/wADf8k88O/9gu2/9FLW7WF4G/5J54d/7Bdt/wCilrdoAKKKKACiuYvPHdhZ/apzY382m2U/2e61KKNDDC4IVsgsHYKTgsqkDnng46OWdIrV7gnMaIXJXnIAzxQBJRWDoHiiTxBBaXVvoOp29ldxiWO7uGt9m0jIJVZS/P8Au9+cVvUAFFFFAGF4g/5Dnhf/ALCj/wDpFc1u1heIP+Q54X/7Cj/+kVzW7QAUUUUAFFZ2s63baJbRSXCSzS3EqwW9vAoaSeQ5wqgkDoCSSQAASSKh0bxFBq95eWTWtzY39kV8+0ugu9VYZVgUZlZTzyCeQQcUAa9FYmreJk0zWrXSYdMvtRvLqF51jtTENqIVBJMkiDqw6ZrUs55Lq0Sae0ms3bOYJyhdOe5RmX34J60AT0UUUAFP+Hn/ACKT/wDYU1L/ANLp6ZT/AIef8ik//YU1L/0unoA6iiiigAoormNW8cW2nXuoW9ppOp6sdLjEl/JYRxlbbK7gDvdS7bfm2oGIBHHIyAdPRVfT9QtdV0231DT5lntbqJZYZV6OrDIP5VzGq+Pp9Ds1utV8H69bwvNHAp8yycs7sEVQq3BYkkjoD69BQB19FFFABXyx+1N/yUTSP+wQv/o6Wvqevlj9qb/komkf9ghf/R0tAHsUP+pT/dH8qfTIf9Sn+6P5U+gAooqnquqWujabLfXzMsMeBhVLMxJAVVA5JJIAHqaALlFY+neI4r3Vm0y6sbzTb3yfPSG7CfvY84JUozKcHGRnIyOK0ru7gsLKa7vJVht4EMkkjdFUDJNAE1FZPhvxFbeJ9I/tCzgubdPNeJorpAkispwQQCcc1rUAFFFFAHFxf8jL4i/6/wCP/wBJIKt1Ui/5GXxF/wBf8f8A6SQVboAKKKKACise98Rw2lxdRQ2V5e/Y1DXLWyqRDkZwdzDccc4XJ6eorTtbqG9tIrm1kEkMyB43HRlIyDQBLRWO/iOOG6t47rT763huZxbxXMqIEZznaCN29ckYGVHUVsUAFFFFAGH4w/5Fxv8Ar6tf/SiOsatnxh/yLjf9fVr/AOlEdY1ABRRRQAUUyaaO3geaZgkcalmY9gOpqjBrMctzBDLbXFt9oBMDTKoEmBnHBJBxzggUAaNFRXE5t4d6wyTNkAJEASSfrgD6kgVDZajHezTw+VLBPAR5kUoG4AjIPBIIPse1AFuiiigAr0n4Ff8AIw+J/wDr1sP/AEO6rzavSfgV/wAjD4n/AOvWw/8AQ7qgC/4G/wCSeeHf+wXbf+ilrdrC8Df8k88O/wDYLtv/AEUtbtABRRRQB5ZaTwWvwH1+0uyBcQHULSWP+ITvLJsXHqfMTHrkV3VtPZW+ippeo38EdxDpytco8yh44wu1pCCeFyD8x44q1JoOkS6qupy6VZPqCkFbtrdDKMDAw+M9OOtTNp9k92909nA1xJF5DzGJS7R5zsJxkrk9OlAHGpBd+CdT8MaRpms3Go2N3I1mLC7SEskSxlvNRo0Vvk2gHduBD9jg13dZ2m+H9G0eV5NI0iwsJJF2u9rbJEWHoSoGRWjQAUUUUAYXiD/kOeF/+wo//pFc1u1heIP+Q54X/wCwo/8A6RXNbtABRRRQByHi4iDxl4Mu5zttkv5oWc9A8kDrGPqW4Huajt7i3X4ra5fmdIrSx0e3hu5XcKiSb5H+Yk4GEIPPQGutu7O21C0ktb+2hureQYeGaMOjDryDwagg0bS7XTH06202zhsZAwe1jgVYmDdQUAwc9+OaAMrUNFs9b1201Sx1y4tL63tCsbWTwPuhlIIYh0cYJTgj0NJ4F1i81zwyLm/ljuXjuJrdLyJNqXiRuUWYAcDdjPHGc4wOK0L3w1oWpLCuo6Lp92tunlwie1RxGv8AdXI4HsK0Y40hiSOJFSNFCqijAUDoAOwoAdRRRQAU/wCHn/IpP/2FNS/9Lp6ZT/h5/wAik/8A2FNS/wDS6egDqKKKKACvPvCN5aaTefEJdXkWL7Nq8l7cByBtt3t4yjHPYhHx9DXoNZuoeHNE1a8hu9V0bT765gAEU9zapI8eDkbWYEjnnigDm/hfLHpfw28K6XqVzHDqFxYB4baaQLK6gbjtUnJ2qwzjpUeot/wlHxastLHzWHhmIahdDPDXUgKwKf8AdXe/4rXZS6fZz30F7NaQSXdsGWCd4wZIg3DBW6jOBnHWlt7G0tJria1tYYJbl/MneOMK0rYxuYj7xwAMn0oAnooooAK+WP2pv+SiaR/2CF/9HS19T18sftTf8lE0j/sEL/6OloA9ih/1Kf7o/lT6ZD/qU/3R/Kn0AFcr8QSItG066k4t7TVrSe4Y9EjEoyT7DNdVTZYo5oXimRZI3Uq6OMhgeoI7igDltSKz/FLRFhb57SwupbnB+6jmNUz9SG/KjxDLPrX9ljTLOTV9FaQ3FzJYTwkTFD8kfzyKCu75jgn7gHc1v2GkabpUTxaXp9rZRyHLpbwLGGPqQoGamtbS2sbVLayt4raCMYSKFAir34A4FAHJfDe6ln07VVlsbi3A1W6ffK0ZBJlbK/KxOR34x6E12dRW9rb2iMtrBFAru0jCNAoZmOSxx1JPJNS0AFFFFAHFxf8AIy+Iv+v+P/0kgq3VSL/kZfEX/X/H/wCkkFW6ACiiigDl9DngsbjxSL5lTyr5riXccYiaJCp+mFb8jU/g50s/CWi2d3Mkd1LbBkhdgHYdeAeTgEfSta60rTr64jnvbC1uJo/uSSwq7LzngkZHNTPawSXMdxJBG80QIjlZAWQHrg9RmgDlvEoMMdhq8WoHUIhfQmCyk2GOQswA8soASwBLAsWHBOO466qUOjaXbXhu7fTbOK5JJM8cCq5J6ncBnmrtABRRRQBh+MP+Rcb/AK+rX/0ojrGrZ8Yf8i43/X1a/wDpRHWNQAUUUUAZfiaN5fDN+sYJbyicD0HJ/SodUkjurrRBbMGL3ImQqesYRsn6cj862qgt7CztHZ7W1ggZ/vNHGFLfXFADJ9StILOW5adGjiJVijBvm6beO+eMVX0m1nEtzqF6vl3F2V/df88kUfKv15JPufarT6fZSQtFJaQPGzmRkaJSC394jHX3ottOsrNy9pZ28DMMFoolUkenAoAsUUUUAFek/Ar/AJGHxP8A9eth/wCh3VebV6T8Cv8AkYfE/wD162H/AKHdUAX/AAN/yTzw7/2C7b/0UtbtYXgb/knnh3/sF23/AKKWt2gAooooAKKKKACiiigAooooAwvEH/Ic8L/9hR//AEiua3awvEH/ACHPC/8A2FH/APSK5rdoAKKKKACiiigAooooAKKKKACn/Dz/AJFJ/wDsKal/6XT0yn/Dz/kUn/7Cmpf+l09AHUUUUUAFFFFABRRRQAUUUUAFfLX7UyY+IGjvnrpQGPpNL/jX1LXy5+1P/wAj3ov/AGC//a0lAHrtu2+1ibplAf0qSobT/jxg/wCua/yqagAooooAKKKKACiiigAooooA4uL/AJGXxF/1/wAf/pJBVuqkX/Iy+Iv+v+P/ANJIKt0AFFFFABRRRQAUUUUAFFFFAGH4w/5Fxv8Ar6tf/SiOsatnxh/yLjf9fVr/AOlEdY1ABRRRQAUUUUAFFFFABRRRQAV6T8Cv+Rh8T/8AXrYf+h3VebV6T8Cv+Rh8T/8AXrYf+h3VAF/wN/yTzw7/ANgu2/8ARS1u1haH4e8eaL4e07S/7C0Wb7DaxW/m/wBsuu/YgXdj7OcZxnGTV77B48/6F3Rf/B2//wAjUAX6KofYPHn/AELui/8Ag7f/AORqPsHjz/oXdF/8Hb//ACNQBfoqh9g8ef8AQu6L/wCDt/8A5Go+wePP+hd0X/wdv/8AI1AF+iqH2Dx5/wBC7ov/AIO3/wDkaj7B48/6F3Rf/B2//wAjUAX6KofYPHn/AELui/8Ag7f/AORqPsHjz/oXdF/8Hb//ACNQBR8Qf8hzwv8A9hR//SK5rdrC1Dw948v77S7j+wtFj/s+6a42/wBsufMzDLFtz9n4/wBbnPPTHfIvfYPHn/Qu6L/4O3/+RqAL9FUPsHjz/oXdF/8AB2//AMjUfYPHn/Qu6L/4O3/+RqAL9FUPsHjz/oXdF/8AB2//AMjUfYPHn/Qu6L/4O3/+RqAL9FUPsHjz/oXdF/8AB2//AMjUfYPHn/Qu6L/4O3/+RqAL9FUPsHjz/oXdF/8AB2//AMjUfYPHn/Qu6L/4O3/+RqAL9P8Ah5/yKT/9hTUv/S6es37B48/6F3Rf/B2//wAjVP4a0zxzoeimzbRdBkLXVzcZbWplI86eSXbgWp6b8ZzzjPHSgDs6KwvN8b/9ADw//wCD2f8A+RKPN8b/APQA8P8A/g9n/wDkSgDdorC83xv/ANADw/8A+D2f/wCRKPN8b/8AQA8P/wDg9n/+RKAN2isLzfG//QA8P/8Ag9n/APkSjzfG/wD0APD/AP4PZ/8A5EoA3aKwvN8b/wDQA8P/APg9n/8AkSjzfG//AEAPD/8A4PZ//kSgDdr5c/an/wCR70X/ALBf/taSvobzfG//AEAPD/8A4PZ//kSvJvi58JfHnxF8RaXfxWWjWohgFq4i1J5Qg3s3mMWhQ4+bGFDHigDrrT/jxg/65r/KpqWHwt43igSP+zvD52KFz/bE/OB/160//hGvG/8A0DfD/wD4OJ//AJFoAjoqT/hGvG//AEDfD/8A4OJ//kWj/hGvG/8A0DfD/wD4OJ//AJFoAjoqT/hGvG//AEDfD/8A4OJ//kWj/hGvG/8A0DfD/wD4OJ//AJFoAjoqT/hGvG//AEDfD/8A4OJ//kWj/hGvG/8A0DfD/wD4OJ//AJFoAjoqT/hGvG//AEDfD/8A4OJ//kWj/hGvG/8A0DfD/wD4OJ//AJFoA4eL/kZfEX/X/H/6SQVbrTX4c+N11LUbv7N4fP26dZtn9qT/ACYijjxn7Nz/AKvPbr7VN/wgHjf/AJ9PD/8A4NZ//kagDGorZ/4QDxv/AM+nh/8A8Gs//wAjUf8ACAeN/wDn08P/APg1n/8AkagDGorZ/wCEA8b/APPp4f8A/BrP/wDI1H/CAeN/+fTw/wD+DWf/AORqAMaitn/hAPG//Pp4f/8ABrP/API1H/CAeN/+fTw//wCDWf8A+RqAMaitn/hAPG//AD6eH/8Awaz/APyNR/wgHjf/AJ9PD/8A4NZ//kagDivGH/IuN/19Wv8A6UR1jV6BrHwu8b6tpptPK8PxZlik3f2nO33JFfGPsw67cfjVL/hT3jf08P8A/gxn/wDkegDjKK7P/hT3jf08P/8Agxn/APkej/hT3jf08P8A/gxn/wDkegDjKK7P/hT3jf08P/8Agxn/APkej/hT3jf08P8A/gxn/wDkegDjKK7P/hT3jf08P/8Agxn/APkej/hT3jf08P8A/gxn/wDkegDjKK7P/hT3jf08P/8Agxn/APkej/hT3jf08P8A/gxn/wDkegDjK9J+BX/Iw+J/+vWw/wDQ7qsn/hT3jf08P/8Agxn/APkeu3+F3gXXPCOo6zda82n/AOnRW0cS2U7y48szEli0aY/1oxjPQ0Af/9k=)

Figure - Image segment

Let’s assume the threshold to be 0.25. We can see that the pixels to the left of the dark line are lighter while the ones to the right darker. The mean of the lighter side is 0.58667 and the mean of the darker side is 0.28. The difference between these values is 0.30667, which is greater than the threshold value. Therefore, the algorithm treats this segment as a feature that looks like the first Haar feature in figure 7.

The need for the second stage arises from the problem explained next. [8] Since these frames are scalable, there are thousands of combinations and places where features fit within even a tiny image. A 24x24 pixel image contains over 180,000 possible features. The frames within that image can be between 1x2 (or 2x1) pixels and 24x24 pixels.

To better illustrate this problem, consider this example. Let’s say that the amount of time it takes for a computer to calculate the mean of a single feature is 1 millisecond (this would be incredibly slow, but let’s run with it). Since there are over 180,000 features in a 24x24 pixel image, it would take 180,000ms, 3 minutes, to calculate all the features in it. That’s not including processing power and memory used up to complete it.

The amount of time explodes even more when you consider that, these days, you’re most likely going to be using an image with a resolution of 1920x1080 pixels. To reduce the amount of time and resources used up, we need to find a way to reduce the complexity of the task. How did Viola and Jones, authors of the paper “Rapid Object Detection using a Boosted Cascade of Simple Features”, accomplish this to such a degree that their algorithm could detect faces in real-time on a digital camera? [8] Enter the integral images.

1. *Creating Integral Images*

An integral image is an image that takes the value of a pixel as the sum of pixel values from the original image. The value of a pixel is equal to the sum of all the pixels located to the top and left of that pixel, including that pixel itself. To understand this, lets consider an image of 10x8 pixels dimension.

![Text, table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADNjEAAJKSAAIAAAADNjEAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTU6NTk6NTIAMjAyMTowODoxMyAxNTo1OTo1MgAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTU6NTk6NTIuNjEyPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAHWAjoDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD3HXNc1Wz1/TtI0PTLO+uLy1uLpmvL5rZI1haFSAVikJJM47D7pqP7d43/AOhe8P8A/g+n/wDkOi+/5KnoX/YF1L/0fY10lAHN/bvG/wD0L3h//wAH0/8A8h0fbvG//QveH/8AwfT/APyHXSUUAc39u8b/APQveH//AAfT/wDyHR9u8b/9C94f/wDB9P8A/IddJRQBzf27xv8A9C94f/8AB9P/APIdUZfEfjGHX7TSG8N6Gbi6tZ7pGGuzbAsTRKwJ+yZzmZccdj04z2Vc3ff8lT0L/sC6l/6PsaAD7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA42XxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM3vt3jf/oXvD//AIPp/wD5Dovv+Sp6F/2BdS/9H2NdJQBzf27xv/0L3h//AMH0/wD8h0fbvG//AEL3h/8A8H0//wAh10lFAHN/bvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHXSUUAc39u8b/9C94f/wDB9P8A/IdUZfEfjGHX7TSG8N6Gbi6tZ7pGGuzbAsTRKwJ+yZzmZccdj04z2Vc3ff8AJU9C/wCwLqX/AKPsaAD7d43/AOhe8P8A/g+n/wDkOj7d43/6F7w//wCD6f8A+Q66SigDm/t3jf8A6F7w/wD+D6f/AOQ6Pt3jf/oXvD//AIPp/wD5DrpKKAOb+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOukooA42XxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM3vt3jf/oXvD/8A4Pp//kOi+/5KnoX/AGBdS/8AR9jXSUAc39u8b/8AQveH/wDwfT//ACHR9u8b/wDQveH/APwfT/8AyHXSUUAc39u8b/8AQveH/wDwfT//ACHR9u8b/wDQveH/APwfT/8AyHXSUUAc39u8b/8AQveH/wDwfT//ACHVGXxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM9lXN33/JU9C/7Aupf+j7GgA+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAONl8R+MYdftNIbw3oZuLq1nukYa7NsCxNErAn7JnOZlxx2PTjN77d43/wChe8P/APg+n/8AkOi+/wCSp6F/2BdS/wDR9jXSUAc39u8b/wDQveH/APwfT/8AyHR9u8b/APQveH//AAfT/wDyHXSUUAc39u8b/wDQveH/APwfT/8AyHR9u8b/APQveH//AAfT/wDyHXSUUAc39u8b/wDQveH/APwfT/8AyHVGXxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM9lXN33/JU9C/7Aupf+j7GgA+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ66SigDm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAONl8R+MYdftNIbw3oZuLq1nukYa7NsCxNErAn7JnOZlxx2PTjN77d43/AOhe8P8A/g+n/wDkOi+/5KnoX/YF1L/0fY10lAHN/bvG/wD0L3h//wAH0/8A8h0fbvG//QveH/8AwfT/APyHXSUUAc39u8b/APQveH//AAfT/wDyHR9u8b/9C94f/wDB9P8A/IddJRQBzf27xv8A9C94f/8AB9P/APIdUZfEfjGHX7TSG8N6Gbi6tZ7pGGuzbAsTRKwJ+yZzmZccdj04z2Vc3ff8lT0L/sC6l/6PsaAD7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5vT9e1z/hKrbRte0jT7T7VZT3cU1lqT3P+qeFCrK0EeM+eCCCehrpK5u+/5KnoX/YF1L/0fY10lAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAUUVT1fVrLQtHutU1SYQWdrGZJZCCcAegHJPYAck0AXKK5/R/F0Wp6x/ZN7pWo6NqDW32uK3v1izNFu2llMbuvykgFSQw3DjmugoAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAoqC9vbbTrGe9v5kt7a3jaWWWQ4VFUZJJ9AKyPCfi+w8ZWN5d6XBeQxWl49m32uAxM7KFO4KeQpDAjcAfUCgDeooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAooqC+uxY2E90YJ7jyULeTbx75JMfwqO5P+cUAT0VhaL4qi1bWLvSbnTL7SdStYUuGtb3yizxOWCurRO6kZVh1yCOlbtABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRWd4g1q38N+Hb/Wb5JZLawgeeVYQC5VRkgAkDP1IqPRtYu9VL/atA1HSUVQyPeSW7CTPYeVK5/PFAGrRRRQBzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jXSUAFFFV7+8Fhp810YJ7jykLCG3jLySHsqqOpP5epA5oAsUVhaJ4qi1fV7vSbnTb7SdStYkne1vhGWaJyQsitE7qRlWH3sgjkVu0AFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQAUVXv7mWzsZJ7exnv5ExttrZoxI/OODIyr78sOn4Vh6V4xOo+KG0C60DVNLvFs/th+1tbMvl79gyYpnIJOcZAztb0oA6SiiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAKKK5vWfHej6J4l07QZ/tE9/fzRwhLeLcsG/dsaVuAoOxsDO44OAQCQAdJRXOaz4zg0rU59PtNK1HWLm0thdXiaesR+yxnO0t5jpkttfCrub5TxyM7Wm6jaaxpdrqWmzLPaXcSzQyqCA6MMg4PI4PQ80AWa5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xoA6SiiigAoqvf3MtnYyT29jPfyJjbbWzRiR+ccGRlX35YdPwrD0rxidR8UNoF1oGqaXeLZ/bD9ra2ZfL37BkxTOQSc4yBna3pQB0lFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFFFc3rPjvR9E8S6doM/2ie/v5o4QlvFuWDfu2NK3AUHY2BnccHAIBIAOkornNZ8ZwaVqc+n2mlajrFzaWwurxNPWI/ZYznaW8x0yW2vhV3N8p45GdrTdRtNY0u11LTZlntLuJZoZVBAdGGQcHkcHoeaALNc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQAUVR1nV7PQNGudU1KRo7a2Tc5VSzHnAAA5JJIAA6k1n6L4si1bVpdKutMv8ASNRjgW5FrfiPdJETt3qY3dSAeCM5BIyORQBvUUUUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQAVyPxTs7i++G+pJaRPNJE9vcmONSzOkU8cjgAck7UbjvXXUUAcDbavpvi74qaLfeG7yDUbPS9Kuzc3dq4kjVpnhEcZYcB8Ru23qAOQMjPfUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUARXV1b2NpLdXs8dvbwoXlmlcIkagZLFjwAB3Nef8Awt8Q6NqOp+LbbT9XsLqebXri5jiguUdnh2RDzAAclM8buma9FooAKKKKAObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoAKpaxf22maPc3l/dNZ28SEyXKru8kdN/QjAzkkggAZPANXaKAPNvBVxbS/EzVJNJ1oeKrW502NrnWS8cht5EfEdsGhCxYKs77VUMDksTuXHpNFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAGT4oGjv4Xv4/E5UaRLEYrsszKojb5Tkryo55bjA5JAGa5Hwfd28nxCurfwlrNxrHhpdMBuJHv5L6KG78wbFSZ2Y5MZYsgYgYU4GefRKKACiiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAKpazrFj4f0W71bVphBZ2cRlmkIzhR6Ack9gO5q7RQB578PdZ0zxHr+oeIJdb0u41fUYEWHTLS+imexs4ySqsFY/OWkLOegJAHTJ9CoooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAR3WONnkYIiglmY4AHqa4v4cg6vb6l4xnUiTxBcb7YMMGOzjykC+2QGkx6y12tFABRRRQBzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jXSUAFec/FHxFolhqnhS1vtY0+2uLfXre4mhmukR44vLlHmMCchcnG48V6NRQB5tbeJtF8LePvFOoa5qdtbWmr21nfadO0g23kaQlGWE9JGBAO1ck71wOa6L4babdaP8M9Asb+Bre5isk8yFhgxEjO0jsRnB+ldPRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAjuscbPIwRFBLMxwAPU1xfw5B1e31LxjOpEniC432wYYMdnHlIF9sgNJj1lrtaKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACvOfij4i0Sw1Twpa32safbXFvr1vcTQzXSI8cXlyjzGBOQuTjceK9GooA82tvE2i+FvH3inUNc1O2trTV7azvtOnaQbbyNISjLCekjAgHauSd64HNdF8NtNutH+GegWN/A1vcxWSeZCwwYiRnaR2Izg/SunooAK5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xoA6SiiigDB8baZY6v4M1Gz1XUl0u2ZFc3zOqi3ZGDo5LcYDKpwevSuS8KNe6/8Ujrf9uafrljYaQ9mb3S7Qw27SSSo+wMZJBIwEZLbWwuU4BPPpdFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lAHN33/JU9C/7Aupf+j7GukrjfEet6VoPxJ0C61zU7PTbd9J1GNZby4WFGYzWRCgsQM4BOPY1e/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgDpKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoA6Subvv+Sp6F/2BdS/9H2NH/Cx/BH/Q5eH/APwaQf8AxVc/eePvB7fEnRrpfFmhm3j0m/jeUalDsVmmsyqk7sAkIxA77T6GgD0Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgDpKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoAL7/kqehf8AYF1L/wBH2NdJXnd54+8Ht8SdGul8WaGbePSb+N5RqUOxWaazKqTuwCQjEDvtPoa6D/hY/gj/AKHLw/8A+DSD/wCKoA6Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgDpK5u+/5KnoX/YF1L/0fY0f8LH8Ef9Dl4f8A/BpB/wDFVz954+8Ht8SdGul8WaGbePSb+N5RqUOxWaazKqTuwCQjEDvtPoaAPRKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoA6Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgAvv+Sp6F/wBgXUv/AEfY10led3nj7we3xJ0a6XxZoZt49Jv43lGpQ7FZprMqpO7AJCMQO+0+hroP+Fj+CP8AocvD/wD4NIP/AIqgDpKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoA6Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAOkrm77/kqehf9gXUv/R9jR/wsfwR/0OXh/wD8GkH/AMVXP3nj7we3xJ0a6XxZoZt49Jv43lGpQ7FZprMqpO7AJCMQO+0+hoA9Eorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgDpKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoA6Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAC+/5KnoX/AGBdS/8AR9jXSV53eePvB7fEnRrpfFmhm3j0m/jeUalDsVmmsyqk7sAkIxA77T6Gug/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgDpKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoA6Subvv+Sp6F/2BdS/9H2NH/Cx/BH/Q5eH/APwaQf8AxVc/eePvB7fEnRrpfFmhm3j0m/jeUalDsVmmsyqk7sAkIxA77T6GgD0Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgDpKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoAL7/kqehf8AYF1L/wBH2NdJXnd54+8Ht8SdGul8WaGbePSb+N5RqUOxWaazKqTuwCQjEDvtPoa6D/hY/gj/AKHLw/8A+DSD/wCKoA6Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgDpK5u+/5KnoX/YF1L/0fY0f8LH8Ef9Dl4f8A/BpB/wDFVz954+8Ht8SdGul8WaGbePSb+N5RqUOxWaazKqTuwCQjEDvtPoaAPRKK5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKoA6Siub/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqAOkorm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqgAvv+Sp6F/wBgXUv/AEfY10lcTbeI9D8QfFPSP7B1nT9T8jRdQ837FdJN5e6eyxu2k4zg4z6Gu2oA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAooooAKKKKACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKKKACiiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAKKKKACiiigArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAooooAKKKKAObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoAKKKKACiiigArm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACiiigAooooA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiiigAooooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKKKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACiiigAooooAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAooooAKKKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACmTTRW1vJPcSJFDEpeSSRgqooGSST0AHen1BewLc2M0L28NyGQjyZ/uOewbg8Z9j9KAK2k6/o+vwyS6Fq1jqccTbZHs7lJgh64JUnBrQrz/AMPPep8X9UbxHbwWep3ukQm1gsZTNA1vDIQ7NIyozSb5gMFFAXGC3OPQKACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAr3+o2WlWMl7ql5BZWkWDJPcyrHGmTgZZiAOSB+NUNK8W+G9duza6J4g0vUbhULmG0vY5XCggFtqknGSOfeteuK8IE+IfF2ueK3Ja2VzpOmHsYYWPmuP96bcM9xEtAHa0UUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABRRXIfFa6uLP4Va/LaPskNtsLB9m1WYKx3dvlJ57UAbun+JND1a+nstK1nT727t8+dBbXSSSRYODuVSSMHjnvWlXGaNqOraJ4wsfCep/2VNaTaY89m2m2b2othCyJ5ZRpHBXEi4I242kYOeOzoAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAR3WONnkYIiglmY4AHqaoaTr+j6/DJLoWrWOpxxNtkezuUmCHrglScGsz4gaPfa/4D1PTdKSOS6mRSkMrbVmCurNGT2DqpXnj5ua5zSbu9vPjZFK+g3Wip/wjzrcR3MkLGTE6eWf3LuMDMgXJz9/gdwD0aiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACmTTRW1vJPcSJFDEpeSSRgqooGSST0AHen1BewLc2M0L28NyGQjyZ/uOewbg8Z9j9KAK2k6/o+vwyS6Fq1jqccTbZHs7lJgh64JUnBrQrz/AMPPep8X9UbxHbwWep3ukQm1gsZTNA1vDIQ7NIyozSb5gMFFAXGC3OPQKACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAR3WONnkYIiglmY4AHqaz9I8RaJ4gWU6DrFhqYhwJTZXSTeXnON20nGcHr6Gsn4kCyb4b63FqktxFbTWphLWyB5CzkKgVSQGJZlGCQDnkgc1zfhV9ZT4oqfG9rbWmrTaIIrBdOXNu8KOrTb2JLeYHZMLjaoJwz5JoA9LooooA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiioL2zh1Cxns7neYbiNo5BHI0bbSMHDKQwPuCDQAlnqNlqHn/YLyC6+zzNBN5Eqv5Uq/eRsHhh3B5FWK4L4VWFppcPiux063jtrW38RXEcUMS7VRRFFgAV3tABXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSUUUUAI7rHGzyMERQSzMcAD1NZ+keItE8QLKdB1iw1MQ4EpsrpJvLznG7aTjOD19DWT8SBZN8N9bi1SW4itprUwlrZA8hZyFQKpIDEsyjBIBzyQOa5vwq+sp8UVPje1trTVptEEVgunLm3eFHVpt7ElvMDsmFxtUE4Z8k0Ael0UUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABUV3d29hZy3V9cRW1tCpeWaZwiRqOpLHgD3NS1k+KtC/4Sbwjqmh/aPsv9oWr2/nbN/l7hjO3Izj0yKAHaT4m0HX5JU0LW9O1N4QDItndxzFAehO0nFalchouta3Z+OD4V197C83aZ9vt7yyt3t8BZFjZHjaSTnLKQwbnnjiuvoAK5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xoA6SiiigBHdY42eRgiKCWZjgAeprP0jxFoniBZToOsWGpiHAlNldJN5ec43bScZwevoayfiQLJvhvrcWqS3EVtNamEtbIHkLOQqBVJAYlmUYJAOeSBzXN+FX1lPiip8b2ttaatNogisF05c27wo6tNvYkt5gdkwuNqgnDPkmgD0uiiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACqupabaavps1hqEXm28y4dQxU9cghlIKkEAgggggEHNWqKAMjR/C+laHdT3VjFcPdTosclzd3c11KUXJCeZKzMFBJO0HGSTiteiigArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigBHQSRsjZAYEHaxB/AjkVT0fSLHQNHtdK0i3FtZWkYjhiDE7VHuSSfqTmrtFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFQ3lnb6hYzWd9BHcW1xGY5YpF3K6kYII7gipqKAMXRPCWj+H7hp9NgmM7RLB591dy3MixKciNXlZiqZ52ggZ5xW1RRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQBBeWkd9Zy2s7TLHKu1mgneFwPZ0IZT7gg1T0bw7pmgm4fToZPOuSpnuLi4kuJpdowoaWRmcgZOATgZOMZNadFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABVXUtNtNX02aw1CLzbeZcOoYqeuQQykFSCAQQQQQCDmrVFAGRo/hfStDup7qxiuHup0WOS5u7ua6lKLkhPMlZmCgknaDjJJxWvRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFAFXVNMsta0u403VbaO6s7qMxzQyDIdT/nr1FUNJ8J6TouoSX9nHdS3kkQhNze3093Ised2xWmdiqk8kLgEgZzgY2aKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACorq3S8tJbaVpFSVCjGKVonAIxw6kMp9wQRUtFAGDoXgzRvDd5cXWkC/SS5ZnmE+p3M6yO2MuVkkZS/ygbsZwMZreoooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAq6ppllrWl3Gm6rbR3VndRmOaGQZDqf89eoqhpPhPSdF1CS/s47qW8kiEJub2+nu5Fjzu2K0zsVUnkhcAkDOcDGzRQAUUUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABVXU9MtdY02Wx1CNpLeYDcFkZGBBBBDKQykEAggggjIq1RQBk6N4Y0rQbi4uNPhma5uQolubq6luZnUdF8yVmbaOcLnAJJxya1qKKACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAq6ppllrWl3Gm6rbR3VndRmOaGQZDqf89eoqhpPhPSdF1CS/s47qW8kiEJub2+nu5Fjzu2K0zsVUnkhcAkDOcDGzRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lAHG+I9XttG+JOgXF5HeSI2k6igFnZTXT586yPKRKzAcdSMdBnkVe/4TzSP+fPxB/4Tmof/ABii+/5KnoX/AGBdS/8AR9jXSUAc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFdJRQBzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMV0lFAHN/8J5pH/Pn4g/8ACc1D/wCMVz95400tviTo1wLXXNkek36EHQL4OS01mRhPJ3EfKckDA4BI3DPolc3ff8lT0L/sC6l/6PsaAD/hPNI/58/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/ABiukooA5v8A4TzSP+fPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/wAYrpKKAOb/AOE80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGK6SigDzu88aaW3xJ0a4FrrmyPSb9CDoF8HJaazIwnk7iPlOSBgcAkbhnoP+E80j/nz8Qf8AhOah/wDGKL7/AJKnoX/YF1L/ANH2NdJQBzf/AAnmkf8APn4g/wDCc1D/AOMUf8J5pH/Pn4g/8JzUP/jFdJRQBzf/AAnmkf8APn4g/wDCc1D/AOMUf8J5pH/Pn4g/8JzUP/jFdJRQBzf/AAnmkf8APn4g/wDCc1D/AOMVz95400tviTo1wLXXNkek36EHQL4OS01mRhPJ3EfKckDA4BI3DPolc3ff8lT0L/sC6l/6PsaAD/hPNI/58/EH/hOah/8AGKP+E80j/nz8Qf8AhOah/wDGK6SigDm/+E80j/nz8Qf+E5qH/wAYo/4TzSP+fPxB/wCE5qH/AMYrpKKAOb/4TzSP+fPxB/4Tmof/ABij/hPNI/58/EH/AITmof8AxiukooA87vPGmlt8SdGuBa65sj0m/Qg6BfByWmsyMJ5O4j5TkgYHAJG4Z6D/AITzSP8Anz8Qf+E5qH/xii+/5KnoX/YF1L/0fY10lAHN/wDCeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wnNQ/+MV0lFAHN/wDCeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wnNQ/+MV0lFAHN/wDCeaR/z5+IP/Cc1D/4xXP3njTS2+JOjXAtdc2R6TfoQdAvg5LTWZGE8ncR8pyQMDgEjcM+iVzd9/yVPQv+wLqX/o+xoAP+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GK6SigDm/+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GK6SigDm/+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GK6SigDzu88aaW3xJ0a4FrrmyPSb9CDoF8HJaazIwnk7iPlOSBgcAkbhnoP+E80j/nz8Qf+E5qH/xii+/5KnoX/YF1L/0fY10lAHN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFdJRQBzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxXSUUAc3/wnmkf8+fiD/wnNQ/+MVz95400tviTo1wLXXNkek36EHQL4OS01mRhPJ3EfKckDA4BI3DPolc3ff8AJU9C/wCwLqX/AKPsaAD/AITzSP8Anz8Qf+E5qH/xij/hPNI/58/EH/hOah/8YrpKKAOb/wCE80j/AJ8/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/GK6SigDm/8AhPNI/wCfPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/xiukooA87vPGmlt8SdGuBa65sj0m/Qg6BfByWmsyMJ5O4j5TkgYHAJG4Z6D/hPNI/58/EH/hOah/8AGKL7/kqehf8AYF1L/wBH2NdJQBzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMV0lFAHN/8J5pH/Pn4g/8ACc1D/wCMUf8ACeaR/wA+fiD/AMJzUP8A4xXSUUAc3/wnmkf8+fiD/wAJzUP/AIxXP3njTS2+JOjXAtdc2R6TfoQdAvg5LTWZGE8ncR8pyQMDgEjcM+iVzd9/yVPQv+wLqX/o+xoAP+E80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGK6SigDm/wDhPNI/58/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/ABiukooA5v8A4TzSP+fPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/wAYrpKKAOJttetNb+KekfYodQi8nRdQ3fbdNuLTOZ7LG3zkXd05xnHGeortq5u+/wCSp6F/2BdS/wDR9jXSUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABRRRQAUVXs9RstQ8/wCwXkF19nmaCbyJVfypV+8jYPDDuDyKsUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFV7rULKxkt4727gt3upPKgWWUIZXxnaoJ+Y4B4HPFF5qNlp/kfb7yC1+0TLBD58qp5srfdRcnlj2A5NAFiiiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAKKKCQqkscAckntQAUVnaR4h0XX0lfQdXsNTWEgSNZXKTBCemdpOM4NaNABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRVe/wBRstKsZL3VLyCytIsGSe5lWONMnAyzEAckD8aoaV4t8N67dm10TxBpeo3CoXMNpexyuFBALbVJOMkc+9AGvRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRVe61CysZLeO9u4Ld7qTyoFllCGV8Z2qCfmOAeBzxQBYorM1LxLoWi3UNrrGtadYXE4zFFdXSRPJzj5QxBPPHFadABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRTJpora3knuJEihiUvJJIwVUUDJJJ6ADvVPSde0jXoHm0LVbLUoo22PJZ3CTKrYzglScHFAF+iiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAKKKr3WoWVjJbx3t3BbvdSeVAssoQyvjO1QT8xwDwOeKALFFVdR1Ow0exe91a9t7G0jwHnuZVjjXJwMsxAGSQKtAhlBU5B5BHegArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAopk00VtbyT3EiRQxKXkkkYKqKBkkk9AB3qnpOvaRr0DzaFqtlqUUbbHks7hJlVsZwSpODigC/RRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFFFV7rULKxkt4727gt3upPKgWWUIZXxnaoJ+Y4B4HPFAFiiszUvEuhaLdQ2usa1p1hcTjMUV1dJE8nOPlDEE88cVp0AFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQAUUVXs9RstQ8/wCwXkF19nmaCbyJVfypV+8jYPDDuDyKALFFFFAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABUF7Zw6hYz2dzvMNxG0cgjkaNtpGDhlIYH3BBqeorq3S8tJbaVpFSVCjGKVonAIxw6kMp9wQRQBw/wqsLTS4fFdjp1vHbWtv4iuI4oYl2qiiKLAArvawdC8GaN4bvLi60gX6SXLM8wn1O5nWR2xlyskjKX+UDdjOBjNb1ABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAHnnxE0XT18UeENa+zBtRfXrW2892ZisYSY7VBOFBJydoGcDOcDCfFLRNPkvPDOtS2wk1CHXtNt4pnYnykN0pIVScKT3IAJAAJIAx0uueCtG8R3sN1qw1B5bd1khEOqXMCRuucOqRyKobk/MBnnrTdY8DaJrwtBqn9pTCzEfkhdWuowrRnKOQsg3SA8+Yct054FAHQ0VFaWyWdnFbQtK0cShFM0zSuQPV3JZj7kk1LQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABXGfFtnHwv1RULBJXt4ptv/PF7iNZR9NhbPtXZ1BfWVtqVhPZahBHcWtxGY5YZFyrqRggigDkdQgjg+M/h02ShHfRb2O4WMY/dJJb+WCPQMzY+prtaxtF8J6P4fuZLnToJzcSRLCZ7q7muZBGpJWMPKzMqAknaCBk5xWzQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAVxXhAnxD4u1zxW5LWyudJ0w9jDCx81x/vTbhnuIlrtHQSRsjZAYEHaxB/AjkVT0fSLHQNHtdK0i3FtZWkYjhiDE7VHuSSfqTmgC7RRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABXnnxE0XT18UeENa+zBtRfXrW2892ZisYSY7VBOFBJydoGcDOcDHodYGueCtG8R3sN1qw1B5bd1khEOqXMCRuucOqRyKobk/MBnnrQBl/EXT9Wu/C2sW+iaVpsy39g8N5dTTbZ1TaR8kezbIwVmKh5EAY9cZrf8M3dpf8AhPSbvTZJZLOazieB5hh2QoMFvfHWqN/4E0HU3ZryK+YSQLbzKmp3KLcxqCAJlWQCU4JBLhiRwSRW/FFHBCkMEaxxRqFREXCqBwAAOgoAfXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAEN3BbXNrJFfRRTW7D94kyhkIHPIPHauO8Jf8T/xvrPi+zi8rS7i1h0+zkxg3wiZ2afHdcvtQ9wpPTFdXq+k2eu6PdaXqkTTWd3GYp41kaPeh6jcpBGfY1S0bwppugzCTTpdTO2PyljudWuriNV46JLIyjoOQMigDZooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgArzz4iaLp6+KPCGtfZg2ovr1rbee7MxWMJMdqgnCgk5O0DOBnOBj0OsDXPBWjeI72G61Yag8tu6yQiHVLmBI3XOHVI5FUNyfmAzz1oA85+Ml//AGhaeILTUrTU0sdJ0uVrTbplxJBc3UkR/etKqGMLGhwCWGGdycbQa9a0m7jvtItbmBZljkjBUTwvC4+qOAw/ECo77RLDUvD8uiX8UlxYT2/2aVJJnLPHjBBfO4kj+LOe+avKoRAqjAUYAoAWubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKAIbuC2ubWSK+iimt2H7xJlDIQOeQeO1cd4S/4n/jfWfF9nF5Wl3FrDp9nJjBvhEzs0+O65fah7hSemK6vV9Js9d0e60vVImms7uMxTxrI0e9D1G5SCM+xqlo3hTTdBmEmnS6mdsflLHc6tdXEarx0SWRlHQcgZFAGzRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABXnnxE0XT18UeENa+zBtRfXrW2892ZisYSY7VBOFBJydoGcDOcDHodYGueCtG8R3sN1qw1B5bd1khEOqXMCRuucOqRyKobk/MBnnrQBl/EXT9Wu/C2sW+iaVpsy39g8N5dTTbZ1TaR8kezbIwVmKh5EAY9cZrf8M3dpf+E9Ju9Nklks5rOJ4HmGHZCgwW98dao3/gTQdTdmvIr5hJAtvMqancotzGoIAmVZAJTgkEuGJHBJFb8UUcEKQwRrHFGoVERcKoHAAA6CgB9c3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAQXtnDqFjPZ3O8w3EbRyCORo22kYOGUhgfcEGuJ+FVhaaXD4rsdOt47a1t/EVxHFDEu1UURRYAFdxdW6XlpLbStIqSoUYxStE4BGOHUhlPuCCKxtC8GaN4bvLi60gX6SXLM8wn1O5nWR2xlyskjKX+UDdjOBjNAG9RRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRRQAUUUUAFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQAUUUUAFFFFAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRRRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUUAFFFFABXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSUUUUAFFFFABRRRQBzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAcb4j0m21n4k6Bb3kl5Gi6TqLg2d7NavnzrIcvEysRz0Jx0OOBV7/hA9I/5/PEH/AIUeof8Ax+i+/wCSp6F/2BdS/wDR9jXSUAc3/wAIHpH/AD+eIP8Awo9Q/wDj9H/CB6R/z+eIP/Cj1D/4/XSUUAc3/wAIHpH/AD+eIP8Awo9Q/wDj9H/CB6R/z+eIP/Cj1D/4/XSUUAc3/wAIHpH/AD+eIP8Awo9Q/wDj9c/eeCtLX4k6Nbi61zZJpN+5J1++LgrNZgYfztwHzHIBweCQdox6JXN33/JU9C/7Aupf+j7GgA/4QPSP+fzxB/4Ueof/AB+j/hA9I/5/PEH/AIUeof8Ax+ukooA5v/hA9I/5/PEH/hR6h/8AH6P+ED0j/n88Qf8AhR6h/wDH66SigDm/+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfrpKKAPO7zwVpa/EnRrcXWubJNJv3JOv3xcFZrMDD+duA+Y5AODwSDtGOg/wCED0j/AJ/PEH/hR6h/8fovv+Sp6F/2BdS/9H2NdJQBzf8Awgekf8/niD/wo9Q/+P0f8IHpH/P54g/8KPUP/j9dJRQBzf8Awgekf8/niD/wo9Q/+P0f8IHpH/P54g/8KPUP/j9dJRQBzf8Awgekf8/niD/wo9Q/+P1z954K0tfiTo1uLrXNkmk37knX74uCs1mBh/O3AfMcgHB4JB2jHolc3ff8lT0L/sC6l/6PsaAD/hA9I/5/PEH/AIUeof8Ax+j/AIQPSP8An88Qf+FHqH/x+ukooA5v/hA9I/5/PEH/AIUeof8Ax+j/AIQPSP8An88Qf+FHqH/x+ukooA5v/hA9I/5/PEH/AIUeof8Ax+j/AIQPSP8An88Qf+FHqH/x+ukooA87vPBWlr8SdGtxda5sk0m/ck6/fFwVmswMP524D5jkA4PBIO0Y6D/hA9I/5/PEH/hR6h/8fovv+Sp6F/2BdS/9H2NdJQBzf/CB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wAKPUP/AI/XSUUAc3/wgekf8/niD/wo9Q/+P0f8IHpH/P54g/8ACj1D/wCP10lFAHN/8IHpH/P54g/8KPUP/j9c/eeCtLX4k6Nbi61zZJpN+5J1++LgrNZgYfztwHzHIBweCQdox6JXN33/ACVPQv8AsC6l/wCj7GgA/wCED0j/AJ/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/H66SigDm/8AhA9I/wCfzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/x+ukooA5v/AIQPSP8An88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8frpKKAPO7zwVpa/EnRrcXWubJNJv3JOv3xcFZrMDD+duA+Y5AODwSDtGOg/4QPSP+fzxB/4Ueof/AB+i+/5KnoX/AGBdS/8AR9jXSUAc3/wgekf8/niD/wAKPUP/AI/R/wAIHpH/AD+eIP8Awo9Q/wDj9dJRQBzf/CB6R/z+eIP/AAo9Q/8Aj9H/AAgekf8AP54g/wDCj1D/AOP10lFAHN/8IHpH/P54g/8ACj1D/wCP1z954K0tfiTo1uLrXNkmk37knX74uCs1mBh/O3AfMcgHB4JB2jHolc3ff8lT0L/sC6l/6PsaAD/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/8AH66SigDzu88FaWvxJ0a3F1rmyTSb9yTr98XBWazAw/nbgPmOQDg8Eg7RjoP+ED0j/n88Qf8AhR6h/wDH6L7/AJKnoX/YF1L/ANH2NdJQBzf/AAgekf8AP54g/wDCj1D/AOP0f8IHpH/P54g/8KPUP/j9dJRQBzf/AAgekf8AP54g/wDCj1D/AOP0f8IHpH/P54g/8KPUP/j9dJRQBzf/AAgekf8AP54g/wDCj1D/AOP1z954K0tfiTo1uLrXNkmk37knX74uCs1mBh/O3AfMcgHB4JB2jHolc3ff8lT0L/sC6l/6PsaAD/hA9I/5/PEH/hR6h/8AH6P+ED0j/n88Qf8AhR6h/wDH66SigDm/+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfrpKKAOb/4QPSP+fzxB/4Ueof/AB+j/hA9I/5/PEH/AIUeof8Ax+ukooA4m20G00T4p6R9im1CXztF1Dd9t1K4u8YnssbfOdtvXnGM8Z6Cu2rm77/kqehf9gXUv/R9jXSUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABRRXD+NNV8S6X4o8N/Ybu0ttGu9Ugs5o1j8ye4LrIWBLDCKNi425YknlcYIB3FFeefFTxXq+laNfWnhO5+zahZ6fJqV3d+Usn2aFAdi7WBUtI4KjIPyrIeoFegQMXt42Y5LICT+FAD65u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAoqrqfmf2VdeRepYP5TEXUiBlg4++QSBx1549a4/wRr1zqnivWbKy8QN4m0S1t4GTU2WH5Lhi++FXhRUcBAjHAypbBPIoA7qiiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAKKKr38VzPp80VhdC0uHQrHOYhJ5ZP8W0kAkds8Z656UAWKK47w5fapB4/1jw9daxNrVpaWVvc/aLmKJJbeWRnHlMYkRSCqBx8uRn6V2NABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRVe/tpbyxkgt76ewkfG25tljMic54Eisvtyp6/jXH+GptYf4i6tYnxDf6rpOl2scU/2yK2XN3Id+1TFCh+SPaTyeZB6UAdxRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRUF6bpbGc6ckMl2I28lJ3KRs+OAzAEgZ6kA0AT0Vx3w51TXNRtdfj8S30V9d2OtT2qyQQCGNUCRsEVeTgFiAWJbHUmuxoAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAorn/HWv3HhjwXfapYxxyXaeXFbrKDs82WRYkLY5wGcE+wrMsbrWdA8fadoWp6zPrVpqmnzzpNdQwxyQzQtGGx5SINjLKOCCQV680AdnRRRQBzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jXSUAFFFc9491648M+B9R1ayMazwKio8y7kj3uqb2GRkLu3HnoKAOhoritI1LU9J+Iq+GNS1qXWobvSjqEM9zFCksTJIqMv7pFBRg4IyMgqeT27WgArm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACiq9/bS3ljJBb309hI+NtzbLGZE5zwJFZfblT1/GuP8NTaw/xF1axPiG/1XSdLtY4p/tkVsubuQ79qmKFD8ke0nk8yD0oA7iiiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAKKKr38VzPp80VhdC0uHQrHOYhJ5ZP8W0kAkds8Z656UAWKK47w5fapB4/1jw9daxNrVpaWVvc/aLmKJJbeWRnHlMYkRSCqBx8uRn6V2NABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRXD+NNV8S6X4o8N/Ybu0ttGu9Ugs5o1j8ye4LrIWBLDCKNi425YknlcYM/j99W0rw/qviC08TyaXFp1k00NstrC0ckignEpdWZgx2qAhQj3JoA7Giq+nTT3Gl2s15D5FxJCjyxf3HKglfwPFWKAObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgArjPG+j+Jda1HRjotnpT22l6hFqG+71CSJ5WRXUx7VgcAfPnduPTpXZ0UAcJ4v+HEHibw/rUkAmstd1az2S+Xq90tqZRGEXcikK6jAHMfI5K8mux02xTTdNgs4mldIUChpp3mc/V3JY/iatUUAFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQBV1L7f8A2bMdH+zG9C5hF1uEbHPRivIBGRkA4znBxg87o+g6vL45m8T65FYWMp08WCWthcPOJR5gfzJJGjjyRjCjbwGbk7sDrKKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACqWs/2odFuxoH2X+0zERbG8ZhEH7FtoJwOuAOf1q7RQByPgbRtb0C3e01XTtPTzi1xdahFqklzPd3Bxl3VreMDIHY4UBQBjp11FFABXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSUUUUAI5YRsYwGfB2hjgE+55xXP+CPD9z4d8NrBqksVxqt1PJd6hPDnbLPIxZiM4O0DCjP8ACoroaKACiiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAKiumuEtJWsoo5rgITFHLIY0ZscAsFYqM9wpx6GpaKAON8D6P4k0XUNaOt2elx2+p6hLqAe0v5JnjZ1RRHtaFARhCd2f8AgPeuyoooAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigDF8YeH/+Eo8J3ukLMLeSYK0MrLuEciOroxHcBlU1naZouu33jC21/wAUJp9s1jYyWlra2Fw86l5WRpJS7omOI0ULg45JJyMdXRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABVXU45ZdLuYre0trySSMqLe6kKRS54KswVsAj/ZP0q1RQBxfhLwOmj+I7jXZtI0XRZWtvskFjoyfu0QsGd3fZHvZiqD7g2hOpzx2lFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFACOWEbGMBnwdoY4BPuecVz/gjw/c+HfDawapLFcardTyXeoTw52yzyMWYjODtAwoz/CoroaKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACqWs/2odFuxoH2X+0zERbG8ZhEH7FtoJwOuAOf1q7RQByPgbRtb0C3e01XTtPTzi1xdahFqklzPd3Bxl3VreMDIHY4UBQBjp11FFABXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSUUUUAcZ430fxLrWo6MdFs9Ke20vUItQ33eoSRPKyK6mPasDgD587tx6dKg8R6L4s1rxDptxJYaNd6TYxpP/AGfLqksIa8Bzvci3bzET+AYXn5iM4C91RQBFaNcvZxNfRRQ3JUGWOGUyIrdwGKqWHuVH0qWiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKAObvv8Akqehf9gXUv8A0fY10lcb4jl1WH4k6A2h2dneXH9k6iGjvLtrdAvnWWSGWOQk5xxgdTzxg3vt3jf/AKF7w/8A+D6f/wCQ6AOkorm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOgDpKK5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDoA6Subvv+Sp6F/wBgXUv/AEfY0fbvG/8A0L3h/wD8H0//AMh1z95eeMf+Fk6MzaFoYuBpN+EjGtTFGXzrPcS32XIIIXAwc5PIwAQD0Siub+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DoA6Siub+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DoA6Siub+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DoAL7/kqehf9gXUv/R9jXSV53eXnjH/AIWTozNoWhi4Gk34SMa1MUZfOs9xLfZcgghcDBzk8jAB6D7d43/6F7w//wCD6f8A+Q6AOkorm/t3jf8A6F7w/wD+D6f/AOQ6Pt3jf/oXvD//AIPp/wD5DoA6Siub+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOgDpK5u+/5KnoX/YF1L/0fY0fbvG//QveH/8AwfT/APyHXP3l54x/4WTozNoWhi4Gk34SMa1MUZfOs9xLfZcgghcDBzk8jABAPRKK5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOgDpKK5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOgDpKK5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOgAvv+Sp6F/wBgXUv/AEfY10led3l54x/4WTozNoWhi4Gk34SMa1MUZfOs9xLfZcgghcDBzk8jAB6D7d43/wChe8P/APg+n/8AkOgDpKK5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDoA6Siub+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ6AOkrm77/kqehf8AYF1L/wBH2NH27xv/ANC94f8A/B9P/wDIdc/eXnjH/hZOjM2haGLgaTfhIxrUxRl86z3Et9lyCCFwMHOTyMAEA9Eorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AOkorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AOkorm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ6AC+/5KnoX/YF1L/0fY10led3l54x/wCFk6MzaFoYuBpN+EjGtTFGXzrPcS32XIIIXAwc5PIwAeg+3eN/+he8P/8Ag+n/APkOgDpKK5v7d43/AOhe8P8A/g+n/wDkOj7d43/6F7w//wCD6f8A+Q6AOkorm/t3jf8A6F7w/wD+D6f/AOQ6Pt3jf/oXvD//AIPp/wD5DoA6Subvv+Sp6F/2BdS/9H2NH27xv/0L3h//AMH0/wD8h1z95eeMf+Fk6MzaFoYuBpN+EjGtTFGXzrPcS32XIIIXAwc5PIwAQD0Siub+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DoA6Siub+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DoA6Siub+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DoAL7/kqehf8AYF1L/wBH2NdJXnd5eeMf+Fk6MzaFoYuBpN+EjGtTFGXzrPcS32XIIIXAwc5PIwAeg+3eN/8AoXvD/wD4Pp//AJDoA6Siub+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ6AOkorm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOgDpK5u+/5KnoX/AGBdS/8AR9jR9u8b/wDQveH/APwfT/8AyHXP3l54x/4WTozNoWhi4Gk34SMa1MUZfOs9xLfZcgghcDBzk8jABAPRKK5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOgDpKK5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOgDpKK5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOgAvv+Sp6F/2BdS/9H2NdJXE20+uTfFPSP7e07T7LGi6h5X2K/e53/v7LO7dDHtxxjGc5PTHPbUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUUAFFFFABXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSUUUUAFFFFABRRRQBzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFFFFABRRRQAVzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jQB0lFFFABRRRQAUUUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRRQAUUUUAFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQAUUUUAFFFFAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABUF7dLY2M91JHNKsEbSGOCJpJGAGcKq5LH0A5NT1FdXKWdpLcyrIyRIXYRRNK5AGeEUFmPsASaAMDwV4sm8W2Wpz3Oky6TJY6jJZG3nlV5CFVWDNt4UkOMqC2D3NdJXAfDa/wB2peJ4JbHVLVrzWZ763a70u5t0khKRKG3yIq5JB+Undx0rv6ACubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKAMnxVrv8AwjPhHVNc+z/av7PtXuPJ37PM2jON2DjPrg0ui3eu3W5tc03TrKMqGiNnqD3JYnqGDQx4/AmpdektYtCum1DTpNTtSm2a0it/PaVCcMPL/jGCSVAJIBwCeK4zwhpVrF8RLrUfCmjT6J4eOmiC4hewewjuLrzAyusDqpyqbgX2gHcBk44APQ6KKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgArlPEXjZ9C8TaPpEei3dymoXcVtJfN+6ghMgcqAxH7xv3Zyq8AYyRkA9XXn/wASNQA1Pw1BDYarctY61Be3DWmlXM6JCEkBbfHGVJBYfKCTz0oA1r/xNrR8Z3Ph/QdGsLtrWyhu5Z73UntxiR5FCgLBJnHlk5JHWuojLmJTKqrIVG5VbcAe4BwMj3wK898ar4Y1qG6XUfBt9qWpzWQWyuRoUryNvUlAs+z9yysed7IUPJx1rsPDFtqNn4S0m21yY3Gpw2USXcpbdvlCAOc9+c896ANSubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKAIL6a4t7CeWytTd3CITFAJAnmN2G48Ae/8+lYWh+Jr688TX3h/XNMt7G/tbWK7U2l4bmKSKRnUfM0cZDBkPBXpg5rX1i5Wz0e5nktru5REO+KyUmYqeCUCkMSBk/L83HGTgVxXgyyEHj7UbrQLXVY9EubFPtc+sQ3Czy3atiMK9yPOZRHuyCSgJXbglqAPQqKKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgAqjrWr2mgaHeatqLMtrZwtNKVGWIAzgDuT0A7mr1cx8SNHvNe+HOs6dpkbTXcsG6KJZNhkZWDbA3YnbjPvQBf0W91+9Yyazo9nptu8YeNU1Bp5wT/DInlKqkDrtdxkYBI5rYrzjwrptkfiHDqfhHw/caDpA0p4tQWTTnsFuJ2kQxKYmVS7IBJlwCBvxu5Ir0egArm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GgDpKKKKAKOtavaaBod5q2osy2tnC00pUZYgDOAO5PQDuaq6Le6/esZNZ0ez023eMPGqag084J/hkTylVSB12u4yMAkc1Q+JGj3mvfDnWdO0yNpruWDdFEsmwyMrBtgbsTtxn3rn/Cum2R+IcOp+EfD9xoOkDSni1BZNOewW4naRDEpiZVLsgEmXAIG/G7kigD0eiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACsnxVrv/CM+EdU1z7P9q/s+1e48nfs8zaM43YOM+uDWtWfr0lrFoV02oadJqdqU2zWkVv57SoThh5f8YwSSoBJAOATxQBFot3rt1ubXNN06yjKhojZ6g9yWJ6hg0MePwJrVrzzwhpVrF8RLrUfCmjT6J4eOmiC4hewewjuLrzAyusDqpyqbgX2gHcBk449DoAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAgvbpbGxnupI5pVgjaQxwRNJIwAzhVXJY+gHJrC8FeLJvFtlqc9zpMukyWOoyWRt55VeQhVVgzbeFJDjKgtg9zW/dXKWdpLcyrIyRIXYRRNK5AGeEUFmPsASa4X4bX+7UvE8Etjqlq15rM99btd6Xc26SQlIlDb5EVckg/KTu46UAd/RRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABXKeIvGz6F4m0fSI9Fu7lNQu4raS+b91BCZA5UBiP3jfuzlV4AxkjIB6uvP/iRqAGp+GoIbDVblrHWoL24a00q5nRIQkgLb44ypILD5QSeelAGtqnivUhr19pPhjRYdVuNMtknvTcXptgpfcY4o8RvvchGJB2gArzzxtaBrdp4k8PWOs6aWNrfQLPFvGGAYZwQM4I6H3FcbHqUnhnxp4h1aXSdXvLXXLa1u7I2mnTSs0kcWxoXAXMTcIR5gUfMckYOOh8BaNdeHvAGi6VqIVbu2tEWdVOQrkZYAjrgkjPtQB0Nc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAUda1e00DQ7zVtRZltbOFppSoyxAGcAdyegHc1V0W91+9Yyazo9nptu8YeNU1Bp5wT/DInlKqkDrtdxkYBI5qh8SNHvNe+HOs6dpkbTXcsG6KJZNhkZWDbA3YnbjPvXP+FdNsj8Q4dT8I+H7jQdIGlPFqCyac9gtxO0iGJTEyqXZAJMuAQN+N3JFAHo9FFFAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRRRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFABRRRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lAHG+I4tVm+JOgLod5Z2dx/ZOolpLy0a4Qr51lkBVkjIOcc5PQ8c5F77D43/wChh8P/APghn/8Akyi+/wCSp6F/2BdS/wDR9jXSUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZXP3ln4x/4WToytruhm4Ok35SQaLMEVfOs9wK/askklcHIxg8HII9Erm77/AJKnoX/YF1L/ANH2NAB9h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JldJRQBzf2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mV0lFAHN/YfG/wD0MPh//wAEM/8A8mUfYfG//Qw+H/8AwQz/APyZXSUUAed3ln4x/wCFk6Mra7oZuDpN+UkGizBFXzrPcCv2rJJJXByMYPByCOg+w+N/+hh8P/8Aghn/APkyi+/5KnoX/YF1L/0fY10lAHN/YfG//Qw+H/8AwQz/APyZR9h8b/8AQw+H/wDwQz//ACZXSUUAc39h8b/9DD4f/wDBDP8A/JlH2Hxv/wBDD4f/APBDP/8AJldJRQBzf2Hxv/0MPh//AMEM/wD8mVz95Z+Mf+Fk6Mra7oZuDpN+UkGizBFXzrPcCv2rJJJXByMYPByCPRK5u+/5KnoX/YF1L/0fY0AH2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJldJRQBzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJldJRQBzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJldJRQB53eWfjH/hZOjK2u6Gbg6TflJBoswRV86z3Ar9qySSVwcjGDwcgjoPsPjf/AKGHw/8A+CGf/wCTKL7/AJKnoX/YF1L/ANH2NdJQBzf2Hxv/ANDD4f8A/BDP/wDJlH2Hxv8A9DD4f/8ABDP/APJldJRQBzf2Hxv/ANDD4f8A/BDP/wDJlH2Hxv8A9DD4f/8ABDP/APJldJRQBzf2Hxv/ANDD4f8A/BDP/wDJlc/eWfjH/hZOjK2u6Gbg6TflJBoswRV86z3Ar9qySSVwcjGDwcgj0Subvv8Akqehf9gXUv8A0fY0AH2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mV0lFAHN/YfG/wD0MPh//wAEM/8A8mUfYfG//Qw+H/8AwQz/APyZXSUUAc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JldJRQB53eWfjH/AIWToytruhm4Ok35SQaLMEVfOs9wK/askklcHIxg8HII6D7D43/6GHw//wCCGf8A+TKL7/kqehf9gXUv/R9jXSUAc39h8b/9DD4f/wDBDP8A/JlH2Hxv/wBDD4f/APBDP/8AJldJRQBzf2Hxv/0MPh//AMEM/wD8mUfYfG//AEMPh/8A8EM//wAmV0lFAHN/YfG//Qw+H/8AwQz/APyZXP3ln4x/4WToytruhm4Ok35SQaLMEVfOs9wK/askklcHIxg8HII9Erm77/kqehf9gXUv/R9jQAfYfG//AEMPh/8A8EM//wAmUfYfG/8A0MPh/wD8EM//AMmV0lFAHN/YfG//AEMPh/8A8EM//wAmUfYfG/8A0MPh/wD8EM//AMmV0lFAHN/YfG//AEMPh/8A8EM//wAmUfYfG/8A0MPh/wD8EM//AMmV0lFAHnd5Z+Mf+Fk6Mra7oZuDpN+UkGizBFXzrPcCv2rJJJXByMYPByCOg+w+N/8AoYfD/wD4IZ//AJMovv8Akqehf9gXUv8A0fY10lAHN/YfG/8A0MPh/wD8EM//AMmUfYfG/wD0MPh//wAEM/8A8mV0lFAHN/YfG/8A0MPh/wD8EM//AMmUfYfG/wD0MPh//wAEM/8A8mV0lFAHN/YfG/8A0MPh/wD8EM//AMmVz95Z+Mf+Fk6Mra7oZuDpN+UkGizBFXzrPcCv2rJJJXByMYPByCPRK5u+/wCSp6F/2BdS/wDR9jQAfYfG/wD0MPh//wAEM/8A8mUfYfG//Qw+H/8AwQz/APyZXSUUAc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JldJRQBzf2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mV0lFAHE20GuQ/FPSP7e1HT73Oi6h5X2Kwe22fv7LO7dNJuzxjGMYPXPHbVzd9/yVPQv+wLqX/o+xrpKAObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoAKKKzPEmuweGfDOoa1dxySw2MDTMkeNzYHQZ4/E0AadFcxovijUbnxQ2g69pNtY3bWAv4Xs743UbR79jBiY4yrAkY4IIJ54rp6ACubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACioL26WxsZ7qSOaVYI2kMcETSSMAM4VVyWPoByawvBXiybxbZanPc6TLpMljqMlkbeeVXkIVVYM23hSQ4yoLYPc0AdJRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFFFV7+e4ttPmmsrQ3lwiExW4kCeY3YbjwB6n07HpQBYorm9E8S3934lvNA13S4dP1C3to7xDa3ZuYZoXZlyGMaEMGQggr6HJzXSUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFUda1e00DQ7zVtRZltbOFppSoyxAGcAdyegHc1V0W91+9Yyazo9nptu8YeNU1Bp5wT/AAyJ5SqpA67XcZGASOaANiiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACiiq9+97HYyPpdvBc3Yx5cVzO0Mbc85dUcjjP8J/rQBYorlNH8Uazd+NZ/D2raPYW7W9it5LPZak9wI9zlURg0EeC21z1PC+4rq6ACubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACioL6a4t7CeWytTd3CITFAJAnmN2G48Ae/8APpWFofia+vPE194f1zTLexv7W1iu1NpeG5ikikZ1HzNHGQwZDwV6YOaAOkooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAooqvfz3Ftp801laG8uEQmK3EgTzG7DceAPU+nY9KALFFc3oniW/u/Et5oGu6XDp+oW9tHeIbW7NzDNC7MuQxjQhgyEEFfQ5Oa6SgArm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACiuU8ReNn0LxNo+kR6Ld3KahdxW0l837qCEyByoDEfvG/dnKrwBjJGQCeLPG0nhnV9IsItEu74ahe29tLdA+XBbLNL5YO8g73zzsUZxySuRkA6uiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACiiszxHr1r4Z8O3msX6yPDapuMcQy8jEgKig92YgD3NAGnRXMaV4o1FvE0Wg+JdIg029ubNru1a1vTcxyKjBZELGNCHXehwAQQevFdPQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFABRXKeIvGz6F4m0fSI9Fu7lNQu4raS+b91BCZA5UBiP3jfuzlV4AxkjIBW/8Ta0fGdz4f0HRrC7a1sobuWe91J7cYkeRQoCwSZx5ZOSR1oA6qimxlzEplVVkKjcqtuAPcA4GR74FOoA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAKwPHR1QeBdW/sG3+03zQFUi8pZSykgPtRvldthbCngnAIOa36KAPMPAOiWuieOJV8HWWqQaDLpyjUH1SxlgJuEKrAI2mRZD8nmZVf3ajGApYA+n0UUAFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQBFdXKWdpLcyrIyRIXYRRNK5AGeEUFmPsASa4X4bX+7UvE8Etjqlq15rM99btd6Xc26SQlIlDb5EVckg/KTu46V39FABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFUtZ1L+x9Fu9QFndXxtojILaziMksxHRVUdSTxV2igDg/h9Ot3qV/qeqxaj/wkGqIslz5+k3dtBbRJwlvG8saqQu4knOWJZsY4HeUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAcx8SNHvNe+HOs6dpkbTXcsG6KJZNhkZWDbA3YnbjPvXP+FdNsj8Q4dT8I+H7jQdIGlPFqCyac9gtxO0iGJTEyqXZAJMuAQN+N3JFej0UAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFI7iONnbJCgk7VJP4AcmlooA5H4eWN3/ZV7r+sWstrqevXbXk0E6FZIIx8kMRB5BWNVyOzFq66iigArm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GgDpKKKKAKWsXK2ej3M8ltd3KIh3xWSkzFTwSgUhiQMn5fm44ycCuK8GWQg8fajdaBa6rHolzYp9rn1iG4WeW7VsRhXuR5zKI92QSUBK7cEtXoVFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFUtZ1L+x9Fu9QFndXxtojILaziMksxHRVUdSTxV2igDg/h9Ot3qV/qeqxaj/wkGqIslz5+k3dtBbRJwlvG8saqQu4knOWJZsY4HeUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAef/EjUANT8NQQ2Gq3LWOtQXtw1ppVzOiQhJAW3xxlSQWHygk89KZ8SdUW5s/D8Vpp+r3Lrq2n6i4t9IupNkCThmLFYztYBSShw/tyK9DooAitLlLyziuYVlWOVQ6iaFonAPqjgMp9iAaloooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgArl/iPpF5rfgHULTTYjPdK0NxFCpGZTDMkuwZ4ydmPxrqKKAOHs7iXxT8R9L1e00/ULXT9J025R5b+yktWead4sRhJArHasRJYAryACecdxRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQB5/wDEjUANT8NQQ2Gq3LWOtQXtw1ppVzOiQhJAW3xxlSQWHygk89Kj8ar4Y1qG6XUfBt9qWpzWQWyuRoUryNvUlAs+z9yysed7IUPJx1r0SigDL8MW2o2fhLSbbXJjcanDZRJdylt2+UIA5z35zz3rUoooA5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xrpKAObvv+Sp6F/wBgXUv/AEfY10lcb4j1e20b4k6BcXkd5IjaTqKAWdlNdPnzrI8pErMBx1Ix0GeRV7/hPNI/58/EH/hOah/8YoA6Siub/wCE80j/AJ8/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/GKAOkorm/8AhPNI/wCfPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/xigDpK5u+/5KnoX/YF1L/0fY0f8J5pH/Pn4g/8JzUP/jFc/eeNNLb4k6NcC11zZHpN+hB0C+DktNZkYTydxHynJAwOASNwyAeiUVzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMUAdJRXN/8J5pH/Pn4g/8ACc1D/wCMUf8ACeaR/wA+fiD/AMJzUP8A4xQB0lFc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFABff8lT0L/sC6l/6Psa6SvO7zxppbfEnRrgWuubI9Jv0IOgXwclprMjCeTuI+U5IGBwCRuGeg/4TzSP+fPxB/4Tmof/ABigDpKK5v8A4TzSP+fPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/wAYoA6Siub/AOE80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGKAOkrm77/kqehf9gXUv/R9jR/wnmkf8+fiD/wAJzUP/AIxXP3njTS2+JOjXAtdc2R6TfoQdAvg5LTWZGE8ncR8pyQMDgEjcMgHolFc3/wAJ5pH/AD5+IP8AwnNQ/wDjFH/CeaR/z5+IP/Cc1D/4xQB0lFc3/wAJ5pH/AD5+IP8AwnNQ/wDjFH/CeaR/z5+IP/Cc1D/4xQB0lFc3/wAJ5pH/AD5+IP8AwnNQ/wDjFH/CeaR/z5+IP/Cc1D/4xQAX3/JU9C/7Aupf+j7Gukrzu88aaW3xJ0a4FrrmyPSb9CDoF8HJaazIwnk7iPlOSBgcAkbhnoP+E80j/nz8Qf8AhOah/wDGKAOkorm/+E80j/nz8Qf+E5qH/wAYo/4TzSP+fPxB/wCE5qH/AMYoA6Siub/4TzSP+fPxB/4Tmof/ABij/hPNI/58/EH/AITmof8AxigDpK5u+/5KnoX/AGBdS/8AR9jR/wAJ5pH/AD5+IP8AwnNQ/wDjFc/eeNNLb4k6NcC11zZHpN+hB0C+DktNZkYTydxHynJAwOASNwyAeiUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFAHSUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFAHSUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFABff8lT0L/sC6l/6Psa6SvO7zxppbfEnRrgWuubI9Jv0IOgXwclprMjCeTuI+U5IGBwCRuGeg/wCE80j/AJ8/EH/hOah/8YoA6Siub/4TzSP+fPxB/wCE5qH/AMYo/wCE80j/AJ8/EH/hOah/8YoA6Siub/4TzSP+fPxB/wCE5qH/AMYo/wCE80j/AJ8/EH/hOah/8YoA6Subvv8Akqehf9gXUv8A0fY0f8J5pH/Pn4g/8JzUP/jFc/eeNNLb4k6NcC11zZHpN+hB0C+DktNZkYTydxHynJAwOASNwyAeiUVzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxQB0lFc3/wnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8ACc1D/wCMUAdJRXN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFABff8AJU9C/wCwLqX/AKPsa6SvO7zxppbfEnRrgWuubI9Jv0IOgXwclprMjCeTuI+U5IGBwCRuGeg/4TzSP+fPxB/4Tmof/GKAOkorm/8AhPNI/wCfPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/xigDpKK5v/AITzSP8Anz8Qf+E5qH/xij/hPNI/58/EH/hOah/8YoA6Subvv+Sp6F/2BdS/9H2NH/CeaR/z5+IP/Cc1D/4xXP3njTS2+JOjXAtdc2R6TfoQdAvg5LTWZGE8ncR8pyQMDgEjcMgHolFc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFAHSUVzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMUAdJRXN/8J5pH/Pn4g/8ACc1D/wCMUf8ACeaR/wA+fiD/AMJzUP8A4xQAX3/JU9C/7Aupf+j7GukribbXrTW/inpH2KHUIvJ0XUN323Tbi0zmeyxt85F3dOcZxxnqK7agDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAKKKKACiiigArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAooooAKKKKAObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoAKKKKACiiigArm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACiiigAooooA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiiigAooooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKKKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACiiigAooooAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAooooAKKKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgAooooAKKKKACubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACiiigAooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAKr399FptjJd3CTvHHjcttbyTyHJxwkaszdewPrViigDC0vxlo+r6z/AGVam/ivvIa4EN5plzakxhgpYGWNQRlgPxrdrifARGv6nrPjRzvj1Kb7JpzelnAWVSPZ5DK/uGWu2oAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAr399FptjJd3CTvHHjcttbyTyHJxwkaszdewPrWVpfjLR9X1n+yrU38V95DXAhvNMubUmMMFLAyxqCMsB+NbtcT4CI1/U9Z8aOd8epTfZNOb0s4CyqR7PIZX9wy0AdtRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABTJZY4IXmnkWOKNSzu7YVQOSST0FPrjvi2Zh8JfEPkHB+y/vDtLAR7h5mQOSNm7PtQBtaN4n0zX5Cul/bJE2CRZ5NPnihlQ9GjldAkgOQQVJyORxzWvXEaVfalpvxGtNDOvTa7Y3ukyXrG4igVrYrIioytDGg2OHYYYE5Tg9c9vQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFAEN3d29hZzXd9PHb20CGSWaVgqooGSSTwABWXovi3R9funtdOmnW5SJZzBd2c1rI0bEgSKsqKWXIxuAIz3rG+LiM/wv1TAzGj28k47eStxG0ufbYGz7U3UHiu/jP4e+xOskkGi3stwUbOIpJIBET7FlfHrtPpQB2tFFFAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAVXvr+10zT577UbiO2tbdDJLNK21UUdSTVisLxpoM/ibwffaVZ3CW1zMEeGSRSyB0dXUMBztJUA+xNAEuieKtJ8QTzQabNOLiBFkkgurSW2lCNna+yVVYqcHDAY4PNbFedaS+tX/AMbBNqttp1s1hoLw3CafePchTLOjRh2aNNpIjcgYPCk5549FoAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAqarqlnomkXWp6pN5FnaRNNPLtLbEUZJwoJP4Cq2j+IrLXGkFjFqKeWoYm80y5tQQf7pljUN+GaTxPpthrPhfUNL1i5NrZX0JtpZVkVCok+UYLAjJJAGQeSK57RL3VdM+JM3hmfWJtasRpQvDLcxQrNaSCQIqExIilXUkjK5+Q8kUAdtRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABWRqnirRNF1bT9L1PUYoL/AFKQRWlty0kp55wASBwfmOBnjNa9cJ8Q7K1i1fwneR20KXU3iO0SWdYwHkVY5toZupA3HAPTJ9aAOg1vxhovh65FvqdxP53kG4eO2s5rloogceZIIkby0yDhmwDtbHQ417e4hu7aK4tZUmgmQPHLGwZXUjIYEcEEc5riNHuLaw+JnjuTVZYoUNtZXG6YgD7KsLgtz/CHEmewz71e+FcEtt8KPDcc6OjfYI2Cv1VSMqD+BFAHW1zd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQBBfX1vpthPe30oit4ELyOQTgD2HJPsOTWfo3ijSteubm20+W4W5tQrTW93aTW0qK2drbJVVtpwcHGODWhfXCWtlJLJcwWvAVZrg/IrE4XPIz8xAxkZziuG8Ppe2Xxh1KHXrmDUtSu9HilS6s4jBFbQRylREYizlSzyM4Yud21gAu3kA9AooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAqC+vrbTbCe91CeO3tbeMySzSNhUUDJJNT1y/xKuLG2+Gutvqtu9zatbeW8aTeUSXIUHeQdgBYEtg4AJwcYoAvaN4t0fXryWzsJrhLqOJZzb3dlNayGNiQHVZUUsuQRuGQD9a2q818MW+s6P8AFRLPxdqEet6ld6IWtryACIW0UboJEaIDne7qfMJ+YrgKmMV6VQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFACO6xxs8jBEUEszHAA9TWX4f8T6N4rs7i78PX8d/b29y9rJNEDs8xcZCkjDDkYZcg54JrQurW3vrSW1vYI7i3mQpLDKgdJFIwVKnggjsa474bIsc3jBI1CIviS4CqowAPKh4FAHbUUUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFI6LJGySKHRgQysMgj0NLRQBFaWlvYWcVrY28VtbQqEihhQIkajoAo4A9hUtFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFACOiyRskih0YEMrDII9DUdpaW9hZxWtjbxW1tCoSKGFAiRqOgCjgD2FS0UAFFFFAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQAUjKrqVcBlYYIIyCKWigDP0nw/o2gRyR6FpNjpiSkNItnbJCHI6EhQM1oUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAI6LJGySKHRgQysMgj0NUNJ8P6NoEckehaTY6YkpDSLZ2yQhyOhIUDNaFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABUF5ZWuo2ctpqFtDdW0y7ZIZ4w6OPQqeCKnooAp6Xo+maHZ/ZNF0600623F/JtIFiTcep2qAM8DmrlFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAEN3Z22oWctpf28V1bTKUlhmQOjqeoKngj61W0nQtJ0G3eDQ9LstNhkbe8dnbpCrNjGSFABOAOav0UAFFFFAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQAVj6p4Q8Na3efa9a8PaVqFztCedd2Ucr7R0G5lJxzWxRQBk3vhTw9qMdomoaDpl2lkgS1WezjcW6jGAmR8o4HAx0Fa1FFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAEV1a299aS2t7BHcW8yFJYZUDpIpGCpU8EEdjVTSdA0fQIZItC0mx0yOVt0iWdskIc9MkKBk1oUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFMmhiubeSC4jSWGVSkkcihldSMEEHqCO1PooAzdI8OaH4f87+wdG0/TPP2+b9itUh8zbnG7aBnGTjPqa0qKKACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAiurW3vrSW1vYI7i3mQpLDKgdJFIwVKnggjsazdK8JeG9CuzdaJ4f0vTrhkKGa0so4nKkgldygHGQOPateigAooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgDjfEd/c6d8SdAls9JvNVdtJ1FTDZvCrqPOsjuPmyIuOMcHPI464vf8JRq//QieIP8Av/p//wAlUX3/ACVPQv8AsC6l/wCj7GukoA5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAOb/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDm/+Eo1f/oRPEH/f/T//AJKrn7zxHqh+JOjSnwXriuuk36iEzWO9wZrMlh/pO3A2gHJB+YYB5x6JXN33/JU9C/7Aupf+j7GgA/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAPO7zxHqh+JOjSnwXriuuk36iEzWO9wZrMlh/pO3A2gHJB+YYB5x0H/CUav/0IniD/AL/6f/8AJVF9/wAlT0L/ALAupf8Ao+xrpKAOb/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA5v/hKNX/6ETxB/3/0//wCSq5+88R6ofiTo0p8F64rrpN+ohM1jvcGazJYf6TtwNoByQfmGAeceiVzd9/yVPQv+wLqX/o+xoAP+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAOb/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDzu88R6ofiTo0p8F64rrpN+ohM1jvcGazJYf6TtwNoByQfmGAecdB/wlGr/9CJ4g/wC/+n//ACVRff8AJU9C/wCwLqX/AKPsa6SgDm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAOb/4SjV/+hE8Qf9/9P/8AkqufvPEeqH4k6NKfBeuK66TfqITNY73BmsyWH+k7cDaAckH5hgHnHolc3ff8lT0L/sC6l/6PsaAD/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAOb/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA87vPEeqH4k6NKfBeuK66TfqITNY73BmsyWH+k7cDaAckH5hgHnHQf8JRq//QieIP8Av/p//wAlUX3/ACVPQv8AsC6l/wCj7GukoA5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAOb/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDm/+Eo1f/oRPEH/f/T//AJKrn7zxHqh+JOjSnwXriuuk36iEzWO9wZrMlh/pO3A2gHJB+YYB5x6JXN33/JU9C/7Aupf+j7GgA/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAPO7zxHqh+JOjSnwXriuuk36iEzWO9wZrMlh/pO3A2gHJB+YYB5x0H/CUav/0IniD/AL/6f/8AJVF9/wAlT0L/ALAupf8Ao+xrpKAOb/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA5v/hKNX/6ETxB/3/0//wCSq5+88R6ofiTo0p8F64rrpN+ohM1jvcGazJYf6TtwNoByQfmGAeceiVzd9/yVPQv+wLqX/o+xoAP+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukooA5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KrpKKAOb/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSq6SigDibbVLvUvinpH2zQtQ0jy9F1Db9tkt283M9lnb5Mr9Mc5x1GM847aubvv+Sp6F/2BdS/9H2NdJQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFFFZGqeKtE0XVtP0vU9Rigv9SkEVpbctJKeecAEgcH5jgZ4zQBr0Vha1400Pw/cvDqlzNGYkWSZ4rOaaO3RiQGldEKxg4PLkcAnpW4jrJGrxsHRgCrKcgj1FAC1zd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jQB0lFFFABRVTVdUs9E0i61PVJvIs7SJpp5dpbYijJOFBJ/AVW0fxFZa40gsYtRTy1DE3mmXNqCD/dMsahvwzQBqUUUUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUyWWOCF5p5FjijUs7u2FUDkkk9BQA+isjRvE+ma/IV0v7ZImwSLPJp88UMqHo0croEkByCCpORyOOa16ACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKyNU8VaJourafpep6jFBf6lIIrS25aSU884AJA4PzHAzxmo9b8YaL4euRb6ncT+d5BuHjtrOa5aKIHHmSCJG8tMg4ZsA7Wx0OADboqO3uIbu2iuLWVJoJkDxyxsGV1IyGBHBBHOakoA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiisjVPFWiaLq2n6XqeoxQX+pSCK0tuWklPPOACQOD8xwM8ZoA16KyNa8V6H4evNOtNY1GG2udTuEtrOA5Z5pGIAAUAnGSAWPAyMkZrXoAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKgvr6302wnvb6URW8CF5HIJwB7Dkn2HJrP0bxRpWvXNzbafLcLc2oVpre7tJraVFbO1tkqq204ODjHBoA16KKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgAoopksscELzTyLHFGpZ3dsKoHJJJ6CgB9FZGjeJ9M1+Qrpf2yRNgkWeTT54oZUPRo5XQJIDkEFScjkcc1r0AFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQAUVXv76LTbGS7uEneOPG5ba3knkOTjhI1Zm69gfWsrS/GWj6vrP9lWpv4r7yGuBDeaZc2pMYYKWBljUEZYD8aAN2iiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAKKKr31/a6Zp899qNxHbWtuhklmlbaqKOpJoAsUVj6J4q0nxBPNBps04uIEWSSC6tJbaUI2dr7JVVipwcMBjg81sUAFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQAUUjuscbPIwRFBLMxwAPU1l+H/E+jeK7O4u/D1/Hf29vcvayTRA7PMXGQpIww5GGXIOeCaANWiiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgArhPiHZWsWr+E7yO2hS6m8R2iSzrGA8irHNtDN1IG44B6ZPrXd1j6p4Q8Na3efa9a8PaVqFztCedd2Ucr7R0G5lJxzQBjePNQm1C1k8G6GFk1fWLZkkYruSytmyj3Eg9OoVf4m4HAYjqrK0i0/T7ezt8+VbxLEm45O1RgZ/AVk3fgfwnqEkb3/AIY0a6eKJYY2m0+JyiKMKoyvCgcAdBWxaWlvYWcVrY28VtbQqEihhQIkajoAo4A9hQBLXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAGV4n02w1nwvqGl6xcm1sr6E20sqyKhUSfKMFgRkkgDIPJFc9ol7qumfEmbwzPrE2tWI0oXhluYoVmtJBIEVCYkRSrqSRlc/IeSK7C7s7bULOW0v7eK6tplKSwzIHR1PUFTwR9araToWk6DbvBoel2WmwyNveOzt0hVmxjJCgAnAHNAF+iiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAK474tmYfCXxD5Bwfsv7w7SwEe4eZkDkjZuz7V2NIyq6lXAZWGCCMgigDidKvtS034jWmhnXptdsb3SZL1jcRQK1sVkRUZWhjQbHDsMMCcpweue3rP0nw/o2gRyR6FpNjpiSkNItnbJCHI6EhQM1oUAFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJRRRQBwnxDsrWLV/Cd5HbQpdTeI7RJZ1jAeRVjm2hm6kDccA9Mn1o0e4trD4meO5NVlihQ21lcbpiAPsqwuC3P8IcSZ7DPvXR6p4Q8Na3efa9a8PaVqFztCedd2Ucr7R0G5lJxzTr3wp4e1GO0TUNB0y7SyQJarPZxuLdRjATI+UcDgY6CgDI+FcEtt8KPDcc6OjfYI2Cv1VSMqD+BFdbRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFcJ8Q7K1i1fwneR20KXU3iO0SWdYwHkVY5toZupA3HAPTJ9a7usfVPCHhrW7z7XrXh7StQudoTzruyjlfaOg3MpOOaAOb+J1lahPD98LaEXbeIdLha4EY8wxi6BCFuu0Ek46ZJrvKxL7wX4W1NoDqXhrSLw28KwQm4sIpPKiXO1FyvCjJwBwM1rWlpb2FnFa2NvFbW0KhIoYUCJGo6AKOAPYUAS1zd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQBBfXCWtlJLJcwWvAVZrg/IrE4XPIz8xAxkZziuG8Ppe2Xxh1KHXrmDUtSu9HilS6s4jBFbQRylREYizlSzyM4Yud21gAu3nu7q1t760ltb2CO4t5kKSwyoHSRSMFSp4II7Gqmk6Bo+gQyRaFpNjpkcrbpEs7ZIQ56ZIUDJoA0KKKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgArjvi2Zh8JfEPkHB+y/vDtLAR7h5mQOSNm7PtXY0jKrqVcBlYYIIyCKAOJ0q+1LTfiNaaGdem12xvdJkvWNxFArWxWRFRlaGNBscOwwwJynB657es/SfD+jaBHJHoWk2OmJKQ0i2dskIcjoSFAzWhQAVzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jQB0lFFFABXE+AiNf1PWfGjnfHqU32TTm9LOAsqkezyGV/cMtdq6LJGySKHRgQysMgj0NR2lpb2FnFa2NvFbW0KhIoYUCJGo6AKOAPYUAS0UUUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABWF400GfxN4PvtKs7hLa5mCPDJIpZA6OrqGA52kqAfYmt2oLyytdRs5bTULaG6tpl2yQzxh0cehU8EUAcDpL61f8AxsE2q22nWzWGgvDcJp949yFMs6NGHZo02kiNyBg8KTnnj0Wqel6Ppmh2f2TRdOtNOttxfybSBYk3HqdqgDPA5q5QAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQBFdWtvfWktrewR3FvMhSWGVA6SKRgqVPBBHY1x3w2RY5vGCRqERfElwFVRgAeVDwK7G6tbe+tJbW9gjuLeZCksMqB0kUjBUqeCCOxrN0rwl4b0K7N1onh/S9OuGQoZrSyjicqSCV3KAcZA49qANeiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKAObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoAKKKKACiiigArm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACiiigAooooA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiiigAooooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKKKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACiiigAooooAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAooooAKKKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgAooooAKKKKACubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKACiiigAooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAooooAKKKKACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKKKACiiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAzdX8OaH4g8n+3tG0/U/I3eV9ttUm8vdjO3cDjOBnHoKzf+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAP+FceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8AiaKKAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImiigA/4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJoooAu6V4T8OaDdNdaHoGl6bcOhjaWzso4XZSQSpKgHGQDj2Fa9FFAH//2Q==)

Figure 5 - Original Image

This image uses values from 0 to 255 to represent the intensity values of its pixels.

To get the integral image, the algorithm moves through all the pixels and assign a new value for that pixel. This value is the sum of pixel values that are in a rectangular, where the pixel we are evaluating for is located at the bottom right of this rectangle. The rectangle extends to the images left and top side, bounded by a horizontal and vertical line starting from the pixel on evaluation. The image below illustrates this.

![Table

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAAAAAAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADNjEAAJKSAAIAAAADNjEAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTY6MDM6MjIAMjAyMTowODoxMyAxNjowMzoyMgAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+EL/2h0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOk1pY3Jvc29mdFBob3RvPSJodHRwOi8vbnMubWljcm9zb2Z0LmNvbS9waG90by8xLjAvIj48TWljcm9zb2Z0UGhvdG86SXRlbVN1YlR5cGU+THVtaWEuTGl2aW5nSW1hZ2U8L01pY3Jvc29mdFBob3RvOkl0ZW1TdWJUeXBlPjwvcmRmOkRlc2NyaXB0aW9uPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvIj48eG1wOkNyZWF0ZURhdGU+MjAyMS0wOC0xM1QxNjowMzoyMi42MTA8L3htcDpDcmVhdGVEYXRlPjwvcmRmOkRlc2NyaXB0aW9uPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIj48ZGM6Y3JlYXRvcj48cmRmOlNlcSB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6bGk+TWlraXlhcyBUZXNmYXllPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMAAgEBAQEBAgEBAQICAgICBAMCAgICBQQEAwQGBQYGBgUGBgYHCQgGBwkHBgYICwgJCgoKCgoGCAsMCwoMCQoKCv/bAEMBAgICAgICBQMDBQoHBgcKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCv/AABEIAhQCdgMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/AP38ooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKMj1ooAKKKKACmxKyjkdsL/wDq7U6igAooooAKKKKACgqpG0rx6UUUAFFFFABTfJjLbiD/AN9HHbt+H4U6igBvkoOmeuc59806iigAooooAKKa0Ubcle4PHtTgoHQUAFFFFABRUU0W3MsX3urDs39M9s1LQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFADcAc7qR8ZoGc4NeVfteftNeCP2RvgHrnxx8czq0Wlw/6HZediS/u3OILdOuS7/8AfCB3OAhxdChiMZiIUKKvObSX5B8OrOK+P/8AwUZ+Bv7PP7UfgX9lvxde/wDEy8Zf8f2oed+60Pedlp5/r9ol/dj/AJ5j95JiPmvokSR7eK/l9+M3xd8d/Hv4pa38ZPidq/27XPEF9Jd31z/7Tj/6Zxx/u44/+ecdfth/wRp/b5i/a1+BEfw/+IOrNN488E20drqkks2ZNSs/uQXmf43/AOWch/56Df8A8tBX6txt4Y4jhrIcPjqT53FWreTe0l5fY+S7s83B5gsRW5D7WByM0UD2or8mPSCgEkciiigAooooAKKKKACijOOtFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFACMNy4498iloooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACgkDrQpJHIr5x/4Kd3muW37Ki2eg+L/ABBoj6p8UvAOk3l/4X1690q/WyvfGWjWd3HHd2UsVxF5lvPLGTHIh2SkZxVQj7SpyAfRuxfSjYvpXxx/wxJ8MP8AorHx2/8AEn/Hf/y6o/4Yk+GH/RWPjt/4k/47/wDl1Xof2XX7ke0R9j7F9KNi+lfHH/DEnww/6Kx8dv8AxJ/x3/8ALqj/AIYk+GH/AEVj47f+JP8Ajv8A+XVP+y6/cPaI+x9i+lGxfSvjj/hiT4Yf9FY+O3/iT/jv/wCXVH/DEnww/wCisfHb/wASf8d//Lqj+y6/cPaI+x9i+lGxfSvzm/a+/Zp8OfDH4UaV4j8CfG/47WN9cfFDwRpUkv8Aw0r42k8yz1DxVpOn3kf7zVf+WlvPcR/9M/M/d/vK9S/4Yk+GH/RWPjt/4k/47/8Al1S/sut3F7RH2PsX0o2L6V8cf8MSfDD/AKKx8dv/ABJ/x3/8uqP+GJPhh/0Vj47f+JP+O/8A5dU/7Lr9x+0R9j7F9KNi+lfHH/DEnww/6Kx8dv8AxJ/x3/8ALqj/AIYk+GH/AEVj47f+JP8Ajv8A+XVH9l1+4e0R9j7F9KNi+lfHH/DEnww/6Kx8dv8AxJ/x3/8ALqvLf2vv2afDnwx+FGleI/Anxv8AjtY31x8UPBGlSS/8NK+NpPMs9Q8VaTp95H+81X/lpbz3Ef8A0z8z93+8pf2XW7i9oj9Gdi+lGxfSvjj/AIYk+GH/AEVj47f+JP8Ajv8A+XVH/DEnww/6Kx8dv/En/Hf/AMuqf9l1+4/aI+x9i+lG1Rzivjj/AIYk+GH/AEVj47f+JP8Ajv8A+XVH/DEnww/6Kx8dv/En/Hf/AMuqP7Lr9xe0R9iF8Hla/H3/AIKDal+0z/wVo/ac/wCFLfso+C7zWPh58Pr+SxbX5P3Glyaj/q7i5knk/dyGP/VpGBJJ5fmSR/6yvrq6/Yb+EV1byWlz8UvjnNDJHsljk/aa8dyRyR/+Dqq2j/sEfBLw7psOieHPHnxusbO0j2W1nY/tKeOo44Ix/wAs40j1mvf4dxVThrFSx1KCnXXwX2g+r83223Zz4iP1in7M/J79vD9hTxh+wX4w8NfD7x54zsNa1jW/Dv8Aat//AGTHJ9ns/wDSJI/Ljkk/eSfc/wBZ5cde0eFf2RP2+v8AglX8b9B/ai8N/DqTxZ4f0/y31DUPCksk8F3p8n/Hxb3Efl+Zb/uufMkj8uOTy/3knl1g/wDBZf4U6F8Jfjz4X0fw54i8XapHceE/Pkk8YeP9Y8Q3Ef8ApFx/q59WuLmSOP8A6ZxyeXX6qeFf+CcX7Pt34d068l+IXx53PYxPII/2pvH6J/qx/B/bVfq3EvHGcYLhjAVMXGFb6xCoqia3V/K1mun5Hm4fCUamKnyfYPaPg18XfBvxz+Guh/Fz4eatHfaL4gsUu7G46HZJ/wAs3GTskTBR4+zjHBBrr1I7Cvm7Qv8Agln+yt4Us/7P8K+JPjdp1t50k8lvp/7UHj6CNpH+/IRHrIy5/WtEf8E0/wBnc9PiR8fv/Er/AIh//L2v55rezdS9L4T3j6Bor5//AOHaf7PH/RSPj9/4lh8Q/wD5e0f8O0/2eP8AopHx+/8AEsPiH/8AL2pA+gKK+f8A/h2n+zx/0Uj4/f8AiWHxD/8Al7XjP7a37FHwz+E3wX0Xxb4B+L3x603ULv4ufD3RbiZf2ovHs++z1Pxjo2nXkP73WSMSWl3cRb/vx+Z5kflyAEAH3NRXz/8A8O0/2eP+ikfH7/xLD4h//L2j/h2n+zx/0Uj4/f8AiWHxD/8Al7QB9AUV8/8A/DtP9nj/AKKR8fv/ABLD4h//AC9o/wCHaf7PH/RSPj9/4lh8Q/8A5e0AfQFFfP8A/wAO0/2eP+ikfH7/AMSw+If/AMvaP+Haf7PH/RSPj9/4lh8Q/wD5e0AfQFFfDP7a37FHwz+E3wX0Xxb4B+L3x603ULv4ufD3RbiZf2ovHs++z1Pxjo2nXkP73WSMSWl3cRb/AL8fmeZH5cgBHs3/AA7T/Z4/6KR8fv8AxLD4h/8Ay9oA+gKK+f8A/h2n+zx/0Uj4/f8AiWHxD/8Al7R/w7T/AGeP+ikfH7/xLD4h/wDy9oA+gKK+f/8Ah2n+zx/0Uj4/f+JYfEP/AOXtH/DtP9nj/opHx+/8Sw+If/y9oA+gKK+f/wDh2n+zx/0Uj4/f+JYfEP8A+XteM/trfsUfDP4TfBfRfFvgH4vfHrTdQu/i58PdFuJl/ai8ez77PU/GOjadeQ/vdZIxJaXdxFv+/H5nmR+XIAQAfc1FfP8A/wAO0/2eP+ikfH7/AMSw+If/AMvaP+Haf7PH/RSPj9/4lh8Q/wD5e0AfQFFfP/8Aw7T/AGeP+ikfH7/xLD4h/wDy9o/4dp/s8f8ARSPj9/4lh8Q//l7QB9AUV8//APDtP9nj/opHx+/8Sw+If/y9o/4dp/s8f9FI+P3/AIlh8Q//AJe0AfQFFfDP7a37FHwz+E3wX0Xxb4B+L3x603ULv4ufD3RbiZf2ovHs++z1Pxjo2nXkP73WSMSWl3cRb/vx+Z5kflyAEezf8O0/2eP+ikfH7/xLD4h//L2gD6Aor5//AOHaf7PH/RSPj9/4lh8Q/wD5e0f8O0/2eP8AopHx+/8AEsPiH/8AL2gD6Aor5/8A+Haf7PH/AEUj4/f+JYfEP/5e0f8ADtP9nj/opHx+/wDEsPiH/wDL2gD6Aor5/wD+Haf7PH/RSPj9/wCJYfEP/wCXteM/trfsUfDP4TfBfRfFvgH4vfHrTdQu/i58PdFuJl/ai8ez77PU/GOjadeQ/vdZIxJaXdxFv+/H5nmR+XIAQAfc1FfP/wDw7T/Z4/6KR8fv/EsPiH/8vaP+Haf7PH/RSPj9/wCJYfEP/wCXtAH0BRXz/wD8O0/2eP8AopHx+/8AEsPiH/8AL2j/AIdp/s8f9FI+P3/iWHxD/wDl7QB9AUV8/wD/AA7T/Z4/6KR8fv8AxLD4h/8Ay9o/4dp/s8f9FI+P3/iWHxD/APl7QB9AUV8M/trfsUfDP4TfBfRfFvgH4vfHrTdQu/i58PdFuJl/ai8ez77PU/GOjadeQ/vdZIxJaXdxFv8Avx+Z5kflyAEezf8ADtP9nj/opHx+/wDEsPiH/wDL2gD6Aor5/wD+Haf7PH/RSPj9/wCJYfEP/wCXtH/DtP8AZ4/6KR8fv/EsPiH/APL2gD6Aor5//wCHaf7PH/RSPj9/4lh8Q/8A5e0f8O0/2eP+ikfH7/xLD4h//L2gD6Aor5//AOHaf7PH/RSPj9/4lh8Q/wD5e15R+1j+yd4E/Zw8BeE/i38H/iz8bbXW7P43fDmxX+1P2jvGurWk9re+NdGsbuCe0vdWlt7iOS3uLiN45I3GJD7UAfa9FFFABRRRQAUUUUAFFFFADW6ivnr/AIKgf8ms6b/2Wj4Zf+p3oNfQrdRXz1/wVA/5NZ03/stHwy/9TvQa0w/8aPqgNuiiivqDjCiiigAooooA8V/b6/5IXof/AGWr4b/+ptote1V4r+31/wAkL0P/ALLV8N//AFNtFr2qgAooooAKKKKACvFf2+v+SF6H/wBlq+G//qbaLXtVeK/t9f8AJC9D/wCy1fDf/wBTbRaAPaqKKKACiiigAooooA/KX/gvN/ycj4Q/7En/ANvLiv2v8Ff8ihpR/wCoXb/+gCvxN/4Lzzf8ZQ+FIf8AlnH4Fjk/8nLiv218NW4t/Den2iD5Eso0/wDHBX1nHn/JI5P/ANxfzic+B/3ioalFFFfk56gUUUUAFfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7QB9AUUUUAFFFFABRRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFFFFABRRRQAV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O0AfQFFFFABRRRQAUUUUAfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BQAUUUUAFFFFABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABRRRQAUUUUAfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFABRRRQAUUUUAFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtAH0BRRRQAUUUUAFFFFABRRRQA1uor56/4Kgf8ms6b/wBlo+GX/qd6DX0K3UV89f8ABUD/AJNZ03/stHwy/wDU70GtMP8Axo+qA26KKK+oOMK+CfDX7VX7U+ofsseB/wDgpjP8Z72fw/4w+IGlJffCWTQdO/sez8M6prMelW/2ef7P/aH9oRxz29x5klx5fmeZH5fl/wCr+9q+L/Bn7BX7S2l/CPwb+xDrN54Dj+Dvgv4g2WtWviS21m9k1zVNF0/Vf7Vs9KksPs32e2k+0R28clx9sk/d23+r8yT92AfaFFFFAHiv7fX/ACQvQ/8AstXw3/8AU20Wvaq8V/b6/wCSF6H/ANlq+G//AKm2i17VQAUUUUAfLPw7+LX7X8X/AAVI1L4KfGTxt4Xj8D6h8INR13wv4N8N6X5n2P7PrNtb295cXckf2iS4kt5P3kcfl20f+r/eeX9pk+pq+Xbv4QftsS/8FB7T9qj/AIVX8K/+EZs/BNx4M+zf8LQ1H+0JNOk1W2vP7R8v+wfL+0eXb/8AHl5nl+Z/y819RUAFeK/t9f8AJC9D/wCy1fDf/wBTbRa9qrxX9vr/AJIXof8A2Wr4b/8AqbaLQB7VRRRQAV8bax+0B8QfCH7cHgD4MfC/9uRPiprniDxxq0HxL+FVlpejfY/B+gx2dzJ9tk+xW/2zTZLeT+z7b/TLiT7TJc/89K+ya+YfiN8Af2wP2kfHHw903426D8L/AA/o/wAO/iXZeLI/GXhLxHqN3qmqfY5JPLt7ewubKOPTftH+ruP9MuP3clxH+88zzKAPp6iiigD8n/8AgvF/ydV4X/7EG2/9LLyv290P/kE2n/XtH/KvxC/4Lxf8nVeF/wDsQbb/ANLLyv290P8A5BNp/wBe0f8AKvquO/8Akksm/wAFT84nPgf96qfIv0UUV+UnqH56/se/tM/Ea7+N1n4X/bQ/bQ+OPhHxfrPxX8T6T4X+Gniv4NWeh+FNas4NRvhplna6tceGovtUkmnxQXCeRqZllPTvHX6FV8efEf8AZ2/bg/a48VfDXwb+03oHwj8N+D/hv8TtL8bXWv8AgXxNquo6hr15pFz9osLeOwutPt49Ljkl8uSUm7vCETyk3+Z5yfYdABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABXxf8XPE/wC1f+zR+1t8D9Iuv2wr/wAeH4ufEvUdF1r4Y6l4Q0ez0+00ZNOvL+S90x7a3F/GbL7Pbxv9rvLlJBcnpIY6+0K+JfgP+z5/wUL8L/te+KP2ofjt8Fvg14s1jxBqn9jaP4kh+M+swSeEvBv2iN49PsNNfw2YzOdguLiQ3EZubjGXijjijiAPtqiiigD5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCgAooooA+F/jjon7Vvwc/aq+A/wABfhj/AMFF/i14p17x540l1LxPovibw/4K/s+28I6XEJ9Ulk+xeHre4Bkkezso9kqESXvmZ/dkH7or5++EP7NXxH0v9uT4q/th/GTVtHvv7a0XS/CvwtstNnkkk0Lw7bJ9ouxNvijCXF5qEkksnl+YnlWtmN58uvoGgAr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2gD6AooooA+af+CpXjn9r/4YfsaeOPiP+yD4w8KeG9Y8O+E9Z1nVvFHiTTJb+fTrSy0y5uQbGz2GK4uZJ44owbhxHEjySeXcFBE/BfED9pj9oHx3pX7Kf7N/gb4nXXhbxP8AHbw7LrXjD4jabptncahYafpmj297eGygubeSzFzc3NxaReZJBJFHFLP5cXmeXJH67/wUB+HX7Q/xw/ZZ8afAf9nLwh4M1LUvH3hLVfDeoXnjbxleaRb6VBeWUtv9pT7Lp16bmRHk/wBURH0/1g6V4zB+yN+2tH4B/Z/+KMPhH4XWXxY/Z/nm0qx0FviFql1ofiXQbjSU0+8El/8A2PHcWNw7xx3EeLS4jjNtGn7zzSYwD0L9hT4vfG7Xfib8bP2Wvjp47uPGGqfB3x5Z2GkeOrjT7Syutb0nUNLttUtPtkVmkUH2mD7TJbySQQQRyCGMiPPmE/TVeB/sZ/s8fFf4Va78Tvjj8ftU0F/H3xb8bx67rmneF7i4n0zRbO2sLbTrDToJ7iOKS6MdtaI8lyYLfzZZZP3SACvfKAPn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gKACiiigD4X+OOiftW/Bz9qr4D/AX4Y/8ABRf4teKde8eeNJdS8T6L4m8P+Cv7PtvCOlxCfVJZPsXh63uAZJHs7KPZKhEl75mf3ZB+6K+fvhD+zV8R9L/bk+Kv7Yfxk1bR77+2tF0vwr8LbLTZ5JJNC8O2yfaLsTb4owlxeahJJLJ5fmJ5VrZjefLr6BoAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKAPmn/AIKleOf2v/hh+xp44+I/7IPjDwp4b1jw74T1nWdW8UeJNMlv59OtLLTLm5BsbPYYri5knjijBuHEcSPJJ5dwUET8F8QP2mP2gfHelfsp/s3+BviddeFvE/x28Oy614w+I2m6bZ3GoWGn6Zo9ve3hsoLm3ksxc3NzcWkXmSQSRRxSz+XF5nlyR+u/8FAfh1+0P8cP2WfGnwH/AGcvCHgzUtS8feEtV8N6heeNvGV5pFvpUF5ZS2/2lPsunXpuZEeT/VER9P8AWDpXjMH7I37a0fgH9n/4ow+EfhdZfFj9n+ebSrHQW+IWqXWh+JdBuNJTT7wSX/8AY8dxY3DvHHcR4tLiOM20afvPNJjAPQv2FPi98btd+Jvxs/Za+Onju48Yap8HfHlnYaR46uNPtLK61vSdQ0u21S0+2RWaRQfaYPtMlvJJBBBHIIYyI8+YT9NV4H+xn+zx8V/hVrvxO+OPx+1TQX8ffFvxvHruuad4XuLifTNFs7awttOsNOgnuI4pLox21ojyXJgt/Nllk/dIAK98oA+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6AoAKKKKAPzL+HP7df7UP8Awoz4I/8ABQ/xF+01/ami/Fr44WHg3X/g3NoelQaPodpqGq3GlRwWc0Vv/aLahZyRpJKZbmdJPLuP9HjzH5f6aV8P6/8A8E3dQ+OP7Vfhv41fEv8AY1/Z3+G9r4Z+IUXi/VvGHw/nk1TxV4vvLSX7Rp8dxdvo2n/YkF4kF5cZkvDKbZIuATLX3BQAV8//APBSv/k3bw7/ANnAfCf/ANWF4dr6Ar5//wCClf8Aybt4d/7OA+E//qwvDtAH0BRRRQAUUUUAFFFFABRRRQA1uor56/4Kgf8AJrOm/wDZaPhl/wCp3oNfQrdRXz1/wVA/5NZ03/stHwy/9TvQa0w/8aPqgNuiiivqDjCiiigAooooA8V/b6/5IXof/Zavhv8A+ptote1V4r+31/yQvQ/+y1fDf/1NtFr2qgAooooAKKKKACvFf2+v+SF6H/2Wr4b/APqbaLXtVeK/t9f8kL0P/stXw3/9TbRaAPaqKKKACiiigAooooA/Jf8A4LxST/8ADXXh+H+D/hXdt/6cLyv3KtYo7a2jii+6kQVfyr8Mv+C7v/J33h//ALJ3Zf8ApfqNfujH9xf90V9Vx9/yS+TL+5V/9Kgc+A/3qt8iaiiivyk9QKKKKACvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHaAPoCiiigAooooAKKKKAPn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gKACiiigAooooAK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AV8//APBSv/k3bw7/ANnAfCf/ANWF4doA+gKKKKACiiigAooooA+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6AoAKKKKACiiigAr5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2gD6AooooAKKKKACiiigD5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCgAooooAKKKKACvn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFfP/wDwUr/5N28O/wDZwHwn/wDVheHaAPoCiiigAooooAKKKKACiiigBrdRXzH/AMFY5vFFn+x9HeeDtNsdQ1aP4wfDdtLs9T1GS0gnuP8AhOdC8qN54o5XiTzDzII5Ng58uTGD9ON1FfPX/BUD/k1nTf8AstHwy/8AU70GtMP/ABo+qA8w/wCE9/4KNf8ARq3wT/8AD+az/wDMpR/wnv8AwUa/6NW+Cf8A4fzWf/mUr2qivqDjPFf+E9/4KNf9GrfBP/w/ms//ADKUf8J7/wAFGv8Ao1b4J/8Ah/NZ/wDmUr2qigDxX/hPf+CjX/Rq3wT/APD+az/8ylH/AAnv/BRr/o1b4J/+H81n/wCZSvaqKAPjf9trxh+3vefBzR7fxR+zf8I7G1/4W94Akiks/jhqs8klx/wmWi/Z4/Ll8Mx/u5Ljy45JP+WcckknlyeX5Unr3/Ce/wDBRr/o1b4J/wDh/NZ/+ZSj9vr/AJIXof8A2Wr4b/8AqbaLXtVAHiv/AAnv/BRr/o1b4J/+H81n/wCZSj/hPf8Ago1/0at8E/8Aw/ms/wDzKV7VRQB4r/wnv/BRr/o1b4J/+H81n/5lKP8AhPf+CjX/AEat8E//AA/ms/8AzKV7VRQB4r/wnv8AwUa/6NW+Cf8A4fzWf/mUryH9trxh+3vefBzR7fxR+zf8I7G1/wCFveAJIpLP44arPJJcf8Jlov2ePy5fDMf7uS48uOST/lnHJJJ5cnl+VJ9kV4r+31/yQvQ/+y1fDf8A9TbRaAD/AIT3/go1/wBGrfBP/wAP5rP/AMylH/Ce/wDBRr/o1b4J/wDh/NZ/+ZSvaqKAPFf+E9/4KNf9GrfBP/w/ms//ADKUf8J7/wAFGv8Ao1b4J/8Ah/NZ/wDmUr2qigDxX/hPf+CjX/Rq3wT/APD+az/8ylH/AAnv/BRr/o1b4J/+H81n/wCZSvaqKAPxt/4LEap8ZdZ/aZ0W8+OfgTwv4c1n/hBbeO1sfCXi241q3kt/tl5+8kuLnTrKSOTzPM/d+X/yzj/efvP3f69J8R/+CpO0Y/Y5+AP3R/zcprn/AMxtflZ/wXd/5O+8P/8AZO7L/wBL9Rr90Y/uL/uivquPv+SXyb/BV/OBz4D/AHqt6o8E/wCFj/8ABUz/AKM3+AP/AIktrn/zGUf8LH/4Kmf9Gb/AH/xJbXP/AJjK+gaK/KT1D5+/4WP/AMFTP+jN/gD/AOJLa5/8xlH/AAsf/gqZ/wBGb/AH/wASW1z/AOYyvoGigD5+/wCFj/8ABUz/AKM3+AP/AIktrn/zGV4d+3344/4KQ3HwK0G28afssfBGxs/+F2fDV4rjTPj9rN5I9yPHGhG3i8uTwrEPLkuPKikk35ijkeQRzFBFJ95V8/8A/BSv/k3bw7/2cB8J/wD1YXh2gBP+Fj/8FTP+jN/gD/4ktrn/AMxlH/Cx/wDgqZ/0Zv8AAH/xJbXP/mMr6BooA+fv+Fj/APBUz/ozf4A/+JLa5/8AMZR/wsf/AIKmf9Gb/AH/AMSW1z/5jK+gaKAPn7/hY/8AwVM/6M3+AP8A4ktrn/zGUf8ACx/+Cpn/AEZv8Af/ABJbXP8A5jK+gaKAPg39vvxx/wAFIbj4FaDbeNP2WPgjY2f/AAuz4avFcaZ8ftZvJHuR440I28XlyeFYh5clx5UUkm/MUcjyCOYoIpPcf+Fj/wDBUz/ozf4A/wDiS2uf/MZS/wDBSv8A5N28O/8AZwHwn/8AVheHa+gKAPn7/hY//BUz/ozf4A/+JLa5/wDMZR/wsf8A4Kmf9Gb/AAB/8SW1z/5jK+gaKAPn7/hY/wDwVM/6M3+AP/iS2uf/ADGUf8LH/wCCpn/Rm/wB/wDEltc/+YyvoGigD5+/4WP/AMFTP+jN/gD/AOJLa5/8xleHft9+OP8AgpDcfArQbbxp+yx8EbGz/wCF2fDV4rjTPj9rN5I9yPHGhG3i8uTwrEPLkuPKikk35ijkeQRzFBFJ95V8/wD/AAUr/wCTdvDv/ZwHwn/9WF4doAT/AIWP/wAFTP8Aozf4A/8AiS2uf/MZR/wsf/gqZ/0Zv8Af/Eltc/8AmMr6BooA+fv+Fj/8FTP+jN/gD/4ktrn/AMxlH/Cx/wDgqZ/0Zv8AAH/xJbXP/mMr6BooA+fv+Fj/APBUz/ozf4A/+JLa5/8AMZR/wsf/AIKmf9Gb/AH/AMSW1z/5jK+gaKAPg39vvxx/wUhuPgVoNt40/ZY+CNjZ/wDC7Phq8Vxpnx+1m8ke5HjjQjbxeXJ4ViHlyXHlRSSb8xRyPII5igik9x/4WP8A8FTP+jN/gD/4ktrn/wAxlL/wUr/5N28O/wDZwHwn/wDVheHa+gKAPn7/AIWP/wAFTP8Aozf4A/8AiS2uf/MZR/wsf/gqZ/0Zv8Af/Eltc/8AmMr6BooA+fv+Fj/8FTP+jN/gD/4ktrn/AMxlH/Cx/wDgqZ/0Zv8AAH/xJbXP/mMr6BooA+fv+Fj/APBUz/ozf4A/+JLa5/8AMZXh37ffjj/gpDcfArQbbxp+yx8EbGz/AOF2fDV4rjTPj9rN5I9yPHGhG3i8uTwrEPLkuPKikk35ijkeQRzFBFJ95V8//wDBSv8A5N28O/8AZwHwn/8AVheHaAE/4WP/AMFTP+jN/gD/AOJLa5/8xlH/AAsf/gqZ/wBGb/AH/wASW1z/AOYyvoGigD5+/wCFj/8ABUz/AKM3+AP/AIktrn/zGUf8LH/4Kmf9Gb/AH/xJbXP/AJjK+gaKAPn7/hY//BUz/ozf4A/+JLa5/wDMZR/wsf8A4Kmf9Gb/AAB/8SW1z/5jK+gaKAPg39vvxx/wUhuPgVoNt40/ZY+CNjZ/8Ls+GrxXGmfH7WbyR7keONCNvF5cnhWIeXJceVFJJvzFHI8gjmKCKT3H/hY//BUz/ozf4A/+JLa5/wDMZS/8FK/+TdvDv/ZwHwn/APVheHa+gKAPn7/hY/8AwVM/6M3+AP8A4ktrn/zGUf8ACx/+Cpn/AEZv8Af/ABJbXP8A5jK+gaKAPn7/AIWP/wAFTP8Aozf4A/8AiS2uf/MZR/wsf/gqZ/0Zv8Af/Eltc/8AmMr6BooA+fv+Fj/8FTP+jN/gD/4ktrn/AMxleMftqeMf29dW+Gfg/S/jP+zd8I9B8Mv+0B8LTqereGfjdqurX9uf+E90LyxFaT+GbKOYGXy0ObiMohL/ALzAjf7or5//AOClf/Ju3h3/ALOA+E//AKsLw7QB9AUUUUAFFFFABRRRQAUUUUANbqK+ev8AgqB/yazpv/ZaPhl/6neg19Ct1FfPX/BUD/k1nTf+y0fDL/1O9BrTD/xo+qA26KKK+oOMKKK+ffEf7XPxs+F/xn8D+CfjV+zfo+h+FfiR43uPC/hfW9N+IP2/VI7j7Pc3FvJeWH2KOOKOSO0k/wBXeXHl+ZH5lAH0FRRRQB4r+31/yQvQ/wDstXw3/wDU20Wvaq8V/b6/5IXof/Zavhv/AOptote1UAFFFFABRXzP8Sv2tP2wPg38QPh74O+I37LvwzkT4iePLbw1pcfhv406jd6hH5kclxcXv2eTw7bR+Xb29vcXEn7yP/V+X/y0jr6YoAK8V/b6/wCSF6H/ANlq+G//AKm2i17VXiv7fX/JC9D/AOy1fDf/ANTbRaAPaqKKKACiivEfhV+038Zv2gvFE3iT4LfA7w/P8MrPxRe6LL4y8SePJLTUNQ+x3ElveXun2Ftp1zHc2/2iOSOPzLi3kk8uT93HH5ckgB7dRRRQB+Sn/Bd3/k77w/8A9k7sv/S/Ua/dGM/Kv+6K/C7/AILu/wDJ33h//sndl/6X6jX7ox/cX/dFfU8ff8kxk3+Cr/6VA58B/vVb1RNRRRX5UeoFFfGHgX/gqX4u8Tj4e/GfXf2bLXS/gn8V/H0fhHwL4+i8dm41iS6uLl7TT7y80kWQjt7O8uY/LjkjvJ5EFxbvJFH5knlfZ9ABXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QB9AUUUUAFFFfLnib9tL9oX4R/H/AMAeCfj5+yzo3hvwf8UvH134R8H69pPxIOpaxHeR217eW0l/pg06OC3iuILCX54Ly48rzI/M/wBgA+o6KKKAPn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCgAooooAKK+KfDf/BUbxz4j1fwf8S3/Zp0mP4R+O/jXc/DLQfFEPxEMniSLUUvb3TkuJ9FOnxxR25vLOTITUJLiOCQSmLiSNPtagAr5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2gD6AooooAKKK+X/hN/wUI1v4rf8FDNd/YcH7M/izw9pOjfD+98QWXxA8VP/Z51yW01WPTp0tNPkjM5tN8oMd5I8fmkOY43i8u4kAPqCiiigD5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4dr6AoAKKKKACivinw3/wVG8c+I9X8H/Et/2adJj+Efjv413Pwy0HxRD8RDJ4ki1FL2905LifRTp8cUdubyzkyE1CS4jgkEpi4kjT7WoAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACiivl39k39rz9qv9rO7m8d6T+zF8PNF+HNv488QeG5daufjFez635el6readJcf2YNCFvmSS03iP7bxHIDvyMUAfUVFFFAHz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AUAFFFFABRXxT4b/wCCo3jnxHq/g/4lv+zTpMfwj8d/Gu5+GWg+KIfiIZPEkWope3unJcT6KdPjijtzeWcmQmoSXEcEglMXEkafa1ABXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QB9AUUUUAFFFFABRRRQAUUUUANbqK+ev+CoH/JrOm/8AZaPhl/6neg19Ct1FfPX/AAVA/wCTWdN/7LR8Mv8A1O9BrTD/AMaPqgNuiiivqDjCvhnxzYWHxR/ar+Gfxb/Z3+EPxssfiZpPxJ/4qwfEzQdefw/oGhSfu9b+zyasJdKtpJLdPLt5NHk8yWSSP/WW8txX3NRQAUUUUAeK/t9f8kL0P/stXw3/APU20Wvaq8V/b6/5IXof/Zavhv8A+ptote1UAFFFFAHzl4N8G+NfjJ/wUY8TfGbxv4O1jTfDPwj8Lx+F/hzJqVhJBHqmo6h5d5rGo2/mf6yOOOOzso5I/wDp8r6NoooAK8V/b6/5IXof/Zavhv8A+ptote1V4r+31/yQvQ/+y1fDf/1NtFoA9qooooAK/Ln4VfsoQ+DfBfgD4M+CP2RvEGj/ALRHg/45x3eqfFr/AIQO5t4/7Bj12S4uNR/4SKS2+z3NncaVJ9n+xfaJJP8ASPs32b93JX6jUUAFFFFAH5L/APBcMfaf21fD9nc/PH/wgunR/wDk5e1+6EZ+Uf7v9K/C/wD4Ldf8nw+Hf+xK07/0svK/dCP7o/3f6V9Xx9/yTeTf4Kn5wObL/wDeq3qiSiiivyg9U/Le9/Y40T4h+Pfhf+yh+yb42/aQT4b+B/jlZeMtW8J+PPh7LoXg/wAK6fpmrSao8Frf6jotlqGpeZcYtra3jvLyOMXPm4EdtHJH+pFFFABXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCvn//AIKV/wDJu3h3/s4D4T/+rC8O0AfQFFFFABX5y/ETSrD4v/tmfCf4y/su/BH4+WPxa0X4qAeMf+FueHPEr+HPDnhuTzLfX/sk+s+bo9tLJbII7eTQ5PNlkkjHmSW0lxn9GqKACiiigD5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4dr6AoAKKKKAPx5+F/wCz949t/jN4A/aH8P8AwF+J2l/thz/He4u/iJJcfCO9tfBNppV3qP2TWJI76Sz/ALEjt/7Dth5eo2dx/at6fKjklkklkt6/YaiigAr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2gD6AooooAK+C77426dP/wAFsNK+JEXwg+Mn/COW/wAFdQ8Az+JP+FC+K/7OGuSeJbKSOP7X/Zvl/ZvKjkk+2eZ9j2fP5uOa+9KKACiiigD5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCgAooooA/Hn4X/s/ePbf4zeAP2h/D/wABfidpf7Yc/wAd7i7+Iklx8I7218E2mlXeo/ZNYkjvpLP+xI7f+w7YeXqNncf2renyo5JZJJZLev2GoooAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACvzU+I3wt+CXxl/aP+EfjX9hf9gnxh8KPizpfxostf8Aid48l+B934P+z6FHcSf23bahq0ltFa619sjkeIR29xeCaSQXAJSMyD9K6KACiiigD5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCgAooooA/Hn4X/s/ePbf4zeAP2h/D/wF+J2l/thz/He4u/iJJcfCO9tfBNppV3qP2TWJI76Sz/sSO3/ALDth5eo2dx/at6fKjklkklkt6/YaiigAr5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4doA+gKKKKACiiigAooooAKKKKAGt1FfPX/BUD/k1nTf+y0fDL/1O9Br6FbqK+Y/+CsSeKbz9j+Oz8HalY6fq8nxg+G66Xeanp0l3BBcHxzoXlSSQRSRPKnmD/ViSPeBjzI85GmH/AI0fVAdlRXiv/CBf8FGv+jqfgn/4YPWf/mro/wCEC/4KNf8AR1PwT/8ADB6z/wDNXX1BxntVFeK/8IF/wUa/6Op+Cf8A4YPWf/mro/4QL/go1/0dT8E//DB6z/8ANXQB7VRXiv8AwgX/AAUa/wCjqfgn/wCGD1n/AOauj/hAv+CjX/R1PwT/APDB6z/81dAB+31/yQvQ/wDstXw3/wDU20Wvaq+N/wBtvwf+3vZfBzR5/FH7SHwjvrX/AIW94Ajijs/gfqsEkdx/wmWi/Z5PMl8TSfu47jy5JI/+WkcckfmR+Z5sfr3/AAgX/BRr/o6n4J/+GD1n/wCaugD2qivFf+EC/wCCjX/R1PwT/wDDB6z/APNXR/wgX/BRr/o6n4J/+GD1n/5q6APaqK8V/wCEC/4KNf8AR1PwT/8ADB6z/wDNXR/wgX/BRr/o6n4J/wDhg9Z/+augD2qvFf2+v+SF6H/2Wr4b/wDqbaLR/wAIF/wUa/6Op+Cf/hg9Z/8AmrryH9tvwf8At72Xwc0efxR+0h8I761/4W94Ajijs/gfqsEkdx/wmWi/Z5PMl8TSfu47jy5JI/8AlpHHJH5kfmebGAfZFFeK/wDCBf8ABRr/AKOp+Cf/AIYPWf8A5q6P+EC/4KNf9HU/BP8A8MHrP/zV0Ae1UV4r/wAIF/wUa/6Op+Cf/hg9Z/8Amro/4QL/AIKNf9HU/BP/AMMHrP8A81dAHtVFeK/8IF/wUa/6Op+Cf/hg9Z/+auj/AIQL/go1/wBHU/BP/wAMHrP/AM1dAHwD/wAFuv8Ak+Hw7/2JWnf+ll5X7oRn5R/u/wBK/Av/AIKlaN8arH9s3RdO+M/jrwvr2t/2Fp32XUfDng640mzji+0XPlxyWlzqN7JL+88z/l4r9dE+HP8AwVJIAX9sf4A9P+ja9c/+bKvrPEBW4cyb/BU/OBy5f/vVb1R9CUV8/f8ACuP+Cpn/AEeT8Af/ABGnXP8A5s6P+Fcf8FTP+jyfgD/4jTrn/wA2dfk56x9A0V8/f8K4/wCCpn/R5PwB/wDEadc/+bOj/hXH/BUz/o8n4A/+I065/wDNnQB9A18//wDBSv8A5N28O/8AZwHwn/8AVheHaT/hXH/BUz/o8n4A/wDiNOuf/NnXh37ffgb/AIKQ2/wK0G48aftT/BG+s/8Ahdnw1SK30z4A6zZyJcnxxoQt5fMk8VSjy47jypZI9mZY43jEkJcSxgH3lRXz9/wrj/gqZ/0eT8Af/Eadc/8Amzo/4Vx/wVM/6PJ+AP8A4jTrn/zZ0AfQNFfP3/CuP+Cpn/R5PwB/8Rp1z/5s6P8AhXH/AAVM/wCjyfgD/wCI065/82dAH0DRXz9/wrj/AIKmf9Hk/AH/AMRp1z/5s6P+Fcf8FTP+jyfgD/4jTrn/AM2dAC/8FK/+TdvDv/ZwHwn/APVheHa+gK+Df2+/A3/BSG3+BWg3HjT9qf4I31n/AMLs+GqRW+mfAHWbORLk+ONCFvL5kniqUeXHceVLJHszLHG8YkhLiWP3H/hXH/BUz/o8n4A/+I065/8ANnQB9A0V8/f8K4/4Kmf9Hk/AH/xGnXP/AJs6P+Fcf8FTP+jyfgD/AOI065/82dAH0DRXz9/wrj/gqZ/0eT8Af/Eadc/+bOj/AIVx/wAFTP8Ao8n4A/8AiNOuf/NnQB9A18//APBSv/k3bw7/ANnAfCf/ANWF4dpP+Fcf8FTP+jyfgD/4jTrn/wA2deHft9+Bv+CkNv8AArQbjxp+1P8ABG+s/wDhdnw1SK30z4A6zZyJcnxxoQt5fMk8VSjy47jypZI9mZY43jEkJcSxgH3lRXz9/wAK4/4Kmf8AR5PwB/8AEadc/wDmzo/4Vx/wVM/6PJ+AP/iNOuf/ADZ0AfQNFfP3/CuP+Cpn/R5PwB/8Rp1z/wCbOj/hXH/BUz/o8n4A/wDiNOuf/NnQB9A0V8/f8K4/4Kmf9Hk/AH/xGnXP/mzo/wCFcf8ABUz/AKPJ+AP/AIjTrn/zZ0AL/wAFK/8Ak3bw7/2cB8J//VheHa+gK+Df2+/A3/BSG3+BWg3HjT9qf4I31n/wuz4apFb6Z8AdZs5EuT440IW8vmSeKpR5cdx5UskezMscbxiSEuJY/cf+Fcf8FTP+jyfgD/4jTrn/AM2dAH0DRXz9/wAK4/4Kmf8AR5PwB/8AEadc/wDmzo/4Vx/wVM/6PJ+AP/iNOuf/ADZ0AfQNFfP3/CuP+Cpn/R5PwB/8Rp1z/wCbOj/hXH/BUz/o8n4A/wDiNOuf/NnQB9A18/8A/BSv/k3bw7/2cB8J/wD1YXh2k/4Vx/wVM/6PJ+AP/iNOuf8AzZ14d+334G/4KQ2/wK0G48aftT/BG+s/+F2fDVIrfTPgDrNnIlyfHGhC3l8yTxVKPLjuPKlkj2ZljjeMSQlxLGAfeVFfP3/CuP8AgqZ/0eT8Af8AxGnXP/mzo/4Vx/wVM/6PJ+AP/iNOuf8AzZ0AfQNFfP3/AArj/gqZ/wBHk/AH/wARp1z/AObOj/hXH/BUz/o8n4A/+I065/8ANnQB9A0V8/f8K4/4Kmf9Hk/AH/xGnXP/AJs6P+Fcf8FTP+jyfgD/AOI065/82dAC/wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+Df2+/A3/BSG3+BWg3HjT9qf4I31n/wuz4apFb6Z8AdZs5EuT440IW8vmSeKpR5cdx5UskezMscbxiSEuJY/cf8AhXH/AAVM/wCjyfgD/wCI065/82dAH0DRXz9/wrj/AIKmf9Hk/AH/AMRp1z/5s6P+Fcf8FTP+jyfgD/4jTrn/AM2dAH0DRXz9/wAK4/4Kmf8AR5PwB/8AEadc/wDmzo/4Vx/wVM/6PJ+AP/iNOuf/ADZ0AfQNfP8A/wAFK/8Ak3bw7/2cB8J//VheHaT/AIVx/wAFTP8Ao8n4A/8AiNOuf/NnXjH7avg39vXSfhn4P1P4z/tI/CPXvDKftAfC0anpPhn4I6rpN/cH/hPdC8sxXc/ia9jhAl8tzm3kLoCn7vIkQA+6KKKKACiiigAooooAKKKKAGt1FfPX/BUD/k1nTf8AstHwy/8AU70GvoVuor56/wCCoH/JrOm/9lo+GX/qd6DWmH/jR9UBt0UUV9QcYUUUUAFFFFAHiv7fX/JC9D/7LV8N/wD1NtFr2qvFf2+v+SF6H/2Wr4b/APqbaLXtVABRRRQAUUUUAFeK/t9f8kL0P/stXw3/APU20Wvaq8V/b6/5IXof/Zavhv8A+ptotAHtVFFFABRRRQAUUUUAfkx/wWP/AOT/APw7/wBi7pP/AKWXFfufH9xa/DD/AILH/wDJ/wD4d/7F3Sf/AEsuK/c+P/VrX1fiF/yTuTf9e5/+2HPgf94qfIkooor8oPUCiiigAr5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4doA+gKKKKACiiigAooooA+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6AoAKKKKACiiigAr5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2gD6AooooAKKKKACiiigD5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4dr6AoAKKKKACiiigAr5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4doA+gKKKKACiiigAooooA+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6AoAKKKKACiiigAr5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2gD6AooooAKKKKACiiigAooooAa3UV89f8ABUD/AJNZ03/stHwy/wDU70GvoVuor56/4Kgf8ms6b/2Wj4Zf+p3oNaYf+NH1QG3RRRX1BxhXz/8ADT9ubUviN+3JrH7H5/Z78UeH9K0vwRe67Y+NvEn+h/2xJb6jHp1xHb2Hl+Z9n/efu7mTy/M/5ZxyR+XJJ9AV8b3Xxk02b/grZpvjyL4Y/FT/AIR+3+EF74Ml8Qf8KW8Tf2f/AG1JrttJHH9o/s7y/s/lxySfbfM+zeX/AMtKAPsiiiigDxX9vr/kheh/9lq+G/8A6m2i17VXiv7fX/JC9D/7LV8N/wD1NtFr2qgArx/9tf8Aaq1L9kH4F6r8W9B+Bvijx/fWdje3cWieH4/Ljjjt7KS8kuLy7k/d2VvHHbyfvJP3n+rjjjkkk8uvYK8O/wCCjviyHRf2M/iN4PtfCHizXNV8YeA9e0XQdN8JeCNV1qS4vbjTrmOOOSPTbaT7NH5n/LSTy4/+mlAE/wAWv2vtT+Gn7I+lftLaB8B/FHi7Vdc8O29/pfg7wvH5n7y4svtv+kXcnlx2VvH5cnmXsn/fuSSSOOTtP2afi/8A8ND/ALOfgD4//wDCN/2P/wAJx4I0rxD/AGT9q+0fY/tllHcfZ/M8uPzPL8zy/M8uOvE9F+N2hWH/AATbsbO6+HnxQ+3f8IHH4Tk0T/hTfib+0P7V/sb/AFf2T+zvtH2fzP3f23y/s3mfu/Mrpv8AgmJ4j+1fsJ/CvwHqng/xZoes+C/hzoOheI9N8WeDdR0W4t9Rt9Kto7iOOO9to/tMccn/AC0j8yP/AKaUgPfK8V/b6/5IXof/AGWr4b/+ptote1V4r+31/wAkL0P/ALLV8N//AFNtFpge1UUUUAFfKelf8FJ/El/oGgfH66+ANnH8D/FHjyPwvo3jqPxl5msf6Ref2db6rcaZ9i8uLTpLz935n2ySTy5I5PL/AOWcf1ZX5y/D74ffFST9hv4a/wDBLb/hSfjyDxj4X+I2g6b4j1u68G3tvodvouj+Io9Vk1mPU5I/sdzHJb2kflxx3Elz5lz5flx+XJ5YB+jVFFFAH5Of8Fcf3v8AwUb8Owy/vI/7L0aPy5P+vmSv3Li/1an/AGa/DP8A4K2f8pH/AA7/ANgvRv8A0olr9zIv9Uv+7X1fiN/yT+Tf9e5/+2HPl/8AFqElFFFflB6h8h/Fb9tL9t/4F/En4ZeB/ip+yR8KWj+KHxHsvCmjR+F/jxql/qMXmRTXFxei2l8M28ckdvZ29xcSAzxj90I/MzImfryvk/wB4E8e/Hf/AIKjeMPjv8RfAuvaT4P+CPheLwl8LJtV014LfWdU1SOK81vVLfzQPNjjii0+yjkT935kd4K+sKACvn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2gD6AooooA8G/b7/bG1f9iX9nvWvjZ4d/Z/8AFXxI1HT9Nv7u30Hw3H5VtFFZ2Vxe3FzfX8o8jT7dIoJMyPmSSTZHFHLI6Rm/cfHX4+eNPgT4D+Jn7PX7P2k+ItW8cabZajPp/iDx5/ZOnaLbz2f2nfPeJZXNxIc7Ik8q0k3u/wA/lR5kHL/8FU/HC6D+wj8U/h9a+CPGniDWfG3w38Q+H/DmmeC/h7rHiGe51C40u4jgSSPTbW4+zxvI4j8yfy4snmQcV5z4T+MXwm1j9gv4W+Fviz8JP2lLHSYNL07w9r0ngb4f+OtB1jSNTs9OikxLb6TFb6x9mc+ZH9pt4pLN5E8t5cmPIB7Z+w/+1RJ+1p8KNY8Y6r8Om8K6/wCGfHeteEfFmgx6wb63ttU0y9ltLkW915cX2mDKZSQxxE940xXtlfJv/BI/4e+PPhd8CPFngm68Cax4b+HkHxI1V/gvpvijQf7N1tPDb+W6S38Ekcc/myXjXkkcl4n26WJ45LzNxJJX1lQB8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFABRRRQB8u+If21/2hfhV8dfAPg/9oP8AZJ0/wx4I+J/ji48KeE/Emk/EpdU1Wz1Hybi5tBqemx2UcFtHcR2k/wA9veXnluY43++SPqKvz28DfHiz/ac/b/034u/tF/CL41eGtB+GPiK80X4J+DL39nvxj9nudRn/ANCn8Vahfx6X9jjSWOSSK2jkk8u2t5JLiXy5ZMW/6E0AFfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7QB9AUUUUAeDft9/tjav+xL+z3rXxs8O/s/+KviRqOn6bf3dvoPhuPyraKKzsri9uLm+v5R5Gn26RQSZkfMkkmyOKOWR0jOr4l/a68C/D39jO0/bL+I2nXenaXP4P0/Wf7Fs5vtFzJc3kcXkadb/c+0XEs88dvH08ySSPpmuR/4Kp+OF0H9hH4p/D618EeNPEGs+Nvhv4h8P+HNM8F/D3WPEM9zqFxpdxHAkkem2tx9njeRxH5k/lxZPMg4ryrwX8EvjB+13+z/APs5+Jfg/wDEb/hApfgza28mteD/AIy/ATXfLv8AXrbS7e3trj7Lc3mjXBFn5lz5cn7y3kklSQfvLaMgA91/4J//ALVXir9tD9mu1+N/jr4Qw+BdaXxRruh6t4Xh8Qf2stlcaXqtzp0gF19nt/MzJaF/9WMA45r3Kvjv/gjX8M/2l/hJ+zBr2h/tGSWcFzcfF7xld6bpkPgO80a4ihn8S6lI9zILm9uPMguC4uLfATZbyxjfcf61/sSgD5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCgAooooA+XfEP7a/wC0L8Kvjr4B8H/tB/sk6f4Y8EfE/wAcXHhTwn4k0n4lLqmq2eo+TcXNoNT02Oyjgto7iO0n+e3vLzy3Mcb/AHyR9RV+e3gb48Wf7Tn7f+m/F39ov4RfGrw1oPwx8RXmi/BPwZe/s9+Mfs9zqM/+hT+KtQv49L+xxpLHJJFbRySeXbW8klxL5csmLf8AQmgAr5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2gD6AooooA8G/b7/bG1f8AYl/Z71r42eHf2f8AxV8SNR0/Tb+7t9B8Nx+VbRRWdlcXtxc31/KPI0+3SKCTMj5kkk2RxRyyOkZv3Hx1+PnjT4E+A/iZ+z1+z9pPiLVvHGm2Woz6f4g8ef2Tp2i289n9p3z3iWVzcSHOyJPKtJN7v8/lR5kHL/8ABVPxwug/sI/FP4fWvgjxp4g1nxt8N/EPh/w5pngv4e6x4hnudQuNLuI4Ekj021uPs8byOI/Mn8uLJ5kHFec+E/jF8JtY/YL+Fvhb4s/CT9pSx0mDS9O8Pa9J4G+H/jrQdY0jU7PTopMS2+kxW+sfZnPmR/abeKSzeRPLeXJjyAe2fsP/ALVEn7Wnwo1jxjqvw6bwrr/hnx3rXhHxZoMesG+t7bVNMvZbS5FvdeXF9pgymUkMcRPeNMV7ZXyb/wAEj/h748+F3wI8WeCbrwJrHhv4eQfEjVX+C+m+KNB/s3W08Nv5bpLfwSRxz+bJeNeSRyXifbpYnjkvM3EklfWVAHz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCvn/wD4KV/8m7eHf+zgPhP/AOrC8O19AUAFFFFAHy/8Jv8AgoRrfxW/4KGa7+w4P2Z/Fnh7SdG+H974gsviB4qf+zzrktpqsenTpaafJGZzab5QY7yR4/NIcxxvF5dxJ9QV8F33xt06f/gthpXxIi+EHxk/4Ry3+CuoeAZ/En/ChfFf9nDXJPEtlJHH9r/s3y/s3lRySfbPM+x7Pn83HNfelABXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCvn//AIKV/wDJu3h3/s4D4T/+rC8O0AfQFFFFABRRRQAUUUUAFFFFADW6ivnr/gqB/wAms6b/ANlo+GX/AKneg19Ct1FfPX/BUD/k1nTf+y0fDL/1O9BrTD/xo+qA26KKK+oOMKKKKACiiigDxX9vr/kheh/9lq+G/wD6m2i17VXiv7fX/JC9D/7LV8N//U20WvaqACiiigAooooAK8V/b6/5IXof/Zavhv8A+ptote1V4r+31/yQvQ/+y1fDf/1NtFoA9qooooAKKKKACiiigD8m/wDgrZ/ykf8ADv8A2C9G/wDSiWv3Mi/1S/7tfhp/wVJHm/8ABT/w5DL+8j8vQU8uT/r5r9y4v9Uv+7X1fiN/yIMm/wCvc/8A2w58v/i1CSiiivyg9QKKKKACvn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2gD6AooooAKKKKACiiigD5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCgAooooAKKKKACvn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHaAPoCiiigAooooAKKKKAPn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCgAooooAKKKKACvn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2gD6AooooAKKKKACiiigD5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCgAooooAKKKKACvn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHaAPoCiiigAooooAKKKKACiiigBrdRXzH/wAFYNfsfCn7H8fizVoLyS1034vfDm7uIdN0u5vLhkj8daDIfLt7eOWWd+OIo43kkPCDJAr6cbqK+ev+CoH/ACazpv8A2Wj4Zf8Aqd6DWlD+NH1QHmH/AA318Df+hE+Nf/iNPjf/AOUtH/DfXwN/6ET41/8AiNPjf/5S17VRX1Bxniv/AA318Df+hE+Nf/iNPjf/AOUtH/DfXwN/6ET41/8AiNPjf/5S17VRQB4r/wAN9fA3/oRPjX/4jT43/wDlLR/w318Df+hE+Nf/AIjT43/+Ute1UUAfG/7bf7bnwa8RfBvR9O0/wV8XI5I/i98P7v8A079n3xlZx+Xb+MtFuJP3lzpUcfmeXH+7j/1ksnlxx+ZJJHHXr3/DfXwN/wChE+Nf/iNPjf8A+UtH7fX/ACQvQ/8AstXw3/8AU20WvaqAPFf+G+vgb/0Inxr/APEafG//AMpaP+G+vgb/ANCJ8a//ABGnxv8A/KWvaqKAPFf+G+vgb/0Inxr/APEafG//AMpaP+G+vgb/ANCJ8a//ABGnxv8A/KWvaqKAPFf+G+vgb/0Inxr/APEafG//AMpa8h/bb/bc+DXiL4N6Pp2n+Cvi5HJH8Xvh/d/6d+z74ys4/Lt/GWi3En7y50qOPzPLj/dx/wCslk8uOPzJJI46+yK8V/b6/wCSF6H/ANlq+G//AKm2i0AH/DfXwN/6ET41/wDiNPjf/wCUtH/DfXwN/wChE+Nf/iNPjf8A+Ute1UUAeK/8N9fA3/oRPjX/AOI0+N//AJS0f8N9fA3/AKET41/+I0+N/wD5S17VRQB4r/w318Df+hE+Nf8A4jT43/8AlLR/w318Df8AoRPjX/4jT43/APlLXtVFAH45f8FB/i/4W+Iv/BQfQ/iR4d0fxRBptudG8228QeA9V0nUP3cv7zy7C9to7iT/AL9/vP8AlnX67D/gpV+zwEUf8K4+P3H/AFaj8Qv/AJRV+Wn/AAVF/wCUn3hz/uA/+lNfuUv+rX6V9V4jf8iXJ/8Ar2//AGw58v8A4tQ8D/4eWfs8f9E3+P3/AIif8Q//AJRUf8PLP2eP+ib/AB+/8RP+If8A8oq+gKK/KT1D5/8A+Hln7PH/AETf4/f+In/EP/5RUf8ADyz9nj/om/x+/wDET/iH/wDKKvoCigD5/wD+Hln7PH/RN/j9/wCIn/EP/wCUVeGft/f8FAfgf4s+Bfh/S9N8CfG6KSL41fDS8lk1P9mjx1ZxhLfxzoVxJiS50aOMylI38uLPmSyeXHEkkkkcZ+86+f8A/gpX/wAm7eHf+zgPhP8A+rC8O0AH/Dyz9nj/AKJv8fv/ABE/4h//ACio/wCHln7PH/RN/j9/4if8Q/8A5RV9AUUAfP8A/wAPLP2eP+ib/H7/AMRP+If/AMoqP+Hln7PH/RN/j9/4if8AEP8A+UVfQFFAHz//AMPLP2eP+ib/AB+/8RP+If8A8oqP+Hln7PH/AETf4/f+In/EP/5RV9AUUAfBn7f3/BQH4H+LPgX4f0vTfAnxuiki+NXw0vJZNT/Zo8dWcYS38c6FcSYkudGjjMpSN/Liz5ksnlxxJJJJHGfc/wDh5Z+zx/0Tf4/f+In/ABD/APlFR/wUr/5N28O/9nAfCf8A9WF4dr6AoA+f/wDh5Z+zx/0Tf4/f+In/ABD/APlFR/w8s/Z4/wCib/H7/wARP+If/wAoq+gKKAPn/wD4eWfs8f8ARN/j9/4if8Q//lFR/wAPLP2eP+ib/H7/AMRP+If/AMoq+gKKAPn/AP4eWfs8f9E3+P3/AIif8Q//AJRV4Z+39/wUB+B/iz4F+H9L03wJ8bopIvjV8NLyWTU/2aPHVnGEt/HOhXEmJLnRo4zKUjfy4s+ZLJ5ccSSSSRxn7zr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QAf8PLP2eP8Aom/x+/8AET/iH/8AKKj/AIeWfs8f9E3+P3/iJ/xD/wDlFX0BRQB8/wD/AA8s/Z4/6Jv8fv8AxE/4h/8Ayio/4eWfs8f9E3+P3/iJ/wAQ/wD5RV9AUUAfP/8Aw8s/Z4/6Jv8AH7/xE/4h/wDyio/4eWfs8f8ARN/j9/4if8Q//lFX0BRQB8Gft/f8FAfgf4s+Bfh/S9N8CfG6KSL41fDS8lk1P9mjx1ZxhLfxzoVxJiS50aOMylI38uLPmSyeXHEkkkkcZ9z/AOHln7PH/RN/j9/4if8AEP8A+UVH/BSv/k3bw7/2cB8J/wD1YXh2voCgD5//AOHln7PH/RN/j9/4if8AEP8A+UVH/Dyz9nj/AKJv8fv/ABE/4h//ACir6AooA+f/APh5Z+zx/wBE3+P3/iJ/xD/+UVH/AA8s/Z4/6Jv8fv8AxE/4h/8Ayir6AooA+f8A/h5Z+zx/0Tf4/f8AiJ/xD/8AlFXhn7f3/BQH4H+LPgX4f0vTfAnxuiki+NXw0vJZNT/Zo8dWcYS38c6FcSYkudGjjMpSN/Liz5ksnlxxJJJJHGfvOvn/AP4KV/8AJu3h3/s4D4T/APqwvDtAB/w8s/Z4/wCib/H7/wARP+If/wAoqP8Ah5Z+zx/0Tf4/f+In/EP/AOUVfQFFAHz/AP8ADyz9nj/om/x+/wDET/iH/wDKKj/h5Z+zx/0Tf4/f+In/ABD/APlFX0BRQB8//wDDyz9nj/om/wAfv/ET/iH/APKKj/h5Z+zx/wBE3+P3/iJ/xD/+UVfQFFAHwZ+39/wUB+B/iz4F+H9L03wJ8bopIvjV8NLyWTU/2aPHVnGEt/HOhXEmJLnRo4zKUjfy4s+ZLJ5ccSSSSRxn3P8A4eWfs8f9E3+P3/iJ/wAQ/wD5RUf8FK/+TdvDv/ZwHwn/APVheHa+gKAPn/8A4eWfs8f9E3+P3/iJ/wAQ/wD5RUf8PLP2eP8Aom/x+/8AET/iH/8AKKvoCigD5/8A+Hln7PH/AETf4/f+In/EP/5RUf8ADyz9nj/om/x+/wDET/iH/wDKKvoCigD5/wD+Hln7PH/RN/j9/wCIn/EP/wCUVeM/to/ts/Br4tfC7wh8PPCPgr4uWupal8fvhb9nuPE37PvjHRbCNk8eaFKRLfalpcFtD9zjzJU3vhF/eOAfuavn/wD4KV/8m7eHf+zgPhP/AOrC8O0AfQFFFFABRRRQAUUUUAFFFFADW6ivnr/gqB/yazpv/ZaPhl/6neg19Ct1FfPX/BUD/k1nTf8AstHwy/8AU70GtMP/ABo+qA26KKK+oOMKKz/Fvi3wr4D8LX3jbx54k0/RtH0u1ku9U1bVr+OC3s7eP/WSSSSfu446sWGs6PrOjweJdL1e3utNuLWOe1vre68y3kjk/eeZHJ/zzoAsUVg/Dn4ofDf4x+ELX4hfCD4haH4q8P3nmfYNb8N6zHf2dx5cnlyeXcRySRyfvI/LreoA8V/b6/5IXof/AGWr4b/+ptote1V4r+31/wAkL0P/ALLV8N//AFNtFr2qgAooooAKK4Xw3+03+zf4t+KF98DfCX7QngfVfGmnyyR3/g3TfFlncapZ+X/rPMtI5PMj8v8A6513VABXiv7fX/JC9D/7LV8N/wD1NtFr2qvFf2+v+SF6H/2Wr4b/APqbaLQB7VRRRQAUUVxPhv8AaW/Zv8Y/FC++Cfg34/eB9V8aaX5n9qeEtN8W2Vxqln5f+s8y0jk8yPy/+udAHbUUUUAfk/8A8FIB5v8AwVf8OQzHzI/7Q8Ox+XJ/11jr9yF/1a/Svw3/AOCj3/KWLw5/2EPD3/o2Ov3IX/Vr9K+q8Rv+RLk3/Xt/+2HPl/8AFqElFFFflJ6gUV4NpH/BTD/gnF4s8T2fgjwt+3/8E9U1rUtQhsdM0jTPixpFxd3lxJIEjgiiS4LySPIQnljkniveaACvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHaAPoCiiigAoorlx8UPhqPiV/wAKNHxF0H/hMl0P+2f+ET/tqD+0/wCy/P8As/277Jv837P537rzdnl+Z8mc8UAdRRRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFFFFABRXndr+1R+zLe/Gub9mey/aJ8BTfEi3XdceAIvGdm+txgW/2j5rASfaB+5/e8x/6v5+nNeiUAFfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7QB9AUUUUAFFFecaT+1Z+zF4g+M9/8As4eHf2iPAuofEDS42fUfA1j4us5datAiB3Mlikn2hMI6EnZwHBoA9HooooA+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gKACiiigAorwbSP+CmH/AATi8WeJ7PwR4W/b/wDgnqmtalqENjpmkaZ8WNIuLu8uJJAkcEUSXBeSR5CE8sck8V7zQAV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6Ar5/8A+Clf/Ju3h3/s4D4T/wDqwvDtAH0BRRRQAUUV5r4U/aw/Zf8AHPxd1H4AeDv2lfh/q3jzR2nGreCNL8YWNxrFiYj+8ElpHL58WzjfvjGMjNAHpVFFFAHz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AUAFFFYXjjx14Q+Gng3UvHvxF8Zab4d0PSbWS61bWtcv47WzsYEGXklnlxHHGOpdyBjP4AG7RXB/EL9or4CfCP4bW3xi+K/xx8G+F/CF79nNl4s8ReKLOx024E/zwGO6lkEb+YvKYP7wdM1ueAfiH4F+K3g7TfiF8NvG2j+ItB1a1FxputaBqUd5Z3cf/PSOeImORPcUAdBXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QB9AUUUUAFFFFABRRRQAUUUUANbqK+ev+CoH/JrOm/8AZaPhl/6neg19Ct1Br56/4Kgf8ms6b/2Wj4Z/+p3oNaYf+NH1QG3RRRX1Bxnzz/wVP+CPwr+Mn7DfxKu/ih4Vj1j/AIRP4feIta0G1ubqT7PHqMelXPl3Elv5nl3MkfmeZH5kcnlyeXJH+8j8yvMfjf431j/hjT4F/AEeHPHn/CM/EDwnp0HxB8SeCfAes69Jp+g2+nW8lxZf8Sm3uZI7i88yOyjkkj/1cl5J/rI46+m/j7+zx8Mf2m/Bcnw9+LX/AAkE+j3EUiX1joHjfVdF+2RyR+XJb3H9m3Nt9pjkjk/1cnmR1a+CHwQ8B/s++B4Phx8Nf+Eg/se3l/0W28QeLdR1qS3/AHccflx3GpXNzJHH5ccf7uOTy46kD53/AOCMPjLwh4i/ZQ1jQPB2gaxptro/xV8Z+Va6l4RvdJjjjk8Q6jJHHH9pto45PLj/AHckcf8Aq5P3cnlyfu6+t65v4WfCL4f/AAT8MP4K+GOh/wBl6dcaxqGqy25upLj/AEy7vJLy4k8yWST/AFlxPJJ/20rpKoDxX9vr/kheh/8AZavhv/6m2i17VXiv7fX/ACQvQ/8AstXw3/8AU20WvaqACiiigD4v/au0rxt4N/aP+AupfEb4V+E/CPwo8L/GmOPw5qXgXVJLvVLzWdUt7nTtPjuLSS2so9Ns5Li/k+0fZ5LzzJPL/dxx+ZJH9oV4/wCDv2Cv2XvAfjjSfHmjeENYnn8P6hJf+HNJ1bx3rN/o+h3EnmfvNP0y5vZLOyk/eSRx/Z7ePyo5PLj8uvYKS7AFeK/t9f8AJC9D/wCy1fDf/wBTbRa9qrxX9vr/AJIXof8A2Wr4b/8AqbaLTA9qooooAK+S/ihoPg/46ftkfCv4D/ALwfp9rpXwH8WyeMPHniTSbD7Pb6HcSadcx2+jW/l/u/tF59v+0XEf/LOOPzJP3kkdfWleHfD7/gnl+zT8KvEEniT4c/8ACxNHkk8Rya7dWNj8bvFUen3GoyXH2iS4ktP7R+zy+ZJ/rI5I/Lk/5aUAe40UUUAfk/8A8FIP+Usfhz/sIeHf/RsdfuRCeK/Df9vg/wDG4Lw5/wBjJ4V/9GW9fuRD0r6zxK/5FGTf9eP/AJA58v8A4lQkooor8nPUPj/48tP+1T/wUv8Ahv8AswWdzLc+EfgjYx/FD4jKuPLfWZDLZ+G7KTA/56JqGoeX/fsbaT/nma+wK4H4cfs+/Cj4TfELxx8VvA3hJrLX/iPrNvqfjTVJNQuLh9TuILWK0gJ82R/LSO3gjjSOPZGAOEBJz31ABXz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCvn/wD4KV/8m7eHf+zgPhP/AOrC8O0AfQFFFFABXwX8Nv2e/hJ8D/8AgvPcap8KfBcem33jL9mrXte8WalJdS3l5qt/J4o0795PcXEkkr7M+XHHv8uKONI4hHHGI6+9K+fT/wAE1P2Vz+0An7UTr8SG8cRySGPWm+Ofi3bHbvdi7eyEH9qfZxZeeiSGy8v7N8g/d9qAPoKiiigD5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCgAooooA/JDwHo63H/BA34C/EK7tpG+I1x8cPBviGG+aP/T38X3nj63j1CX1+0SG71COT/YMkZ4r9b68D8P/APBOb9kPw98XYPjLpPwqvF1Kz8VXHijTdKufFmqzaHY65PHIJNUt9Gkuf7Otrz9/OftEdukm+4kk3+ZJIT75QAV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6Ar5/8A+Clf/Ju3h3/s4D4T/wDqwvDtAH0BRRRQAV+RWv8Aw7/ai/Zz/Z6/Zp/ZY8e/shaxp3i7wb+1h4ekX4wWWv6LJpOum48Q3El5qFuIr3+1DJeafPcyXMclnHiOS48yQ+X+8/XWvGfBn7EH7Pfgn4uw/HW20vxVrXirT5byXRdS8efEbXPEUeiSXGUuH0+DVb24i055Iy8XmWyRnynMf+rPl0AezUUUUAfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gK+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BQAUUUUAfH/AMeWn/ap/wCCl/w3/Zgs7mW58I/BGxj+KHxGVceW+syGWz8N2UmB/wA9E1DUPL/v2NtJ/wA8zX2BXA/Dj9n34UfCb4heOPit4G8JNZa/8R9Zt9T8aapJqFxcPqdxBaxWkBPmyP5aR28EcaRx7IwBwgJOe+oAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACviH4s6H4M/aJ/bt+Dn7OP7NvgLS7PSf2cvG9z41+I/ivRNPjgtNAuJ9Mvbe38PW7RDy/tl49/8Aabi3/wCWdukcknzyxZ+3q+cfh3/wTD/ZR+DXiaTxV8J4fidoctx4ol8R3Wn2Px98Ypp93qs9x9onuJ7H+1fs85klO+RJIykuSJARQB9HUUUUAfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BQAV8q/8FhvgB8Jvjr/wT2+K+ofF7wbDrq+Dfhr4n1/w5aX11cG0g1GPRr1ILiS3DiK5kj8xnj8yOTypRHLHskjjkH1VXmH7R/7LXwf/AGrPh+3ws+NS+KLjQbiKWK+07w94+1nQl1CGSJ4pLe4OlXlu11A8bODBKXjweUoA828F/E74B/s+/wDBP34V/tJ/H2DT7ew8EfDXRrnS9Sm00XV3b3Fxp0Fslvp4wZDc3BkFvHHH+8l83y/46b/wS0+CPjj4M/s13urfFHwOvhHXviH8QfEHji78C28m6PwvHqmoS3MOm56CSON0Moj/AHf2iSfy/wB3g1Z1z/glr+yB4m+F3g/4O69pXxAvNF8B+KF8QeDvtHxw8W/a9Ev0t/s0Utvd/wBqfaYxFb7444xII4vMkMaJ5kmfU/gf8CPBHwD8O3fh7wJrXjK+ivLr7XNJ42+Ims+JLiOTywmEn1a8uZIk+T/Vo4TOTjnNAHfV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAH0BRRRQAUUUUAFFFFADeV5FNDEjIGKGJHLV8K/t6/8Ft/gj+zG198N/gaLPx142j8xJPs83/Er0yX/AKeJ4/8AWP8A9Mo/+2kkVeplGS5lnuKWGwNNzm+3TzZlWr08PT55n1l8afjx8Jf2d/BE3xE+Mnj+w8P6Pbqc3N9N/rX7JHGPnkf/AGEBJrwP9s74oWfxl/YV8L/FDTPDuoaXZ658Yvhndabb6xH5dwbV/Heg+XJJH/AXjxJ5fvX5K+Afir4r/wCCgf7ZXhe9/bW+PVna6DJqfn65qPiTWY7DT7TT4/3klvB+8jjj8zy/Lj8v/lpJ5lfqF/wUA/bB/ZA8Wfs36R4Q+H37SngHULi3+LHw8u003R/FFnK6Wdn4y0a5uJNiSf6uK3gkkk/uRxv6V9dxHwPW4XqYbD+9WrztOfIm4wT0Sv1e9/yOTD4yOJUz3SivLf8AhuD9jf8A6Oh8A/8AhV2f/wAco/4bg/Y3/wCjofAP/hV2f/xyuf8AsvMP+fM//AB+0onqVFeW/wDDcH7G/wD0dD4B/wDCrs//AI5R/wANwfsb/wDR0PgH/wAKuz/+OUf2XmH/AD4n/wCAD9pRPUqK8t/4bg/Y3/6Oh8A/+FXZ/wDxyj/huD9jf/o6HwD/AOFXZ/8Axyj+y8w/58T/APAA9pRMf9vr/kheh/8AZavhv/6m2i17VXyl+2r+1r+y34z+Duj6P4T/AGhPBeoXUfxa8AX8lvZeIreSSO3t/F2i3NxJ/rP9XHbxySSSf8s445K9b/4bg/Y3/wCjofAP/hV2f/xyj+ysx/58T/8AAA9pRPUqK8t/4bg/Y3/6Oh8A/wDhV2f/AMco/wCG4P2N/wDo6HwD/wCFXZ//AByj+y8w/wCfE/8AwAPaUT1KivLf+G4P2N/+jofAP/hV2f8A8co/4bg/Y3/6Oh8A/wDhV2f/AMco/svMP+fE/wDwAPaUT1KvFf2+v+SF6H/2Wr4b/wDqbaLWx/w3B+xv/wBHQ+Af/Crs/wD45Xkn7av7Wv7LfjP4O6Po/hP9oTwXqF1H8WvAF/Jb2XiK3kkjt7fxdotzcSf6z/Vx28ckkkn/ACzjjko/srMf+fE//AA9pRPq2ivLf+G4P2N/+jofAP8A4Vdn/wDHKP8AhuD9jf8A6Oh8A/8AhV2f/wAco/svMP8AnxP/AMAD2lE9Sory3/huD9jf/o6HwD/4Vdn/APHKP+G4P2N/+jofAP8A4Vdn/wDHKP7LzD/nxP8A8AD2lE9Sory3/huD9jf/AKOh8A/+FXZ//HKP+G4P2N/+jofAP/hV2f8A8co/svMP+fM//AA9pRPzx/b4H/G4Lw4P+pk8K/8Aoy3r9yFzj8K/B79sH4g+CviX/wAFYvCviv4deL9L1zSrjxJ4Zji1LSb+O4t5PLlt/wDlpHX7wx/d/Cvf8TqdWjlWUQqLX2H/AMiY5f8AxahJRRRX5MeoFFFFABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABRRRQAUUUUAfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFABRRRQAUUUUAFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtAH0BRRRQAUUUUAFFFFAHz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AUAFFFFABRRRQAV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAH0BRRRQAUUUUAFFFFAHz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BQAUUUUAFFFFABXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QB9AUUUUAFFFFABQenNFFAHlP7WX7ONv+1L8ENU+D3/Cytf8KDUv+Yr4bu/KkP8A0yk7SQPuxJGceYOM1+Ev7af/AATo/aM/Ye8SyW/xE8O/2j4ank2aX4w0mOSSwuP+mcn/AD7Sf9M5P+2fmV/RcVI6DNZPizwp4Z8Y6DdeFfGGgWWqabfwmC90/UrVJ4LiM/wSJJkOK+44J48zLg3EfuoKdF7wf+ff8DixeBp4qOp/Od+wj+zH4T/a+/aE034CeKfidceFZNYt7gaXqEWji68y4SPzPLkTzI/L8yNJP+2nl/8APSvrP9pP/ggrY/s/fDzTvHC/tOTap/aHxA8J+G/s6+EPI2f214h07RzcbzeSH919vMpj6SCMR/u8+YPWv2tP+CIGt+AfG9r+0p/wT01qTTda0O+j1W18F3111uY5PMT7HPJ/qv8ArnJ/38x+7P0V+1t4+1P4mfsQ+AfHOveHLjRNSv8A42fCOTWNHvYXSSwvP+FgeHvPgO/n5JN6/hX3fGfiRmWI9hjcixbVOa9+m4Q5oTXyvZ97207nFhMvppclaB8w/wDEM9pv/R48/wD4Qw/+TaP+IZ7Tf+jx5/8Awhh/8m1+p2V9aMr618V/xFDjj/oLf/gFP/5A7f7NwP8AIflj/wAQz2m/9Hjz/wDhDD/5No/4hntN/wCjx5//AAhh/wDJtfqdlfWjK+tH/EUOOP8AoLf/AIBT/wDkA/s3A/yH5Y/8Qz2m/wDR48//AIQw/wDk2j/iGe03/o8ef/whh/8AJtfqdlfWjK+tH/EUOOP+gt/+AU//AJAP7NwP8h+Nf7Sv/BBOy/Z8+HmneN1/adm1T+0PiB4S8Ni3HhDyNn9teIdO0c3G/wC2SH919vMpj6SCMR/u8+YPRv8AiGe03/o8ef8A8IYf/JtfZ/8AwUqI/wCGdvDnP/NwHwn/APVheHa9/wAr60f8RQ44/wCgt/8AgFP/AOQD+zcD/Iflj/xDPab/ANHjz/8AhDD/AOTaP+IZ7Tf+jx5//CGH/wAm1+p2V9aMr60f8RQ44/6C3/4BT/8AkA/s3A/yH5Y/8Qz2m/8AR48//hDD/wCTaP8AiGe03/o8ef8A8IYf/JtfqdlfWjK+tH/EUOOP+gt/+AU//kA/s3A/yH5Y/wDEM9pv/R48/wD4Qw/+Ta85/aV/4IJ2X7Pnw807xuv7Ts2qf2h8QPCXhsW48IeRs/trxDp2jm43/bJD+6+3mUx9JBGI/wB3nzB+ymV9a8A/4KVEf8M7eHOf+bgPhP8A+rC8O0f8RQ44/wCgt/8AgFP/AOQD+zcD/IfGH/EM9pv/AEePP/4Qw/8Ak2j/AIhntN/6PHn/APCGH/ybX6nZX1oyvrR/xFDjj/oLf/gFP/5AP7NwP8h+WP8AxDPab/0ePP8A+EMP/k2j/iGe03/o8ef/AMIYf/JtfqdlfWjK+tH/ABFDjj/oLf8A4BT/APkA/s3A/wAh+WP/ABDPab/0ePP/AOEMP/k2j/iGe03/AKPHn/8ACGH/AMm1+p2V9aPlPANH/EUOOP8AoLf/AIBT/wDkA/s3A/yH47/Gz/ghPoX7NWheF/ihq/7RE3iWym+Kngrw9qmijw0bGSa21fxLpelzlJ47yQxOkd87ggHlPTmv0G/4dq/s87ePiP8AH7/xK74hf/L2nf8ABSrP/DO3h3J/5r/8J/8A1YXh6voD/eFfN51xJnnEVSE8wruo4aK9v0sb0cPTw6tBHgI/4Jp/s8Y/5KR8fv8AxLD4h/8Ay9o/4dp/s8f9FI+P3/iWHxD/APl7X0BRXimx8/8A/DtP9nj/AKKR8fv/ABLD4h//AC9o/wCHaf7PH/RSPj9/4lh8Q/8A5e19AUUAfP8A/wAO0/2eP+ikfH7/AMSw+If/AMva8M/b+/4J+/A/wn8C/D+qaZ47+Nssk3xq+GlpLHqf7S/jm8jKXHjnQreTEdzrMkYlCSP5coHmRSeXJE8ckccg+86+f/8AgpX/AMm7eHf+zgPhP/6sLw7QAf8ADtP9nj/opHx+/wDEsPiH/wDL2j/h2n+zx/0Uj4/f+JYfEP8A+XtfQFFAHz//AMO0/wBnj/opHx+/8Sw+If8A8vaP+Haf7PH/AEUj4/f+JYfEP/5e19AUUAfP/wDw7T/Z4/6KR8fv/EsPiH/8vaP+Haf7PH/RSPj9/wCJYfEP/wCXtfQFFAHwZ+39/wAE/fgf4T+Bfh/VNM8d/G2WSb41fDS0lj1P9pfxzeRlLjxzoVvJiO51mSMShJH8uUDzIpPLkieOSOOQe5/8O0/2eP8AopHx+/8AEsPiH/8AL2j/AIKV/wDJu3h3/s4D4T/+rC8O19AUAfP/APw7T/Z4/wCikfH7/wASw+If/wAvaP8Ah2n+zx/0Uj4/f+JYfEP/AOXtfQFFAHz/AP8ADtP9nj/opHx+/wDEsPiH/wDL2j/h2n+zx/0Uj4/f+JYfEP8A+XtfQFFAHz//AMO0/wBnj/opHx+/8Sw+If8A8va8M/b+/wCCfvwP8J/Avw/qmmeO/jbLJN8avhpaSx6n+0v45vIylx450K3kxHc6zJGJQkj+XKB5kUnlyRPHJHHIPvOvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAB/w7T/AGeP+ikfH7/xLD4h/wDy9o/4dp/s8f8ARSPj9/4lh8Q//l7X0BRQB8//APDtP9nj/opHx+/8Sw+If/y9o/4dp/s8f9FI+P3/AIlh8Q//AJe19AUUAfP/APw7T/Z4/wCikfH7/wASw+If/wAvaP8Ah2n+zx/0Uj4/f+JYfEP/AOXtfQFFAHwZ+39/wT9+B/hP4F+H9U0zx38bZZJvjV8NLSWPU/2l/HN5GUuPHOhW8mI7nWZIxKEkfy5QPMik8uSJ45I45B7n/wAO0/2eP+ikfH7/AMSw+If/AMvaP+Clf/Ju3h3/ALOA+E//AKsLw7X0BQB8/wD/AA7T/Z4/6KR8fv8AxLD4h/8Ay9o/4dp/s8f9FI+P3/iWHxD/APl7X0BRQB8//wDDtP8AZ4/6KR8fv/EsPiH/APL2j/h2n+zx/wBFI+P3/iWHxD/+XtfQFFAHz/8A8O0/2eP+ikfH7/xLD4h//L2vDP2/v+CfvwP8J/Avw/qmmeO/jbLJN8avhpaSx6n+0v45vIylx450K3kxHc6zJGJQkj+XKB5kUnlyRPHJHHIPvOvn/wD4KV/8m7eHf+zgPhP/AOrC8O0AH/DtP9nj/opHx+/8Sw+If/y9o/4dp/s8f9FI+P3/AIlh8Q//AJe19AUUAfP/APw7T/Z4/wCikfH7/wASw+If/wAvaP8Ah2n+zx/0Uj4/f+JYfEP/AOXtfQFFAHz/AP8ADtP9nj/opHx+/wDEsPiH/wDL2j/h2n+zx/0Uj4/f+JYfEP8A+XtfQFFAHwZ+39/wT9+B/hP4F+H9U0zx38bZZJvjV8NLSWPU/wBpfxzeRlLjxzoVvJiO51mSMShJH8uUDzIpPLkieOSOOQe5/wDDtP8AZ4/6KR8fv/EsPiH/APL2j/gpX/ybt4d/7OA+E/8A6sLw7X0BQB8//wDDtP8AZ4/6KR8fv/EsPiH/APL2j/h2n+zx/wBFI+P3/iWHxD/+XtfQFFAHz/8A8O0/2eP+ikfH7/xLD4h//L2j/h2n+zx/0Uj4/f8AiWHxD/8Al7X0BRQB8/8A/DtP9nj/AKKR8fv/ABLD4h//AC9rxn9tH9ib4NfCX4XeEPiH4R8a/Fy61LTfj98Lfs9v4m/aC8Y61YSM/jzQoiZbHUtUntpvv8eZE+x8Ov7xAR9zV8//APBSv/k3bw7/ANnAfCf/ANWF4doA+gKKKKACiiigAooooAKMZ6iiigAr5/8A+ClY/wCMdfDvH/NwHwn/APVheHq+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABRRXwz8K7X9pTwN/wW81Lwd8Uv2rfEPi/QfEH7Pera5pvg2O3Gm+H9Djj8S2cVolvYRyP5lylvJJHLeyvJLKZP8AlnF5dvGAfc1FFFAHz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCvn//AIKV/wDJu3h3/s4D4T/+rC8O19AUAFFFFABRX5wfs5ahrX7Mfxn0Sf8A4KD+Bv2kNH8T+Lvjdr2l+CviJqvxyvNS8FX8l/qt7JoennTLPxFcR2wksngt4o7jT44vNCJnzPLr9H6ACvn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFfP/wDwUr/5N28O/wDZwHwn/wDVheHaAPoCiiigAor5a/4K36V8dNU/YS+JXiL4I/tI6x8M5PCvgXXtb1fVvC1nF/a19FaaVdyxW1veSSf8S7/SVieSdI3l8uJ44pIJH82Pzb9oTwr+0/8AGX9kv9lvxB8NvD/xa8Z2cN7ourfFvTvhn8Uj4a1vWNLk8NXic38mq6c8g/tCWzkkj+0An7/8NAH3dRXz1/wT3+LnwU+KHwf1jQ/hBp/xH02Xwj4y1Dw/4x8L/FfxNqOs69oOswFJJLa5vL69vXlHlyRSRyRXMtuY5Y/LevoWgD5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4dr6AoAKKKKACivzt+JfiSL4Yf8FFvg34F+C3xh+O1r4g134pawnxT1b4ra94htfB2raX/Z97J/ZunQasYtIurx7l7P7HFo0TyJFbzySfu45ZK/RKgAr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2gD6AooooAKKK/Ln9lP9sXTPidJ4V/bR/a08H/tHQ6Z47+Mdxovg3x5p3xFfTfAuiJJrNxp2j6XJo2nazby3Nv5kcEUl5e6XL5txcv5kv2fy/LAP1GooooA+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gKACiiigAor8uf2U/wBsXTPidJ4V/bR/a08H/tHQ6Z47+Mdxovg3x5p3xFfTfAuiJJrNxp2j6XJo2nazby3Nv5kcEUl5e6XL5txcv5kv2fy/L/UagAr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2gD6AooooAKKK/OD9nLUNa/Zj+M+iT/8FB/A37SGj+J/F3xu17S/BXxE1X45XmpeCr+S/wBVvZND086ZZ+IriO2Elk8FvFHcafHF5oRM+Z5dAH6P0UUUAfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BQAUUUUAFFfDPwrtf2lPA3/BbzUvB3xS/at8Q+L9B8Qfs96trmm+DY7cab4f0OOPxLZxWiW9hHI/mXKW8kkct7K8kspk/wCWcXl28f3NQAV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6Ar5/8A+Clf/Ju3h3/s4D4T/wDqwvDtAH0BRRRQAUV8tf8ABW/Svjpqn7CXxK8RfBH9pHWPhnJ4V8C69rer6t4Ws4v7WvorTSruWK2t7yST/iXf6SsTyTpG8vlxPHFJBI/mx+Y+PfiN8S/i0v7GH7Jl98UfFGl6P8WvCl1r/wASfEHh/wASXem61q9tpGh21wlnHqVtLHd2xuL27t5ZZIJElkjt5I/M8uWQSAH3nRXyn/wT517x34U+NX7Qn7J/iHx7r3inQvhb8QNOHgnVPFmuXGqanb6bqmjWWqf2fPd3Lvc3It7ie4EctxJJJ5UkcfmYjwPqygD5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCgAooooAKK/Ln9lP9sXTPidJ4V/bR/a08H/tHQ6Z47+Mdxovg3x5p3xFfTfAuiJJrNxp2j6XJo2nazby3Nv5kcEUl5e6XL5txcv5kv2fy/L/UagAr5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2gD6AooooAKKKKACiiigAooooAK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AV8//APBSv/k3bw7/ANnAfCf/ANWF4doA+gKKKKACvk+b9jH9sS5/b8tf22n/AGr/AIZ/Z7PwvceD4vCv/CldQ8z/AIR6XVItQeP7X/wkP/IQ/cJH9p8ryuPM+zf8s6+sKKACiiigD5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCgAooooA+U9Y/Yh/aS+M3jPwPbftYftZ6D4x8F/DvxpZ+K9H0fw78LP7F1TVdWsJvN0+TUr7+0biKVIJP3hjtLSz8yVI/uRgxP9WUUUAFfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gK+f/8AgpX/AMm7eHf+zgPhP/6sLw7QB9AUUUUAeMftu/Ab41/tO/s7+Iv2f/hJ8YfC/g2HxpoOoaF4k1TxJ4DuNcf+zry0lt5Ps8cWo2QinHmZEkhlT1jrkfAn7PX7efwy+Bvgr4X+Ef2yfhvDq/g2OPTFvrr4G3j6XqelR2UVvBHcWn9vfaEvI5I/N+0R3kcUgcxm36PX0rRQB4v+x1+yw/7L/hnxQ3iL4hzeLPGHxB8aXPirx34ll0tLGG/1Se3gt/8AR7QSSfZreO3tIIo4jJI4SMGSSWQvIfaKKKAPn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHa+gKACiiigD5X8UfsT/ALS/xq8W+DbH9qL9rfQfF3gbwB4/sfGGjaTovwt/sjW9TvdPuPtGmDUL8ajLbyJHJ5ckn2ays/Nkt4/9XH5kcn1RRRQAV8//APBSv/k3bw7/ANnAfCf/ANWF4dr6Ar5//wCClf8Aybt4d/7OA+E//qwvDtAH0BRRRQAV8X+Hf+CWPjfTtK0b4Cal+05Dd/Ajw78W/wDhPdD8Aw+C/K1qK4j1WTWYNLn1drySObTo9QfzBH9ijuPLjij+0YQmT7QooAKKKKAPn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHa+gKACiiigD4v8ADv8AwSx8b6dpWjfATUv2nIbv4EeHfi3/AMJ7ofgGHwX5WtRXEeqyazBpc+rteSRzadHqD+YI/sUdx5ccUf2jCEyfaFFFABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABXynrH7EP7SXxm8Z+B7b9rD9rPQfGPgv4d+NLPxXo+j+HfhZ/Yuqarq1hN5unyalff2jcRSpBJ+8MdpaWfmSpH9yMGJ/qyigAooooA+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6AoAKKKKAPk+b9jH9sS5/b8tf22n/av+Gf2ez8L3Hg+Lwr/AMKV1DzP+Eel1SLUHj+1/wDCQ/8AIQ/cJH9p8ryuPM+zf8s6+sKKKACvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHaAPoCiiigDxj9t34DfGv9p39nfxF+z/APCT4w+F/BsPjTQdQ0LxJqniTwHca4/9nXlpLbyfZ44tRshFOPMyJJDKnrHXlEX7Av7QV18K/hC95+014Rtfih8DdS/4t/40074UTx6ZLpcmnf2dcadf6ZLrMklyJYN8kkkF5bnzEt5EA8oiT6+ooA8V/ZK/Zc1j9nS38c+LfiD8Sv8AhMvHnxJ8ZSeJPG3iiHQ/7Nt57j7Nb2dtbWlqJZ5Le0t7S0t4I45J55Pkd3kcyE17VRRQB8//APBSv/k3bw7/ANnAfCf/ANWF4dr6Ar5//wCClf8Aybt4d/7OA+E//qwvDtfQFABRRRQB8X+Hf+CWPjfTtK0b4Cal+05Dd/Ajw78W/wDhPdD8Aw+C/K1qK4j1WTWYNLn1drySObTo9QfzBH9ijuPLjij+0YQmT7QoooAK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AV8//APBSv/k3bw7/ANnAfCf/ANWF4doA+gKKKKACiiigAooooAKKKKACvn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8zf8FUvCvhfx9+yfY+CPHfh+w1nQtY+NfwxsdX0fVLFLm0v7aXx7oMUkE8cvySxyRuY3jfgjPBoA+maK+ff+HT//AAS2/wCkaPwA/wDDNaH/API1H/Dp/wD4Jbf9I0fgB/4ZrQ//AJGoA+gqK+ff+HT/APwS2/6Ro/AD/wAM1of/AMjUf8On/wDglt/0jR+AH/hmtD/+RqAPoKivn3/h0/8A8Etv+kaPwA/8M1of/wAjUf8ADp//AIJbf9I0fgB/4ZrQ/wD5GoAd/wAFK/8Ak3bw7/2cB8J//VheHa+gK+Df2/f+CaH/AATf8G/AvQdY8Hf8E/PgjpV1N8a/hrYTXWm/CjRreVrW78caHbXFuXjtx+7lgmkikj6SxySRniQ17h/w6f8A+CW3/SNH4Af+Ga0P/wCRqAPoKivn3/h0/wD8Etv+kaPwA/8ADNaH/wDI1H/Dp/8A4Jbf9I0fgB/4ZrQ//kagD6Cor59/4dP/APBLb/pGj8AP/DNaH/8AI1H/AA6f/wCCW3/SNH4Af+Ga0P8A+RqAPoKvn/8A4KV/8m7eHf8As4D4T/8AqwvDtN/4dP8A/BLb/pGj8AP/AAzWh/8AyNXh/wC37/wTQ/4Jv+DfgXoOseDv+CfnwR0q6m+Nfw1sJrrTfhRo1vK1rd+ONDtri3Lx24/dywTSRSR9JY5JIzxIaAPvKivn3/h0/wD8Etv+kaPwA/8ADNaH/wDI1H/Dp/8A4Jbf9I0fgB/4ZrQ//kagD6Cor59/4dP/APBLb/pGj8AP/DNaH/8AI1H/AA6f/wCCW3/SNH4Af+Ga0P8A+RqAPoKivn3/AIdP/wDBLb/pGj8AP/DNaH/8jUf8On/+CW3/AEjR+AH/AIZrQ/8A5GoAd/wUr/5N28O/9nAfCf8A9WF4dr6Ar4N/b9/4Jof8E3/BvwL0HWPB3/BPz4I6VdTfGv4a2E11pvwo0a3la1u/HGh21xbl47cfu5YJpIpI+ksckkZ4kNe4f8On/wDglt/0jR+AH/hmtD/+RqAPoKivn3/h0/8A8Etv+kaPwA/8M1of/wAjUf8ADp//AIJbf9I0fgB/4ZrQ/wD5GoA+gqK+ff8Ah0//AMEtv+kaPwA/8M1of/yNR/w6f/4Jbf8ASNH4Af8AhmtD/wDkagD6Cr5//wCClf8Aybt4d/7OA+E//qwvDtN/4dP/APBLb/pGj8AP/DNaH/8AI1eH/t+/8E0P+Cb/AIN+Beg6x4O/4J+fBHSrqb41/DWwmutN+FGjW8rWt3440O2uLcvHbj93LBNJFJH0ljkkjPEhoA+8qK+ff+HT/wDwS2/6Ro/AD/wzWh//ACNR/wAOn/8Aglt/0jR+AH/hmtD/APkagD6Cor59/wCHT/8AwS2/6Ro/AD/wzWh//I1H/Dp//glt/wBI0fgB/wCGa0P/AORqAPoKivn3/h0//wAEtv8ApGj8AP8AwzWh/wDyNR/w6f8A+CW3/SNH4Af+Ga0P/wCRqAHf8FK/+TdvDv8A2cB8J/8A1YXh2voCvg39v3/gmh/wTf8ABvwL0HWPB3/BPz4I6VdTfGv4a2E11pvwo0a3la1u/HGh21xbl47cfu5YJpIpI+ksckkZ4kNe4f8ADp//AIJbf9I0fgB/4ZrQ/wD5GoA+gqK+ff8Ah0//AMEtv+kaPwA/8M1of/yNR/w6f/4Jbf8ASNH4Af8AhmtD/wDkagD6Cor59/4dP/8ABLb/AKRo/AD/AMM1of8A8jUf8On/APglt/0jR+AH/hmtD/8AkagD6Cr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7Tf8Ah0//AMEtv+kaPwA/8M1of/yNXh/7fv8AwTQ/4Jv+DfgXoOseDv8Agn58EdKupvjX8NbCa6034UaNbyta3fjjQ7a4ty8duP3csE0kUkfSWOSSM8SGgD7yor59/wCHT/8AwS2/6Ro/AD/wzWh//I1H/Dp//glt/wBI0fgB/wCGa0P/AORqAPoKivn3/h0//wAEtv8ApGj8AP8AwzWh/wDyNR/w6f8A+CW3/SNH4Af+Ga0P/wCRqAPoKivn3/h0/wD8Etv+kaPwA/8ADNaH/wDI1H/Dp/8A4Jbf9I0fgB/4ZrQ//kagB3/BSv8A5N28O/8AZwHwn/8AVheHa+gK+Df2/f8Agmh/wTf8G/AvQdY8Hf8ABPz4I6VdTfGv4a2E11pvwo0a3la1u/HGh21xbl47cfu5YJpIpI+ksckkZ4kNe4f8On/+CW3/AEjR+AH/AIZrQ/8A5GoA+gqK+ff+HT//AAS2/wCkaPwA/wDDNaH/API1H/Dp/wD4Jbf9I0fgB/4ZrQ//AJGoA+gqK+ff+HT/APwS2/6Ro/AD/wAM1of/AMjUf8On/wDglt/0jR+AH/hmtD/+RqAPoKvn/wD4KV/8m7eHf+zgPhP/AOrC8O03/h0//wAEtv8ApGj8AP8AwzWh/wDyNXh/7fv/AATQ/wCCb/g34F6DrHg7/gn58EdKupvjX8NbCa6034UaNbyta3fjjQ7a4ty8duP3csE0kUkfSWOSSM8SGgD7yor59/4dP/8ABLb/AKRo/AD/AMM1of8A8jUf8On/APglt/0jR+AH/hmtD/8AkagD6Cor59/4dP8A/BLb/pGj8AP/AAzWh/8AyNR/w6f/AOCW3/SNH4Af+Ga0P/5GoA+gqK+ff+HT/wDwS2/6Ro/AD/wzWh//ACNR/wAOn/8Aglt/0jR+AH/hmtD/APkagB3/AAUr/wCTdvDv/ZwHwn/9WF4dr6Ar4N/b9/4Jof8ABN/wb8C9B1jwd/wT8+COlXU3xr+GthNdab8KNGt5WtbvxxodtcW5eO3H7uWCaSKSPpLHJJGeJDXuH/Dp/wD4Jbf9I0fgB/4ZrQ//AJGoA+gqK+ff+HT/APwS2/6Ro/AD/wAM1of/AMjUf8On/wDglt/0jR+AH/hmtD/+RqAPoKivn3/h0/8A8Etv+kaPwA/8M1of/wAjUf8ADp//AIJbf9I0fgB/4ZrQ/wD5GoA+gq+f/wDgpX/ybt4d/wCzgPhP/wCrC8O03/h0/wD8Etv+kaPwA/8ADNaH/wDI1eN/tn/8E+P2CPgh8MfB/wAUvgv+xL8IfB/ibSf2gPhb/ZviLwv8NtK0+/tPN8eaFFII57e3SSPfHI8ZweUfnqRQB9zUUUUAFFFFABRRRQAUUUUAFfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7QB9AUUUUAFFFFABRRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFFFFABRRRQAV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O0AfQFFFFABRRRQAUUUUAfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BQAUUUUAFFFFABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABRRRQAUUUUAfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFABRRRQAUUUUAFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtAH0BRRRQAUUUUAFFFFAHz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AUAFFFFABRRRQAV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAH0BRRRQAUUUUAFFFFAHz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BQAUUUUAFFFFABXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QB9AUUUUAFFFFABRRRQAUUUUAFfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gK+f/8AgpX/AMm7eHf+zgPhP/6sLw7QB9AUUUUAFfkH8Of2lviRdftieBvhlqvxo+J1n8XX/ad1rTPGHxA1D4oXMnww1jw/b3Nz/wASKwtjevpcuoSWdxZ2cen29oNRt723kkuPL8uSWT9fK+HfCf8AwSk+Kmi/DbwP+yXr/wC1F4f1D4H+AfiJa+KNH8N2/wAMTB4muIrLVpNUsLK41r+0ZLfYlx5Aklj0+O4uIonQyRySyXFAH3FRRRQB8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFABRRRQB8M/Cu1/aU8Df8FvNS8HfFL9q3xD4v0HxB+z3q2uab4Njtxpvh/Q44/EtnFaJb2Ecj+ZcpbySRy3srySymT/lnF5dvH9zV8nzfsY/tiXP7flr+20/7V/wz+z2fhe48HxeFf+FK6h5n/CPS6pFqDx/a/wDhIf8AkIfuEj+0+V5XHmfZv+WdfWFABXz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCvn/wD4KV/8m7eHf+zgPhP/AOrC8O0AfQFFFFABXwz8aPA+t/AX9vP4B+E/gV+0Z8VNe8e+OvG2sal8SNC8SePtQ1bS7nwbHZ3Ml5cy6ZJJ/Z+lJFevpdvby2lvb/PIIv3m+SvuavkD4A/sPfto/BX9oDxd8drz9rH4W+KNS8deKI7rxRq2ufAvUf7X/sWKT/R9Gs7uPxKILa3t4vMSIC2IEkklxIkskkhkAPr+iiigD5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCgAooooA/Ln9lP9sXTPidJ4V/bR/a08H/tHQ6Z47+Mdxovg3x5p3xFfTfAuiJJrNxp2j6XJo2nazby3Nv5kcEUl5e6XL5txcv5kv2fy/L/Uavi/w7/wSx8b6dpWjfATUv2nIbv4EeHfi3/wnuh+AYfBfla1FcR6rJrMGlz6u15JHNp0eoP5gj+xR3HlxxR/aMITJ9oUAFfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gK+f/8AgpX/AMm7eHf+zgPhP/6sLw7QB9AUUUUAFfAPx4/Z08M+Gv25PgP+zh+zp8X/AI06fr2oa5P49+INxqH7RXjTU7e38K6QY99s9pe6rJbuL3ULiytv3kZBjF1xmvv6vE/g/wDso3Hw2/at+LH7WPi34ht4i1z4kRaNpujW/wDYxhj8OaHpsEnladG/mymTzLm4vLmST93vkuMeXiNKAPbKKKKAPn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCgAooooA/O34l+JIvhh/wUW+DfgX4LfGH47WviDXfilrCfFPVvitr3iG18Hatpf9n3sn9m6dBqxi0i6vHuXs/scWjRPIkVvPJJ+7jlkr9Eq+V/FH7E/wC0v8avFvg2x/ai/a30Hxd4G8AeP7Hxho2k6L8Lf7I1vU73T7j7Rpg1C/Goy28iRyeXJJ9msrPzZLeP/Vx+ZHJ9UUAFfP8A/wAFK/8Ak3bw7/2cB8J//VheHa+gK+f/APgpX/ybt4d/7OA+E/8A6sLw7QB9AUUUUAFfDPxo8D638Bf28/gH4T+BX7RnxU17x7468baxqXxI0LxJ4+1DVtLufBsdncyXlzLpkkn9n6UkV6+l29vLaW9v88gi/eb5K+5q+QPgD+w9+2j8Ff2gPF3x2vP2sfhb4o1Lx14ojuvFGra58C9R/tf+xYpP9H0azu4/Eogtre3i8xIgLYgSSSXEiSySSGQA+v6KKKAPn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHa+gKACvlr/grfpXx01T9hL4leIvgj+0jrHwzk8K+Bde1vV9W8LWcX9rX0VppV3LFbW95JJ/xLv9JWJ5J0jeXy4njikgkfzY/qWvGP23fgN8a/2nf2d/EX7P/wAJPjD4X8Gw+NNB1DQvEmqeJPAdxrj/ANnXlpLbyfZ44tRshFOPMyJJDKnrHQB5d8WdG+P3xf8A+CVvh/Ufhx+0xrvw/wBauvhPZ6p4n8YafaJda3eWw0UyzpbXdxJizuZZTH/pmySSMCTy/LkdLiLvv+CaXizxX42/4Jy/AHx3448UX+sa1rHwV8K3+tarq1/Lc3V/dS6RbPLcTSyfvJJJHfe7uSSTk561h2f7Ln7Y+n/sU237LFt+038M/wC2rfTR4fXxVJ8GtRNo+gjTvsnlfYf+Eh8z7bn959p+0eVj5Ps3/LSup/YV/Z7+LX7Jf7M3hP8AZq+Kfxe8N+MofAvhvTfD/hfV/D/gifQpG0+zs4raP7THLqN6Jbg+UHeSMxoc/wCrFAHttfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7QB9AUUUUAFflV4P+J3xzvv+CeHwv8A+CxH/DQPjp/iB4s+JvhrVNc8OzeNL9/Dlx4f1jxLb6N/YaaN5h0+BIrK8t/9Jjt/tP2i3+0eYZJJN/6q18X+EP8Aglv450DQvC37Oep/tI6fP8BfBHxKt/GPhz4f23w/+z6u32fUX1Sz0q71Y3slvcafBelJPLSwilkS2t43nI8wyAH2hRRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFfLX/BW/Svjpqn7CXxK8RfBH9pHWPhnJ4V8C69rer6t4Ws4v7WvorTSruWK2t7yST/AIl3+krE8k6RvL5cTxxSQSP5sf1LXjH7bvwG+Nf7Tv7O/iL9n/4SfGHwv4Nh8aaDqGheJNU8SeA7jXH/ALOvLSW3k+zxxajZCKceZkSSGVPWOgD54/aE8K/tP/GX9kv9lvxB8NvD/wAWvGdnDe6Lq3xb074Z/FI+Gtb1jS5PDV4nN/JqunPIP7Qls5JI/tAJ+/8Aw17T/wAE9/i58FPih8H9Y0P4Qaf8R9Nl8I+MtQ8P+MfC/wAV/E2o6zr2g6zAUkktrm8vr29eUeXJFJHJFcy25jlj8t6z/An7PX7efwy+Bvgr4X+Ef2yfhvDq/g2OPTFvrr4G3j6XqelR2UVvBHcWn9vfaEvI5I/N+0R3kcUgcxm36PXW/sdfssP+y/4Z8UN4i+Ic3izxh8QfGlz4q8d+JZdLSxhv9Unt4Lf/AEe0Ekn2a3jt7SCKOIySOEjBkklkLyEA9or5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2gD6AooooAKKKKACiiigAooooAK+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHaAPoCiiigAooooAKKKKAPn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gKACiiigAooooAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACiiigAooooA+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gKACiiigAooooAK+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHaAPoCiiigAooooAKKKKAPn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gKACiiigAooooAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACiiigAooooA+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gKACiiigAooooAK+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHaAPoCiiigAooooAKKKKAPn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gKACiiigAooooAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACiiigAooooAKKKKACvmX/gqZbeK739lLTbLwLrOn6drknxt+GKaRqWraXJeWltdf8J9oPlyz28U1u9xEsmC8aSxlxx5ked4+mq+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AJ/wrj/gqZ/0eT8Af/Eadc/+bOj/AIVx/wAFTP8Ao8n4A/8AiNOuf/NnX0DRQB8/f8K4/wCCpn/R5PwB/wDEadc/+bOj/hXH/BUz/o8n4A/+I065/wDNnX0DRQB8/f8ACuP+Cpn/AEeT8Af/ABGnXP8A5s6P+Fcf8FTP+jyfgD/4jTrn/wA2dfQNFAHwb+334G/4KQ2/wK0G48aftT/BG+s/+F2fDVIrfTPgDrNnIlyfHGhC3l8yTxVKPLjuPKlkj2ZljjeMSQlxLH7j/wAK4/4Kmf8AR5PwB/8AEadc/wDmzpf+Clf/ACbt4d/7OA+E/wD6sLw7X0BQB8/f8K4/4Kmf9Hk/AH/xGnXP/mzo/wCFcf8ABUz/AKPJ+AP/AIjTrn/zZ19A0UAfP3/CuP8AgqZ/0eT8Af8AxGnXP/mzo/4Vx/wVM/6PJ+AP/iNOuf8AzZ19A0UAfP3/AArj/gqZ/wBHk/AH/wARp1z/AObOvDv2+/A3/BSG3+BWg3HjT9qf4I31n/wuz4apFb6Z8AdZs5EuT440IW8vmSeKpR5cdx5UskezMscbxiSEuJY/vKvn/wD4KV/8m7eHf+zgPhP/AOrC8O0AJ/wrj/gqZ/0eT8Af/Eadc/8Amzo/4Vx/wVM/6PJ+AP8A4jTrn/zZ19A0UAfP3/CuP+Cpn/R5PwB/8Rp1z/5s6P8AhXH/AAVM/wCjyfgD/wCI065/82dfQNFAHz9/wrj/AIKmf9Hk/AH/AMRp1z/5s6P+Fcf8FTP+jyfgD/4jTrn/AM2dfQNFAHwb+334G/4KQ2/wK0G48aftT/BG+s/+F2fDVIrfTPgDrNnIlyfHGhC3l8yTxVKPLjuPKlkj2ZljjeMSQlxLH7j/AMK4/wCCpn/R5PwB/wDEadc/+bOl/wCClf8Aybt4d/7OA+E//qwvDtfQFAHz9/wrj/gqZ/0eT8Af/Eadc/8Amzo/4Vx/wVM/6PJ+AP8A4jTrn/zZ19A0UAfP3/CuP+Cpn/R5PwB/8Rp1z/5s6P8AhXH/AAVM/wCjyfgD/wCI065/82dfQNFAHz9/wrj/AIKmf9Hk/AH/AMRp1z/5s68O/b78Df8ABSG3+BWg3HjT9qf4I31n/wALs+GqRW+mfAHWbORLk+ONCFvL5kniqUeXHceVLJHszLHG8YkhLiWP7yr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QAn/AArj/gqZ/wBHk/AH/wARp1z/AObOj/hXH/BUz/o8n4A/+I065/8ANnX0DRQB8/f8K4/4Kmf9Hk/AH/xGnXP/AJs6P+Fcf8FTP+jyfgD/AOI065/82dfQNFAHz9/wrj/gqZ/0eT8Af/Eadc/+bOj/AIVx/wAFTP8Ao8n4A/8AiNOuf/NnX0DRQB8G/t9+Bv8AgpDb/ArQbjxp+1P8Eb6z/wCF2fDVIrfTPgDrNnIlyfHGhC3l8yTxVKPLjuPKlkj2ZljjeMSQlxLH7j/wrj/gqZ/0eT8Af/Eadc/+bOl/4KV/8m7eHf8As4D4T/8AqwvDtfQFAHz9/wAK4/4Kmf8AR5PwB/8AEadc/wDmzo/4Vx/wVM/6PJ+AP/iNOuf/ADZ19A0UAfP3/CuP+Cpn/R5PwB/8Rp1z/wCbOj/hXH/BUz/o8n4A/wDiNOuf/NnX0DRQB8/f8K4/4Kmf9Hk/AH/xGnXP/mzrw79vvwN/wUht/gVoNx40/an+CN9Z/wDC7PhqkVvpnwB1mzkS5PjjQhby+ZJ4qlHlx3HlSyR7MyxxvGJIS4lj+8q+f/8AgpX/AMm7eHf+zgPhP/6sLw7QAn/CuP8AgqZ/0eT8Af8AxGnXP/mzo/4Vx/wVM/6PJ+AP/iNOuf8AzZ19A0UAfP3/AArj/gqZ/wBHk/AH/wARp1z/AObOj/hXH/BUz/o8n4A/+I065/8ANnX0DRQB8/f8K4/4Kmf9Hk/AH/xGnXP/AJs6P+Fcf8FTP+jyfgD/AOI065/82dfQNFAHwb+334G/4KQ2/wACtBuPGn7U/wAEb6z/AOF2fDVIrfTPgDrNnIlyfHGhC3l8yTxVKPLjuPKlkj2ZljjeMSQlxLH7j/wrj/gqZ/0eT8Af/Eadc/8Amzpf+Clf/Ju3h3/s4D4T/wDqwvDtfQFAHz9/wrj/AIKmf9Hk/AH/AMRp1z/5s6P+Fcf8FTP+jyfgD/4jTrn/AM2dfQNFAHz9/wAK4/4Kmf8AR5PwB/8AEadc/wDmzo/4Vx/wVM/6PJ+AP/iNOuf/ADZ19A0UAfP3/CuP+Cpn/R5PwB/8Rp1z/wCbOvDv2+/A3/BSG3+BWg3HjT9qf4I31n/wuz4apFb6Z8AdZs5EuT440IW8vmSeKpR5cdx5UskezMscbxiSEuJY/vKvn/8A4KV/8m7eHf8As4D4T/8AqwvDtACf8K4/4Kmf9Hk/AH/xGnXP/mzo/wCFcf8ABUz/AKPJ+AP/AIjTrn/zZ19A0UAfP3/CuP8AgqZ/0eT8Af8AxGnXP/mzo/4Vx/wVM/6PJ+AP/iNOuf8AzZ19A0UAfP3/AArj/gqZ/wBHk/AH/wARp1z/AObOj/hXH/BUz/o8n4A/+I065/8ANnX0DRQB8G/t9+Bv+CkNv8CtBuPGn7U/wRvrP/hdnw1SK30z4A6zZyJcnxxoQt5fMk8VSjy47jypZI9mZY43jEkJcSx+4/8ACuP+Cpn/AEeT8Af/ABGnXP8A5s6X/gpX/wAm7eHf+zgPhP8A+rC8O19AUAfP3/CuP+Cpn/R5PwB/8Rp1z/5s6P8AhXH/AAVM/wCjyfgD/wCI065/82dfQNFAHz9/wrj/AIKmf9Hk/AH/AMRp1z/5s6P+Fcf8FTP+jyfgD/4jTrn/AM2dfQNFAHz9/wAK4/4Kmf8AR5PwB/8AEadc/wDmzrxj9tXwb+3rpPwz8H6n8Z/2kfhHr3hlP2gPhaNT0nwz8EdV0m/uD/wnuheWYrufxNexwgS+W5zbyF0BT93kSJ90V8//APBSv/k3bw7/ANnAfCf/ANWF4doA+gKKKKACiiigAooooAKKKKACvn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2gD6AooooAKKK+LPjR8Zv+CjPwL+Ovwc+FN38dPgv4wvvid8Ro9Mk8M6T8EdX0u7g0G3jkvNU1H7XJ4nuY4xb20YjD+RIPtF1boR+8oA+06KKKAPn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gKACiiigAor4s+NHxm/wCCjPwL+Ovwc+FN38dPgv4wvvid8Ro9Mk8M6T8EdX0u7g0G3jkvNU1H7XJ4nuY4xb20YjD+RIPtF1boR+8r7ToAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACiivh39mn/gpDf8A7W3x3j0fwN+118AfCGmTeNNS07RPg/rKnVPG/iLTbC4ljk1AbNYs/wCzjcxwT3EUBsLvyrYR3DySeaYogD7iooooA+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6AoAKKKKACivz/8ADn/BSz9qnVPgf4N/4KLS6F4Fk+A/jb4l6dodr4Oh0G9XxJp+hahrA0ay1x9TN2beV5LmS3ufsYsI8W9x5X2gyR+ZJ+gFABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABRRXwF8Pv+ClH7UWr/D74T/tp+M7D4fP8GPi78TrPwpp/hPS9GvovEHh+21DUJNP0zUZ9Skvfs9zm4EH2i3Fnb+VHcHEshi/eAH37RRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFFFFABRXwn+wf/AMFAPiv+1p8X9S8Oa7+2t+znZahpnxA8VaTdfA/SfCtxJ4uGn6Xqt5ZRyefJ4hzG8kVtHc+YbDZsk+5j56+7KACvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHaAPoCiiigAor55/4KQ/tFftLfsufsq+LPjB+zF8FNH8V69oeharqc914m1sWuk6LbWWnXF693coh+0XOTAIUt7cZeSVPMkt4/Mlj5D4h/tp/Ge/8I/s6/C74M6d4Zt/il+0BpZv4tY1/TLi60Xw3Y2mlR6hqd5JZx3MVxc8vBbRQfaIsSXkckkv7sxyAH1rRXz5+xh+0h8Xvix4r+KnwF/aD0vQY/Hnwh8bxaNrOreFbG4tdN1uyu7C31HT9Rgt7iW4e1MlvdeXJb/aLjy5Ldz5mJAE+g6APn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCgAooooAKK+QfiJ+0r+2P+z5+1N8H/AIcfFvxB8K/EGg/GX4hap4e0/wAGeFfDuoW+v6LZwafe6hHqP2641CSLUYoI7SMXP+hW/lm6jwem/wCvqACvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHaAPoCiiigAoor87/An/AAVT/aA8W/FnwWX1/wCFN3b+MP2gtV+G+ofAOz0W9XxxodnZXF5bT6rPdf2jJHKbeO3t9RuIv7Pjjjs7n/j4/wBXJKAfohRRRQB8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6Ar5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFABRRRQAUV8kfC39sj9qnxH/wVE1v9jz4nfArQPBvw/T4Ual4l8J3Taz9u1/U5LTXLfT/ts5gkNvbW1xHceZFbfvbgAB5JI3kNvF9b0AFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtAH0BRRRQAUUUUAFFFFABRRRQAV8//APBSv/k3bw7/ANnAfCf/ANWF4dr6Ar5//wCClf8Aybt4d/7OA+E//qwvDtAH0BRRRQAV8x/Cj4I/F/xX/wAFF/iJ+1f8cvCg03RfDPhOy8EfBVGvYJvtGny+Xe6xqnlxSP5RuLv7JbokmJRHp2cAS4r6cooAKKKKAPn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gKACiiigD5j+FHwR+L/AIr/AOCi/wARP2r/AI5eFBpui+GfCdl4I+CqNewTfaNPl8u91jVPLikfyjcXf2S3RJMSiPTs4AlxX05RRQAV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAH0BRRRQAV+Z3gT9h79qvT/ANnv4f8A/BN4fsyR6Tpfw7/aCtfGFr8bo9e0oaQ2jWniWTXY57O3juf7TTVZI3SykR7SOLzJLiT7T5ezzP0xooAKKKKAPn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCgAooooA/Nf4ffse/td2H7JHw3/wCCU2q/s8ahZ+FfAvxM0V9Z+L914m0ptIv/AAro+ux6zAbSCO4/tH+0Lj7LaWxjks44o5DPJ9okjjj839KKKKACvn//AIKV/wDJu3h3/s4D4T/+rC8O19AV8/8A/BSv/k3bw7/2cB8J/wD1YXh2gD6AooooAK/ObVf+Cc+g/GL4++B9E+Hf7EvxG+Evgvwh8Y4fiB4iv/GHxfjn0C4uLO9fUI4tE8O6frOoWcUt3e7JJZJLez8u3kuMZkk8s/ozRQAUUUUAfP8A/wAFK/8Ak3bw7/2cB8J//VheHa+gK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BQAUUUUAfDvx48G/tX/ty+Nvg54T8YfsVa58M2+Gvxh0vxtrvxD8ReL9CvrOKPTLgyPZ6R/Zt5LeXH2wf6Pm4trP/AEeSQyDzP3T/AHFRRQAV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAH0BRRRQB89/wDBSmD4w+Lv2MPiF8Hvgt+zx4o8f6/8QPAmueG7G28O6po1qumzXmnT28dxcvquoWY+z+ZImfKMsg/55+ng9v8AC39qxfDv7Lv7Sul/seeMI/FPwBtrzwt4q+FupeKPD0ep6xpV/o1tZ3N9p9xFqkmnyeXc29vJHHc3FvJJHFP/AKsmMSfflFAHzf8AsKfCH4t6H4++Mv7T/wAcPAjeDda+L/jy31LTfBdxqtveXOjaNYaXZ6XZx3b20kluLuUWklxIlvLLHH9oSPzZPLzX0hRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFFFFAH5/8Aij9nf4s/FT9pjwP8UfhL/wAE4G+AvxA074nWuqfE/wCNum614eS38R6Fb3G+/wBP83Tbn+0dYj1BI440j1C0t0jDi4kEctvHGf0AoooAK+f/APgpX/ybt4d/7OA+E/8A6sLw7X0BXz//AMFK/wDk3bw7/wBnAfCf/wBWF4doA+gKKKKACvy38DfsP/tat4k8B3et/sueJtI/aE074wx6r4+/a1l8daO+n6xoUeqyXF3bZivzqlzZXGlpHZ2+jy2EVtbSSRj92lv9oP6kUUAFFFFAHz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BQAUUUUAfEd1F+1Jc/8FctP/aOX9g34m/8ILafCm8+H8mvt4m8JbDcS69bXCap5H9u/aPsIggeT/V/aeQPs2/gfblFFABXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCvn//AIKV/wDJu3h3/s4D4T/+rC8O0AfQFFFFABRRRQAUUUUAFFFFABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+Zf+CqOh6p4l/ZR0/Q9I8YaloFxffG74YW9rrOkxW0l3YPJ4+0FI7m3FzFLB5sZw6ebHJHkfvI3GQQD6aor5//AOGNv2iv+ksX7QH/AITnw8/+ZSj/AIY2/aK/6SxftAf+E58PP/mUoA+gKK+f/wDhjb9or/pLF+0B/wCE58PP/mUo/wCGNv2iv+ksX7QH/hOfDz/5lKAPoCivn/8A4Y2/aK/6SxftAf8AhOfDz/5lKP8Ahjb9or/pLF+0B/4Tnw8/+ZSgA/4KV/8AJu3h3/s4D4T/APqwvDtfQFfBf/BQH9lL48aF8CtCutR/4KZfGzWlk+NXwzt47HUtB8DRxxyS+OdCiS4H2fw1HJ5kEkiTx5Jj8yOMSxyxmSOT3T/hjb9or/pLF+0B/wCE58PP/mUoA+gKK+f/APhjb9or/pLF+0B/4Tnw8/8AmUo/4Y2/aK/6SxftAf8AhOfDz/5lKAPoCivn/wD4Y2/aK/6SxftAf+E58PP/AJlKP+GNv2iv+ksX7QH/AITnw8/+ZSgD6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7R/wxt+0V/wBJYv2gP/Cc+Hn/AMyleF/8FAf2UvjxoXwK0K61H/gpl8bNaWT41fDO3jsdS0HwNHHHJL450KJLgfZ/DUcnmQSSJPHkmPzI4xLHLGZI5AD70or5/wD+GNv2iv8ApLF+0B/4Tnw8/wDmUo/4Y2/aK/6SxftAf+E58PP/AJlKAPoCivn/AP4Y2/aK/wCksX7QH/hOfDz/AOZSj/hjb9or/pLF+0B/4Tnw8/8AmUoA+gKK+f8A/hjb9or/AKSxftAf+E58PP8A5lKP+GNv2iv+ksX7QH/hOfDz/wCZSgA/4KV/8m7eHf8As4D4T/8AqwvDtfQFfBf/AAUB/ZS+PGhfArQrrUf+CmXxs1pZPjV8M7eOx1LQfA0ccckvjnQokuB9n8NRyeZBJIk8eSY/MjjEscsZkjk90/4Y2/aK/wCksX7QH/hOfDz/AOZSgD6Aor5//wCGNv2iv+ksX7QH/hOfDz/5lKP+GNv2iv8ApLF+0B/4Tnw8/wDmUoA+gKK+f/8Ahjb9or/pLF+0B/4Tnw8/+ZSj/hjb9or/AKSxftAf+E58PP8A5lKAPoCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtH/DG37RX/SWL9oD/wAJz4ef/MpXhf8AwUB/ZS+PGhfArQrrUf8Agpl8bNaWT41fDO3jsdS0HwNHHHJL450KJLgfZ/DUcnmQSSJPHkmPzI4xLHLGZI5AD70or5//AOGNv2iv+ksX7QH/AITnw8/+ZSj/AIY2/aK/6SxftAf+E58PP/mUoA+gKK+f/wDhjb9or/pLF+0B/wCE58PP/mUo/wCGNv2iv+ksX7QH/hOfDz/5lKAPoCivn/8A4Y2/aK/6SxftAf8AhOfDz/5lKP8Ahjb9or/pLF+0B/4Tnw8/+ZSgA/4KV/8AJu3h3/s4D4T/APqwvDtfQFfBf/BQH9lL48aF8CtCutR/4KZfGzWlk+NXwzt47HUtB8DRxxyS+OdCiS4H2fw1HJ5kEkiTx5Jj8yOMSxyxmSOT3T/hjb9or/pLF+0B/wCE58PP/mUoA+gKK+f/APhjb9or/pLF+0B/4Tnw8/8AmUo/4Y2/aK/6SxftAf8AhOfDz/5lKAPoCivn/wD4Y2/aK/6SxftAf+E58PP/AJlKP+GNv2iv+ksX7QH/AITnw8/+ZSgD6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7R/wxt+0V/wBJYv2gP/Cc+Hn/AMyleF/8FAf2UvjxoXwK0K61H/gpl8bNaWT41fDO3jsdS0HwNHHHJL450KJLgfZ/DUcnmQSSJPHkmPzI4xLHLGZI5AD70or5/wD+GNv2iv8ApLF+0B/4Tnw8/wDmUo/4Y2/aK/6SxftAf+E58PP/AJlKAPoCivn/AP4Y2/aK/wCksX7QH/hOfDz/AOZSj/hjb9or/pLF+0B/4Tnw8/8AmUoA+gKK+f8A/hjb9or/AKSxftAf+E58PP8A5lKP+GNv2iv+ksX7QH/hOfDz/wCZSgA/4KV/8m7eHf8As4D4T/8AqwvDtfQFfBf/AAUB/ZS+PGhfArQrrUf+CmXxs1pZPjV8M7eOx1LQfA0ccckvjnQokuB9n8NRyeZBJIk8eSY/MjjEscsZkjk90/4Y2/aK/wCksX7QH/hOfDz/AOZSgD6Aor5//wCGNv2iv+ksX7QH/hOfDz/5lKP+GNv2iv8ApLF+0B/4Tnw8/wDmUoA+gKK+f/8Ahjb9or/pLF+0B/4Tnw8/+ZSj/hjb9or/AKSxftAf+E58PP8A5lKAPoCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtH/DG37RX/SWL9oD/wAJz4ef/MpXhf8AwUB/ZS+PGhfArQrrUf8Agpl8bNaWT41fDO3jsdS0HwNHHHJL450KJLgfZ/DUcnmQSSJPHkmPzI4xLHLGZI5AD70or5//AOGNv2iv+ksX7QH/AITnw8/+ZSj/AIY2/aK/6SxftAf+E58PP/mUoA+gKK+f/wDhjb9or/pLF+0B/wCE58PP/mUo/wCGNv2iv+ksX7QH/hOfDz/5lKAPoCivn/8A4Y2/aK/6SxftAf8AhOfDz/5lKP8Ahjb9or/pLF+0B/4Tnw8/+ZSgA/4KV/8AJu3h3/s4D4T/APqwvDtfQFfBf/BQH9lL48aF8CtCutR/4KZfGzWlk+NXwzt47HUtB8DRxxyS+OdCiS4H2fw1HJ5kEkiTx5Jj8yOMSxyxmSOT3T/hjb9or/pLF+0B/wCE58PP/mUoA+gKK+f/APhjb9or/pLF+0B/4Tnw8/8AmUo/4Y2/aK/6SxftAf8AhOfDz/5lKAPoCivn/wD4Y2/aK/6SxftAf+E58PP/AJlKP+GNv2iv+ksX7QH/AITnw8/+ZSgD6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7R/wxt+0V/wBJYv2gP/Cc+Hn/AMyleL/tpfs3/GrwJ8MvBvjHxh+3/wDF3xpptn8fvhabjwv4p0fwdFYXu/x7oMY819O0G2uRsLiQeXPH+8jGd8eY6APuiiiigAooooAKKKKACiiigAr5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2gD6AooooAKKKKACiiigD5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2voCgAooooAKKKKACvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHaAPoCiiigAooooAKKKKAPn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gKACiiigAooooAK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AV8//APBSv/k3bw7/ANnAfCf/ANWF4doA+gKKKKACiiigAooooA+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6AoAKKKKACiiigAr5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BXz/AP8ABSv/AJN28O/9nAfCf/1YXh2gD6AooooAKKKKACiiigD5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BXz/8A8FK/+TdvDv8A2cB8J/8A1YXh2voCgAooooAKKKKACvn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFfP/wDwUr/5N28O/wDZwHwn/wDVheHaAPoCiiigAooooAKKKKAPn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFfP8A/wAFK/8Ak3bw7/2cB8J//VheHa+gKACiiigAooooAK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4doA+gKKKKACiiigAooooAKKKKACvn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHaAPoCiiigD55/wCCkP7RX7S37Ln7Kviz4wfsxfBTR/FevaHoWq6nPdeJtbFrpOi21lp1xevd3KIftFzkwCFLe3GXklTzJLePzJY9Kx8Z/tZfG39nD4b+PfgTrnw88Pa94s0TTtV8Tat4r0O91Sz06OfT/tGy3sLe7tpLgvO8cfz3kflxkv8AvSNhz/8AgpTB8YfF37GHxC+D3wW/Z48UeP8AX/iB4E1zw3Y23h3VNGtV02a806e3juLl9V1CzH2fzJEz5RlkH/PP08b8ZeLP+CjOhf8ABPL4f/CT4AfsbfEDQ/HSxaX4R8WXEniLwg+p+HNKg0+NLvWrBH1n7Hc3D8xW0UlxH5cn72WMxxiO4APaf+Cfn7TnxE/ac+EHiDVPi3pGhw+J/BvxF13wdrd/4VWQaVq0+mXslsb2zSWSSSKOTy/9U8khjkEkfmSbM17/AF4X+wb4W0r4afs7aV8G/Cf7LnjH4TaL4SzYaTo/jnVdGvL3UN5M8uoSSaRqN7FJLPcSSSSSSSJJJLJJIR+8yfdKAPn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFfP/wDwUr/5N28O/wDZwHwn/wDVheHa+gKACiiigD4T/YP/AOCgHxX/AGtPi/qXhzXf21v2c7LUNM+IHirSbr4H6T4VuJPFw0/S9VvLKOTz5PEOY3kito7nzDYbNkn3MfPX3ZXw78ePBv7V/wC3L42+DnhPxh+xVrnwzb4a/GHS/G2u/EPxF4v0K+s4o9MuDI9npH9m3kt5cfbB/o+bi2s/9HkkMg8z90/3FQAV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAH0BRRRQAV8O/s0/wDBSG//AGtvjvHo/gb9rr4A+ENMm8aalp2ifB/WVOqeN/EWm2FxLHJqA2axZ/2cbmOCe4igNhd+VbCO4eSTzTFF9xV+Z3gT9h79qvT/ANnv4f8A/BN4fsyR6Tpfw7/aCtfGFr8bo9e0oaQ2jWniWTXY57O3juf7TTVZI3SykR7SOLzJLiT7T5ezzAD9MaKKKAPn/wD4KV/8m7eHf+zgPhP/AOrC8O19AV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gKACvnn/gpD+0V+0t+y5+yr4s+MH7MXwU0fxXr2h6Fqupz3XibWxa6TottZadcXr3dyiH7Rc5MAhS3txl5JU8yS3j8yWP6Gr57/wCClMHxh8XfsYfEL4PfBb9njxR4/wBf+IHgTXPDdjbeHdU0a1XTZrzTp7eO4uX1XULMfZ/MkTPlGWQf88/QA474h/tp/Ge/8I/s6/C74M6d4Zt/il+0BpZv4tY1/TLi60Xw3Y2mlR6hqd5JZx3MVxc8vBbRQfaIsSXkckkv7sxydl+xh+0h8Xvix4r+KnwF/aD0vQY/Hnwh8bxaNrOreFbG4tdN1uyu7C31HT9Rgt7iW4e1MlvdeXJb/aLjy5Ldz5mJAE8Gt/hb+1Yvh39l39pXS/2PPGEfin4A2154W8VfC3UvFHh6PU9Y0q/0a2s7m+0+4i1STT5PLube3kjjubi3kkjin/1ZMYk9s/YU+EPxb0Px98Zf2n/jh4EbwbrXxf8AHlvqWm+C7jVbe8udG0aw0uz0uzju3tpJLcXcotJLiRLeWWOP7QkfmyeXmgD6Qr5//wCClf8Aybt4d/7OA+E//qwvDtfQFfP/APwUr/5N28O/9nAfCf8A9WF4doA+gKKKKAPnn/gpD+0V+0t+y5+yr4s+MH7MXwU0fxXr2h6Fqupz3XibWxa6TottZadcXr3dyiH7Rc5MAhS3txl5JU8yS3j8yWPP+L/7TX7T+ifsA6L+0d8Bfgbovi7x1rfgmz1Z7TUNXOmaJopk0pryXULn95JcS20Ui7BbW4kuJTJHHlEMlzHpf8FKYPjD4u/Yw+IXwe+C37PHijx/r/xA8Ca54bsbbw7qmjWq6bNeadPbx3Fy+q6hZj7P5kiZ8oyyD/nn6cZpXiD9ozTP+Catn8MZP2EPiVJ4yh8Gx+DJPCUOueEvtiuNGEH9q+cdc+yfY/N/d/6/7T/077PnoA9a/Yj+M3i79pH9jT4R/tFeP7Sxttc8ffDPQvEmsW2kwvHaW9ze2EFxJHAkkkjiMPKdm95Dgck167Xzr/wTA0L4v+Af2E/hb8D/AI4fAPxJ4B8S/Dn4daD4X1Kz1/UdIu49QuLDTLe3kubeTTL28T7OZY22eYYpOMmIV9FUAfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BQAUUUUAfIPxE/aV/bH/AGfP2pvg/wDDj4t+IPhX4g0H4y/ELVPD2n+DPCvh3ULfX9Fs4NPvdQj1H7dcahJFqMUEdpGLn/QrfyzdR4PTf9fV+f8A4o/Z3+LPxU/aY8D/ABR+Ev8AwTgb4C/EDTvida6p8T/jbputeHkt/EehW9xvv9P83Tbn+0dYj1BI440j1C0t0jDi4kEctvHGf0AoAK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O19AV8/wD/AAUr/wCTdvDv/ZwHwn/9WF4doA+gKKKKACvh39mn/gpDf/tbfHePR/A37XXwB8IaZN401LTtE+D+sqdU8b+ItNsLiWOTUBs1iz/s43McE9xFAbC78q2Edw8knmmKL7ir8zvAn7D37Ven/s9/D/8A4JvD9mSPSdL+Hf7QVr4wtfjdHr2lDSG0a08Sya7HPZ28dz/aaarJG6WUiPaRxeZJcSfafL2eYAfpjRRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFFFFAHxZ8aPjN/wUZ+Bfx1+Dnwpu/jp8F/GF98TviNHpknhnSfgjq+l3cGg28cl5qmo/a5PE9zHGLe2jEYfyJB9ourdCP3lfadfMfwo+CPxf8AFf8AwUX+In7V/wAcvCg03RfDPhOy8EfBVGvYJvtGny+Xe6xqnlxSP5RuLv7JbokmJRHp2cAS4r6coAK+f/8AgpX/AMm7eHf+zgPhP/6sLw7X0BXz/wD8FK/+TdvDv/ZwHwn/APVheHaAPoCiiigAr4C+H3/BSj9qLV/h98J/20/Gdh8Pn+DHxd+J1n4U0/wnpejX0XiDw/bahqEmn6ZqM+pSXv2e5zcCD7Rbizt/KjuDiWQxfvPv2vzm1X/gnPoPxi+PvgfRPh3+xL8RvhL4L8IfGOH4geIr/wAYfF+OfQLi4s719Qji0Tw7p+s6hZxS3d7sklkkt7Py7eS4xmSTyyAfozRRRQB8/wD/AAUr/wCTdvDv/ZwHwn/9WF4dr6Ar5/8A+Clf/Ju3h3/s4D4T/wDqwvDtfQFABRRRQB8kfC39sj9qnxH/AMFRNb/Y8+J3wK0Dwb8P0+FGpeJfCd02s/btf1OS01y30/7bOYJDb21tcR3HmRW3724AAeSSN5DbxfW9fEd1F+1Jc/8ABXLT/wBo5f2Dfib/AMILafCm8+H8mvt4m8JbDcS69bXCap5H9u/aPsIggeT/AFf2nkD7Nv4H25QAV8//APBSv/k3bw7/ANnAfCf/ANWF4dr6Ar5//wCClf8Aybt4d/7OA+E//qwvDtAH0BRRRQAUUUUAFFFFABRRRQAV8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtAH0BRRRQAUUUUAFFFFAHz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7X0BQAUUUUAFFFFABXz//AMFK/wDk3bw7/wBnAfCf/wBWF4dr6Ar5/wD+Clf/ACbt4d/7OA+E/wD6sLw7QB9AUUUUAFFFFABRRRQB8/8A/BSv/k3bw7/2cB8J/wD1YXh2voCvn/8A4KV/8m7eHf8As4D4T/8AqwvDtfQFABRRRQAUUUUAFfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7QB9AUUUUAFFFFABRRRQB8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O19AUAFFFFABRRRQAV8//wDBSv8A5N28O/8AZwHwn/8AVheHa+gK+f8A/gpX/wAm7eHf+zgPhP8A+rC8O0AfQFFFFABRRRQAUUUUAfP/APwUr/5N28O/9nAfCf8A9WF4dr6Ar5//AOClf/Ju3h3/ALOA+E//AKsLw7X0BQAUUUUAFFFFABXz/wD8FK/+TdvDv/ZwHwn/APVheHa+gK+f/wDgpX/ybt4d/wCzgPhP/wCrC8O0AfQFFFFABRRRQAUUUUAfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtfQFABRRRQAUUUUAFfP/8AwUr/AOTdvDv/AGcB8J//AFYXh2voCvn/AP4KV/8AJu3h3/s4D4T/APqwvDtAH0BRRRQAUUUUAFFFFABRRRQAV4N/wUI8E/Ezx1+zhb2vwq+GuoeL9d0j4neBvESeG9JvrKC7vrfSPFulardxwyX1xb2/mfZ7OfZ5ksYJGM817zRQB8//APDZH7RX/SJ39oD/AMKP4ef/ADV0f8NkftFf9Inf2gP/AAo/h5/81dfQFFAHz/8A8NkftFf9Inf2gP8Awo/h5/8ANXR/w2R+0V/0id/aA/8ACj+Hn/zV19AUUAfP/wDw2R+0V/0id/aA/wDCj+Hn/wA1dH/DZH7RX/SJ39oD/wAKP4ef/NXX0BRQB8VftcfFz9rL48fC/S/BHg//AIJafGy3u7H4meCvEUjal4o8ApGLbR/FGl6tcJ+78TOfMe3spUj7eYY87Ad9eq/8NkftFf8ASJ39oD/wo/h5/wDNXX0BRQB8/wD/AA2R+0V/0id/aA/8KP4ef/NXR/w2R+0V/wBInf2gP/Cj+Hn/AM1dfQFFAHz/AP8ADZH7RX/SJ39oD/wo/h5/81dH/DZH7RX/AEid/aA/8KP4ef8AzV19AUUAfP8A/wANkftFf9Inf2gP/Cj+Hn/zV15V+1x8XP2svjx8L9L8EeD/APglp8bLe7sfiZ4K8RSNqXijwCkYttH8UaXq1wn7vxM58x7eylSPt5hjzsB319q0UAfP/wDw2R+0V/0id/aA/wDCj+Hn/wA1dH/DZH7RX/SJ39oD/wAKP4ef/NXX0BRQB8//APDZH7RX/SJ39oD/AMKP4ef/ADV0f8NkftFf9Inf2gP/AAo/h5/81dfQFFAHz/8A8NkftFf9Inf2gP8Awo/h5/8ANXR/w2R+0V/0id/aA/8ACj+Hn/zV19AUUAfFX7XHxc/ay+PHwv0vwR4P/wCCWnxst7ux+JngrxFI2peKPAKRi20fxRperXCfu/EznzHt7KVI+3mGPOwHfXqv/DZH7RX/AEid/aA/8KP4ef8AzV19AUUAfP8A/wANkftFf9Inf2gP/Cj+Hn/zV0f8NkftFf8ASJ39oD/wo/h5/wDNXX0BRQB8/wD/AA2R+0V/0id/aA/8KP4ef/NXR/w2R+0V/wBInf2gP/Cj+Hn/AM1dfQFFAHz/AP8ADZH7RX/SJ39oD/wo/h5/81deVftcfFz9rL48fC/S/BHg/wD4JafGy3u7H4meCvEUjal4o8ApGLbR/FGl6tcJ+78TOfMe3spUj7eYY87Ad9fatFAHz/8A8NkftFf9Inf2gP8Awo/h5/8ANXR/w2R+0V/0id/aA/8ACj+Hn/zV19AUUAfP/wDw2R+0V/0id/aA/wDCj+Hn/wA1dH/DZH7RX/SJ39oD/wAKP4ef/NXX0BRQB8//APDZH7RX/SJ39oD/AMKP4ef/ADV0f8NkftFf9Inf2gP/AAo/h5/81dfQFFAHxV+1x8XP2svjx8L9L8EeD/8Aglp8bLe7sfiZ4K8RSNqXijwCkYttH8UaXq1wn7vxM58x7eylSPt5hjzsB316r/w2R+0V/wBInf2gP/Cj+Hn/AM1dfQFFAHz/AP8ADZH7RX/SJ39oD/wo/h5/81dH/DZH7RX/AEid/aA/8KP4ef8AzV19AUUAfP8A/wANkftFf9Inf2gP/Cj+Hn/zV0f8NkftFf8ASJ39oD/wo/h5/wDNXX0BRQB8/wD/AA2R+0V/0id/aA/8KP4ef/NXXlX7XHxc/ay+PHwv0vwR4P8A+CWnxst7ux+JngrxFI2peKPAKRi20fxRperXCfu/EznzHt7KVI+3mGPOwHfX2rRQB8//APDZH7RX/SJ39oD/AMKP4ef/ADV0f8NkftFf9Inf2gP/AAo/h5/81dfQFFAHz/8A8NkftFf9Inf2gP8Awo/h5/8ANXR/w2R+0V/0id/aA/8ACj+Hn/zV19AUUAfP/wDw2R+0V/0id/aA/wDCj+Hn/wA1dH/DZH7RX/SJ39oD/wAKP4ef/NXX0BRQB8VftcfFz9rL48fC/S/BHg//AIJafGy3u7H4meCvEUjal4o8ApGLbR/FGl6tcJ+78TOfMe3spUj7eYY87Ad9eq/8NkftFf8ASJ39oD/wo/h5/wDNXX0BRQB8/wD/AA2R+0V/0id/aA/8KP4ef/NXR/w2R+0V/wBInf2gP/Cj+Hn/AM1dfQFFAHz/AP8ADZH7RX/SJ39oD/wo/h5/81dH/DZH7RX/AEid/aA/8KP4ef8AzV19AUUAfP8A/wANkftFf9Inf2gP/Cj+Hn/zV15V+1x8XP2svjx8L9L8EeD/APglp8bLe7sfiZ4K8RSNqXijwCkYttH8UaXq1wn7vxM58x7eylSPt5hjzsB319q0UAfP/wDw2R+0V/0id/aA/wDCj+Hn/wA1dH/DZH7RX/SJ39oD/wAKP4ef/NXX0BRQB8//APDZH7RX/SJ39oD/AMKP4ef/ADV0f8NkftFf9Inf2gP/AAo/h5/81dfQFFAHz/8A8NkftFf9Inf2gP8Awo/h5/8ANXR/w2R+0V/0id/aA/8ACj+Hn/zV19AUUAfFX7XHxc/ay+PHwv0vwR4P/wCCWnxst7ux+JngrxFI2peKPAKRi20fxRperXCfu/EznzHt7KVI+3mGPOwHfXqv/DZH7RX/AEid/aA/8KP4ef8AzV19AUUAfP8A/wANkftFf9Inf2gP/Cj+Hn/zV0f8NkftFf8ASJ39oD/wo/h5/wDNXX0BRQB8/wD/AA2R+0V/0id/aA/8KP4ef/NXR/w2R+0V/wBInf2gP/Cj+Hn/AM1dfQFFAHz/AP8ADZH7RX/SJ39oD/wo/h5/81decftEfEb9p/8Aad8IeFvhRov/AATg+L3hnd8XvAutahr/AIl8QeCfsOn2WleLNJ1S8lk+xeIri4OLeznISOKSQvgY719j0UAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH//ZUEsDBC0ACAAAAMmADVMAAAAAAAAAAAAAAAAZAAAAZm9ybWF0cy9saXZpbmcvbGl2aW5nLmpwZ//Y/+AAEEpGSUYAAQEBAGAAYAAA/9sAQwADAgIDAgIDAwMDBAMDBAUIBQUEBAUKBwcGCAwKDAwLCgsLDQ4SEA0OEQ4LCxAWEBETFBUVFQwPFxgWFBgSFBUU/9sAQwEDBAQFBAUJBQUJFA0LDRQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQU/8AAEQgCFAJ2AwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A/VOiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAopKWgAooooAKztZ1rT/DumT6hqt/baXYW67pbu8mWGKNfVmb5RWjXxR448N237Tn7eV14C8XRHVPh78O/D1vq39gztm2vdTuGUxyTx/8tFWNvut/d/2m3AH1D4N+M/w/+I95JaeEvHPhrxRcxrukh0bV7e7dV91jZq7avjL9uL9m/wAE6L8Bde+IPgrw5pvgjxz4LiXWtI1vw9ax2E8TQurMreWq7l27/lb+LFa3xS/a08X+Evh78AfEXhfwpa+J9R+JCW6tpDFopGluLHzoVjk3bY18xl3MyttjDUAfR/jn4i+GPhppEGqeKdcs9A0+a5js47i9k2K00n3I/wDebmuor5D+Ofjb4i/D/wCBGm6n8VPDnw38U67N4x0y1gsrSxuLrTY7eWSJFk23DbhcRs0u114+6237y11nxi+OHxBb46ab8H/hTpXhx/E8mgHxLqOreLJZ/sVrafaPIVVih2ySSM3+0oX5aAPoqaaO2jaSRljjRcszHaqisDwH8QPDfxO8M23iDwrrNnr2iXTOsN9ZPvjkKsyt/wCPK35V88/sr/GT4xfFD4lfEzwv8TbXwPar4NnXTLmz8N2t3vmmkVJIZlkmmZWhaPzPl2q+dudtcH4P/ak1TwV/wTQsvjTo3hLwroOo28hYaDounta6Witrf2OTy4VkDKzRsz/e/wBY27/ZoA+56K+NfHn7SXx3+D9v4c8feOvAvhTT/hpqepW9hfaPZ3lxNrujR3EipHPPJ/qZNu75o0X7zKu7ncvuXxi1T4vRahpumfC/QfC8yzRSS3eveLbuYW1qysu2JbeH95IzZY7tyqu2gD1ivPPg38YtG+OHhW71/Q7e/tLO11K60p49RjWOTzreQxyN8rMu3cOK8+/Zz+OPjTxr4++IPw3+JGi6PpvjfwabOae88OySPp19b3UbPFJGsh8xW+X5lb1rnv8AgnX/AMkP8Qf9jnrn/pW1AH0RrPi7Q/Dd5pdnq2s6fpV5q1x9l0+C+uo4ZLybG7y4VZv3jf7K1u18i/twf8lg/Zb/AOygQ/8AoFavxd/aF+Juj/tQWvwf+HnhXRdcub/wjHr8N9q8skEWnyfbZoZJrhlbc8KrHGqxxruZpPvbegB9S0V8U+F/2nPj5r3xN8V/Bv8A4QbwfJ8TNEaO6k8SJdXMfh6Kwlj3RzNHua4aRmZVEat/E3zLt+b1L9mT49+KfidefEPwh460XTdO+IPgS/isdSj0OdnsrtZo2kgmh8z51VlVuG9P+AqAfQlFfHHxS+OH7THwl8C3vxM8QeCvh5beENM8u51DwtbahdT6zBbFlV/9K+W3aRd38Ksv+9Xd/HD9orxH4f1j4WeEfhvo+maj4z+IwuZ9Nn8RySJZWVvb2yzyTTLH8zna6/Krdm+agD6Mor5E+DPxm+PeqftT6r8LviJF8O7ay0jS49auJvDtrfCa9tZN8cbQtJMyoyzeWGWRfu7tv96ueuv2yPGvxI13xDP8NdZ+EvhrwtouoT6ZC3xC1mSO/wBXkhba8sccMi+TCzblVpNzN97bQB9uUV4/+y78erf9o74R2Xi+Oxj0rUFuZtP1LT4rlbmOC6hbbIqyL8rKflZW/uutewUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQA38aGorhvi98TdN+EfgHU/E2psClqn7qHfhp5W4jjXr95v++V3N0Wqp051pxp0170g2Oc+IH7Rnhn4efFLwx4Iv5P9M1n/AF1xv+Sx3HbD5n/XRvl/2fvN8vNet7hivxT8Z+LtU8feKdS8Q61cfadS1CZp5pP/AGVf9lV+VV/urX6QfsafHxfi14DTStWnMnijRI1huGZvmuYfuxze7fwt/tDP8Qr7nO+GJ5bg6eJh71vj/wA/0OOjiPaS5T6Pooor4Q7Ar5B+MXgfxx8Ff2pLb47eDfCd5478Pavoi6D4o0DR9v8AaUfltujuoFZl84/LGu373y/7W5fr6igD4l+OHxA8f/tfeA7r4W+Avhd418FWWvyR2+t+KvHWk/2Zb6fZbleTyo3bzJpG27dqr/F97+Je0+O3wyv9P8efsw2HhvRtQvdE8La/5c01tbtNHY2sdk0aNMyriNeFXc1fU1FAHzb+3V4V1nxl8IdDsNC0m/1q+j8WaPctbafbPPIscd0rSSMqj7qryzdFrwH9q9jqH7a9sptfiLqNxZ+CY1spvg88P9saazXcjS/a93/LN127VZtv91dzbq/RCvnP4ifsv+Jb74w6n8S/hr8Ubz4d+I9asrew1iCfR4dVs76OEbY28uRlaNlX+JW/9CbcAYX7GHiT4Y6a3ifwT4U0vxjoXjWKZdZ1+1+IdvJHrd202F+1TM25ZP7u5Pl6f3tzfP3/AAqbxwP+CNP/AAhH/CG+IP8AhM8f8i//AGXP/aH/ACMPnf8AHvt8z/VfvPu/d+avrf4I/s33fw18ba9498WeONR+IfxB1q1isLjWbq2jsoIrWNtywwW0fyxru+b7zf8AoRb3OgD5p/4KBeFdb8Zfs2alpfh/SNQ13UX1bS5EstNtZLmYql7CzNsjVm2qqszcdq87/bJ0HxFqPx08JzeKPDfxA8bfA/8AsSWO40T4etO0/wDa/nN+8u47dlkaHySqr833t3+1u+2qKAPhv9h34X3PgX4+fF/U7P4a+JPhr4Q1jTNHbR7XxBNPcTSbfOWTfM8kn7zcNzR+YzRqy/dr1P8AYT8Laz4O+D+t2OuaTqGi3cnivWLlLbUrV7eVoZLpmjk2sNxVl5Vu9fSNFAHyz+2B4N17xZ8Uv2cbrRtF1HVbbSvG8d7fzWdrJLHZwqn+smZV/dr/ALTVc/4RHXf+Hj3/AAkn9kaj/wAI3/wqf+zf7a+yyfZPtX9seZ9n8/bt8zy/m253bfmr6aooA+WPhd4P17Tf2+fjR4kudF1C38P3/h7SLe01Sa1kW2uJEjXcscm3azL/ABKv3axfhH4J8b6L+0Z+1/q1hpF5pFxrkekf8I3qmoWrR2l3cJYXKho5GXbIqyMm7bu2/wAXv9g0UAfkR4q+EF744+AutafrXwO+Mfif48rp839o+INevLz7AJlLM0kD+d5dwvXy4Y423M23/ar2r9rmGRfGH7NGk6hp3i68az0i9kXTfh4Vj8UWl0LSBVnjVvmWNdrK3zKv97dt21+hteC/Gn9m3VPiF8RdB+Ifg34gX3w88d6RYSaUuoR6fFqNrcWsknmNFJbybc/N/ErL/wCOrtAPLf2SfEXw28J/FDVvD5034maV8VvE1v8AbLi++LFu39papb2/G2OZcwska/wx/wDsvy+U/DT4XaF+zjeeKfBnxN/ZjvfikP7bur3Q/GGheD7XXTfWUrBo452b5oZF+b721f8A0Jvp34cfsxa5pPxWsviT8SPiRffEvxbpdnNYaR/xLIdKsrCOb/WtHbxs26Rl+Xczev8As7foWgDzX4C2tjb/AA5sn034bJ8KrWeWWRfDK2lvbNCpkYLJJHb/ALtWkVVYr1XdzXpVFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUlAryH9p6a5j+FIjtdQ1DTWuvEOgWUtxpd5NZ3Ihm1myhmVZoXWRd0cjrlWXhjTiuZ8oHr20UbRXz1/wpHRf+g747/8OBrv/wAm0f8ACkdF/wCg747/APDga7/8m11/VZk8x9C7RRtFfPX/AApHRf8AoO+O/wDw4Gu//JtH/CkdF/6Dvjv/AMOBrv8A8m0/qsw5j6F2ijaK+ev+FI6L/wBB3x3/AOHA13/5No/4Ujov/Qd8d/8AhwNd/wDk2j6rMOY+hdoo2ivkT4v/AA0s/DHhOxvNL8S+O7a5k8QaHZM3/Cea226G41W0t5l+a7/ijkkX/Z3fL81dt/wpHRf+g747/wDDga7/APJtL6rMOY+hdoo2ivnr/hSOi/8AQd8d/wDhwNd/+TaP+FI6L/0HfHf/AIcDXf8A5Np/VZhzH0LtFG0V89f8KR0X/oO+O/8Aw4Gu/wDybR/wpHRf+g747/8ADga7/wDJtH1WYcx9C7RRtFfPX/CkdF/6Dvjv/wAOBrv/AMm1xPxf+Gln4Y8J2N5pfiXx3bXMniDQ7Jm/4TzW23Q3Gq2lvMvzXf8AFHJIv+zu+X5qX1WYcx9d7RRtFfPX/CkdF/6Dvjv/AMOBrv8A8m0f8KR0X/oO+O//AA4Gu/8AybT+qzDmPoXaKMCvnr/hSOi/9B3x3/4cDXf/AJNo/wCFI6L/ANB3x3/4cDXf/k2j6rMOY+g93tX5/ftB3PjP9rT4nf8ACOeBdOm1Dwl4fma3OoN+7tGufuyytI3ytt+6q/M23cy/er3uX4G6BLG0b6346kjZdrK3j7XWVl/8Dais/gH4b062jtrPVPG9tbwrtjhg8d66qov91VW9r1Muqyy2o8RBc1T7Pl5mNRe0jynwn8ePgTqHwF1jRtJ1TUbfUtQvrL7bN9kVvLh/eMu1Wb5m+797atejaV8Ifin+yr440vxtZ6Q2u6Tb7WmuNJZpI5rdv9ZHIu3dH8v8TLtVtvzNtrL/AGzPClr4S8eaJb2d3q96kmneYzaxrN5qci/vJPuyXUkjKv8Asq22vuPSv2cfCk2nWkjat483NCrNt+IXiBV+7/d+2191mWeYqjl+HnXUZ+0UuY46dGMqkuX7J6J4N8Xad468Nabr+kzrc6bqEKzwydPlb+FuflYYwV7MK6AV49Y/ss+B9Jh8qxvPG9pDuaRo7f4ga/GpZvvNhb3rVz/hmnwl/wBBjx//AOHG8Q//ACdX5LO3N7mx6h6tRXlP/DNPhL/oMeP/APw43iH/AOT6P+GafCX/AEGPH/8A4cbxD/8AJ9ID1aivKf8Ahmnwl/0GPH//AIcbxD/8n1538a/gno3hPwXpt/pWv+PbO7m8S+HtPdx8QdekzDdazZW06fNen70U0i56ru3LtbmgD6aoryn/AIZp8Jf9Bjx//wCHG8Q//J9H/DNPhL/oMeP/APw43iH/AOT6APVqK8p/4Zp8Jf8AQY8f/wDhxvEP/wAn0f8ADNPhL/oMeP8A/wAON4h/+T6APVqK8p/4Zp8Jf9Bjx/8A+HG8Q/8AyfR/wzT4S/6DHj//AMON4h/+T6APVqK+ZfjX8E9G8J+C9Nv9K1/x7Z3c3iXw9p7uPiDr0mYbrWbK2nT5r0/eimkXPVd25drc16J/wzT4S/6DHj//AMON4h/+T6APVqK8p/4Zp8Jf9Bjx/wD+HG8Q/wDyfR/wzT4S/wCgx4//APDjeIf/AJPoA9Woryn/AIZp8Jf9Bjx//wCHG8Q//J9H/DNPhL/oMeP/APw43iH/AOT6APVqK8p/4Zp8Jf8AQY8f/wDhxvEP/wAn1538a/gno3hPwXpt/pWv+PbO7m8S+HtPdx8QdekzDdazZW06fNen70U0i56ru3LtbmgD6aoryn/hmnwl/wBBjx//AOHG8Q//ACfR/wAM0+Ev+gx4/wD/AA43iH/5PoA9Woryn/hmnwl/0GPH/wD4cbxD/wDJ9H/DNPhL/oMeP/8Aw43iH/5PoA9Woryn/hmnwl/0GPH/AP4cbxD/APJ9H/DNPhL/AKDHj/8A8ON4h/8Ak+gD1aivmX41/BPRvCfgvTb/AErX/HtndzeJfD2nu4+IOvSZhutZsradPmvT96KaRc9V3bl2tzXon/DNPhL/AKDHj/8A8ON4h/8Ak+gD1aivKf8Ahmnwl/0GPH//AIcbxD/8n0f8M0+Ev+gx4/8A/DjeIf8A5PoA9Woryn/hmnwl/wBBjx//AOHG8Q//ACfR/wAM0+Ev+gx4/wD/AA43iH/5PoA9Woryn/hmnwl/0GPH/wD4cbxD/wDJ9ed/Gv4J6N4T8F6bf6Vr/j2zu5vEvh7T3cfEHXpMw3Ws2VtOnzXp+9FNIueq7ty7W5oA+mqK8p/4Zp8Jf9Bjx/8A+HG8Q/8AyfR/wzT4S/6DHj//AMON4h/+T6APVqK8p/4Zp8Jf9Bjx/wD+HG8Q/wDyfR/wzT4S/wCgx4//APDjeIf/AJPoA9Woryn/AIZp8Jf9Bjx//wCHG8Q//J9H/DNPhL/oMeP/APw43iH/AOT6APVqK+ZfjX8E9G8J+C9Nv9K1/wAe2d3N4l8Pae7j4g69JmG61mytp0+a9P3oppFz1XduXa3Neif8M0+Ev+gx4/8A/DjeIf8A5PoA9Woryn/hmnwl/wBBjx//AOHG8Q//ACfR/wAM0+Ev+gx4/wD/AA43iH/5PoA9Woryn/hmnwl/0GPH/wD4cbxD/wDJ9H/DNPhL/oMeP/8Aw43iH/5PoA9Woryn/hmnwl/0GPH/AP4cbxD/APJ9cL8WPhPpfw30HQde8P6942h1KHxZ4ctx9q8c61ewvFNrdlBNHJDNdvHIrRySKysrfeoA+kKKKKACiiigAooooAKKKKAEPavJv2oP+SWWf/Y1eGf/AE+2FesntXk37UH/ACSyz/7Grwz/AOn2wq6fxIDSooor2znCiiigAooooA84+Pv/ACIumf8AY1eG/wD092Vej15x8ff+RF0z/savDf8A6e7KvR6ACiiigAooooAK84+Pv/Ii6Z/2NXhv/wBPdlXo9ecfH3/kRdM/7Grw3/6e7KgD0eiiigAooooAKKKKQHwx+3n/AMlI0D/sFf8AtaSv0f0X/kD2P/XvH/6CK/N79vR/+LoaEv8ACukK3/kaSv0k02Py9NtYx91YlX9K93Pv+RZgv+3v0MaHxyLtFFFfCncFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnV6tQAUUUUAFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnV6tQAUUUUAFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnV6tQAUUUUAFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQAUUUUAIe1eTftQf8AJLLP/savDP8A6fbCvWT2ryb9qD/klln/ANjV4Z/9PthV0/iQGlRRRXtHOFfLem/FXxxcfCvw18Zm8RTS6VrGtWqzeEms7b7DDpl1eLaxeXJ5f2j7QqyRybmk27ty7dv3fqSvnTRfgL4ytfCPh74a3Emgr8PtF1qG/j1KO6mbULqyt7v7VDaNb+X5cbeYsatJ5zfLH93c3ygH0XRRRQB5x8ff+RF0z/savDf/AKe7KvR684+Pv/Ii6Z/2NXhv/wBPdlXo9ABRRRQB4h4d8W/EBf2pLzw34h1LS18NXHhm41LT9G0233eT5d7HHHNJMy+Y0jRt8yrtjX7vzbfMb2+vE5vB/wASG/aEg8cf2H4V/sWHSZNA8v8A4SC4+0tbtdxzfaNv2Db5m2P/AFO7bu/5aV7ZQAV5x8ff+RF0z/savDf/AKe7KvR684+Pv/Ii6Z/2NXhv/wBPdlQB6PRRRQAV883nxA1bR/jh4V8O6J8TF8canqGrXceveFYbez8jR7BYZG85vJj863aNvs0f7+RvMaT+9X0NXiviPwB8QPiRrnhOHxJa+F9K0/w7r0OtLrOk31xNd3Xks22OO3khVbfzPuyfvpPlaRfm3bqAPaqKKKAPhT9vH/kqui/9gaP/ANHTV+lNj/x6Qf8AXNf5V+a37eP/ACVXRf8AsDR/+jpq/Smx/wCPSD/rmv8AKvdz7/kW4H0l+aMqH8SRaooor4U7T5N+D3xM1ebxvb2XxF+IvjjQdfvPEeqWWn+GdW8Lw6fo17DHczi0hhvJNNXzWa3SORfLutzf+O19ZV8++JPh38S/i5qvg7TvGlr4R0fw/wCG9ftfEEmoaFf3V1c381nL5lvGtvLbxrbKzbWb99MQF2ru3b1+gqACvKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOoA9WooooAK+dPF2qeOvhn8W/hpbv8QbjxQfF2vXNhdeGLnTLOC2ishbzXDT2hjj+0L5HlRq3nTSBvN/vba+i6+bfAfw9+LOl/F7WvG3ifw54N13UNQuPsFrqSeKbyNtI0bzFZbe3tW03aZPl8yRvMXzJP4lVVVAD6SooooA8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTq9WoAKKKKAPmTxxY+OvBvxV+F/hbRfi74t1vVNe1VrvULLU7LRPs0WkWq+Zdu3k6dHJ8zNDCu1l+afdn5a+m68p8IfDXWLX45eOfiD4hns7r7ba2ujeHobZ2ZrHTox5kwk3Ku2Sa4ZmbbuG2KH5vlr1agAryn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTqAPVqKKKAPG/2pdc+IHhf4M+JdY8AahpOj6hp2m3t/c6pqVu1zJbwwWsso+zw42ySNIqL+8baqszbZNuxuW8QfEzxXr1r8DPB+ma1LomteO7JtQ1PxHbQQyXMFva2cc83kRyRtD5ksksK7mjZVVpNq7trL337QHh3xb44+FniPwv4Q0/Rby81/TbrSZptb1SayjtY5oHj81fKt5vMZWb7vy/71edx/CP4jroHwq1tbDwvbeOvh+72UNgdauptP1OwktFt5g1x9jWSGRmVZFxDIq+Uq/Nu+UA6z4E+L/Et94m+JHgjxPqkniC98HaxDbW2uyQw28t7aXFrHdQ+ckKrH5kfmtGzRxxq2xfl+9Xs9eWfBn4d674VvvGnibxVPYN4p8Xasuo3dvpbySWllDHbxW1vbxySKrSbY4VZpPLj3MzfKuK9ToA8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06vVqACiiigD5k8cWPjrwb8Vfhf4W0X4u+Ldb1TXtVa71Cy1Oy0T7NFpFqvmXbt5OnRyfMzQwrtZfmn3Z+WvpuvKfCHw11i1+OXjn4g+IZ7O6+22tro3h6G2dmax06MeZMJNyrtkmuGZm27htih+b5a9WoAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKAPG/2pdc+IHhf4M+JdY8AahpOj6hp2m3t/c6pqVu1zJbwwWsso+zw42ySNIqL+8baqszbZNuxuW8QfEzxXr1r8DPB+ma1LomteO7JtQ1PxHbQQyXMFva2cc83kRyRtD5ksksK7mjZVVpNq7trL337QHh3xb44+FniPwv4Q0/Rby81/TbrSZptb1SayjtY5oHj81fKt5vMZWb7vy/71edx/CP4jroHwq1tbDwvbeOvh+72UNgdauptP1OwktFt5g1x9jWSGRmVZFxDIq+Uq/Nu+UA6z4E+L/Et94m+JHgjxPqkniC98HaxDbW2uyQw28t7aXFrHdQ+ckKrH5kfmtGzRxxq2xfl+9Xs9eWfBn4d674VvvGnibxVPYN4p8Xasuo3dvpbySWllDHbxW1vbxySKrSbY4VZpPLj3MzfKuK9ToA8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTq9WoAKKKKAPjHw58dvG3/AAgvw2+LV34z+26d4t8W2+g3ng17S1jsbGK4upLVUhkWP7QbiBlVm3yurbZP3a/Lt+zq+adQ/Zul8cfFbR/Ees/Dz4d+D4NM1pdcudY8Pu13rGrzQv5lsskzWdv5K+csc0nzTbvLVePvV9LUAFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFFFFABRRRQAUUUUAIe1eTftQf8kss/wDsavDP/p9sK9ZPavJv2oP+SWWf/Y1eGf8A0+2FXT+JAaVFFFe0c4UUUUAFFFFAHnHx9/5EXTP+xq8N/wDp7sq9Hrzj4+/8iLpn/Y1eG/8A092Vej0AFFFFABRRRQAV5x8ff+RF0z/savDf/p7sq9Hrzj4+/wDIi6Z/2NXhv/092VAHo9FFFABRRRQAUUUUAfB/7eLN/wALd0lf4f7Ej/8ASiav0xiURxoq9FUAV+Zn7d3/ACV/Sf8AsCQ/+lFxX6bL90fSvcz/AP5F+B9JfmjHD/xJklFFFfDHcFFFFABXlP7S3/JO9I/7HPwn/wCpDp1erV5T+0t/yTvSP+xz8J/+pDp1AHq1FFFABRRRQAUUUUAeU/tLf8k70j/sc/Cf/qQ6dXq1eU/tLf8AJO9I/wCxz8J/+pDp1erUAFFFFABRRRQAV5T+0t/yTvSP+xz8J/8AqQ6dXq1eU/tLf8k70j/sc/Cf/qQ6dQB6tRRRQAUUUUAFFFFAHlP7S3/JO9I/7HPwn/6kOnV6tXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1ABRRRQAUUUUAFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/+pDp1erV5T+0t/wAk70j/ALHPwn/6kOnV6tQAUUUUAFFFFABXlP7S3/JO9I/7HPwn/wCpDp1erV5T+0t/yTvSP+xz8J/+pDp1AHq1FFFABRRRQAUUUUAFFFFACHtXi37WT3sPwfWTT4YLq/XxN4bNvDdTtDHJJ/bthsVpFVmRd38W1tv91ule0ntXk37UH/JLLP8A7Grwz/6fbCrp/EgOK/t74vf9CP4J/wDCyvf/AJVUf298Xv8AoR/BP/hZXv8A8qq9Hor2jnPOP7e+L3/Qj+Cf/Cyvf/lVR/b3xe/6EfwT/wCFle//ACqr0eigDzj+3vi9/wBCP4J/8LK9/wDlVR/b3xe/6EfwT/4WV7/8qq9HooA+evjbrHxSm8G6el74P8I20H/CTeH2VofFt1IzSf2zZeWu1tMX5Wk2qzfwqzNtbbtbvv7e+L3/AEI/gn/wsr3/AOVVHx9/5EXTP+xq8N/+nuyr0egDzj+3vi9/0I/gn/wsr3/5VUf298Xv+hH8E/8AhZXv/wAqq9HooA84/t74vf8AQj+Cf/Cyvf8A5VUf298Xv+hH8E/+Fle//KqvR6KAPOP7e+L3/Qj+Cf8Awsr3/wCVVcD8bdY+KU3g3T0vfB/hG2g/4Sbw+ytD4tupGaT+2bLy12tpi/K0m1Wb+FWZtrbdrfQtecfH3/kRdM/7Grw3/wCnuyoAP7e+L3/Qj+Cf/Cyvf/lVR/b3xe/6EfwT/wCFle//ACqr0eigDzj+3vi9/wBCP4J/8LK9/wDlVR/b3xe/6EfwT/4WV7/8qq9HooA84/t74vf9CP4J/wDCyvf/AJVUf298Xv8AoR/BP/hZXv8A8qq9HooA/PP9sS68RXnxM06TxNpel6RqP9kRrHBpOpSX8TR+dN8zSSW0LK27d8u3+Ffm+b5fvtfEnxuwP+Le+AOn/Q933/ymr4e/bu/5K/pP/YEh/wDSi4r9Nl+6PpXuZ/8A8i/A+kvzRjh/4kzy3/hJPjf/ANE88Af+F5ff/Kaj/hJPjf8A9E88Af8AheX3/wApq9Wor4Y7jyn/AIST43/9E88Af+F5ff8Aymo/4ST43/8ARPPAH/heX3/ymr1aigDyn/hJPjf/ANE88Af+F5ff/KavM/j9rnxgk8C6Wmo+B/BFtb/8JX4aZZLXxneTsZRrliY02tpSfK0mxWbd8qszbX27W+oq8p/aW/5J3pH/AGOfhP8A9SHTqAD/AIST43/9E88Af+F5ff8Aymo/4ST43/8ARPPAH/heX3/ymr1aigDyn/hJPjf/ANE88Af+F5ff/Kaj/hJPjf8A9E88Af8AheX3/wApq9WooA8p/wCEk+N//RPPAH/heX3/AMpqP+Ek+N//AETzwB/4Xl9/8pq9WooA+Xfj9rnxgk8C6Wmo+B/BFtb/APCV+GmWS18Z3k7GUa5YmNNraUnytJsVm3fKrM219u1vTP8AhJPjf/0TzwB/4Xl9/wDKaj9pb/knekf9jn4T/wDUh06vVqAPKf8AhJPjf/0TzwB/4Xl9/wDKaj/hJPjf/wBE88Af+F5ff/KavVqKAPKf+Ek+N/8A0TzwB/4Xl9/8pqP+Ek+N/wD0TzwB/wCF5ff/ACmr1aigDyn/AIST43/9E88Af+F5ff8AymrzP4/a58YJPAulpqPgfwRbW/8AwlfhplktfGd5OxlGuWJjTa2lJ8rSbFZt3yqzNtfbtb6iryn9pb/knekf9jn4T/8AUh06gA/4ST43/wDRPPAH/heX3/ymo/4ST43/APRPPAH/AIXl9/8AKavVqKAPKf8AhJPjf/0TzwB/4Xl9/wDKaj/hJPjf/wBE88Af+F5ff/KavVqKAPKf+Ek+N/8A0TzwB/4Xl9/8pqP+Ek+N/wD0TzwB/wCF5ff/ACmr1aigD5d+P2ufGCTwLpaaj4H8EW1v/wAJX4aZZLXxneTsZRrliY02tpSfK0mxWbd8qszbX27W9M/4ST43/wDRPPAH/heX3/ymo/aW/wCSd6R/2OfhP/1IdOr1agDyn/hJPjf/ANE88Af+F5ff/Kaj/hJPjf8A9E88Af8AheX3/wApq9WooA8p/wCEk+N//RPPAH/heX3/AMpqP+Ek+N//AETzwB/4Xl9/8pq9WooA8p/4ST43/wDRPPAH/heX3/ymrzP4/a58YJPAulpqPgfwRbW//CV+GmWS18Z3k7GUa5YmNNraUnytJsVm3fKrM219u1vqKvKf2lv+Sd6R/wBjn4T/APUh06gA/wCEk+N//RPPAH/heX3/AMpqP+Ek+N//AETzwB/4Xl9/8pq9WooA8p/4ST43/wDRPPAH/heX3/ymo/4ST43/APRPPAH/AIXl9/8AKavVqKAPKf8AhJPjf/0TzwB/4Xl9/wDKaj/hJPjf/wBE88Af+F5ff/KavVqKAPl34/a58YJPAulpqPgfwRbW/wDwlfhplktfGd5OxlGuWJjTa2lJ8rSbFZt3yqzNtfbtb0z/AIST43/9E88Af+F5ff8Aymo/aW/5J3pH/Y5+E/8A1IdOr1agDyn/AIST43/9E88Af+F5ff8Aymo/4ST43/8ARPPAH/heX3/ymr1aigDyn/hJPjf/ANE88Af+F5ff/Kaj/hJPjf8A9E88Af8AheX3/wApq9WooA8p/wCEk+N//RPPAH/heX3/AMpq86+NWsfFK78M+H4PEXg/wjpejN4z8LG4u9M8WXV7cx/8T+w27IX0yFX+baP9YuB83zfdb6bryn9pb/knekf9jn4T/wDUh06gD1aiiigAooooAKKKKACiiigBD2ryb9qD/klln/2NXhn/ANPthXrJ7V5N+1B/ySyz/wCxq8M/+n2wq6fxIDSooor2jnCiivKNS+LniTwv408Nab4j8H2emaH4k1aTR9PvrbWvtN2snlySRtPb+SqqrLC33ZpNu5d1AHq9FFFAHnHx9/5EXTP+xq8N/wDp7sq9Hrzj4+/8iLpn/Y1eG/8A092Vej0AFFFFABRXjPiX4tfEDwb4g8J6fq/gnwyy+ItYj0m3XTfFVxNcruVpJJvLbTo12xxxySN8y/d2/wAS17NQAV5x8ff+RF0z/savDf8A6e7KvR684+Pv/Ii6Z/2NXhv/ANPdlQB6PRRRQAUUV5r4V+J3iL4g6pJeeHPDOny+DIdQmsG1nUtYaG5uPJkaOea2t47aRZI/MVlXdJGzbW+VV2swB6VRRRQB8G/t3f8AJX9J/wCwJD/6UXFfpsvQfSvzJ/bu/wCSv6T/ANgSH/0ouK/TZfuj6V7mf/8AIvwPpL80Y4f+JMkooor4Y7gor510L9qa/wBU/wCET8RXXg6Kx+G/izWV0TSNfXWDLetLJI0NtNNZ+RtjhmkXarLNIy+ZGzKu5tv0VQAV5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnUAerUUUUAFFFeJan8afFnhH4geFdN8U+CLPR/D/AIp1mbQ9Mv7TXftd8syxzzRNcWv2dUjWSO3f5o55Nu5d3+yAe20UUUAeU/tLf8k70j/sc/Cf/qQ6dXq1eU/tLf8AJO9I/wCxz8J/+pDp1erUAFFFFABRXzhpv7Uep6leeH9ZPg20XwFr3iuTwjZ6omtltVS4Wae2WSSxNuqLH50DfduGkWNg+37yr9H0AFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFFFeKeE/2hLnxX+0Nqfwz/wCEM1bSbCz0WfU4vEGqn7N9uaG7W3kWG2ZfM8nL/LMzLu+barLtkYA9rooooA8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTq9WoAKKKKACivnDTf2o9T1K88P6yfBtovgLXvFcnhGz1RNbLaqlws09ssklibdUWPzoG+7cNIsbB9v3lX6PoAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKACiivE/hN8XvHPxamk1SDwX4d07whHrGoaU17J4nmkv9trdzWzSfZRYeXlmh3bfP8AusPmoA9sooooA8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTq9WoAKKKKACivnDTf2o9T1K88P6yfBtovgLXvFcnhGz1RNbLaqlws09ssklibdUWPzoG+7cNIsbB9v3lX6PoAK8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06gD1aiiigAooooAKKKKACiiigBD2ryb9qD/klln/2NXhn/ANPthXrJ7V5N+1B/ySyz/wCxq8M/+n2wq6fxIDSooor2jnCvmXXLeLxR8VvBuveEtA8bWvjO013/AImX/CTWd+2m2Fi3y3/lNdbrWNmjXbG1k25mZfvRtJX01RQAUUUUAecfH3/kRdM/7Grw3/6e7KvR684+Pv8AyIumf9jV4b/9PdlXo9ABRRRQB5Do2jal4y/aM1rxFqWn3lnovhHT10fQ2uYWjW6uLjbNe3Ee77yqqwQqy/8ATavXqKKACvOPj7/yIumf9jV4b/8AT3ZV6PXnHx9/5EXTP+xq8N/+nuyoA9HooooAK+JfCvwnXRtF8K+HdN8A6hp/xb0fxcs9x4t/seSNfsC37SSXH9ptH5ckMlq3l+T5jN+88vy/lavtqigAooooA+D/ANuL958atJjf5l/si3X/AMjTV+mq9B9K/Mr9t3/kuGkf9gq3/wDR01fpqvQfSvdz/wD3HA/4ZfmjHD/xJj6KKK+FO4+JJvg3beIte8FeBfAmpfEhfB+h+LodeudJ17RH0/RNKt7W7a6aOG4uLKG4uN0mI441mmVRJu+7GrL9t0UUAFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFfIXiK1i8YfGbwJ4i8E+GvH1t48svEX/E0/4S6x1JtL07TW3R6j5Ml5us42aNQsbWDbmZl+Zo2kr69ooAKKKKAPKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOr1agAooooA/Pvwv8P9Uj8Z+FfFtp4W8T2X7QUnjCSfW2k8NTw6BDazXHlXrLcND9hWP7DF8tzDJ9qm+RWZmdo6/QSiigAryn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTqAPVqKKKACvlyfxtDJ+2xY6wvh/xl/ZEfhW48NPqX/CHat9lF82pQsq+d9m2+XsVm87d5O35t1fUdFABRRRQB5T+0t/yTvSP+xz8J/8AqQ6dXq1eU/tLf8k70j/sc/Cf/qQ6dXq1ABRRRQB+ffhf4f6pH4z8K+LbTwt4nsv2gpPGEk+ttJ4anh0CG1muPKvWW4aH7Csf2GL5bmGT7VN8iszM7R1+glFFABXlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dQB6tRRRQAV8b+I/C3hvxl8SPAWpfDL4W6x4F8d2vimHU9f15vCUuieXYrI32+K5vGjWK885WZNsck29m8z7qlq+yKKACiiigDyn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOr1agAooooA/Pvwv8P9Uj8Z+FfFtp4W8T2X7QUnjCSfW2k8NTw6BDazXHlXrLcND9hWP7DF8tzDJ9qm+RWZmdo6/QSiigAryn9pb/knekf9jn4T/wDUh06vVq8p/aW/5J3pH/Y5+E//AFIdOoA9WooooAKKKKACiiigAooooAQ9q8m/ag/5JZZ/9jV4Z/8AT7YV6ye1eL/tYrfTfB9Y9Pmgtb9vE3hsW811A00ccn9u2GxmjVlZ13fw7l3f3l61dP4kB0NFecf2D8Xv+h48E/8AhG3v/wAtaP7B+L3/AEPHgn/wjb3/AOWte0c56PRXnH9g/F7/AKHjwT/4Rt7/APLWj+wfi9/0PHgn/wAI29/+WtAHo9Fecf2D8Xv+h48E/wDhG3v/AMtaP7B+L3/Q8eCf/CNvf/lrQAfH3/kRdM/7Grw3/wCnuyr0evnn43aP8UofBunte+MPCNzB/wAJN4fVVh8JXUbLJ/bNl5bbm1NvlWTazL/Eqsu5d25e/wD7B+L3/Q8eCf8Awjb3/wCWtAHo9Fecf2D8Xv8AoePBP/hG3v8A8taP7B+L3/Q8eCf/AAjb3/5a0Aej0V5x/YPxe/6HjwT/AOEbe/8Ay1o/sH4vf9Dx4J/8I29/+WtAHo9ecfH3/kRdM/7Grw3/AOnuyo/sH4vf9Dx4J/8ACNvf/lrXAfG7R/ilD4N09r3xh4RuYP8AhJvD6qsPhK6jZZP7ZsvLbc2pt8qybWZf4lVl3Lu3KAfQ1Fecf2D8Xv8AoePBP/hG3v8A8taP7B+L3/Q8eCf/AAjb3/5a0Aej0V5x/YPxe/6HjwT/AOEbe/8Ay1o/sH4vf9Dx4J/8I29/+WtAHo9Fecf2D8Xv+h48E/8AhG3v/wAtaP7B+L3/AEPHgn/wjb3/AOWtAHyt+27/AMlw0j/sFW//AKOmr9NV6D6V+WP7Utn4jg+M2mw+ItT0vVNS+x2/l3Gm6XJZwKvmSbVaGS4mZvm3f8tK++V8OfG7jHxC8Af+EJff/Lmve4g/3HA/4ZfoY4f+JM9Yoryn/hG/jf8A9FD8Af8AhB33/wAuaP8AhG/jf/0UPwB/4Qd9/wDLmvhDuPVqK8p/4Rv43/8ARQ/AH/hB33/y5o/4Rv43/wDRQ/AH/hB33/y5oA9Wryn9pb/knekf9jn4T/8AUh06j/hG/jf/ANFD8Af+EHff/LmvM/j9ofxgj8C6W+o+OPBFzb/8JX4aVY7XwZeQMJTrliI33Nqr/KsmxmXb8yqy7k3blAPqKivKf+Eb+N//AEUPwB/4Qd9/8uaP+Eb+N/8A0UPwB/4Qd9/8uaAPVqK8p/4Rv43/APRQ/AH/AIQd9/8ALmj/AIRv43/9FD8Af+EHff8Ay5oA9Woryn/hG/jf/wBFD8Af+EHff/Lmj/hG/jf/ANFD8Af+EHff/LmgA/aW/wCSd6R/2OfhP/1IdOr1avl34/aH8YI/AulvqPjjwRc2/wDwlfhpVjtfBl5AwlOuWIjfc2qv8qybGZdvzKrLuTduX0z/AIRv43/9FD8Af+EHff8Ay5oA9Woryn/hG/jf/wBFD8Af+EHff/Lmj/hG/jf/ANFD8Af+EHff/LmgD1aivKf+Eb+N/wD0UPwB/wCEHff/AC5o/wCEb+N//RQ/AH/hB33/AMuaAPVq8p/aW/5J3pH/AGOfhP8A9SHTqP8AhG/jf/0UPwB/4Qd9/wDLmvM/j9ofxgj8C6W+o+OPBFzb/wDCV+GlWO18GXkDCU65YiN9zaq/yrJsZl2/Mqsu5N25QD6ioryn/hG/jf8A9FD8Af8AhB33/wAuaP8AhG/jf/0UPwB/4Qd9/wDLmgD1aivKf+Eb+N//AEUPwB/4Qd9/8uaP+Eb+N/8A0UPwB/4Qd9/8uaAPVqK8p/4Rv43/APRQ/AH/AIQd9/8ALmj/AIRv43/9FD8Af+EHff8Ay5oAP2lv+Sd6R/2OfhP/ANSHTq9Wr5d+P2h/GCPwLpb6j448EXNv/wAJX4aVY7XwZeQMJTrliI33Nqr/ACrJsZl2/Mqsu5N25fTP+Eb+N/8A0UPwB/4Qd9/8uaAPVqK8p/4Rv43/APRQ/AH/AIQd9/8ALmj/AIRv43/9FD8Af+EHff8Ay5oA9Woryn/hG/jf/wBFD8Af+EHff/Lmj/hG/jf/ANFD8Af+EHff/LmgD1avKf2lv+Sd6R/2OfhP/wBSHTqP+Eb+N/8A0UPwB/4Qd9/8ua8z+P2h/GCPwLpb6j448EXNv/wlfhpVjtfBl5AwlOuWIjfc2qv8qybGZdvzKrLuTduUA+oqK8p/4Rv43/8ARQ/AH/hB33/y5o/4Rv43/wDRQ/AH/hB33/y5oA9Woryn/hG/jf8A9FD8Af8AhB33/wAuaP8AhG/jf/0UPwB/4Qd9/wDLmgD1aivKf+Eb+N//AEUPwB/4Qd9/8uaP+Eb+N/8A0UPwB/4Qd9/8uaAD9pb/AJJ3pH/Y5+E//Uh06vVq+Xfj9ofxgj8C6W+o+OPBFzb/APCV+GlWO18GXkDCU65YiN9zaq/yrJsZl2/Mqsu5N25fTP8AhG/jf/0UPwB/4Qd9/wDLmgD1aivKf+Eb+N//AEUPwB/4Qd9/8uaP+Eb+N/8A0UPwB/4Qd9/8uaAPVqK8p/4Rv43/APRQ/AH/AIQd9/8ALmj/AIRv43/9FD8Af+EHff8Ay5oA9Wryn9pb/knekf8AY5+E/wD1IdOo/wCEb+N//RQ/AH/hB33/AMua86+NWjfFK08M+H5vEXjDwjqmjL4z8LC4tNM8J3Vlcyf8T+w27Jn1OZU+baf9W2R8vy/eUA+m6KKKACiiigAooooAKKKKAEPavJv2oP8Aklln/wBjV4Z/9PthXrJ7V5N+1B/ySyz/AOxq8M/+n2wq6fxIDSooor2jnCiiigAooooA84+Pv/Ii6Z/2NXhv/wBPdlXo9ecfH3/kRdM/7Grw3/6e7KvR6ACiiigAooooAK84+Pv/ACIumf8AY1eG/wD092Vej15x8ff+RF0z/savDf8A6e7KgD0eiiigAooooAKKKKAPg/8AbI/5OA0j/rxtP/R0lfpqv3Vr8yv2yP8Ak4DSP+vG0/8AR0lfpqv3Vr3eIf8AccD/AIZfoY0PjkPooor4U7gooooAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKACiiigAooooA8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/wDUh06vVq8p/aW/5J3pH/Y5+E//AFIdOoA9WooooAKKKKACiiigDyn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOr1agAooooAKKKKACvKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06gD1aiiigAooooAKKKKAPKf2lv+Sd6R/2OfhP/wBSHTq9Wryn9pb/AJJ3pH/Y5+E//Uh06vVqACiiigAooooAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKACiiigAooooAKKKKAEPavJv2oP+SWWf/Y1eGf/AE+2FesntXk37UH/ACSyz/7Grwz/AOn2wq6fxIDSooor2jnCvKvDPxzm8R/HLUPh/wD8InqmlWNrpM2ow63qX7j7Y0dwtvIsdvt3eX83yyNt3fwqy7Wb1WvnmXxlC/7W1nqi6L4q/sqPwzNoDah/wiup/ZvtrX8bKvmfZtvl7VZvO3eXt/ioA+hqKKKAPOPj7/yIumf9jV4b/wDT3ZV6PXnHx9/5EXTP+xq8N/8Ap7sq9HoAK8/+NnxVm+EHgW+1618M6p4quYYZp1sdPXaqrHC0zSTzN8sMarG3zN833VVWZttegV5n+0dqy2XwZ8X6emn6tqd9rGj39hZ22k6Td37STSW8iqrLbxt5a7v4m2r/ALVAEvi34vzeGfhHY+MrXwvqmvX19Yx3Nvo+lru+aSHzv3kzbVhjXa26Zv8AvlmZVbo/hp4w/wCFifDnwr4q+x/2f/bmk2mqfZPM8zyfOhWTy921d23dt3bVrzay8b2tv+zbbRvpPij7T/Y66K1j/wAIvqf2n7X9i+75P2bzPL3fL523y93y7q2v2YdS834E+B9Ln0/VtM1HRdDsNNvrbVtLubCWO4jtI1kVVmjXzFVv4l3L/tUAep15x8ff+RF0z/savDf/AKe7KvR684+Pv/Ii6Z/2NXhv/wBPdlQB6PRRRQAV4Za/tKXlxp+leKn8Kwr8NdU1hdHtddXVN19+8m+zx3clr5O1bdpvl3eczbWVtv8ACvudfIfh/wAP643wN8HfBH/hG9ei8Q6XrlhaX19Lpc0enx2VnqK3TXq3TL5MitHCu1VkaTdJt2rtbaAfXlFFFAHwl+1x837R2kK3zJ9nsl2t/wBdGr9Ml+6PpX5m/tbf8nIaR/172X/oxq/TJfuj6V7vEf8AuWB/wy/9tMcP8Uh9FFFfCnceBeK/jT8SvAviTwZpmueAvChTxRrkGi2q6X4wurm6TcrySzCJtMjVljhjkkb94v3du75lr32vCvD+g6p48/aj8QeKNX0y/sfD/gjT10Tw891A0cd5dXSpNf3Ue4fMqqltArL8u5Z691oAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKAPLvj98Y7j4JfD3UfElp4U1Xxhd28FxOlhpq7IlWGGSaSS4uG/dwRqsbfM3zM21VVmZVq1J468U614E8L6z4T8KWmrX+uQQ3T2+oax9jtbKOSHzd0kywSSN/Ci7IW3M3zbV+asT9qrXBYfAjxvpKabrWq6jrehahplja6Lot5qcklxJayLGrLbxSeWrM23dJtXn71cjpPjHQbz4C+CLHXtB+JVtYx29tpd42h6NrunXtpdQ2yt88Vqsd55bfMvmxq0LMNrN92gD0j4H/FQ/FrwnqGoT6QdD1XTNYvdD1KwW5+0RRXVrO0MvlTbV8yPK/K21c/3Vr0ivCP2R/D2qeF/Aeu6a+l3mj+Eo9du28LW2qWf2W/XTW2srXEbKsm5pjOytMPOZWVpv3jNXu9AHlP7S3/JO9I/7HPwn/6kOnV6tXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1ABRRRQB4nqHxs8WeFfHXhbT/FngK30Xw14o1eTRdN1K010Xd5DcbJJIftdqsCxxrIsMnzRzTbW2qfvV7ZXydofjyP4nftAWev8Ai7QPGujaX4YvZtP8KaLN4K1nypLiT9zJqtzcLa+SqsrMkas22ONmkbazfu/rGgAryn9pb/knekf9jn4T/wDUh06vVq8p/aW/5J3pH/Y5+E//AFIdOoA9WooooA8u+P3xjuPgl8PdR8SWnhTVfGF3bwXE6WGmrsiVYYZJpJLi4b93BGqxt8zfMzbVVWZlWr2pfF3TPD3wZg+ImrwzWllJplvf/YoW82VpJlXy7eP7vmSPJIsa9NzMtYH7VWuCw+BHjfSU03WtV1HW9C1DTLG10XRbzU5JLiS1kWNWW3ik8tWZtu6TavP3q4fRfBPiD4vfD/4RXnh/V/8AhFn8GRxtdaP4y8HX+2e/jtY44pPJkmspMQ7pdrfNGzMrfejXAB6b+z/8Vb740fDWDxLqegJ4Z1Eahfadc6Wl79sEElrdS2zfvvLj3ZaEt93vXptfPn7Gvhnxl4R+F+qW3i8wxTSeJdZmgtU0eaxlVH1O5ZpWEk8m6OQt5keNu2Nl+aT7zfQdAHlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnV6tQAUUUUAeJ6h8bPFnhXx14W0/xZ4Ct9F8NeKNXk0XTdStNdF3eQ3GySSH7XarAscayLDJ80c021tqn71e2V8naH48j+J37QFnr/i7QPGujaX4YvZtP8KaLN4K1nypLiT9zJqtzcLa+SqsrMkas22ONmkbazfu/rGgAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooA8u+P3xjuPgl8PdR8SWnhTVfGF3bwXE6WGmrsiVYYZJpJLi4b93BGqxt8zfMzbVVWZlWrUnjrxTrXgTwvrPhPwpaatf65BDdPb6hrH2O1so5IfN3STLBJI38KLshbczfNtX5qxP2qtcFh8CPG+kpputarqOt6FqGmWNroui3mpySXElrIsastvFJ5aszbd0m1efvVyOk+MdBvPgL4Isde0H4lW1jHb22l3jaHo2u6de2l1DbK3zxWqx3nlt8y+bGrQsw2s33aAPSPgf8VD8WvCeoahPpB0PVdM1i90PUrBbn7RFFdWs7Qy+VNtXzI8r8rbVz/dWvSK8I/ZH8Pap4X8B67pr6XeaP4Sj127bwtbapZ/Zb9dNbaytcRsqybmmM7K0w85lZWm/eM1e70AeU/tLf8AJO9I/wCxz8J/+pDp1erV5T+0t/yTvSP+xz8J/wDqQ6dXq1ABRRRQB4p4T/aEufFf7Q2p/DP/AIQzVtJsLPRZ9Ti8Qaqfs325obtbeRYbZl8zycv8szMu75tqsu2Rva6+XJ/G0Mn7bFjrC+H/ABl/ZEfhW48NPqX/AAh2rfZRfNqULKvnfZtvl7FZvO3eTt+bdX1HQAV5T+0t/wAk70j/ALHPwn/6kOnV6tXlP7S3/JO9I/7HPwn/AOpDp1AHq1FFFABRRRQAUUUUAFFFFACHtXk37UH/ACSyz/7Grwz/AOn2wr1k9q8m/ag/5JZZ/wDY1eGf/T7YVdP4kBpUUUV7RzhRRRQAUUUUAecfH3/kRdM/7Grw3/6e7KvR684+Pv8AyIumf9jV4b/9PdlXo9ABRRRQAUUUUAFecfH3/kRdM/7Grw3/AOnuyr0evOPj7/yIumf9jV4b/wDT3ZUAej0UUUAFFFFABRRRQB8Jftbf8nIaR/172X/oxq/TJfuj6V+Zv7UnzftQaQrfMu2wXa3/AF0r9Ml+6PpXu8R/7ngf8L/9tMcP8Uh9FFFfCncFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnV6tQAUUUUAFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnV6tQAUUUUAFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnV6tQAUUUUAFFFFABXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1eU/tLf8k70j/sc/Cf8A6kOnUAerUUUUAFFFFABRRRQAUUUUAIe1eLftYahFpPwfS/nWZ4LbxL4cndLa3knkIXXbBvljjVmduPuqrM38PNe0ntXk37UH/JLLP/savDP/AKfbCrp/EgOK/wCF++Gf+gX42/8ACD1v/wCQqP8Ahfvhn/oF+Nv/AAg9b/8AkKvR6K9o5zzj/hfvhn/oF+Nv/CD1v/5Co/4X74Z/6Bfjb/wg9b/+Qq9HooA84/4X74Z/6Bfjb/wg9b/+QqP+F++Gf+gX42/8IPW//kKvR6KAPnn43fG7w7qPg3T4YtN8XIy+JvD8/wC/8F6zAu2PWbKRvmktFXdtX5V+8zbVXczKtd//AML98M/9Avxt/wCEHrf/AMhUfH3/AJEXTP8AsavDf/p7sq9HoA84/wCF++Gf+gX42/8ACD1v/wCQqP8Ahfvhn/oF+Nv/AAg9b/8AkKvR6KAPOP8Ahfvhn/oF+Nv/AAg9b/8AkKj/AIX74Z/6Bfjb/wAIPW//AJCr0eigDzj/AIX74Z/6Bfjb/wAIPW//AJCrgPjd8bvDuo+DdPhi03xcjL4m8Pz/AL/wXrMC7Y9ZspG+aS0Vd21flX7zNtVdzMq19DV5x8ff+RF0z/savDf/AKe7KgA/4X74Z/6Bfjb/AMIPW/8A5Co/4X74Z/6Bfjb/AMIPW/8A5Cr0eigDzj/hfvhn/oF+Nv8Awg9b/wDkKj/hfvhn/oF+Nv8Awg9b/wDkKvR6KAPOP+F++Gf+gX42/wDCD1v/AOQqP+F++Gf+gX42/wDCD1v/AOQq9HooA/Pb9oTxhY+Iv2hNM1i0t9Uis4/se6PUNHu7K5+Vvm2280ayN/3z838NffP/AA0r4S2j/iT+P/8Aw3PiH/5Br4i/ai/5Of0j/tw/9G1+mQ+6te5xH/umB/w/5GOH+KR5Z/w0t4S/6A/j/wD8Nz4h/wDkCj/hpbwl/wBAfx//AOG58Q//ACBXq1FfDHceU/8ADS3hL/oD+P8A/wANz4h/+QKP+GlvCX/QH8f/APhufEP/AMgV6tRQB5T/AMNLeEv+gP4//wDDc+If/kCvM/j/APtAeGtW8C6VBDpfjdHXxV4ZnZrrwHrsC7Y9csZG+aSyVS21W2rnczbVVWZlWvqKvKf2lv8Aknekf9jn4T/9SHTqAD/hpbwl/wBAfx//AOG58Q//ACBR/wANLeEv+gP4/wD/AA3PiH/5Ar1aigDyn/hpbwl/0B/H/wD4bnxD/wDIFH/DS3hL/oD+P/8Aw3PiH/5Ar1aigDyn/hpbwl/0B/H/AP4bnxD/APIFH/DS3hL/AKA/j/8A8Nz4h/8AkCvVqKAPl34//tAeGtW8C6VBDpfjdHXxV4ZnZrrwHrsC7Y9csZG+aSyVS21W2rnczbVVWZlWvTP+GlvCX/QH8f8A/hufEP8A8gUftLf8k70j/sc/Cf8A6kOnV6tQB5T/AMNLeEv+gP4//wDDc+If/kCj/hpbwl/0B/H/AP4bnxD/APIFerUUAeU/8NLeEv8AoD+P/wDw3PiH/wCQKP8Ahpbwl/0B/H//AIbnxD/8gV6tRQB5T/w0t4S/6A/j/wD8Nz4h/wDkCvM/j/8AtAeGtW8C6VBDpfjdHXxV4ZnZrrwHrsC7Y9csZG+aSyVS21W2rnczbVVWZlWvqKvKf2lv+Sd6R/2OfhP/ANSHTqAD/hpbwl/0B/H/AP4bnxD/APIFH/DS3hL/AKA/j/8A8Nz4h/8AkCvVqKAPKf8Ahpbwl/0B/H//AIbnxD/8gUf8NLeEv+gP4/8A/Dc+If8A5Ar1aigDyn/hpbwl/wBAfx//AOG58Q//ACBR/wANLeEv+gP4/wD/AA3PiH/5Ar1aigD5d+P/AO0B4a1bwLpUEOl+N0dfFXhmdmuvAeuwLtj1yxkb5pLJVLbVbaudzNtVVZmVa9M/4aW8Jf8AQH8f/wDhufEP/wAgUftLf8k70j/sc/Cf/qQ6dXq1AHlP/DS3hL/oD+P/APw3PiH/AOQKP+GlvCX/AEB/H/8A4bnxD/8AIFerUUAeU/8ADS3hL/oD+P8A/wANz4h/+QKP+GlvCX/QH8f/APhufEP/AMgV6tRQB5T/AMNLeEv+gP4//wDDc+If/kCvM/j/APtAeGtW8C6VBDpfjdHXxV4ZnZrrwHrsC7Y9csZG+aSyVS21W2rnczbVVWZlWvqKvKf2lv8Aknekf9jn4T/9SHTqAD/hpbwl/wBAfx//AOG58Q//ACBR/wANLeEv+gP4/wD/AA3PiH/5Ar1aigDyn/hpbwl/0B/H/wD4bnxD/wDIFH/DS3hL/oD+P/8Aw3PiH/5Ar1aigDyn/hpbwl/0B/H/AP4bnxD/APIFH/DS3hL/AKA/j/8A8Nz4h/8AkCvVqKAPl34//tAeGtW8C6VBDpfjdHXxV4ZnZrrwHrsC7Y9csZG+aSyVS21W2rnczbVVWZlWvTP+GlvCX/QH8f8A/hufEP8A8gUftLf8k70j/sc/Cf8A6kOnV6tQB5T/AMNLeEv+gP4//wDDc+If/kCj/hpbwl/0B/H/AP4bnxD/APIFerUUAeU/8NLeEv8AoD+P/wDw3PiH/wCQKP8Ahpbwl/0B/H//AIbnxD/8gV6tRQB5T/w0t4S/6A/j/wD8Nz4h/wDkCvO/jR8bPDvi3wvoGk2Gm+LoLy58ZeFtkmp+C9ZsLZSuvWDfPcXFrHEn3f4mG44UfMwr6aryn9pb/knekf8AY5+E/wD1IdOoA9WooooAKKKKACiiigAooooAQ9q8m/ag/wCSWWf/AGNXhn/0+2FesntXk37UH/JLLP8A7Grwz/6fbCrp/EgNKiiivaOcKKqatq1joOl3OpapeW+nafaxtPcXd3MscUMa/eZmb5VWpbe8t7yzivILiOezkjWSOeOTdGyt825W/u0ATUVl+HPFGj+MtHg1bw/q1jrmlTbvJvtNuluIJNrbW2yKzK3zLtrUoA84+Pv/ACIumf8AY1eG/wD092Vej15x8ff+RF0z/savDf8A6e7KvR6ACiiigAormNN+J3g/VvFFz4ZsPFmh33iO3Zlm0a21KGS7h2/e3Qq25dv+7XT0AFecfH3/AJEXTP8AsavDf/p7sq9Hrzj4+/8AIi6Z/wBjV4b/APT3ZUAej0UUUAFFFc3pvxL8H6x4oufDeneKtDvvEdru+0aTbalDJeQ7fvboVbcu3/doA6SiiigD4U/aQ+b9rDSFb5l87Tl2t/vLX6YD7q1+Z/7R/wDydjpH/XbTv/Qlr9MB91a9ziP/AHXA/wCH/Ixw/wAUh9FFFfDHcFFeXWf7THwg1bVLfTbH4q+Cb3UrmZLa3s7XxHZyTTSM21Y0RZNzMzYXaK9RoAK8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06gD1aiiigAoorE/4SjRv+El/wCEZ/tew/4SEWn2/wDsn7VH9r+y+Z5fn+Tnd5e/5d23bu+WgDbooooA8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06vVqACiiigAorkYvip4Mm8bSeDI/F2gyeMIxl/D66pC1+v7vzObfd5n3Pm+7935q66gAryn9pb/knekf8AY5+E/wD1IdOr1avKf2lv+Sd6R/2OfhP/ANSHTqAPVqKKKACiiuPtPit4L1DxpdeD7TxboV34rtVLT6HBqcL38O1QzFrcN5i/Kyn7v8VAHYUUUUAeU/tLf8k70j/sc/Cf/qQ6dXq1eU/tLf8AJO9I/wCxz8J/+pDp1erUAFFFFABRXl1n+0x8INW1S302x+Kvgm91K5mS2t7O18R2ck00jNtWNEWTczM2F2ivUaACvKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOoA9WooooAKKK43Sfix4K1zxdd+FdP8ZeH7/xRZl/tOh2upwSX0BU/MGhV/MXbxncvegDsqKKKAPKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOr1agAoorL1zXdP8ADOjXmqavqNtpOmWkbTXN7fTLDBBGv3meRsKq+7UAalFcv4h+Ivhbwj4bh8Q674m0bRdAm8sxatqOoQ29pJ5nzRlZmYK24crz81aWgeItM8V6PZ6to+pWer6Xdx+bBe6fOs8Eq/3lkU7WWgDWryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKKKACiiigAooooAQ9q8m/ag/5JZZ/wDY1eGf/T7YV6ye1eTftQf8kss/+xq8M/8Ap9sKun8SA0qKKK9o5zyX9qjwRofjL4G+MZNbsV1D+ydF1G/s4pJG8pbhbSTbI0e7bIy7ty7lba21l+Zd1cZ441y4/wCFM/DLwr9j17+xfEGm28etalomj3uotb2EdvG0kP8AoscjLJNuWFWZfutM33lWvZ/H3w70X4naK2k69/aEunyKyzQafq13YecrLtaOT7PJH5isrfdbctTeB/A+l/D7Q4tH0b+0P7Pjb93HqGpXF+0fyqu1ZLiSRlXaq/KrbVpAeS/sYazp+o/CfULXT7W8s4LPxFrW2K502ayVVbUbllVfMjVW2r8rKv3W+VtrfLXvVY/hXwjpXgnS203Rbb7FaSXVxetH5jSfvppmmkbczN96SRm/4FWxTA84+Pv/ACIumf8AY1eG/wD092Vej15x8ff+RF0z/savDf8A6e7KvR6ACiiigD50+K9rqWjfEj4Wzavoek6D4F0vxUq2NzoVw015Ne3UclvbLJC0cK28LSXDeZ5bTbm2/Kq7mX6Lrz/R/gL4J0HXLHVLfT7yWXT5mubG0u9YvbmxsZG3fNbWskzQwt8zKvlxrtVtq7a9AoAK84+Pv/Ii6Z/2NXhv/wBPdlXo9ecfH3/kRdM/7Grw3/6e7KgD0eiiigArwfxRYaf46+Mngfwv4V0+3gsfAepNrusalaQ+XFYyNbyLHZR7fl8yb7R5ki/wqu5vmZa94rzPw/8As8+DfCuoNeaR/wAJFp7NfNqUkEHizVVtpLhpPMaRoftPltub7ysu1v4qAPTKKKKAPhT9pD/k7LSP+u2nf+hLX6YJX5n/AB8/5PB0j/r+0r/0KOv0wSve4l/3bA/4P8jLD/FIfRRRXwh2nz/48LfFT9pjwf4KjdptB8ERL4w1wD7rXrbodMgb/gS3Nxt/vQRN/dr6ArlfDfw+0Lwn4h8S67plgbbVfEl1Hd6rdNNJK1zJHEsMZ+Zm2qscaqqrtX/ZrqqACvKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOoA9WooooAK+XPDfw90HwP+3pLPoWnLZ3Os+A7/UtSuWkaee7uG1S3+aSSRmY7fuqu7aqqqrtVdtfUdeUf8M0+B/+FgL42I8SHxKrNi9Pi7VsLG0wmaAR/avL8jzFVvJ2+X8v3aAPV6KKKAPKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06vVqACiiigD4K0GzEn7A3wu1aRGPi+Txbo2qLOV/0ltYm1+Nblv8Aro3nXKt/sllr71ryzT/2c/AGn+LovEUGhzC8h1GTWILWTUruTT4L6RW3XUVi0n2eOb95J+8WNWzIzbtzMa9ToAK8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06gD1aiiigAr4G1Dw742+HPw9+DfgfVPAF5aa/o3xH09h4whvLJrK+MmoyNPcR7J/tW6e3klaRWhX5Wl3N8vzffNed6L8D/CeieLo/E6QarqWuW7TPaXOva5faoti0nyyNbR3U8i27Mu5d0Sr8p2/d+WgD0SiiigDyn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOr1agAooooA+f8Ax4W+Kn7THg/wVG7TaD4IiXxhrgH3WvW3Q6ZA3/Alubjb/egib+7X0BXK+G/h9oXhPxD4l13TLA22q+JLqO71W6aaSVrmSOJYYz8zNtVY41VVXav+zXVUAFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFfNfiyx074ifHb4e+EPB2l2tvYfDnVpPEGuatYwrHDYSPazxx6fGVG3zpmuPMkj/hjVWb5mWvpSvIPDv7MPgXwbqbX2hL4n015NQfVZLeDxlrK20t1JJ5kkklv9r8t9z/ADMrLtbndxQB6/RRRQB5T+0t/wAk70j/ALHPwn/6kOnV6tXlP7S3/JO9I/7HPwn/AOpDp1erUAFeG/th/D/QfHX7PfjqXX9OTUxo2hanqdjDPJJ5KXK2UyxyNGG2yMu4su5W2ttZdrKrV7lXFfEj4W+H/it4fOh+IxqkulyK6TW+n6zeacLhGVlaOX7LNGZY2UkeW25efu0Acdovifwt8Pv2fvA/jHxUtvFa6HoNnLb3LwedNHJJbJEsdt/F5km4Rqq/M27b/FSfss+CNT8GfDW5n1vTBoOqeIta1DxFJoUbZXS1urhpUts/3lUru2/L5jSbflxU19+y18P9T8L+H/D11B4guNN0HUBqel+Z4t1bzrK4WPykaOb7V5i7Y9yqu7au5tqruau38D+A9N8A6dPaaXc6zcpNJ5zNret3uqyK20D5ZLqaRlXj7qtigDqq8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06gD1aiiigAooooAKKKKAG9KTP4UH3r5j+PX7bnhr4Ym50fwz5PibxIu5W8t/8ARLVv+mki/eb/AGV/4Ey124PBV8dUVHDx5pETqRpx5pHu/jTx5oPw70OTV/EOq2+lafGP9ZO33m/uqv3mb/ZWvLPjP4oj8ZfArRdbhtLixt77xP4ZmgjvF2ymJtdsNrMv8O5fm2+9fB2geKr79oL4y6JJ8R/FMMOltceZd3GpXS29tFbr8zRx/Mqru27V2/xNur7W/aA+MHw/1b4b2Gn6T4x0C7lj8R+HZxbWeoQuyww6zZSSNtVvurHGzN/dVWr38yyOeVypUtZ1JaytsvI56dZVOY9OoriP+F4fDz/odtA/8GMP/wAVR/wvD4ef9DtoH/gxh/8Aiqx+q1/+fb+4fNE7eiuI/wCF4fDz/odtA/8ABjD/APFUf8Lw+Hn/AEO2gf8Agxh/+Kp/Va//AD7f3BzRO3oriP8AheHw8/6HbQP/AAYw/wDxVH/C8Ph5/wBDtoH/AIMYf/iqPqtf/n2/uDmiZ/x9/wCRF0z/ALGrw3/6e7KvR68L+NXxa8Ea14O0+3sPFmi3c6+JPD9y0cN9GzLHHq9lJI33vurGrMzfwqrV3v8AwvD4ef8AQ7aB/wCDGH/4ql9Vr/8APt/cHNE7eiuI/wCF4fDz/odtA/8ABjD/APFUf8Lw+Hn/AEO2gf8Agxh/+Kp/Va//AD7f3BzRO3oriP8AheHw8/6HbQP/AAYw/wDxVH/C8Ph5/wBDtoH/AIMYf/iqPqtf/n2/uDmidvXnHx9/5EXTP+xq8N/+nuyrQ/4Xh8PP+h20D/wYw/8AxVcF8avi14I1rwdp9vYeLNFu518SeH7lo4b6NmWOPV7KSRvvfdWNWZm/hVWpfVa//Pt/cHNE90oriP8AheHw8/6HbQP/AAYw/wDxVH/C8Ph5/wBDtoH/AIMYf/iqf1Wv/wA+39wc0Tt6K4j/AIXh8PP+h20D/wAGMP8A8VR/wvD4ef8AQ7aB/wCDGH/4qj6rX/59v7g5onb0VxH/AAvD4ef9DtoH/gxh/wDiqP8AheHw8/6HbQP/AAYw/wDxVH1Wv/z7f3BzRPkv4+f8ng6R/wBf2lf+hR1+mAr8vvjB4g03xN+1jod9pGoWup2Ml9pirc2kyyRttaP+Ja/UFelepxPGUMPgoy/k/wAiMP8AFIfRRRXwh2hRRRQAV5T+0t/yTvSP+xz8J/8AqQ6dXq1eU/tLf8k70j/sc/Cf/qQ6dQB6tRRRQAUUUUAFFFFAHlP7S3/JO9I/7HPwn/6kOnV6tXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1ABRRRQAUUUUAFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFFFFABRRRQB5T+0t/yTvSP+xz8J/+pDp1erV5T+0t/wAk70j/ALHPwn/6kOnV6tQAUUUUAFFFFABXlP7S3/JO9I/7HPwn/wCpDp1erV5T+0t/yTvSP+xz8J/+pDp1AHq1FFFABRRRQAUUUUAeU/tLf8k70j/sc/Cf/qQ6dXq1eU/tLf8AJO9I/wCxz8J/+pDp1erUAFFFFABRRRQAV5T+0t/yTvSP+xz8J/8AqQ6dXq1eU/tLf8k70j/sc/Cf/qQ6dQB6tRRRQAUUUUAFFFFAHC/Fn4cJ8UvA994f/tnUNCFz/wAvWmybG/3W/vI2fmX+KvzE+NX7Ofi/4H6k6avafa9Gkbbb6xaKzW0n+y3/ADzb/Zb/AIDur9c8fjVDVtJstYsJrHULWG+s7hfLlt7mNZI5F/usrfer6bJM+r5NP3I80OxzVqEaqPyK+BHwxsPi/wDEKz8LX2tSaG94kn2e4W287dIq7trLuXbuVW/4Ft/vV7v8Sv2Covh/4dtNTHjR737RrWk6T5Y0zy9v23ULazMm7zm+59o3bf4tu35fvV3nxa/YfudA1yHxj8JrlrPUbGZb2PRZ5P8Alorbl8mRvu/7rf8AfX8NeufFvX5vE3wQ8LandWcmm3lx4r8ItdWcysrwTf8ACQad5kZz/dbcPwr6fOuJK9T2eIy6t7svijyxvGX3HPRw8fhqRPFv+HZ8P/RQpP8AwUf/AG6j/h2fD/0UKT/wUf8A26vt/ijivm/9aM2/5/fhH/I6Pq1L+U+IP+HZ8P8A0UKT/wAFH/26j/h2fD/0UKT/AMFH/wBur7f4o4o/1ozb/n9+Ef8AIPq1L+U+IP8Ah2fD/wBFCk/8FH/26j/h2fD/ANFCk/8ABR/9ur7f4o4o/wBaM2/5/fhH/IPq1L+U/PH4lfsEx/D3w7aakPGj3v2jWtJ0ny/7M8vb9t1C2szJu85vufaN23+Lbt+X71df/wAOz4f+ihSf+Cj/AO3V9FftK/8AJO9I/wCxz8J/+pDp1eq8Uf60Zt/z+/CP+QfVqX8p8Qf8Oz4f+ihSf+Cj/wC3Uf8ADs+H/ooUn/go/wDt1fb/ABRxR/rRm3/P78I/5B9WpfynxB/w7Ph/6KFJ/wCCj/7dR/w7Ph/6KFJ/4KP/ALdX2/xRxR/rRm3/AD+/CP8AkH1al/KfEH/Ds+H/AKKFJ/4KP/t1ch8Sv2CY/h74dtNSHjR737RrWk6T5f8AZnl7ftuoW1mZN3nN9z7Ru2/xbdvy/er9DuK8q/aV/wCSd6R/2OfhP/1IdOo/1ozb/n9+Ef8AIPq1L+U+df8Ah2fD/wBFCk/8FH/26j/h2fD/ANFCk/8ABR/9ur7f4o4o/wBaM2/5/fhH/IPq1L+U+IP+HZ8P/RQpP/BR/wDbqP8Ah2fD/wBFCk/8FH/26vt/ijij/WjNv+f34R/yD6tS/lPiD/h2fD/0UKT/AMFH/wBuo/4dnw/9FCk/8FH/ANur7f4pOKP9aM2/5/fhH/IPq1L+U/Prxt+wna/DWx0XW7jxa+s2z+ItF0u4svsH2dnju9TtbWTbIszFWCzs3/Aa+r/+GavCWP8AkMeP/wDw43iH/wCTqX9pX/knekf9jn4T/wDUh06vVfrXj43MsXmMoyxVTm5TWFONP4Tyv/hmnwl/0GPH/wD4cbxD/wDJ9H/DNPhL/oMeP/8Aw43iH/5Pr1aivONDyn/hmnwl/wBBjx//AOHG8Q//ACfR/wAM0+Ev+gx4/wD/AA43iH/5Pr1aigDyn/hmnwl/0GPH/wD4cbxD/wDJ9eZ/H/8AZ+8NaT4F0qeHVPGzu/irwzAy3XjzXZ12ya5Yxt8sl6yhtrNtbG5W2srKyq1fUVeU/tLf8k70j/sc/Cf/AKkOnUAH/DNPhL/oMeP/APw43iH/AOT6P+GafCX/AEGPH/8A4cbxD/8AJ9erUUAeU/8ADNPhL/oMeP8A/wAON4h/+T6P+GafCX/QY8f/APhxvEP/AMn16tRQB5T/AMM0+Ev+gx4//wDDjeIf/k+j/hmnwl/0GPH/AP4cbxD/APJ9erUUAfLvx/8A2fvDWk+BdKnh1Txs7v4q8MwMt14812ddsmuWMbfLJesobazbWxuVtrKysqtXpn/DNPhL/oMeP/8Aw43iH/5Po/aW/wCSd6R/2OfhP/1IdOr1agDyn/hmnwl/0GPH/wD4cbxD/wDJ9H/DNPhL/oMeP/8Aw43iH/5Pr1aigDyn/hmnwl/0GPH/AP4cbxD/APJ9H/DNPhL/AKDHj/8A8ON4h/8Ak+vVqKAPKf8Ahmnwl/0GPH//AIcbxD/8n15n8f8A9n7w1pPgXSp4dU8bO7+KvDMDLdePNdnXbJrljG3yyXrKG2s21sblbaysrKrV9RV5T+0t/wAk70j/ALHPwn/6kOnUAH/DNPhL/oMeP/8Aw43iH/5Po/4Zp8Jf9Bjx/wD+HG8Q/wDyfXq1FAHlP/DNPhL/AKDHj/8A8ON4h/8Ak+j/AIZp8Jf9Bjx//wCHG8Q//J9erUUAeU/8M0+Ev+gx4/8A/DjeIf8A5Po/4Zp8Jf8AQY8f/wDhxvEP/wAn16tRQB8u/H/9n7w1pPgXSp4dU8bO7+KvDMDLdePNdnXbJrljG3yyXrKG2s21sblbaysrKrV6Z/wzT4S/6DHj/wD8ON4h/wDk+j9pb/knekf9jn4T/wDUh06vVqAPKf8Ahmnwl/0GPH//AIcbxD/8n0f8M0+Ev+gx4/8A/DjeIf8A5Pr1aigDyn/hmnwl/wBBjx//AOHG8Q//ACfR/wAM0+Ev+gx4/wD/AA43iH/5Pr1aigDyn/hmnwl/0GPH/wD4cbxD/wDJ9eZ/H/8AZ+8NaT4F0qeHVPGzu/irwzAy3XjzXZ12ya5Yxt8sl6yhtrNtbG5W2srKyq1fUVeU/tLf8k70j/sc/Cf/AKkOnUAH/DNPhL/oMeP/APw43iH/AOT6P+GafCX/AEGPH/8A4cbxD/8AJ9erUUAeU/8ADNPhL/oMeP8A/wAON4h/+T6P+GafCX/QY8f/APhxvEP/AMn16tRQB5T/AMM0+Ev+gx4//wDDjeIf/k+j/hmnwl/0GPH/AP4cbxD/APJ9erUUAfLvx/8A2fvDWk+BdKnh1Txs7v4q8MwMt14812ddsmuWMbfLJesobazbWxuVtrKysqtXpn/DNPhL/oMeP/8Aw43iH/5Po/aW/wCSd6R/2OfhP/1IdOr1agDyn/hmnwl/0GPH/wD4cbxD/wDJ9H/DNPhL/oMeP/8Aw43iH/5Pr1aigDyn/hmnwl/0GPH/AP4cbxD/APJ9H/DNPhL/AKDHj/8A8ON4h/8Ak+vVqKAPKf8Ahmnwl/0GPH//AIcbxD/8n1538aPgn4d8JeF9A1aw1LxdPeW3jLwtsj1PxprN/bMW16wX57e4upIn+9/Ep2nDD5lFfTVeU/tLf8k70j/sc/Cf/qQ6dQB6tRRRQAUUUUAFFFFABRRRQAV5T+0t/wAk60j/ALHPwn/6kOnV6tXlP7S3/JO9I/7HPwn/AOpDp1AHq1FFFABRRXzN4Vi8Y6H+29eafrfjrUNf0vUPBV3qMGjKgtdNsVXU4VhWO3Vm3SrGzK0zMzNu/hXbGoB9M0UUUAeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnV6tQAUUUUAFFfH/wAObi5+GPjTTW+LGmfEjT9a1fxZf2eleIrrxdNdaDcNPdTtYW5tYdRkWMNCY41WS3VdwVfvba+wKACvKf2lv+Sd6R/2OfhP/wBSHTq9Wryn9pb/AJJ3pH/Y5+E//Uh06gD1aiiigAorxH9ri18T3XwJ8Y3fhrxheeDH0rSL/ULm70uJfts6xWkzJHFOzf6P+8CM0iqW2qyq0bNuXjviFpXjXxl8Jfgjd6PaeLfEVuktle+JLfwz4hOlX95atpsy83DXdsW/0h4GZfM5+92oA+n6K8m/Z78XeG/FHg/ULbw/F4ks30jVLjTNU0vxZf3F9qNheR7WaKWaaaZm+VkZWWVo9rLtavWaAPKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOr1agAooooAKK+SPE2pL4X/aL+HmmeHPEHjuHVr7xDeL4hu/Fd5qMOh3dr9nmb7NbR3WyzlmaQweStkrMqxyM3yqzV9b0AFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFFFfE3wp+MUPidtD+I3jzT/iPHZa94oksNL1631xrXw9ZK15JbWVq1jb3sbSR7ljRpp7Vt0kjbm8vbtAPtmiiigDyn9pb/knekf8AY5+E/wD1IdOr1avKf2lv+Sd6R/2OfhP/ANSHTq9WoAKKKKACivib4U/GKHxO2h/Ebx5p/wAR47LXvFElhpevW+uNa+HrJWvJLaytWsbe9jaSPcsaNNPatukkbc3l7dv2zQAV5T+0t/yTvSP+xz8J/wDqQ6dXq1eU/tLf8k70j/sc/Cf/AKkOnUAerUUUUAFFFfH/AMObi5+GPjTTW+LGmfEjT9a1fxZf2eleIrrxdNdaDcNPdTtYW5tYdRkWMNCY41WS3VdwVfvbaAPsCiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKACivmbwrF4x0P8AbevNP1vx1qGv6XqHgq71GDRlQWum2KrqcKwrHbqzbpVjZlaZmZm3fwrtjX6ZoAK8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06gD1aiiigAorxH9ri18T3XwJ8Y3fhrxheeDH0rSL/ULm70uJfts6xWkzJHFOzf6P+8CM0iqW2qyq0bNuXi9e8R6z4tH7OvgOXW9UsdP8W6dLqeu6hp99Na393HZ2MciwrdRss0fmTzRuzRsrMsbLu2swYA+oqK8M/Z8v9U0nxr8WPAl3ql/remeFtatxpN1q13Jd3cdtdWUN19nkmkZpJPLkkk2tIzNtZV3fLXudAHlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dXq1ABRRRQAUV8TfCn4xQ+J20P4jePNP+I8dlr3iiSw0vXrfXGtfD1krXkltZWrWNvextJHuWNGmntW3SSNuby9u37ZoAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKACiiigAooooAKKKKACvKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOoA9WooooAK8Jf4MfEGT4/QfEk+OvDPlQ6fJoS6V/wilxu/s5rpLhl87+0f+Pj92q+Zt28bvL/AIa92ooAKKKKAPKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOr1agAooooA8MvPgh4x8Z614aTx348sPEPhzw7qsOtW1np3h77Bd3V3bvvtmurj7RIrLG3zbYYYdzKv3V+Vvc6KKACvKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOoA9WooooA86+N3gPxJ8Tvh3q/hTQfEGl+Ho9as7jTr661LR5NQb7PNC0beUq3EO2T5vvNuX/AGawNB+HvxR8M+BvDmiWHxD8Nx3+jKtoJ5fCUzWl1aLCscayQ/b/ADBMrLu8xZlVt23y/wCKvZKKAPOfg78Kz8L9M1s3erPrviDxBqsms6xqTW4t0nunjjj/AHUO5vLjWOGNVXczbV+Zmbcx9GoooA8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTq9WoAKKKKAPD9U+CfjLxrq3h6Lxt49sNe8M+H9Zg121tLLw99iv7me3k8y1FzcfaXjZVbazeVBDuaNfuruVvcKKKACvKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOoA9WooooAK+dNO/ZY1K3tdO8LTeNEn+GGneJP+EltNATStl+ki3TXkdrJemZle3W4bdt8hZNqqvmfL830XRQAUUUUAeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnV6tQAUUUUAfOmnfssalb2uneFpvGiT/DDTvEn/AAktpoCaVsv0kW6a8jtZL0zMr263DbtvkLJtVV8z5fm+i6KKACvKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06gD1aiiigArwy8+CHjHxnrXhpPHfjyw8Q+HPDuqw61bWeneHvsF3dXdu++2a6uPtEissbfNthhh3Mq/dX5W9zooAKKKKAPKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOr1agAooooA8Jf4MfEGT4/QfEk+OvDPlQ6fJoS6V/wilxu/s5rpLhl87+0f+Pj92q+Zt28bvL/AIa92oooAK8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTqAPVqKKKAPOvjd4D8SfE74d6v4U0HxBpfh6PWrO406+utS0eTUG+zzQtG3lKtxDtk+b7zbl/2a4VfgF4rl8K+ATJ4z0iHxr4Gn/4k2tW/hyRLRrVrf7NJb3Fq16zSb49zM0c0fzLGy/c+b3+igDzj4S/C24+HMfia/wBW1n/hIvFHiTVG1bVtUS0+yxSSeXHDFFDDukaOGOGGKNVaR2+VmZm3V6PRRQB5T+0t/wAk70j/ALHPwn/6kOnV6tXlP7S3/JO9I/7HPwn/AOpDp1erUAFFFFAHzpp37LGpW9rp3habxok/ww07xJ/wktpoCaVsv0kW6a8jtZL0zMr263DbtvkLJtVV8z5fm+i6KKACvKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOoA9WooooAKKKKACiiigAooooAK8p/aW/5J3pH/Y5+E/8A1IdOr1avGf2qdKstf+E9rpuqWlvqOmXnivwxb3NndQrLDPG2v2CNHIrfKyspKlWoA9moryj/AIZP+CP/AERr4f8A/hL2P/xqj/hk/wCCP/RGvh//AOEvY/8AxqgD1eivKP8Ahk/4I/8ARGvh/wD+EvY//GqP+GT/AII/9Ea+H/8A4S9j/wDGqAPV6K8o/wCGT/gj/wBEa+H/AP4S9j/8ao/4ZP8Agj/0Rr4f/wDhL2P/AMaoAX9pb/knekf9jn4T/wDUh06vVq+Xfj9+zP8AB/RvAul3Gn/CnwRYzP4r8NWzS23hyzjcxTa5YxyRllj+60cjIy/xKzL/ABV6X/wyf8Ef+iNfD/8A8Jex/wDjVAHq9FeUf8Mn/BH/AKI18P8A/wAJex/+NUf8Mn/BH/ojXw//APCXsf8A41QB6vRXlH/DJ/wR/wCiNfD/AP8ACXsf/jVH/DJ/wR/6I18P/wDwl7H/AONUAer15T+0t/yTvSP+xz8J/wDqQ6dSf8Mn/BH/AKI18P8A/wAJex/+NV5p8fv2Z/g/o3gXS7jT/hT4IsZn8V+GrZpbbw5ZxuYptcsY5Iyyx/daORkZf4lZl/ioA+oqK8o/4ZP+CP8A0Rr4f/8AhL2P/wAao/4ZP+CP/RGvh/8A+EvY/wDxqgD1eivKP+GT/gj/ANEa+H//AIS9j/8AGqP+GT/gj/0Rr4f/APhL2P8A8aoA9Xoryj/hk/4I/wDRGvh//wCEvY//ABqj/hk/4I/9Ea+H/wD4S9j/APGqAF/aW/5J3pH/AGOfhP8A9SHTq9Wr5d+P37M/wf0bwLpdxp/wp8EWMz+K/DVs0tt4cs43MU2uWMckZZY/utHIyMv8Ssy/xV6X/wAMn/BH/ojXw/8A/CXsf/jVAHq9FeUf8Mn/AAR/6I18P/8Awl7H/wCNUf8ADJ/wR/6I18P/APwl7H/41QB6vRXlH/DJ/wAEf+iNfD//AMJex/8AjVH/AAyf8Ef+iNfD/wD8Jex/+NUAer15T+0t/wAk70j/ALHPwn/6kOnUn/DJ/wAEf+iNfD//AMJex/8AjVeafH79mf4P6N4F0u40/wCFPgixmfxX4atmltvDlnG5im1yxjkjLLH91o5GRl/iVmX+KgD6ioryj/hk/wCCP/RGvh//AOEvY/8Axqj/AIZP+CP/AERr4f8A/hL2P/xqgD1eivKP+GT/AII/9Ea+H/8A4S9j/wDGqP8Ahk/4I/8ARGvh/wD+EvY//GqAPV6K8o/4ZP8Agj/0Rr4f/wDhL2P/AMao/wCGT/gj/wBEa+H/AP4S9j/8aoAX9pb/AJJ3pH/Y5+E//Uh06vVq+Xfj9+zP8H9G8C6Xcaf8KfBFjM/ivw1bNLbeHLONzFNrljHJGWWP7rRyMjL/ABKzL/FXpf8Awyf8Ef8AojXw/wD/AAl7H/41QB6vRXlH/DJ/wR/6I18P/wDwl7H/AONUf8Mn/BH/AKI18P8A/wAJex/+NUAer0V5R/wyf8Ef+iNfD/8A8Jex/wDjVH/DJ/wR/wCiNfD/AP8ACXsf/jVAHq9eU/tLf8k70j/sc/Cf/qQ6dSf8Mn/BH/ojXw//APCXsf8A41Xmnx+/Zn+D+jeBdLuNP+FPgixmfxX4atmltvDlnG5im1yxjkjLLH91o5GRl/iVmX+KgD6ioryj/hk/4I/9Ea+H/wD4S9j/APGqP+GT/gj/ANEa+H//AIS9j/8AGqAPV6K8o/4ZP+CP/RGvh/8A+EvY/wDxqj/hk/4I/wDRGvh//wCEvY//ABqgD1eivKP+GT/gj/0Rr4f/APhL2P8A8ao/4ZP+CP8A0Rr4f/8AhL2P/wAaoAX9pb/knekf9jn4T/8AUh06vVq+Xfj9+zP8H9G8C6Xcaf8ACnwRYzP4r8NWzS23hyzjcxTa5YxyRllj+60cjIy/xKzL/FXpf/DJ/wAEf+iNfD//AMJex/8AjVAHq9FeUf8ADJ/wR/6I18P/APwl7H/41R/wyf8ABH/ojXw//wDCXsf/AI1QB6vRXlH/AAyf8Ef+iNfD/wD8Jex/+NUf8Mn/AAR/6I18P/8Awl7H/wCNUAer15T+0t/yTvSP+xz8J/8AqQ6dSf8ADJ/wR/6I18P/APwl7H/41Xmnx+/Zn+D+jeBdLuNP+FPgixmfxX4atmltvDlnG5im1yxjkjLLH91o5GRl/iVmX+KgD6ioryj/AIZP+CP/AERr4f8A/hL2P/xqj/hk/wCCP/RGvh//AOEvY/8AxqgD1eivKP8Ahk/4I/8ARGvh/wD+EvY//GqP+GT/AII/9Ea+H/8A4S9j/wDGqAPV6K8o/wCGT/gj/wBEa+H/AP4S9j/8ao/4ZP8Agj/0Rr4f/wDhL2P/AMaoAX9pb/knekf9jn4T/wDUh06vVq+Xfj9+zP8AB/RvAul3Gn/CnwRYzP4r8NWzS23hyzjcxTa5YxyRllj+60cjIy/xKzL/ABV6X/wyf8Ef+iNfD/8A8Jex/wDjVAHq9FeUf8Mn/BH/AKI18P8A/wAJex/+NUf8Mn/BH/ojXw//APCXsf8A41QB6vRXlH/DJ/wR/wCiNfD/AP8ACXsf/jVH/DJ/wR/6I18P/wDwl7H/AONUAer15T+0t/yTvSP+xz8J/wDqQ6dSf8Mn/BH/AKI18P8A/wAJex/+NV578aP2e/hb4H8MeH9b8OfDbwh4f1q08Z+FvI1HS9Ctba5i3a9YI22SONWXKsy8HoaAPpmiiigAooooAKKKKACiiigAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKKKACiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKKKACiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKKKACiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKKKACiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKKKACiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKKKACiiigAooooAK8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06gD1aiiigAr4B8OfEvWJfjF4Z0WfxH4nt/HzeP7201PxBceIJW8JXmnxyyf6Dbxec1q1w0MkEK28cP2iOaNmk27WZvv6vmjSf2UdcsvDfhrwHdeNtPuvhpoGtxaxa6bHoBj1aRIbtrq3gkvvtDR7Vk8vc626ySKrDcrM0lAH0vRRRQB5T+0t/yTvSP+xz8J/8AqQ6dXq1eU/tLf8k70j/sc/Cf/qQ6dXq1ABRRRQB8zeFYvGOh/tvXmn63461DX9L1DwVd6jBoyoLXTbFV1OFYVjt1Zt0qxsytMzMzbv4V2xr9M14S/wAGPiDJ8foPiSfHXhnyodPk0JdK/wCEUuN39nNdJcMvnf2j/wAfH7tV8zbt43eX/DXu1ABXlP7S3/JO9I/7HPwn/wCpDp1erV5T+0t/yTvSP+xz8J/+pDp1AHq1FFFABXzL400O58BfHr4W2Hhjxf4q1TxTruq3l3rtjqWs3F7ZyaMsMrTSPas32e1VZmtI43hjj+Ztvzbmr6ar5/8AAHwP+I3gr4ga/wCJ5PHfhbW7zXdQWbULu+8IXH237Erfu7KGZdS8uOONdyr+6+8zSMrszbgD6AooooA8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06vVqACiiigD4m+FPxih8TtofxG8eaf8R47LXvFElhpevW+uNa+HrJWvJLaytWsbe9jaSPcsaNNPatukkbc3l7dv2zXzpp37LGpW9rp3habxok/ww07xJ/wktpoCaVsv0kW6a8jtZL0zMr263DbtvkLJtVV8z5fm+i6ACvKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOoA9WooooAK+VfHnw5stN+OXwv8H+EfEHjS11S4u5PEmtSXHjfWruKPSrPbuiaGa7aNhPcSwR/Mv3fNr6qrzfwf8ACh/DfxW8deO7/Vjq+peJFs7S1j+y+WunWNtG2y2U7m3bpJJpWb5dzSfd+VaAPSKKKKAPKf2lv+Sd6R/2OfhP/wBSHTq9Wryn9pb/AJJ3pH/Y5+E//Uh06vVqACiiigD5I8Takvhf9ov4eaZ4c8QeO4dWvvEN4viG78V3mow6Hd2v2eZvs1tHdbLOWZpDB5K2SsyrHIzfKrNX1vXh+qfBPxl411bw9F428e2GveGfD+swa7a2ll4e+xX9zPbyeZai5uPtLxsqttZvKgh3NGv3V3K3uFABXlP7S3/JO9I/7HPwn/6kOnV6tXlP7S3/ACTvSP8Asc/Cf/qQ6dQB6tRRRQAV8y+NNDufAXx6+Fth4Y8X+KtU8U67qt5d67Y6lrNxe2cmjLDK00j2rN9ntVWZrSON4Y4/mbb825q+mq+f/AHwP+I3gr4ga/4nk8d+FtbvNd1BZtQu77whcfbfsSt+7soZl1Ly44413Kv7r7zNIyuzNuAPoCiiigDyn9pb/knekf8AY5+E/wD1IdOr1avKf2lv+Sd6R/2OfhP/ANSHTq9WoAK8R/a4tfE918CfGN34a8YXngx9K0i/1C5u9LiX7bOsVpMyRxTs3+j/ALwIzSKpbarKrRs25fbq86+N3gPxJ8Tvh3q/hTQfEGl+Ho9as7jTr661LR5NQb7PNC0beUq3EO2T5vvNuX/ZoA4nxZZ+KvGH7K2lTaP4zvvCupS+HIbzUNYt4xNfzRiyLSLFNI37mVmK/vtrMvzbdrMsi9V+zTq19rf7OXwr1TU7241DUbzwppVzdXV3M0s08rWcbPJI7fMzMzbmZvWsyH4W/EK3+CkPgdPGnhn+0o4Bpg1VvC9x5JsPs/k7fs/9obvPz83meZt/h8v+Ktv4FfD3XvhL8M9B8G65r+m+IY9CsbbTNPvNP0mTTmNvDCka+arXM26Q7NzMu1efu0Aek15T+0t/yTvSP+xz8J/+pDp1erV5T+0t/wAk70j/ALHPwn/6kOnUAerUUUUAFfDej+J/E0/7O/gr9oP/AISvXW8V6tr+mXl3pz6rcNpcmn3mpx2f2FbHd9nRVhmj/eLH5nmR+Zu3M277kr500f8AZb1PT7HRPCE3jC3l+F2h69Hrtj4fj0byr0+XcG6htZrzz2jkt45irbVt0ZhHGrSfe3AH0XRRRQB5T+0t/wAk70j/ALHPwn/6kOnV6tXlP7S3/JO9I/7HPwn/AOpDp1erUAFeI/tcWvie6+BPjG78NeMLzwY+laRf6hc3elxL9tnWK0mZI4p2b/R/3gRmkVS21WVWjZty+3V518bvAfiT4nfDvV/Cmg+INL8PR61Z3GnX11qWjyag32eaFo28pVuIdsnzfebcv+zQB5L8QtK8a+MvhL8EbvR7Txb4it0lsr3xJb+GfEJ0q/vLVtNmXm4a7ti3+kPAzL5nP3u1ejfs9+LvDfijwfqFt4fi8SWb6RqlxpmqaX4sv7i+1GwvI9rNFLNNNMzfKyMrLK0e1l2tVTQfh78UfDPgbw5olh8Q/Dcd/oyraCeXwlM1pdWiwrHGskP2/wAwTKy7vMWZVbdt8v8Aire+DvwrPwv0zWzd6s+u+IPEGqyazrGpNbi3Se6eOOP91Duby41jhjVV3M21fmZm3MQD0avKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06gD1aiiigAooooAKKKKACiiigAryn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTqAPVqKKKACiiigAooooA8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06vVqACiiigAooooAK8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06gD1aiiigAooooAKKKKAPKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOr1agAooooAKKKKACvKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOoA9WooooAKKKKACiiigDyn9pb/knekf8AY5+E/wD1IdOr1avKf2lv+Sd6R/2OfhP/ANSHTq9WoAKKKKACiiigAryn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTqAPVqKKKACiiigAooooA8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06vVqACiiigAooooAK8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06gD1aiiigAooooAKKKKAPKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOr1agAooooAKKKKACvKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOoA9WooooAKKKKACiiigAooooAK8Y/amjvpvhTZx6ZcW9pqbeLPDC21zd27Twxy/2/YbXkjV42kQN1VWUsP4l+8PZ68p/aW/5J3pH/AGOfhP8A9SHTqAD/AIRv43/9FD8Af+EHff8Ay5o/4Rv43/8ARQ/AH/hB33/y5r1aigDyn/hG/jf/ANFD8Af+EHff/Lmj/hG/jf8A9FD8Af8AhB33/wAua9WooA8p/wCEb+N//RQ/AH/hB33/AMuaP+Eb+N//AEUPwB/4Qd9/8ua9WooA+Xfj9ofxgj8C6W+o+OPBFzb/APCV+GlWO18GXkDCU65YiN9zaq/yrJsZl2/Mqsu5N25fTP8AhG/jf/0UPwB/4Qd9/wDLmj9pb/knekf9jn4T/wDUh06vVqAPKf8AhG/jf/0UPwB/4Qd9/wDLmj/hG/jf/wBFD8Af+EHff/LmvVqKAPKf+Eb+N/8A0UPwB/4Qd9/8uaP+Eb+N/wD0UPwB/wCEHff/AC5r1aigDyn/AIRv43/9FD8Af+EHff8Ay5rzP4/aH8YI/AulvqPjjwRc2/8AwlfhpVjtfBl5AwlOuWIjfc2qv8qybGZdvzKrLuTduX6iryn9pb/knekf9jn4T/8AUh06gA/4Rv43/wDRQ/AH/hB33/y5o/4Rv43/APRQ/AH/AIQd9/8ALmvVqKAPKf8AhG/jf/0UPwB/4Qd9/wDLmj/hG/jf/wBFD8Af+EHff/LmvVqKAPKf+Eb+N/8A0UPwB/4Qd9/8uaP+Eb+N/wD0UPwB/wCEHff/AC5r1aigD5d+P2h/GCPwLpb6j448EXNv/wAJX4aVY7XwZeQMJTrliI33Nqr/ACrJsZl2/Mqsu5N25fTP+Eb+N/8A0UPwB/4Qd9/8uaP2lv8Aknekf9jn4T/9SHTq9WoA8p/4Rv43/wDRQ/AH/hB33/y5o/4Rv43/APRQ/AH/AIQd9/8ALmvVqKAPKf8AhG/jf/0UPwB/4Qd9/wDLmj/hG/jf/wBFD8Af+EHff/LmvVqKAPKf+Eb+N/8A0UPwB/4Qd9/8ua8z+P2h/GCPwLpb6j448EXNv/wlfhpVjtfBl5AwlOuWIjfc2qv8qybGZdvzKrLuTduX6iryn9pb/knekf8AY5+E/wD1IdOoAP8AhG/jf/0UPwB/4Qd9/wDLmj/hG/jf/wBFD8Af+EHff/LmvVqKAPKf+Eb+N/8A0UPwB/4Qd9/8uaP+Eb+N/wD0UPwB/wCEHff/AC5r1aigDyn/AIRv43/9FD8Af+EHff8Ay5o/4Rv43/8ARQ/AH/hB33/y5r1aigD5d+P2h/GCPwLpb6j448EXNv8A8JX4aVY7XwZeQMJTrliI33Nqr/KsmxmXb8yqy7k3bl9M/wCEb+N//RQ/AH/hB33/AMuaP2lv+Sd6R/2OfhP/ANSHTq9WoA8p/wCEb+N//RQ/AH/hB33/AMuaP+Eb+N//AEUPwB/4Qd9/8ua9WooA8p/4Rv43/wDRQ/AH/hB33/y5o/4Rv43/APRQ/AH/AIQd9/8ALmvVqKAPKf8AhG/jf/0UPwB/4Qd9/wDLmvM/j9ofxgj8C6W+o+OPBFzb/wDCV+GlWO18GXkDCU65YiN9zaq/yrJsZl2/Mqsu5N25fqKvKf2lv+Sd6R/2OfhP/wBSHTqAD/hG/jf/ANFD8Af+EHff/Lmj/hG/jf8A9FD8Af8AhB33/wAua9WooA8p/wCEb+N//RQ/AH/hB33/AMuaP+Eb+N//AEUPwB/4Qd9/8ua9WooA8p/4Rv43/wDRQ/AH/hB33/y5o/4Rv43/APRQ/AH/AIQd9/8ALmvVqKAPl34/aH8YI/AulvqPjjwRc2//AAlfhpVjtfBl5AwlOuWIjfc2qv8AKsmxmXb8yqy7k3bl9M/4Rv43/wDRQ/AH/hB33/y5o/aW/wCSd6R/2OfhP/1IdOr1agDyn/hG/jf/ANFD8Af+EHff/Lmj/hG/jf8A9FD8Af8AhB33/wAua9WooA8p/wCEb+N//RQ/AH/hB33/AMuaP+Eb+N//AEUPwB/4Qd9/8ua9WooA8p/4Rv43/wDRQ/AH/hB33/y5rzP4/aH8YI/AulvqPjjwRc2//CV+GlWO18GXkDCU65YiN9zaq/yrJsZl2/Mqsu5N25fqKvKf2lv+Sd6R/wBjn4T/APUh06gA/wCEb+N//RQ/AH/hB33/AMuaP+Eb+N//AEUPwB/4Qd9/8ua9WooA8p/4Rv43/wDRQ/AH/hB33/y5o/4Rv43/APRQ/AH/AIQd9/8ALmvVqKAPKf8AhG/jf/0UPwB/4Qd9/wDLmj/hG/jf/wBFD8Af+EHff/LmvVqKAPl34/aH8YI/AulvqPjjwRc2/wDwlfhpVjtfBl5AwlOuWIjfc2qv8qybGZdvzKrLuTduX0z/AIRv43/9FD8Af+EHff8Ay5o/aW/5J3pH/Y5+E/8A1IdOr1agDyn/AIRv43/9FD8Af+EHff8Ay5o/4Rv43/8ARQ/AH/hB33/y5r1aigDyn/hG/jf/ANFD8Af+EHff/Lmj/hG/jf8A9FD8Af8AhB33/wAua9WooA8p/wCEb+N//RQ/AH/hB33/AMua86+NWjfFK08M+H5vEXjDwjqmjL4z8LC4tNM8J3Vlcyf8T+w27Jn1OZU+baf9W2R8vy/eX6bryn9pb/knekf9jn4T/wDUh06gD1aiiigAooooAKKKKACiiigAryn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOoA9WooooAKKK+cvGnjP4veBfHXw90KTxP4L8QXPifXFs20y08J3lpNHYRq013cec2pyKvlxLt3eW37yWNf4qAPo2iiigDyn9pb/knekf8AY5+E/wD1IdOr1avKf2lv+Sd6R/2OfhP/ANSHTq9WoAKKKKACivnLxp4z+L3gXx18PdCk8T+C/EFz4n1xbNtMtPCd5aTR2EatNd3HnNqcir5cS7d3lt+8ljX+Kvo2gAryn9pb/knekf8AY5+E/wD1IdOr1avKf2lv+Sd6R/2OfhP/ANSHTqAPVqKKKACiivmj4aftIS/Fvx4lvpnj7wBoFk+q3NraeD7wG71/Uba3kdWuPlvIfs5lWOSRY/s822MLIzNu2qAfS9FFFAHlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dXq1ABRRRQAUV8qab+0t44uvA/h74uta6E/wv1vXrfTo9HSznGqW9hcXn2KC+a787y2LSNHL5P2df3cm3zNy7m+q6ACvKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06gD1aiiigAoor5W8P/tKeNrzw/wCBfiNqMXh9vh14u1+HRYdJtbWdNS0+O4uGt7S5kumn8uT955fmR+THtWQ/M235gD6pooooA8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTq9WoAKKKKACivmL4D/ALQGu/FrxheWd18R/hzbXdrrWq2Unge006Rtb+z2t1NAreY2ofKzJEsm77Pt2t0719O0AFeU/tLf8k70j/sc/Cf/AKkOnV6tXlP7S3/JO9I/7HPwn/6kOnUAerUUUUAFFeTftIfEXxl8LfhVrviDwX4bs9d1Sxs7q7eXU7vybOyiht5JmmlUfvJM+XsWOP7zOu5o13MvP+IvjV4iuNI+EeieHYdMh8b/ABAt/tK3moW8k1hpsENotxdTNAsqySfejiSPzF+aZWZvl2sAe80V5P8ABf4ka/4s1bxx4W8WQWC+KPCGrJYXV3pUUkNrfQSwR3FtcRxSNI0W6OXa0fmSbWjb5vm49YoA8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06vVqACiiigAorwDxF8SviF8Pfin8P9H1678K6tpfjLW7rS4NF0qxuItSsoY7ee4W5+0SXDLcLGsK+Z+4j2+av/AAL3+gAryn9pb/knekf9jn4T/wDUh06vVq8p/aW/5J3pH/Y5+E//AFIdOoA9WooooAKKK+SdB/aq8V6t4s8OZuvCk8WseNLrwpN4BhtZh4gsYYZJo5LqSb7Qyt5axx3Mi/Z1VYZP9Z91mAPraiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKACivBfC3xk8cal+1FqXw+1rwxp/h7wovhy51bTZTdfaNSumhvo7fzpNjeXHFIsm5Y/mk43MylvLX3qgAryn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTqAPVqKKKACiiigAooooAKKKKACvKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06gD1aiiigArxfwn4I8Qat+0Z4t8deJrH7HpumabD4e8KKZUk8y3fbPe3W1GbaZJvJjVWw222z/FXtFFABRRRQB5T+0t/yTvSP+xz8J/8AqQ6dXq1eU/tLf8k70j/sc/Cf/qQ6dXq1ABRRRQB4v4T8EeINW/aM8W+OvE1j9j03TNNh8PeFFMqSeZbvtnvbrajNtMk3kxqrYbbbZ/ir2iiigAryn9pb/knekf8AY5+E/wD1IdOr1avKf2lv+Sd6R/2OfhP/ANSHTqAPVqKKKACvjPQfgf45t/h74U+D/wDwha2Fj4d8aRa7H43W8tRZGyh1Nr9ZIY1k+1C6ZWWFlaFV3NI3mbdu77MooAKKKKAPKf2lv+Sd6R/2OfhP/wBSHTq9Wryn9pb/AJJ3pH/Y5+E//Uh06vVqACiiigD468P/AAe8fW/wj8H/AAMn8JXFvoeha9ZNdeMJb+0NlcaVZ3y3sfkxrJ9o+0SeTDHtaFVVjI3mMqru+xaKKACvKf2lv+Sd6R/2OfhP/wBSHTq9Wryn9pb/AJJ3pH/Y5+E//Uh06gD1aiiigAr5Duv2c7Xxj4+8NW2kfDbxH4D8OaP4oTxPfXGseJlk02SSGZrhVsNMt724hVpp9rMzRw7Y2kx8zba+vKKACiiigDyn9pb/AJJ3pH/Y5+E//Uh06vVq8p/aW/5J3pH/AGOfhP8A9SHTq9WoAKKKKAPmjx5o3jr45a38PbDUPhxfeDD4a8T2viG88RajqdhcQKtrJuaGz+zzNNJ53+r/AHkUP7tm3fN8rfS9FFABXlP7S3/JO9I/7HPwn/6kOnV6tXlP7S3/ACTvSP8Asc/Cf/qQ6dQB6tRRRQB5P+0pH4g1f4L+LPD/AIc8Jap4q1XxBo99pMUenXFlCLZ5reSNZJWuriEeXuZfubm/2a8vj8LeORp3wT8ZQfD7WE1vwBHNo2o+FrnUNOW7vLW4so4ZZ7aRbprdtskcTKsskbMqSfd+Xd9UUUAeP/Anwhr1jr/xD8a+JdLPh7UfGGsR3cGiyXEc8tlZ29rDawrM0bNH5zeS0jCNmVfMVdzba9goooA8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06vVqACiiigD5U1T4d694q+JnhrW9B+D5+F3iq31+K88QeNra605YtRsY5N1xb77eT7Tdrcqqqq3MMaru8xtrxqtfVdFFABXlP7S3/JO9I/7HPwn/wCpDp1erV5T+0t/yTvSP+xz8J/+pDp1AHq1FFFABXxJofwP8eHUvC8lz4J1Ow+LFv4nW91n4tNq9m1teWK3TSTR/LcfapIZLVVhjs3t1jjZlHyrH5lfbdFABRRRQB5T+0t/yTvSP+xz8J/+pDp1erV5T+0t/wAk70j/ALHPwn/6kOnV6tQAUUUUAfNkq+N5P2ubTxePhd4m/wCEZh8OzeGW1A3+kbTI1/HIt15f2/zPI8uNm+75nP8Aq91fSdFFABXlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dQB6tRRRQAUUUUAFFFFABRRRQAV5T+0t/yTvSP+xz8J/+pDp1erV4x+1RYz6l8KLS2t9QudKmn8WeF4o7y0WJpoGbX7BVkj8xWj3Lwy7lZf7ytQB7PRXlX/Cm/F3/AEXb4gf+APh7/wCVVH/Cm/F3/RdviB/4A+Hv/lVQB6rRXlX/AApvxd/0Xb4gf+APh7/5VUf8Kb8Xf9F2+IH/AIA+Hv8A5VUAeq0V5V/wpvxd/wBF2+IH/gD4e/8AlVR/wpvxd/0Xb4gf+APh7/5VUAJ+0t/yTvSP+xz8J/8AqQ6dXq1fLn7QHwp8UWPgXTHm+M3jbUVbxV4ZiWC5s9CVVZtcsEWT93pitujZlkX+Hcq7lZdyt6d/wpvxd/0Xb4gf+APh7/5VUAeq0V5V/wAKb8Xf9F2+IH/gD4e/+VVH/Cm/F3/RdviB/wCAPh7/AOVVAHqtFeVf8Kb8Xf8ARdviB/4A+Hv/AJVUf8Kb8Xf9F2+IH/gD4e/+VVAHqteU/tLf8k70j/sc/Cf/AKkOnUv/AApvxd/0Xb4gf+APh7/5VV5j+0B8KfFFj4F0x5vjN421FW8VeGYlgubPQlVWbXLBFk/d6Yrbo2ZZF/h3Ku5WXcrAH1HRXlX/AApvxd/0Xb4gf+APh7/5VUf8Kb8Xf9F2+IH/AIA+Hv8A5VUAeq0V5V/wpvxd/wBF2+IH/gD4e/8AlVR/wpvxd/0Xb4gf+APh7/5VUAeq0V5V/wAKb8Xf9F2+IH/gD4e/+VVH/Cm/F3/RdviB/wCAPh7/AOVVACftLf8AJO9I/wCxz8J/+pDp1erV8uftAfCnxRY+BdMeb4zeNtRVvFXhmJYLmz0JVVm1ywRZP3emK26NmWRf4dyruVl3K3p3/Cm/F3/RdviB/wCAPh7/AOVVAHqtFeVf8Kb8Xf8ARdviB/4A+Hv/AJVUf8Kb8Xf9F2+IH/gD4e/+VVAHqtFeVf8ACm/F3/RdviB/4A+Hv/lVR/wpvxd/0Xb4gf8AgD4e/wDlVQB6rXlP7S3/ACTvSP8Asc/Cf/qQ6dS/8Kb8Xf8ARdviB/4A+Hv/AJVV5j+0B8KfFFj4F0x5vjN421FW8VeGYlgubPQlVWbXLBFk/d6Yrbo2ZZF/h3Ku5WXcrAH1HRXlX/Cm/F3/AEXb4gf+APh7/wCVVH/Cm/F3/RdviB/4A+Hv/lVQB6rRXlX/AApvxd/0Xb4gf+APh7/5VUf8Kb8Xf9F2+IH/AIA+Hv8A5VUAeq0V5V/wpvxd/wBF2+IH/gD4e/8AlVR/wpvxd/0Xb4gf+APh7/5VUAJ+0t/yTvSP+xz8J/8AqQ6dXq1fLn7QHwp8UWPgXTHm+M3jbUVbxV4ZiWC5s9CVVZtcsEWT93pitujZlkX+Hcq7lZdyt6d/wpvxd/0Xb4gf+APh7/5VUAeq0V5V/wAKb8Xf9F2+IH/gD4e/+VVH/Cm/F3/RdviB/wCAPh7/AOVVAHqtFeVf8Kb8Xf8ARdviB/4A+Hv/AJVUf8Kb8Xf9F2+IH/gD4e/+VVAHqteU/tLf8k70j/sc/Cf/AKkOnUv/AApvxd/0Xb4gf+APh7/5VV5j+0B8KfFFj4F0x5vjN421FW8VeGYlgubPQlVWbXLBFk/d6Yrbo2ZZF/h3Ku5WXcrAH1HRXlX/AApvxd/0Xb4gf+APh7/5VUf8Kb8Xf9F2+IH/AIA+Hv8A5VUAeq0V5V/wpvxd/wBF2+IH/gD4e/8AlVR/wpvxd/0Xb4gf+APh7/5VUAeq0V5V/wAKb8Xf9F2+IH/gD4e/+VVH/Cm/F3/RdviB/wCAPh7/AOVVACftLf8AJO9I/wCxz8J/+pDp1erV8uftAfCnxRY+BdMeb4zeNtRVvFXhmJYLmz0JVVm1ywRZP3emK26NmWRf4dyruVl3K3p3/Cm/F3/RdviB/wCAPh7/AOVVAHqtFeVf8Kb8Xf8ARdviB/4A+Hv/AJVUf8Kb8Xf9F2+IH/gD4e/+VVAHqtFeVf8ACm/F3/RdviB/4A+Hv/lVR/wpvxd/0Xb4gf8AgD4e/wDlVQB6rXlP7S3/ACTvSP8Asc/Cf/qQ6dS/8Kb8Xf8ARdviB/4A+Hv/AJVV5j+0B8KfFFj4F0x5vjN421FW8VeGYlgubPQlVWbXLBFk/d6Yrbo2ZZF/h3Ku5WXcrAH1HRXlX/Cm/F3/AEXb4gf+APh7/wCVVH/Cm/F3/RdviB/4A+Hv/lVQB6rRXlX/AApvxd/0Xb4gf+APh7/5VUf8Kb8Xf9F2+IH/AIA+Hv8A5VUAeq0V5V/wpvxd/wBF2+IH/gD4e/8AlVR/wpvxd/0Xb4gf+APh7/5VUAJ+0t/yTvSP+xz8J/8AqQ6dXq1fLn7QHwp8UWPgXTHm+M3jbUVbxV4ZiWC5s9CVVZtcsEWT93pitujZlkX+Hcq7lZdyt6d/wpvxd/0Xb4gf+APh7/5VUAeq0V5V/wAKb8Xf9F2+IH/gD4e/+VVH/Cm/F3/RdviB/wCAPh7/AOVVAHqtFeVf8Kb8Xf8ARdviB/4A+Hv/AJVUf8Kb8Xf9F2+IH/gD4e/+VVAHqteU/tLf8k70j/sc/Cf/AKkOnUv/AApvxd/0Xb4gf+APh7/5VV5z8afhv4j0Hwz4e1DUPir4u8R2cPjLwtv0vVLXRktpt2v2C/O1vYRyfKW3fLIvzKOq/LQB9N0UUUAFFFFABRRRQAUUUUAFeU/tLf8AJO9I/wCxz8J/+pDp1erV5T+0t/yTvSP+xz8J/wDqQ6dQB6tRRRQAUUUUAFFFFAHlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dXq1ABRRRQAUUUUAFeU/tLf8AJO9I/wCxz8J/+pDp1erV5T+0t/yTvSP+xz8J/wDqQ6dQB6tRRRQAUUUUAFFFFAHlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dXq1ABRRRQAUUUUAFeU/tLf8AJO9I/wCxz8J/+pDp1erV5T+0t/yTvSP+xz8J/wDqQ6dQB6tRRRQAUUUUAFFFFAHlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dXq1ABRRRQAUUUUAFeU/tLf8AJO9I/wCxz8J/+pDp1erV5T+0t/yTvSP+xz8J/wDqQ6dQB6tRRRQAUUUUAFFFFAHlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dXq1ABRRRQAUUUUAFeU/tLf8AJO9I/wCxz8J/+pDp1erV5T+0t/yTvSP+xz8J/wDqQ6dQB6tRRRQAUUUUAFFFFAHlP7S3/JO9I/7HPwn/AOpDp1erV5T+0t/yTvSP+xz8J/8AqQ6dXq1ABRRRQAUUUUAFeU/tLf8AJO9I/wCxz8J/+pDp1erV5T+0t/yTvSP+xz8J/wDqQ6dQB6tRRRQAUUUUAFFFFABRRRQAV5T+0t/yTvSP+xz8J/8AqQ6dXq1eU/tLf8k70j/sc/Cf/qQ6dQB6tRRRQB5N+0h8RfGXwt+FWu+IPBfhuz13VLGzurt5dTu/Js7KKG3kmaaVR+8kz5exY4/vM67mjXcy24Na8d+Nvhv4P1Twxc+HdJ1TVrS3vb+71a0nu4LdZLfzNsdvHNG0mXZV+aZdq5b5vu1V/aUj8Qav8F/Fnh/w54S1TxVqviDR77SYo9OuLKEWzzW8kayStdXEI8vcy/c3N/s155rOrfF6x/Z58K6D4V+HniDTPEwW10PUpGvdIa7020jt1Wa9t1a88mSRvuxq0i7W+Zl2rtkAPRv2ffidq/xO8H6rPr1vYx61o2uX+hXdxpQYWd3JaztGZoFZmZVbb91mba25dzba9VrzL4DaXB4Z+Hdj4esPBOseBNO0n/Rraz1y4sp57jd+8e4ZrW4mVmkkZmZmZWZmZv4q9NoA8p/aW/5J3pH/AGOfhP8A9SHTq9Wryn9pb/knekf9jn4T/wDUh06vVqACiiigD5i+A/7QGu/FrxheWd18R/hzbXdrrWq2Unge006Rtb+z2t1NAreY2ofKzJEsm77Pt2t0719O180ePNG8dfHLW/h7Yah8OL7wYfDXie18Q3niLUdTsLiBVtZNzQ2f2eZppPO/1f7yKH92zbvm+VvpegAryn9pb/knekf9jn4T/wDUh06vVq8p/aW/5J3pH/Y5+E//AFIdOoA9WooooAK+aPhp+0hL8W/HiW+mePvAGgWT6rc2tp4PvAbvX9RtreR1a4+W8h+zmVY5JFj+zzbYwsjM27av0vXxnoPwP8c2/wAPfCnwf/4QtbCx8O+NItdj8breWosjZQ6m1+skMayfahdMrLCytCq7mkbzNu3cAfZlFFFAHlP7S3/JO9I/7HPwn/6kOnV6tXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1ABXk37SHxF8ZfC34Va74g8F+G7PXdUsbO6u3l1O78mzsoobeSZppVH7yTPl7Fjj+8zruaNdzL6zXk/7SkfiDV/gv4s8P+HPCWqeKtV8QaPfaTFHp1xZQi2ea3kjWSVrq4hHl7mX7m5v9mgDnvEXxq8RXGkfCPRPDsOmQ+N/iBb/AGlbzULeSaw02CG0W4upmgWVZJPvRxJH5i/NMrM3y7W6H4L/ABI1/wAWat448LeLILBfFHhDVksLq70qKSG1voJYI7i2uI4pGkaLdHLtaPzJNrRt83zceXx+FvHI074J+MoPh9rCa34Ajm0bUfC1zqGnLd3lrcWUcMs9tIt01u22SOJlWWSNmVJPu/Lu9I+BPhDXrHX/AIh+NfEulnw9qPjDWI7uDRZLiOeWys7e1htYVmaNmj85vJaRhGzKvmKu5ttAHsFeU/tLf8k70j/sc/Cf/qQ6dXq1eU/tLf8AJO9I/wCxz8J/+pDp1AHq1FFFAHk37SHxF8ZfC34Va74g8F+G7PXdUsbO6u3l1O78mzsoobeSZppVH7yTPl7Fjj+8zruaNdzLT8YfE3xrY/ADTfF/hbwzZa/4nvtKhvTDcXP2Swst1qZnuJfmaRolYbfLj3SNuVcqu6Rbv7SkfiDV/gv4s8P+HPCWqeKtV8QaPfaTFHp1xZQi2ea3kjWSVrq4hHl7mX7m5v8AZrnbXUPF9r+zVb6Kfhf4lfxEmlroLaSl3pHng/YvL+17/t3k+Tv+X/WeZ/0z2/NQB3nwR8Z3/wASPgz4C8XarHBDqWv6BYatcx2iMsMck1vHIyxqzM23c527mY+9d9XkX7L9j4g0D4E+CfDXiXwtqXhXWfDmh2Gjzw6hPZzLcSQWscbSRNbTzDy9ynG7a3+zXrtAHlP7S3/JO9I/7HPwn/6kOnV6tXlP7S3/ACTvSP8Asc/Cf/qQ6dXq1ABRRRQB4B4i+JXxC+HvxT+H+j69d+FdW0vxlrd1pcGi6VY3EWpWUMdvPcLc/aJLhluFjWFfM/cR7fNX/gXv9fKmqfDvXvFXxM8Na3oPwfPwu8VW+vxXniDxtbXWnLFqNjHJuuLffbyfabtblVVVW5hjVd3mNteNVr6roAK8p/aW/wCSd6R/2OfhP/1IdOr1avKf2lv+Sd6R/wBjn4T/APUh06gD1aiiigAr5o+Gn7SEvxb8eJb6Z4+8AaBZPqtza2ng+8Bu9f1G2t5HVrj5byH7OZVjkkWP7PNtjCyMzbtq/S9fGeg/A/xzb/D3wp8H/wDhC1sLHw740i12Pxut5aiyNlDqbX6yQxrJ9qF0yssLK0KruaRvM27dwB9mUUUUAeU/tLf8k70j/sc/Cf8A6kOnV6tXlP7S3/JO9I/7HPwn/wCpDp1erUAFFFFAHzl408Z/F7wL46+HuhSeJ/BfiC58T64tm2mWnhO8tJo7CNWmu7jzm1ORV8uJdu7y2/eSxr/FX0bXi/hPwR4g1b9ozxb468TWP2PTdM02Hw94UUypJ5lu+2e9utqM20yTeTGqthtttn+KvaKACvKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOoA9WooooAK+VvD/7Snja88P+BfiNqMXh9vh14u1+HRYdJtbWdNS0+O4uGt7S5kumn8uT955fmR+THtWQ/M235vqmvkO6/ZztfGPj7w1baR8NvEfgPw5o/ihPE99cax4mWTTZJIZmuFWw0y3vbiFWmn2szNHDtjaTHzNtoA+vKKKKAPKf2lv+Sd6R/wBjn4T/APUh06vVq8p/aW/5J3pH/Y5+E/8A1IdOr1agAooooA8F8LfGTxxqX7UWpfD7WvDGn+HvCi+HLnVtNlN19o1K6aG+jt/Ok2N5ccUiyblj+aTjczKW8tfeq+bJV8byftc2ni8fC7xN/wAIzD4dm8MtqBv9I2mRr+ORbry/t/meR5cbN93zOf8AV7q+k6ACvKf2lv8Aknekf9jn4T/9SHTq9Wryn9pb/knekf8AY5+E/wD1IdOoA9WooooAKKKKACiiigAooooAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKACiiigAooooA8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/wDUh06vVq8p/aW/5J3pH/Y5+E//AFIdOoA9WooooAKKKKACiiigDyn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOr1agAooooAKKKKACvKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06gD1aiiigAooooAKKKKAPKf2lv+Sd6R/2OfhP/wBSHTq9Wryn9pb/AJJ3pH/Y5+E//Uh06vVqACiiigAooooAK8p/aW/5J3pH/Y5+E/8A1IdOr1avKf2lv+Sd6R/2OfhP/wBSHTqAPVqKKKACiiigAooooA8p/aW/5J3pH/Y5+E//AFIdOr1avKf2lv8Aknekf9jn4T/9SHTq9WoAKKKKACiiigAryn9pb/knekf9jn4T/wDUh06vVq8p/aW/5J3pH/Y5+E//AFIdOoA9WooooAKKKKACiiigDyn9pb/knekf9jn4T/8AUh06vVq8p/aW/wCSd6R/2OfhP/1IdOr1agAooooAKKKKACvKf2lv+Sd6R/2OfhP/ANSHTq9Wryn9pb/knekf9jn4T/8AUh06gD1aiiigAooooAKKKKACiiigAry79oTRNZ134bxJoejXGv6nZ6/oeqDTbSWGOaeO01a0u5ljaaSOPd5cMmNzL0r1GigDyr/hcni7/ohPxA/8DvD3/wAtaP8Ahcni7/ohPxA/8DvD3/y1r1WigDyr/hcni7/ohPxA/wDA7w9/8taP+FyeLv8AohPxA/8AA7w9/wDLWvVaKAPKv+FyeLv+iE/ED/wO8Pf/AC1o/wCFyeLv+iE/ED/wO8Pf/LWvVaKAPnH4ueLvHfjzwvZabp/wR8bQzwa/ouqMbnUNAVfLs9UtbuVfl1NvmaOB1X/a2529a7n/AIXJ4u/6IT8QP/A7w9/8ta9VooA8q/4XJ4u/6IT8QP8AwO8Pf/LWj/hcni7/AKIT8QP/AAO8Pf8Ay1r1WigDyr/hcni7/ohPxA/8DvD3/wAtaP8Ahcni7/ohPxA/8DvD3/y1r1WigDyr/hcni7/ohPxA/wDA7w9/8ta4b4ueLvHfjzwvZabp/wAEfG0M8Gv6LqjG51DQFXy7PVLW7lX5dTb5mjgdV/2tudvWvo6igDyr/hcni7/ohPxA/wDA7w9/8taP+FyeLv8AohPxA/8AA7w9/wDLWvVaKAPKv+FyeLv+iE/ED/wO8Pf/AC1o/wCFyeLv+iE/ED/wO8Pf/LWvVaKAPKv+FyeLv+iE/ED/AMDvD3/y1o/4XJ4u/wCiE/ED/wADvD3/AMta9VooA+cfi54u8d+PPC9lpun/AAR8bQzwa/ouqMbnUNAVfLs9UtbuVfl1NvmaOB1X/a2529a7n/hcni7/AKIT8QP/AAO8Pf8Ay1r1WigDyr/hcni7/ohPxA/8DvD3/wAtaP8Ahcni7/ohPxA/8DvD3/y1r1WigDyr/hcni7/ohPxA/wDA7w9/8taP+FyeLv8AohPxA/8AA7w9/wDLWvVaKAPKv+FyeLv+iE/ED/wO8Pf/AC1rhvi54u8d+PPC9lpun/BHxtDPBr+i6oxudQ0BV8uz1S1u5V+XU2+Zo4HVf9rbnb1r6OooA8q/4XJ4u/6IT8QP/A7w9/8ALWj/AIXJ4u/6IT8QP/A7w9/8ta9VooA8q/4XJ4u/6IT8QP8AwO8Pf/LWj/hcni7/AKIT8QP/AAO8Pf8Ay1r1WigDyr/hcni7/ohPxA/8DvD3/wAtaP8Ahcni7/ohPxA/8DvD3/y1r1WigD5x+Lni7x3488L2Wm6f8EfG0M8Gv6LqjG51DQFXy7PVLW7lX5dTb5mjgdV/2tudvWu5/wCFyeLv+iE/ED/wO8Pf/LWvVaKAPKv+FyeLv+iE/ED/AMDvD3/y1o/4XJ4u/wCiE/ED/wADvD3/AMta9VooA8q/4XJ4u/6IT8QP/A7w9/8ALWj/AIXJ4u/6IT8QP/A7w9/8ta9VooA8q/4XJ4u/6IT8QP8AwO8Pf/LWuG+Lni7x3488L2Wm6f8ABHxtDPBr+i6oxudQ0BV8uz1S1u5V+XU2+Zo4HVf9rbnb1r6OooA8q/4XJ4u/6IT8QP8AwO8Pf/LWj/hcni7/AKIT8QP/AAO8Pf8Ay1r1WigDyr/hcni7/ohPxA/8DvD3/wAtaP8Ahcni7/ohPxA/8DvD3/y1r1WigDyr/hcni7/ohPxA/wDA7w9/8taP+FyeLv8AohPxA/8AA7w9/wDLWvVaKAPnH4ueLvHfjzwvZabp/wAEfG0M8Gv6LqjG51DQFXy7PVLW7lX5dTb5mjgdV/2tudvWu5/4XJ4u/wCiE/ED/wADvD3/AMta9VooA8q/4XJ4u/6IT8QP/A7w9/8ALWj/AIXJ4u/6IT8QP/A7w9/8ta9VooA8q/4XJ4u/6IT8QP8AwO8Pf/LWj/hcni7/AKIT8QP/AAO8Pf8Ay1r1WigDyr/hcni7/ohPxA/8DvD3/wAta4b4ueLvHfjzwvZabp/wR8bQzwa/ouqMbnUNAVfLs9UtbuVfl1NvmaOB1X/a2529a+jqKAPKv+FyeLv+iE/ED/wO8Pf/AC1o/wCFyeLv+iE/ED/wO8Pf/LWvVaKAPKv+FyeLv+iE/ED/AMDvD3/y1o/4XJ4u/wCiE/ED/wADvD3/AMta9VooA8q/4XJ4u/6IT8QP/A7w9/8ALWj/AIXJ4u/6IT8QP/A7w9/8ta9VooA+cfi54u8d+PPC9lpun/BHxtDPBr+i6oxudQ0BV8uz1S1u5V+XU2+Zo4HVf9rbnb1ruf8Ahcni7/ohPxA/8DvD3/y1r1WigDyr/hcni7/ohPxA/wDA7w9/8taP+FyeLv8AohPxA/8AA7w9/wDLWvVaKAPKv+FyeLv+iE/ED/wO8Pf/AC1o/wCFyeLv+iE/ED/wO8Pf/LWvVaKAPKv+FyeLv+iE/ED/AMDvD3/y1rj/AIieI/GvxO0fRNCtvg/4v0XPibQtQn1DUr3RPs9vBa6taXU7t5OoySH93BJwqM2a+haKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD/2VBLBwjPQv0VILgAAAAAAAAguAAAAAAAAFBLAwQtAAgAAADJgA1TAAAAAAAAAAAAAAAAGQAAAGZvcm1hdHMvbGl2aW5nL2xpdmluZy5tcDQAAAAYZnR5cG1wNDIAAAAAbXA0MWlzb20AAAAodXVpZFynCPsyjkIFqGFlDsoKlZYAAAAMMTAuMC4xOTA0Mi4wAAegTG1kYXQAAAAAAAAAEAAAAAIJEAAAABYGAAeAew4Aew5AAQcAAAMAAAMAAASAAABoGiWIgE///8EQfFAAEVrxxpOTk5OTk5OTk5OTk5OT//yg0MQB1/2ZcFH6n+cyN8zfxxWGA44WugtIXZI2dgBAE7gPbFyBTgr/hF9b4AAIBFcBgsxABQaQZhemEsokHwR2A2/0kgAsKU0ZEx7xdPwQAFAN5CwOsfGvFfnBH6kPTgh/AP+vXogQAifmEB45Op6MlA2/Y8d/H8PhkEUcmmscDODTa0ADFZ+AB4Ma9O5ScRJ7pAWixLeV7jUBgKi6OAGBWqnNaSPgGqOzVF9Qv/vANQBgas0Je8ptlhmeLSPqAiJGAgPCOVWQrQ3mEAAgMO94mCJaUCTAqvhdAJf4XuFWSoAcr+mf/8RwHuYa7gTotM9D/98ufAAlGGBmEiKScFSEWeAOH8AgB1sBjwJJW+rJ4ErAl6fAFQDkAAVD4ek/EUo8zU69wAYg8usRPkzRUpoV4u//pBB5MgBKHKj+KixtE8rUP32A14CAFAChbfApCEwfCWf3mQG4N/hLA0f2+RnhX4wBQAMsIPvAk9ZhrtPp3kELx4mKmwmGoAzi/9iauLLWjv7AYrQIkcOtjG4A8Ml0v936S/B1TywAOMQAXxWAHE4ocWvR15Vd/11YdWYDXi8CEPCifIVKLmTC9No8BgACALghWa7oTFlll5UVr/cA3C+Tr+juXcEd4cAAb8jQABAvwepQAGYQT6PAFwBwFcNiT7FPcZlokQk/D3P4rAxX7vekNTKQVQcd7jQYWiZP/FUTAJ55/6NIAAQDQcA7MrA3huUcUAJrY4YQ/qGThsUTs+AABACAIMMHiIITQiA09xpYSc8AYKBNpK7J8HRZKS4tCRQ8qqv++AJ8YQJDjy2GgtHZU9P+mCGeqxbD5SjZZfXiAAEAATRR4H/q593ITvqGwjVP8qzIB4iADMs4he4r//9VTkFquud+6AHB8DhLR4sE2QValRyfwi0+8rpuv/89AdIBnBTqtUigTNPSu3pvSvz/+89gZhgIGaylU592ENEiIHJECIiBHifSwVv+IAAedBowHK3/w40rPlVcOO/SdvfK+/hyktln3tfYAGigAEKAYbCdTZgJXjO0gHA+FAYAAgRhKZ4AOAYEODRND46dfLyte2cN/AICJECe7jgq1a8nY2pR+CIt/6Vkki//3gBg4tb45SRAw6wbk0Wa6ILb/xc0WhQr8QBikOBjY73PkZLnL1RzCSgAoCA1VJSfm5wROfeMDBghp/I60U9oD+kKFr2BIAYDB7EJNkpqa5Z1MPPwG7dBhxOtJHj40jayDU6uf7/uAAwVZWA0/wTJIz2h5p+2IaO7ONSyCW/8ajTCsDfEAFAKClchqLyIhNt+AEgdLBhQyO928GBQVv3nhAA3JDgwpYS12txmPqTI4xIMD93MEVQuSjYla0mJH17t8AuQIoA4CAtJNGenYwRF/3ggmPIRo7NrBHpa249ZAGQAELABAULHQdZ0sVxx/4qrRLCu0z4VsXc//5ACAfAYP0WJCN/Fjxm+Xs/ABYEeOEdYl0BCrOxQQJXgSDA6T5UmEK5SxG6jr9AEZwpJgIY0uJoUiJb7G5mMABGl6Q4BoLVv/IAAQBxwaCO6wIp0Z0vK6eoq3GGpCnACj4MoVCGBZ/f85/hn7g0VMUbdZtaulKRu53+uAMB0EDiR8fQJhJvgiPzPkZ2B/R/8/gIpOTk5OTk5OTk5OTk5P4f/w1gcAAQYQABFKAAESlBw4AAgwgACKUAAIlCAOAAIMIAAilAACJQg8QAARMAABH3iAACJoAAI/cDgACBIAAIGYAAgKXMOAAIEgAAgZgACApcwOAAIEgAAgagACApcw4AAgSAACBqAAIClzJycnJycnJycnJycn//8u+XC8V7vuoAH+0aVKhv///gEj0vsRK7EP/2CONRXGfv/lwAHgBhi2HR+rdXKTAgLvwQF1Y4IwjNGh/QFq8akDUSLG4aquS6W+aEwAVVqvaDP78A1PJe5lG/vgFBCrWyEBSgmZ3khk//cAACAOCYBCrEDxWAwXvBKIf/8/ymukkFDVgACAKHC44apo8o6I/fnEgrUaH/fWyZXVVlX3fJEI4SURMw/v8AFIAAgFHUlxn1PSSVdr+Ven/ePAVIVU6EcGGx8RQyQo7dSKQ4vAgABAPAAoAYmEARnlgB1sHPQ2PIUSS8ZNTAR/te0x+8vKFbJJYwi3qJTBq4wP/BCk7G26AbElwPGT/0Nf9BjrCAALSvoGA4S9MWZJv+8ADoBglZChNp0G0GafYaAbPHe8t/V+3eAMAVpRrgQDdE3gleIW1V8A8BbGL9vDwtdlTuA/9f+ABqAimIw0AWNiiDTSqzPhgACAAiGAHAfmaUBTZ//rvAADOUIKaxgamVMZp2t/SAAIAspUAAcAoDxLQzHjJUqcHQtpj18z7sRIvGp5vCAYmABOTJCgQBRVWMaR1Fo+kYh4q8VzltIrk3/cs6IzcIffcukqy4On/87wMDGSAE4fd0OguqK19J4+AAEAC3iwhMlKKhsmYEU3gAAgAgLZATpEG5EZOXgMO6/P4EClISUByuIxG5mrK4AjgB2gW64FYPSUAuwtvH/7wABAeQSg90ToxyPmQl36PAAIDUJe6EyRnf63yAMusWiv9ZTfu7bkG2jQk13/XAU9mEY8vgACPeEPAgLQFVBNQtz/aRIi+BT/a/94AAIAAM5IS0ExdQoxSO3lbRp4xORS0BDSwq6z5P5CjsGHUFhVgYzoKgOGDLk2Rxi9geWBi92AYDBow5N0UIuYHldXmu0AAhQV18KkeoRqCsqQbO/eBJh1chg90uZw2JrawF1JN//3EPNdJxzgtT6EIKHDwtgku9Tl8gg+iJpk74626wJNcAgMJNkh9zYcj6swYajG4AlAAXWLoAcNHJ/AWDBj3gAjBQKLug0wKqUYPiorpoo8YAQAQXCRAMk46XLKOUXpyADB6ASYO2BOFGCZUZUr/4WjEH7DD9BL4Zzg0AGFVkibIDfo2PB50wClRvf7kL3/eAGAcnAUKTuZsGawMoRSJvg3CJ5KVPgZ3l/cA2CkyRdbY//3wnPy+a9d3eBAxMAC0SZTg4CiitW0znijNLV3P//+v+AYjkCWAPM3ygYNKlvduk+kzmMf/+egAXgADmgLPBaIvSiIi3GyxEaTFtH56eoZE2wGuiPq7+AIDhJI4UIjbtKsLFz1uw8AYHCCZwqRGnaRcWrnrhd/wDAOFuIdqydpUr3dGGAItZG/zzMEUCAoRL6aMhAnMqyoeDOM1yS3DUHivnSiXBNd76RbKRf+4QwBf5NAY8FSuNwZP9wDDPWAgfLcPMBMwElXZL7AIBj2SMGWpsQZsRioAItxNwSn0vFfJAwEB7oWTKIvQ8Zj2R43IAGdwAYErHvBETyW4wE/eQBcYSWTBNnYz2Bkw/7XgwAcCYHnKroFhckDiURn3TIGfkYb4PeRe//8ACAAUL2sVRAfdJApOhCwmlx0AwGP88A7+jB+/+CF7hBcB7KAAED9g4BEcFbGznXAKHDgEEboqIxE2jWeH/uAB0FA2gKmh7IMWnwtSoX0io9sG/Hxf/dVfbyP97TITKe0fr4AZhC5BuAgY304B0gryf4OuK/dLEpqkerugANeAMMU0SLPUnVmJWrKOKfAGcR/PNYIsyeScG1fgAIAO9VOCQLFOgfJiX7a1C5tuU4ZrfvAACDlMYeKE30BJeibxFOoAAQCHUADwLneoBQFk1M14ADA1kCIqg+t67ND4nWKfADDuCjGYjHHkCdcvKzGcruoR/vnCMXltl8+/gDGCR/i1Mr//4S+aD7gAUB4qssaVHPLKKpqRH4nf/8aAwHoDpEkhKYlETUq/vaQS6WtCfPj+fycnJycnJycnJycnJycU9P/B0OTk//+8IQ8ubwAO5qlz1B/bkEDABgNnBiUhOoS1y4VD74PGfql+fs5RmLeLX/vQVtOoJuMPf/xw9DZ8PnPh8zSqWykssQQkITSSTKcsqnL863J1uf+OHBZ8PmfD5gAeQLfex+d+zD///IBQAYQACqcKSDopUOM79yWcAoMm7K6smsn//3ABP53/MFi5+fxBZNcWcucm/Otydbn/j+CHT4fM+HzAA8gW+9j879mH//+QCgAwgAFU4UkHRSocZ37ks4CQZN2V1ZNZ//1wAT+d/zBYufn855N//8PQ2fD5nw+ZBZNcWcuc+n3zrc/azj8X6uKw2p4AsEcVHkFc8bthBG8GMxyhUMJctaVrU8ABcBzaYSE9mUDHFbGn0AAIA4EVZOCEKySSHc1gEYz98wMAIIscIXaNMcErr7oK+sfrxlOA5spD40bhNQB/WAQTsF6pSQfIZbdP9wIAAQAQEFsBBUgoDCvVX87XIJcYbVg/8i4HfRturIxgmrH1HExmCaJ61711gER10nCyNvZu5IBbrVlkX/ZxzD4CrGiR77jWJmX/QBhLvYKi6OYELm7VxexMT/9xsAAQBwJkqD6uOw1sj70AAIAQyBgvLPxUtqMx6lBS0AAEAIdJOtWVEQgk5//eBAFRISLL0ViZzf/gSNbI0ZmaENEn7/8cACImMVbDP6YD+JvnT3GWwABDCOhwqAABA4A/m8KenKeV/8lF0LTSVfz9BAACAGAHAGCAQTD7ewAchFAZw8jXGdBW4fiQq4nZPUEBZeoBfp6CnoylCHLzVOhokNIhEg9Lp/hjfwxLLrYmusWcfbTmNzzYAIHDIU0zyKEFiLrgMmurLzcbZ0z6UgE4KSKgkyTEdU/eKYBSSmdS//O9qlfXtfDMh2T/8DdCEXjjsBg4Y8yG6b8x+bAGNp5n7+PX/oJBdBIL//8EC6AC0D3EXURFyf7/4AUAAQCQCWAAVBTQKjle7xFL0w/wEsz29s9sD6taR40ljH/fK9v//w9AtjFJ54umn7X2v/gEACCDsAFoHuIuoiLk/3/wAoAAgEgEsAAqCmgVHK93iKXph/gJZnt7Z7YH1a0jxpLGP++DFJ567f2tr+HAMAggXQAWge4i6iIuT/f/ACgACASASwACoKaBUcr3eIpemH+Alme3tntgfVrSPGksY/75Xt+F1HiQ2lv/8EkiJFLDyKWkkHkUsPIpcXTT9ra/+OHBB2AC0D3EXURFyf7/4AUAAQCQCWAAVBTQKjle7xFL0w/wEsz29s/YH1a0jxpLGP++DFJ567f2tr/4/ggXQAWge4i6iIuT/f/ACgACASASwACoKaBUcr3eIpemH+Alme3tntgfVrSPGksY/75Xt//+HwWxik85U6aftbX/xw4IOwAWge4i6iIuT/f/ACgACASASwACoKaBUcr3eIpemH+Alme3tntgfVrSPGksY/74MUnnXb+1tf/H8EC6AKlFB2gf/4gFgAYMACBE8OXjcNyct8X7n//gVmEnWJKf///Gt7LhEksbcvb9PTycn//+xuf35IoEmfe49RXwhWi8MkhYcVx/bt/x6OADnX7W1///QmMqDAADHmTCqMtivKolUWtr//+gp1UGAAGPMmFUZVEqiRdrIv//948JmqYQILphrGWtlU5JlnAass8BiV34GDJ+EAfL6BME3KPOFIROS8aMCAAEjRwKWAfBkncBoFbgYqGfConcPFgqJ3DxYCuPwshz8+vrXAAFJ///wWf2U5bY7H5Hycn///BX/ZTnKx2P5OT///gs/spy2x2PyOWADJigAyYoAP//8Ff9lOcrHY/k5P//+Cz+ynLbHY/I+Tk///4K/7Kc5WOx/Jyf//8FnyAFCJmxktsdj8j6eTk6cylP/Vl8KlCkABAABAFFEKvAWcnb2hxfsEHAq+EAtFgGCrlY/0WWLLvUvMCAwVGSfdJAhVMCWT94GkANRcMDwCo2jxb0W74CpQDit88CJAIuc2Nui8AAPgBAA3lmRt0VFVcx3n7wDSnAYYi4Wm88dG8lvkAxbBImne30QTr4MJlhrk+aB4RD4mAAgACAA4bk8li1rNgItwuciP4wA2BqA820WInUFsEWfAAQBgOGEGO9bQiiMWcBT9oMNFyr7qyp2f/oDh9DEubypq5i5dbMXY3RaEZ8P93YAwACDGApgOpmVyhgPS3oS/MACBR5puh00i4L4YK7F1/1h4orwpAAQAIBmA2YeGK/fubIiY4WCr4ABg4omx8jVEpYSRSO+fGBmgBASOEHcmxWKSB8w+AAEMBYQT696BpdtplaLMteAIg3NICj/o1GFLBar8YYAAgbEEEeACQNKR04XZa9k8AAqAI4gwBqjzSyQNimYp7SwAY4bupV91ur/Ew///sNQeaaYPIK5M8f7TKLtKAMuFtAcBkBxofI/UF/V/lgAIZggD8BwL1VR/KFBWN0QZfEAAIBijhYTDPpBmUJha92YXmAgHAOKgoH+vl3Q2crV3Sf7AAYgWNLVvT1AqVJvmq0DgH4J4BRjQrxF+2XtmLF4A2AAgA/qVjpADeBBjELO3gAEgwrHAR00w8oHJFgOvhgrSzRKrrv2SaKr7ZKnMuR/6iHkRjDEABEAAIAiAUSAsPW+7czSkonVj34AAIBoAUGESnytVUKDnVRH7cKMjk0Gfv14AAg22NnMuC2SIyvqIGgCgACBSwADFABmdGwM4OYNiyD/uMAwL8x4S223VNd+0AAIBBKQHVkEXiUOWlR5ngYISNJE/C67dQRomTNcapw051yfGwdpn8LwAPlsAAQzfdQABB+AAKkABVtwCgGgAZgA0HCAR7Wicv8tdXAJkDFTXIxZa0IX4A2AUBl1qUDTT5VDg7b8IQAAgAgOFM4Z4X7WzIit/3HgGCm7JoX/qf9y///hgGHibahLMfJzLVah59w1TRLyhv/+4lTmXI/0ODQjgdQAlJrbdDu76ACEAAe2gKLQh1CoBMhAgJR5CzP6WHD394AAjAAYAhAuVJ2AIGYt9zEuxowA4GcCSJry6eSn//8AQABAhAKA5kJDhFZVeIiYbRORjPyLJZ/UW8dP/3AjVnEpoB3CVRY/K/8C7u30f7+nQ4JMp3tiL8NgWJYoG/9LwjCCFlgdSIMOlwdiLiQ+GGVpNptIj//eIAAwo81/BAD5MGCPHhJ0DwGBhLJI28PsrVBm0IiFd6D1AHAYFT6evbo//3qHNrUP3X5fgAgDltAcCJC+OdiKppxyzsBXr7cmbnv/s5ACDCNlVhcMWaLB2SrP9htxqFp8r/84//8BnAAwDVIJEwVoFSpLpJ8uk/cXT1dzCGsa6dniYypZqVtJcu97Z+FqU51yfGwdpn8LwAPlsAAQzfdQABB+AAKkABVtwCgGgAZgA0HCAR7Wicv8tdXAJkDFTXIxZa0IX4A2AUBl1qUDTT5VDg7b8IQAAgAgOFM4Z4X7WzIit/3HgGCm7JoX/qf9y///hgGHibahLMfJzLVah59w1TRLyhv/+4lTmXI/0ODQjgdQAlJrbdDu76ACEAAe2gKLQh1CoBMhAgJR5CzP6WHD394AAjAAYAhAuVJ2AIGYt9zEuxowA4GcCSJry6eSn//8AQABAhAKA5kJDhFZVeIiYbRORjPyLJZ/UW8dP/3AjVnEpoB3CVRY/K/8C7u30f7+nQ4JMp3tiL8NgWJYoG/9LwjCCFlgdSIMOlwdiLiQ+GGVpNptIj//eIAAwo81/BAD5MGCPHhJ0DwGBhLJI28PsrVBm0IiFd6D1AHAYFT6evbo//3qHNrUP3X5fgAgDltAcCJC+OdiKppxyzsBXr7cmbnv/s5ACDCNlVhcMWaLB2SrP9htxqFp8r/84//8BnAAwDVIJEwVoFSpLpJ8uk/cXT1dzCGsa6dniYypZqVtJcu97Z+FqU51yfUEwq1/lgAIADOAYNYAYNR7/rdImAxYhD8AAEAMABww2NeqcE6TxUmkZ7+wwYLNWtg2Pg5gSbSnc8IBTs5BBQAEhUC7lf6JeMDh/AIwQgRw2kawUwEymR34DKgAAgygAuNwB8r/CSSwz07P4IIogYkBvZBZ0gBGJdwz+Gcoc3bWJ6ju8axJU8j08nJ05lKeTk65OTDXXJyf//HeAcPhOaBAV0p6V512PYDeRsijzDpkjVw0/gHjQqYQEkTPl2XpxDx1IwkHxGD2AjATgIwL0+fDAdU5lyPIsnTnXJ2oacy5HtfEYYDqnOuTtQ05lyPa+IwwHVOdcnIoaeR6eTk45wAEGQpCFIUrFGQ8h/gAqxLN5pI++BEDKonoqKq//9hL/j/9jwQUgUXaZMCNiN0rarP8P4/L+xNzaGkjAACov/LZSRSWW4vffwEMAh/EwAcMjeWksff3+BITonRaWzX/7wPFYZ/Zc//3eAEFAQHEM/HLEPXS7i3JDnqSKSMBQyy3qoMADDImFUb7/HCHw4qUkUlgA4ZG8tJY+/v8CQnROi0tmv/3geKwz+yo//3eAEFAQHEM/HLEPXS7k3JDrqoMADDImFUfAMA/4S6kikjAHCXLZSRSW+P/9hf/AMQD+xsAKlKk6HF/4AliCytM8uamZ3gBGIJLmi7h88YCL1QyNCPRkAGLFxUfFRv/6BisgABBZlAAEIEAAQdxrqYh14hAapgQKL90JOO2v8jGRiE3BRClt5k5nOZOZ/yJa+OH/sOQAYzIV13O//sBKNFuwnst/eB9xl6UPi1vAAEHAwOJ8zlC3eL04Wm/KR/IJVLGSJof/AMA/2CL8wAAmHX8tkS1OSanJYDwD/Y2ADGZCuu53/9gJRot2E9lv7wPuMvlD4tbwABBwMDifM5Qt3i9OFpvykf5gABMOv5b8glUsZIlD/tTkmpyXHD/2HIAMZkK67nf/2AlGi3YT2W/vA+4y+UPi1vAAEHAwOJ8zlC3eL04Wm/KR/IJVLGSJof/AMA/2CL8wAAmHX8tkS1OSanJYDwD/Y2ADGZCuu53/9gJRot2E9lv7wPuMvlD4tbwABBwMDifM5Qt3i9OFpvykf5gABMOv5b8glUsZIlD/tTkmpyXHD/2HIAMZkK67nf/2AlGi3YT2W/vA+4y+UPi1vAAEHAwOJ8zlC3eL04Wm/KR/IJVLGSJof/AMA/2CL8wAAmHX8tkS1OSanJYDwD/Y2ADGZCuu53/9gJRot2E9lv7wPuMvlD4tbwABBwMDifM5Qt3i9OFpvykf5gABMOv5b8glUsZIlD/tTkmpyXHD/2HIAF0Zh+6JrD//wECi3VrrVP/mA1D8nsuSdvbQAgGBERVycoIxiwvK2x37yKKnImh/p/TycnTmUp///rBDABcE6klul5+72BgGrXzZSyH//QAh04MYAKbBRV0kbFII7BX4ADUA6SzcABoIBJSTcBHUf4nXJ//kuGFYAHgfQ2BZyIuIf//tA2xC58XGTNv//+AgIVFAAfKUAAiBLCK5+teAIhwABAneAsZRy5AyWivlVySfw66///IYIYAHm6iR95kbVP//9QXAXuvss///gAQABAYAAEA0oB4DfF2iV0dBpEkwxf8PLwDGgIG1UfhS0eN2hOFnQ/O//63v5H//r8MwAeSebXyFdfcDartY4t4AoADAcB5kMWjBO1YhEyoK6HfvAABATA4BoLJ96cAjqlzKs6lVhP4BwGqeR///Y4JYALZZA9E8QU9/cAV6F3nLLNd4AQDYKOSBb8UcNW7wqn+0Z/AABAJAK0NCs0Ap6ujlLn82sjgHU9PJ//1DwQQAMhDz55pcX/qBbt0hLX//3ngAAgCgCgaLzuNx9Ncnozce/cEHwAAwABALMAxkJxtzOgCie4ylFlTyP//5pBDAAghZK9rmHY0kb+KM3++8AAEDhhDwADQzDIhOvSoILJ2C/4EQKWXNwBoqYiWEsqqCnp5P/+oeCCABkIefPNLi/9QLdukJa//+88AAEAUAUDRedxuPprk9Gbj37gg+AAGAAIBZgGMhONuZ0AUT3GUosqeR//+94JYAe1a0Yfv8AJi6WLbX9/+AFcAAYcDDoNSggMDctt6OC/7gCTAY8FlS1CR0MnaUnAHU9PJ//1DwQQAMhDz55pcX/qBbt0hLX//3ngAAgCgCgaLzuNx9Ncnozce/cEHwAAwABALMAxkJxtzOgCie4ylFlTmXI9PJydOZSn/gT/8P/BA+QLBEIPtCFayMX/4z8AACB0AAIAlgUEqVKQZsLe6xcMj/+8AAEAAAAwMWNCp0K+0yVKyly6r5/AABAjABQCUUCptYGoCie6hyvJhrk9mY//4TgJEwBQvenDTjL6eOuegQEQOnNTJE2ipU2zoQAEQDZkezPnx4vNGV/3GYKZEqI2SL/7wPXX+Co//D/wwOPv0c/Lqnf54vE/Jj4AQAUUDV639n2ShgjrsVv//3gAMABygMIgsSlPTqPM4Y/y+AAwABABBqqY+76NMTDbCBChWHD//sbANAAZU/6A4oSuQOCxS/ip3rHqfoy1zqSUGquWHTVy/I+gE//8J/AAM4AFkJAJCn7X9I/Eic0W74AAIDoABbUwAWIlGHGrw0uYk/gAQAJpICeAAdwTaYShtE91fAABAtKKAoYwpoKlXRXDkfzAYHp5H/gT/8MfIAcoCgA0AWf3SaKBwkpRH4AAEEAAAQGLAUPVpUARkV9I8/XF//vAABAGAAEBAsLCouIfKhWldTxhYb/gAAgUgCgF7WOiuAyhLUeVQQcoGAeAipw08ngKP//C/wAEAAIJWAG6DdYjtEG+eIOMQu/AAAgSAACBJwAxBMZUC+SrGWEU/v/7wAAQBQoBtxUKGXWm/FfWQL7bE8AAgA4EgmrEKzcSMrV01XqPMDA8AKnkf8LJ/oP6IHqTvNc/55Yw+lLvMqn/2gBAEAAICQGwbQACO8BYx1CyJP2eAGAAIAwYJ19gr1dU1HtlrnQTl+nk8BR//4X+AAgABBKwA3QbrEdog3zxBxiF34AAECQAAQJOAGIJjKgXyVYywin9//eAACAKFANuKhQy6034r6yBfbYngAEAHAkE1YhWbiRlaumq9R5gYHgBU8j/mpP/oMeEAQAwIicBM44RbBut8av+8ADACgkGFKeWUY2z5pS7SW4+AACAUAAIBGhIuJCajVpUHKIlln1+AACBSAd5AKRfSAxARK6JDFCGAeAtNhgOqeTwFH//hf4ACAAEErADdBusR2iDfPEHGIXfgAAQJAABAk4AYgmMqBfJVjLCKf3/94AAIAoUA24qFDLrTfivrIF9tieAAQAcCQTViFZuJGVq6ar1HmBgeAFTmXI9PJycc4ACCKUpGdyMUfnEP//BJ477EAJMIQLLttGhCxG7VtFQA4xrdprY++wwRUE5cXEXf/z/j/YTi8XmAAEjoeWzIAyElmkF9/D8QiAcXKolUQAelBm1l0//3QBAMIAgOoZueWAeulzJvSHUKhK2lJMOPf/oGRF6pQABCRAAECaMgJB9/vGAcLctkAACACsZbzEnmJfhj4RhSVRKogBZUGbWVH/+4AQDCAIDqGbnlgHrpcyb0h1CoStpSTDj3/6BkReqUAAQkQABAmjICQff73/AMA4IJgHC3LZAAAgArGW8xJ5iX/aIiD2HYACJjAhwcEk8PBaqG6p1kYmA+AiLwn8zLsIDSQhABABdJADAR3+1qSw3AiY0PWQsAAQWKAAIQIAAg7PU5d5LDAABFOybYZPAo8WefhNwWhS3+wyQzyGSGcyWv8MfCLBdAC1Rn6cPi1gBAAYYDA6nyQoWwMyZm5fVIkgyjMd1/O//toyR6oAAQywABB6mQADAAU/eMnof/8AwDgkmAAEg6Ey2YIVElsXi1NjU2YfiEQDYdgBaox2ywfFrACAAwwGB1PkhQtgZkzN0+qRJBlGZ6ZsN//bRkj1QAAhlgACD1MgAGAAp+8YAASDoTLZghUSWzJ0P7W1/hj4RYLoAWqM/Th8WsAIADDAYHU+SFC2BmTM3L6pEkGUZnpmw3/9tGSPVAACGWAAIPUyAAYACn7xk9D//gGAcEkwAAkHQmWzBCokti8WpsamzD8QiAbDsALVGO2WD4tYAQAGGAwOp8kKFsDMmZun1SJIMozPTNhv/7aMkeqAAEMsAAQepkAAwAFP3jAACQdCZbMEKiS2ZOh/a2v8MfCLBdAC1Rn6cPi1gBAAYYDA6nyQoWwMyZm5fVIkgyjM9M2G//toyR6oAAQywABB6mQADAAU/eMnof/8AwDgkmAAEg6Ey2YIVElsXi1NjU2YfiEQDYdgBaox2ywfFrACAAwwGB1PkhQtgZkzN0+qRJBlGZ6ZsN//bRkj1QAAhlgACD1MgAGAAp+8YAASDoTLZghUSWzJ0P7W1/hj+LBdAA9j0skiLO3sBIBgMCYijg5+hGDC8LLHfgJ8yHtqmlL/+rB1ZoAAIVoAAgkSgAsID/5jJ6H6enk5P+H/sTvfkeAEXLTPe6cettMJyfD//hPqoIAE2TBVGVRKok5P+H/wp1UEACbJgqjKolUV5OTw//7HR4AMKqYbAe6Z56/7YhefiRg4kYWIWOMcyL/D/0Cz48AAuEqEzmtjsfiPxxpFkXh//oFfx4ABcJUJnJWOx/Isi/w/9As+PAALhKhM5rY7H4j8caRZF4f/6BX8eAAXCVCZyVjsfyLIv8P/QLPjwAC4SoTOa2Ox+I/HGkWReH/+gV/HgAFwlQmclY7H8iyL/D/0Cz48H7JnNbHY/I+nk5OnTT/9PCyQpAB7A+LtV9Tbr//QNWYAW3nu5X+fgFAAECiAoAJCcEHJdy+GF0uD3uAAUFJ9tAs6FTegjJWv0gCiXqdL7v6+QrHqYZMRV2AEgABAED9EUAD+cZAztGkaLS8YAAgLAYDU2wBlA5dvUIQbanpfr/5fDhSAHgA1UjJaf/YBqBZyba+RX/vYBQMddwuJ5M3UX//vAABAWAKLFz0li44EG3U4YS8FG0gxbuKq5je6wnK7EOkt+94CYC555W+tX9/eEAA1nC6AC6EtTjb4SKX3v0TT20GoEgIRCOmvvKna/7ADGmAjpVf6pxdALlA7ScBbZEO0Fc/3/8AAECQbDQACRvCNm8lJBxRIgq2kDUXcvZmD9/7hYGJrUkf/zeCGgn2/4LCJ+ZzEYtX4ANT1Utfx3UHOksbQr/nVikO31JGP91vAwADBnzYiFuxJiJFd0tREXwEAAIAALQJmgBNGnYRyDaDHgUBVBa2mxf//uLM2FUMyfR93gYAZgC/SAP/NykR0SVvlbqMCSVitVI//vTq/X/kvhR4UgB4ABE0jaTh/2PIEmsYuVdF3X/8AEAxwLJi66M6ZJGwLL+H2EnwwAXwAQE3ucqtmECOp3JbXwAaVg0ysJ/GMU6XBkQoiJ89yMiiv3gAAgEgAfSAsChK/mXJ4RFrp1uAABATAAUDX7nz6wEj6zqhj//yf///sbAFQACLfZHBC+Ym/FUDNDMrpWtr+6MT8qD0wQMqePaDVXMOmrmViSsSRxQAfqHZmP4XgAti0lvkQp8wGyWx6JvM///zAEkZmIAAIGedFYAAIHYABWQHPgCCLAAXEJk62XQDJoOe1nL/0AgA4vMmhzbVLfZbxzCoEnRSLJ9dbJt94IwAAgFMAmpNWI6vgKD8UatFIiKpES2JU8j/LTDhKoAP1IyyaDf39gFUdpL1X7gVOPJ7Jef/v48AAECYA4LHzc1kXJBd37P2M8BxBZTWWWW934KHvrZNin/vd4AiKO/08DU3QfgOacfAABAJoApmAARsBBYkYED8GtwxgrdxR1n/+r1pBpZrPFl/wLRt0tU3//z4QAAgBEgpegAJqRDhICIXqSOk8dQnxzNrbv9pgACAHgUADQCBPhkuEiCjMvfeBgACAcK+XFQ3/JMJgskrBORfABAACAMC/kwCw3l4cWhHP3SIexzevwv+WCGDezXJOc9/2g9cq4DetvAGA41F8vmoDZoCaIq4CO38c+q1fL8fw+gAAgfAACBhgCDhESF7iWSXN8zfv6RZL503/18AAECcAAQAQBbqI2S7Hkp1VlorW5nIls9P///4CKnk/I/ZmHDLAD6n1Gj6wHgbLk+rj+NoAQYSDBwFrxlquZPCeINQ4+ADAFCyYZyqKyssFGWB3ZyOfwPwgMgpdhxKVxP1Vhn94AAICoFQAx72jhhrCJBt9/wAAQBQAUAXuI4CvM7Spy+YttWb4AAIAoAIK8bHz5hz2i8sZMxQSp5H+WgQ7XqAD9SMsmg39/YBVHaS9V+4FTjyeyXn/7+PAABAmAOCx83NZFyQXd+z9jPAcQcUq7W+/7gHc0Vdb/c3gQzRe4ToM8/n9hvXH4hgACAGAYHJ7GK2VGQ7HAeFcFbuKOs//1etINLNZ4sv+BaNulqm//+fCAAEAIkFL0ABNSIcJARC9SR0m3jyr5KlN/y8AAEB0ADh7ChMEiZ5ggVhmRF27wGAAyDQ8Ihz6TYSlbIVxX//2CC1izWJXefw5vf4SH2WBvFyfVt/9w6Ayz0oF1XAxQtP6oXKwwamXLMFlUq61dF+/4+f/AABAADAJCX8ZJd49R6ishSHGwkVJP4n5/fPAABAIBgLPBve2jQNipeVFTh2yBRV+7VK//3hKnk/I/ZmHDLAD6n1Gj6wHgbLk+rj+NoAQYSDBwFrxlquZPCeINQ4+ADAFCyYZyqKyssFGWB3ZyOfwPwgMgpdhxKVxP1Vhn94AAICoFQAx72jhhrCJBt9/wAAQBQAUAXuI4CvM7Spy+YttWb4AAIAoAIK8bHz5hz2i8sZMxQSp5H+WmHCVQAfqRlk0G/v7AKo7SXqv3AqceT2S8//fx4AAIEwBwWPm5rIuSC7v2fsZ4DiCymssst7vwUPfWybFP/e7wBEUd/p4Gpug/Ac04+AACATQBTMAAjYCCxIwIH4NbhjBW7ijrP/9XrSDSzWeLL/gWjbpapv//nwgABACJBS9AATUiHCQEQvUkdJ46hPjmbW3f7TAAEAPAoAGgECfDJcJEFGZe+8DAAEA4V8uKhv+SYTBZJWCci+ACAAEAYF/JgFhvLw4tCOfukQ9jm9fhf8sEMG9muSc57/tB65VwG9beAMBxqL5fNQGzQE0RVwEdv459Vq+X4/h9AABA+AAEDDAEHCIkL3Eskub5m/f0iyXzpv/r4AAIE4AAgAgC3URsl2PJTqrLRWtzORLZ6f///wEVPJ+aeFk+WABBCyV7XMOxpI38UZv994AAIHDCHgAGhmGRCdelQQWTsF/wIgUsubgDRUxEsJZVUE/geiB6k7zXP+eWMPpS7zKp/9oAQBAACAkBsG0AAjvAWMdQsiT9ngBgACAMGCdfYK9XVNR7Za50E4lTyPTycnTpp5OTrk5MNdcnI///7CsAVAU+2KCF8DZvx0Apd7pR9eX9Mjz4YDqnke18RhgOqeTiMMB1TyPa+IwwHVPJxGGA6p5HtfEYYDqnk5FDTyPTycnHOAAgyFIQpClYoyCSifADY5aVv+7gbgmUpqRakL+/A+T7tb/fZwAEABXvDAg9U+YI/UnC7/D8R+X9hOeIORACrX4vefHnzAcA/8TAAsMaP1NVmbMT/7B2H00PQ///AgZh4jvd2tv/38AAECYAFA8uSOgCvXzRboOkyu9niDkAAFYrX1UGABCTiYVRvPjz5Hw/+FIAFhjR+p6szZif/YOw+mh6H//4EDMPEct3a2//fwAAQJgAUDy5I6AK9fNFug6TK73qoMACEnEwqjwD//D08QcgAArFa7z43PnZMQD+8Afmhauu3U/f0wyIMSLjtnYfv8AGABSjgB4BEihlf3CiRTzcBAXfOMGkcfY5Ntr/73ZAACGjQABCCAAMjt+LQyxBPTBADsmf1/6gUTKGwb5YHTK4/f4XcMgBluhMLYTC/yJrb/tfHD/2HIAPecqdDevsB7MWsjLLX78BDPubf//14AAIEwABQPNlDoAK+dOnNgWKmEn+YAAjbKZyJbQ/+AYB/sFf5AABEa2uRLbf7W14DwD/Y2AD3nKnQ3r7AezFrIyy1+/AQz7Tb//+vAABAmAAKB5sodABXzp05sCxUwk/5AABEa2v5gACNspnIlDb/a2vjh/7DkAHvOVOhvX2A9mLWRllr9+Ahn2m3//9eAACBMAAUDzZQ6ACvnTpzYFiphJ/mAAI2ymciW0P/gGAf7BX+QAARGtrkS23+1teA8A/2NgA95yp0N6+wHsxayMstfvwEM+02///rwAAQJgACgebKHQAV86dObAsVMJP+QAARGtr+YAAjbKZyJQ2/2tr44f+w5AB7zlTob19gPZi1kZZa/fgIZ9pt///XgAAgTAAFA82UOgAr506c2BYqYSf5gACNspnIltD/4BgH+wV/kAAERra5Ett/tbXgPAP9jYAPecqdDevsB7MWsjLLX78BDPtNv//68AAECYAAoHmyh0AFfOnTmwLFTCT/kAAERra/mAAI2ymciUNv9ra+OH/sOQAsDWmmtFHxOgJcEPs4rZuJn8Altdo373/3aAACABACvAAJAVOLcnAg8LKz7vwpjkS2h/p/TycnTpp//764VgCYBLrpkf+8UCEVVnR/8g3zIok9/+7+1BgoloaWTIydmyaNwWgeyo1VIf+B13H/ffvliKU7mHJnCerWYfjNo6oYf///f8KwMboAk3j3V//AekBentl69agAHwAwCgnDlEbGpUbp5gwEls0+t5/+Pc/rk//2X4VgBnAR72om//0wMYFJpdZW9+AXQDCBoUfIZOC0akLo2vJvGGINdMghUw2yfw66///ZYIYANzHuLiKjX/4DuJNdLLLYBOgMIHhR4hi0KRqQuDn5N4wxBpkpClSDPyP//+x8AVAAJt9mKCHzCb8dQqV7pRDLvaO7BA1T9Nezmh8j//kOGFYAP+XXR++0BmHZas8u7AHoNuAAIGlTXaAAIIIABCYHfhCvCjDzIyz3UPFDtekP4dPI///1glgB6ef7GH+ugPnlfTHF+QAgYGHETZd4UcfKSda0cMfAIMEkHeWVNOvtbwncA6np5P/+vwzAF6vYGYEPVMCY4ACKgUzgPGjSPmIWtLwqNfB0ELwIaMzUElrRSz/98A4DVPI///1glgD3uOXQAUV3fe/2ABh8IwCQgXc03CFvJSo68mRgACAAGCUoIiCFUh9gDqenk//yHDCsAH/Lro/faAzDstWeXdgD0G3AAEDSprtAAEEEAAhMDvwhXhRh5kZZ7qHih2vSH8Onkf//2WCWAC5Sfyo/fsCfkOXXct+AHA2FGC5YRJakBuPyx8e/FaAMIUGpT+UbIPogHU9PCmAAgGM573uc5zzXmGG//gAtVz+6fvxkC9ymv8DOD9fr/e4YCIKPOvBhNUjMXpURAHf/q+uFYPrsrmO7sFHafWOF84EwUw3YkQmjGl6f/7AG4BASGCz/w5HZIRG+/BDdf17wVKqmj+ZrgxHBuq9LFSxcuRbLtp7hPI9PJycc6f/+9Pw7Rlv6ggBFIk2S+U3/7+AABAZwAAgCigx40PCZ9HSPUNL4DgKDZ+TdROP//ytgO4iQJmUg/fd4IASH1xjgVs2///8eAACAngAQM5SiYL/kBpYrf9agerzVQFXL6//PABAEECzZsDO9m3VkEwRkktg8VmHEvg5//PDAAEAEQKTACSMvTIeyg5GlL4DQVNEVFlX/+9gsJMqvZau7xAACAygcBpIAIbUf3Sh5yk1cMgxb+ZmZmTWxYRhUT2Sg//6qMEj7VbSv7/HYDL2v+/mDgOs8l4sEAgu0a5EZKIQ8ai4ybb/neAACA2Cg7jDACNcBOhlPGkB7oBCLurlGX/7P7vn/gkKAELMAiJgFBpT2oFD/9api75Zcf7/7rGnQSIievYf1hStb9JXGPf65PEDH7/wn8YAYDO4SmbsxouTEUKfhaAAECXCAPNAPAIMlWQ2W+4ARuwBADx7SPAqE5B+NbgAAQHQAHCxI16QjnuSGu1M6wvtAAYAAgAgtI6DoTL9KdhUiGcf99xAACAcAGCBBAuoUaec/Jcf/4ED8+838Q3frAjsMiKmomKb/i6/xRm9hjCnwARACEQNRO89E+ZEUbHQAAQAw5hiygDwwWGgqu2Vj9/eMAAwcCBzylClRpr7mlyHwAIAwIipqEztEQrGpuq8kACAwUdAFCuziEzLAzZJ3gIAClNBog1SIvfuXNitZYz2zWvGev1pgArG8TX2L+y///+wX34DgAkYVMBwAEM9iY35KDgMgKkDgOgcv8j4izegR9hflBL0WXJBX6eAOAACA+B4nNHQMOxaeI0R7uAKBIAOL19AMKiN/L1pl+8CIYDlRLA9smXwy6r5AACAiUAAQFReRawsEJCySk+GiyAxakmla+c4j0nlNlOhddAaPCVPI/5AHyfYU+AACBKDgmo0UKpNDZqO+7KJlTgmfvawiMnmR9hizpk1FlXv//y0khWSMGqUOf+AEBgAVgKqTACzFa0vITA9Gm7wgABAZkGgrYDKFXzwrpoj4db891/eHX6oDffxOGnk+YQ5v+wn8YRwABAGCKTYAWKvH0EQCdX8ACIAIAKORoLZjktfuaxMYvDUEDVox8dEE3M091WrEORhYFqkjEiNP37wAAQAggKPTA2dK6tHFGxWpR+EADGAwLLmjA0SNsVl6dXoHv86vZPBf5Sufl4T/vhPI/8zD77CngQMKMCUktBQ8SVzgL+f/vAAIQUD129CgzdgTKHlSRUbwBnQAAQCg0DIs519mSPaYVHT6AAEAgAAQBgJIAQJGFBJNWuMRvl8AAwOSo8NAA5/ZZ1kCRlwGvwAAQFgYBQki1gSx6Vkc1zWCiHf5UmX/38RGLeQfP6E4aeTxFm9Aj7C/KCXosuSCv08AcAAEB8DxOaOgYdi08Roj3cAUCQAcXr6AYVEb+XrTL94EQwHKiWB7ZMvhl1XyAAEBEoAAgKi8i1hYISFklJ8NFkBi1JNK185xHpPKbKdC66A0eEqeR/xRm+PCngCwghts7ZCgqxcr3PvAABABBRSSqGQ+ZCRWIGOvLYuAAGAChwJeSrXfKy2ht03eAAQBAVQtqkieJheNrRl4gCGDjhsALKz5IZYngFMBf8AEABSiwWLN23m6JGpuYpq8Pbtvr+rxhSpvZ0kkqcNP/D+nCkHdEJZZH/03AAAgVoAAIAdCgsifCxQRJ5PXU3/4HlKPReJ//ixbIElVqyH7uATh2PZIs9P/d4wABAjoEAXsAEIIduFg8d+hnCq5qSx//GJBaLa6b79b0W1yxYbXSJsPa2BrlH/68AQgYQUVXLpPICbMjXu5YD/V2tHxfZwAQBQElgSw9S18ncA6IxR/eAACACAcAhCKEQuWPhMRsN+Y6WS51L498cAACAIADAyhZCXCfoh9rJZ/+s2ypasz/3HgIAAQG3DQyoBlii2bEA8cKNHQCMACAYVACSUVYmZYEWctv/QPP7EH3cQA3rP7A/8vAgDsWFjCVNpyg3/0V8Yp91m4mf/sRwpp/J996OqVBB/u11P5Hp5P//uT9y5Fblx8uZ8gA5fSXm9fwBJZRzSghaioihUJEYCg3+AYOFUcGVOYuzPP7QBgJsECnsStSrZX9/BAAHAHGkAgEhCjJoR8aMAcbaTgAIQBJGcC6CN9eUN2Jmj4Ao9LDA9EQ1VaGh3KKeYG/8HABxQCHKSvpAEnwCxUOQPSa0vbtwPYd199bPveYAAgBG8AAwCJrkj3gPwzoBkikUf8/nQRQTSxMNwcQUYDP9cHAU4Vtioj3fXruX//qEJXFRcTMP/7s8A6dhLAQaVYSFzMdVlP2G5Gg5KdY6vsyiAounLJf9+2DMiQ7tWsfvt4MgAIAeV4YJiTZasIxNrUQgABAFoAzgMCtAMRwdIMxq/OGbMCVC12/dgGuHngkvvvlfk0QWAQXfbgZWCikhExaYh7P/4BgCDvpszAA9PLbNniIJDyQspYdMpY0ZcZLWKskyyTLa+1/D/HgCH0KhQAL36SabrvwGRDVlVabiZn/+AZJo616ullvBjA4JrZknKpIRoHp16T9NmRBGa64+KX9ra/+Hj9BChUKzZ4AF79JNN134DIhqyqtNxMz//AMk0da9XSy3gxgcE1syTlUkI0D069J14+KX//gGAIO+mzIgjNdmz12mimvawuv/+wtfoL/+33oZVxUfdjMwAWAZ/Vj5G43pHDfwEMIiAQNk+M5EO0jbNoDup2Fng/4QmpBbJBKbgBl+o0DM/gvDyPIvp5HkWTp5OI/AdU8jyKKAGTp5ORfTyPIsnTz8S619PI9PJ8q1VPr8AGik5LYM/76AWAzYAAQD8eEQjwCQU2p38HFurdrrTXXyxnu57DWjzLfvd3d/f0JEWy2f/fgCIkAw3RXkLYZcL/+0AgsWaWZcllPQVv3n8+Sqp/wv/n1+0GE3TGvct/tQTHA3Wn/oCAAPgAQOXChlgAK95GIHlhqtfLJbYAQUFGXYTT3W41xi1CISSXALUZa8qRitVQA/hMAvn9J7Jf/9wSCoXW/fwptu/2iYxvnET0xEd/7RAAGAt0ofhlaxYANgPr3EGdGYyzxyV//vbQXtLV1Ysuk04l6ej76ja9AACGeAAIQEgAGCz7unAGEySyMUiQlrSQv+8BIosT+is+7KHlYH1esL//OAQRnOE6VlX1E2E/9VaLRNy/7ttbaetSAAEAUa3hQvUlTWuyV/zjpelR4IAAQJQOAiQQABDdcWxBdKrz4FFJPEA1mwAAgONf9dKRkgAEBYbUAFMlLj4EsKSULjcKyAATp6sH93nP//ofPuWcQRinyZRrjFRlBlDFTFQhaGKIB8lhwfJbIqWVFS/8JqYj/sbH2Nj3ITUxH/Y2PY2Pc4x+H6wJgzoxCLPPb/9c2QX5aurFl+BE0crUjP37rNraAAEM8AAQgIkAAwWPdcectnGlvdQQrTGJ8qBJUMVMVOaAv4TUxH/Y2PsbHuQmpiP+xsexse5/GPw0EIEwZ0YhFnnt/+ubIL8tXViy/AbNHVq0b9yza2gABDPAAEICJAAMFj3XHUHUY2oIVpjE50BfhNRAzCzLUyyjLJMtTLUyyTLJMujo2EwqOjYTCchNXEf/Y2PY2PchNTEf5dY2PY/cxeIBw/9yqua2b/zxYAYAEMLUWAsTeKLLVdQEq1BbrLIW//cxWX+AACFWAAII0Z1A9ZKIAAhbUAAQPgOA9PMHeajFGc9iAAFyKWuaz4xQEAAVBxbIAkGRbHCiKACMbyxIsPdW9gqAP8+n///BXmXwZ7Gn/anJR+If7BZABaOrmn//6wAgACBOAAQDzRQ4P+dgzJU3nkVCmC6i7nb3//cSMV0pCUTn78IlND/8P/2CuYAAQGqZbAORKaf7W1xiHD/Y2AB6OpzTv/YAQABAnAAIB5oocHfOwZkqbzxKhTBdRdzt7//uJGK6UhqIh+/CAAIlNcA/7fIlDT/a2uPxD/YLIAHo6uad/7ACAAIE4ABAPNFDg/52DMlTeeJUKILqLudvf/9xIxXSkJROfvwiU0P/w//YK5AABASmuAciU0/2trjEOH+xsAD0dTmnf+wAgACBOAAQDzRQ4P+dgzJU3niVCmC6i7nb3//cSMV0piURD9+EAAEBsa4B/2XyJQ0/2trj8Q/2HIAHo6nNO/9gBAAECcAAgHmihwf87BmSpvPEqFMF1F3O3v/+4kYrpTEoiH78/ZfIlND/8P/2CuQAAQGxrgHIlNP9ra4xDh/sbAA9HU5p3/sAIAAgTgAEA80UOD/nYMyVN54lQpguou529//3EjFdKYlEQ/fhAABAbGuAf9l8iUNP9ra4+A/9hyAA6SqM1zt/9gAAIANAK4AAgBQ4QORB5WWF/tSAMaeaRR8TrRYQ2xvfFzc/nqSSZyJTQ/0/p5O1/D/6DXkDwceDrky7mv9HY/nwekpYcb//pBAlgAIAAIF4ABhBkSutCdPRoFH0YiQE3gJABqAK14EoW5WQRCFV/+2nkmgABAkAAEDOaAAEBYEv37hLMUWjE3s/nAHf//oIxLT//9BrF8vL8lY7H8i//evoMwAEYBg4BJMPh1z7uDs1FS5hC/4GAC0UCRQKuUKZQjmDxbiewGEAMsHQ+UUr4oUVo2xlfwAAQFAQBeljgtsMZDNOrQ0n2HAOA1//+gWYvmtjsfiOON/9wNICgzAC/Km4dXsAIAAgLgACA0BgLwSUhHbWpsdKMxKC2CweeaSmsfd/3w2lAFggEEQYD/TCbGKL4oAAQBCgAjFAO+qRRFMVa3wDFNAabD4Ye0FsJzAVLUsK9psXWVKT/63hnBgBlgyGCWsIS5BVjbWUTJ/71+gz4AAEBHmAFAYAMNJKNJQSeKMVhk08vLt+v3AAQAEB5CYs44FLtHuQ/qH/2CBX26yJ0f+9HnP4CKFs68z5n/mfM/yVj2P5P/6s3wrAAQCBQ2p8AmLsdLBqRDVztHXwABEKAAIAYKEHFQjRkr1Smue3xgAEYYHgYBCh6ZapUIEyfx8AAECsAAQAQ5ABTps4RkwkiUek1XA4B05lyP//3BYJYADgACBCAAIFACC4/gKyHgXkxUUOAp+0AEAAIAJmgJNABxdUgBlumy/+vAAQIItkBEwLYjUP0xmy6Sf4AMDAkLLzgTUEPK7Z9Vmr7AOp6eT/+4LhhmAA4AAgQgACBQAguP4Csh4F5MVFDgKftABAACACZoCTQAcXVIAZbpsv/rwAECCLZARMC2I1D9MZsukn+ADAwJCy84E1BDyu2fVZq+zzhwGqcy5H//71glgAIwDBwCSYfDrn3cHZqKlzCF/wMAFooEigVcoUyhHMHi3E9gMIAZYOh8opXxQorRtjK/gAAgKAgC9LHBbYYyGadWhpPsA6np5P/6Q+CSAAgAAgXgAGEGRK60J09GgUfRiJATeAkAGoArXgShblZBEIVX/7aeSaAAECQAAQM5oAAQFgS/fuEsxRaMTez+cA1TyP/9wNIYZgBflTcOr2AEAAQFwABAaAwF4JKQjtrU2OlGYlBbBYPPNJTWPu/74bSgCwQCCIMB/phNjFF8SAARQAZGAFfVJpiGKtX4AAICgAAgFAgG1IlTCGl7GAlLiNOG3ATL/MJ0xMu/uJABBhlKU8AqF8CBrhf/xk/9Tl7DPgAAQCAABAFAKJg0ZcGd4ow4L9/20o0qX25//8DM4iYqOAANpPIJVdZPXyVi//7j+fwGqeT/+4LhhmAA4AAgQgACBQAguP4Csh4F5MVFDgKftABAACACZoCTQAcXVIAZbpsv/rwAECCLZARMC2I1D9MZsukn+ADAwJCy84E1BDyu2fVZq+zzhwGqeR6eTk6eR/2Qf/BHAGAAEAdwOACkwsiiEC6rvrtImewABAT4cABWBjFiKX3Q2oVvFtsyXSuH/3WJCqfJH9f9wEU2GA6pzrk8gEP/4e+DAByB8wMogSbokeO/ujjZ8AAEA4ACAedD9u+4Zfi2SKEUh1JCbfnwMcd4yGaEaa7Z///ZOZcj4hdCF/9BaIQpKkNxl6AAEAuiAO8PVnN5pYNylPZxULu4M/VySFL/k1W//7hAACAaIAEOCjP8jT+C3cgMW8gAYIBswIoAwqXKENzbmuzhJ67tWrUdTqSKiSW/8JSYQH/+HvgAAgOAAYEhM1jp/GWprKk6EU6ECW5Ww4+lgdT3aRo57/9WbjXpej++hznXrX618nkAh//BF8wABAjgAoHAXuBlomR195ISva4AAEBoABgaFTuKdeNiv5IULpo//PIZehQP//Zg1s8a1ezv3/ACpzLkf9AEP+CP4QBABJA2+kAsQiCCm30Rn38AQAAgGNACQEUk70kMuQSRpxb//8iqXWG9fxwWRJfm1lt/i1YaeT0AQ//h74QBABJA2+kAsQiCCm30Rn38AQAAgGNACQEUk70kMuQSRpxb//8iqXWG9fxwWRJfm1lt/k5lyP+QCH+gR/BgA5A+YGUQJN0SPHf3Rxs+AACAcABAPOh+3fcMvxbJFCKQ6khNvz4GOO8ZDNCNNds///sAtNhgOqeT2Qf/8PQBgABAHcDgApMLIohAuq767SJnsAAQE+HAAVgYxYil90NqFbxbbMl0rh/91iQqnyR/X/dPI+IXRB/8LRCFJUhuMvQAAgF0QB3h6s5vNLBuUp7OKhd3Bn6uSQpf8mq3//egABAByAACAYUBwvu7RohbqQGbgABAACAmIEWNQo7pVNR2/lPK0EJMdE5c5Fp/WEZD/ugeIU/sAi2uX/8JfACABCgAeBdRAX3mbQ0vWPFckck9WFH/8pYXi+yzbn/eqdNHvp3/4P5508noAh//D3wgCACSBt9IBYhEEFNvojPv4AgABAMaAEgIpJ3pIZcgkjTi3//5FUusN6/jgsiS/NrLb/J5Hp5OThZwAECOcpjHOQhQqiCi//wAVPayS/Rf8ApAUoECabl83TMyhe3cAuMi90v9/+U4Hqx/tVMvQ//4wD4JJgANK0tmbUti8Wtrw/EIAEGHYAYR9St37sAIAIOAUPL7ekbUE5Gv8vSkSwRXVb0z//bSFm1wAAgFhjB/8WTAFXSWx+1LZk6H9ra/wx8IMF0AMI+pW792AEAEHAKHl9vSNqCcjX+XpSJYIrqt6Z//tpCza4AAQCwxg/+LJk9D//gEADgkmAKuktj9qWxeLW14fiEACDDsAMI+pW792AEAEHAKHl9vSNqCcjX+XpSJYIrqt6Z//tpCza4AAQCwxg/+LJgCrpLY/alsydD+1tf4Y+EGC6AGEfUrd+7ACACDgFDy+3pG1BORr/L0pEsEV1W9M//20hZtcAAIBYYwf/Fkyeh//wCABwSTAFXSWx+1LYvFra8PxCABBh2AGEfUrd+7ACACDgFDy+3pG1BORr/L0pEsEV1W9M//20hZtcAAIBYYwf/FkwBV0lsftS2ZOh/a2v8MfCDBdADCPqVu/dgBABBwCh5fb0jagnI1/l6UiWCK6remf/7aQs2uAAEAsMYP/iyZPQ//4BAA4JJgCrpLY/alsXi1teH4hAAgw7ADCPqVu/dgBABBwCh5fb0jagnI1/l6UiWCK6remf/7aQs2uAAEAsMYP/iyYAq6S2P2pbMnQ/tbX+GPhBgugBhH1K3fuwAgAg4BQ8vt6RtQTka/y9KRLBFdVvTP/9tIWbXAACAWGMH/xZMnof/8AgAcEkwBV0lsftS2Lxa2vD8QgAQYdgBhH1K3fuwAgAg4BQ8vt6RtQTka/y9KRLBFdVvTP/9tIWbXAACAWGMH/xZMAVdJbH7UtmTof2tr/DH42C6ADV+coU5/7rASVBA6Iq3N0QxXXddYf9B0BuutcONctVzX1N/GT0PyPTycn/D/4LPKoSsmaylsdj8Q/jjRHAYFEcBgX//8Ff9mMC7WOx/EcBgURwGBf//wWf2YwWpsdj8Q+ONEcBgURwGBf//wV/2YwLtY7H8RwGBRHAYF///BZ/ZjBamx2PxD440RwGBRHAYF///BX/ZjAu1jsfxHAYFEcBgX//8Fn9mMFqbHY/EPjjRHAYFEcBgX//8Ff9mMC7WOx/EcBgURwGBf//wWf2YwWpsdj8Q+ONEcBgURwGBf//wV/2YwLtY7H8RwGBRHAYF///BZ8h5McFqbHY/I+nk5Onkf+qN7EOGIACAACAMDUAPOgJnx6nJDALHLtJHvwBAEAa50Gi6YRzHaPqw++vAAAgxgACAEgBw0gDXX4QLlalbV3gAAgRgA8lAACAgKPjp3ETR8uuRf4AAICQATQPVHcBgU9zYr/URRseAwABASAIB16olF+5DNRsu4odG2hebMq4//s0Pv2rMswSkff41Thp5PpD2QfwvAAQAAQLwADCDIldaE6ejQKPoxEgJvASADUAVrwJQtysgiEKr/9tPJNAACBIAAIGc0AAICwJfv3CWYotGJvZ/OAGAAEAdwOACkwsiiEC6rvrtImewABAT4cABWBjFiKX3Q2oVvFtsyXSuH/3WJCqfJH9f9yVPI/9bexi8MQAECAKNuXAFRFVpYsyIcNtY8+AACAcGoA0Q2SVCvl+/So7vp8GM5pbVCGtJk1WGE/AiAACAiHD8cchoQGR9sylc+AACBsgIAsCpS+EkKkheGNW4knwCBRZAk8DjFj6keBqfN5bwgcW7PJcd//+ziiKNjki+z/+NU4aeT7guFAEPlgAOAAIEIAAgUAILj+ArIeBeTFRQ4Cn7QAQAAgAmaAk0AHF1SAGW6bL/68ABAgi2QETAtiNQ/TGbLpJ/gAwMCQsvOBNQQ8rtn1Wavs84fwgCACSBt9IBYhEEFNvojPv4AgABAMaAEgIpJ3pIZcgkjTi3//5FUusN6/jgsiS/NrLb/EqeR/4s3sY4YgAcJK4AAhTbFQAAIHgCtAEN/ADgwABAIDXQUM+hHVNlPKWuquAo4AhITtDEcUyidJfeIARAABAIUrOB1i/qIDaXwdDACCH9dGfU98kJ0h4N1dVU78XfTvUTu+439crFs0XEXmcapw08n1ZvIBD5YACAQKG1PgExdjpYNSIaudo6+AAIhQABADBQg4qEaMleqU1z2+MAAjDA8DAIUPTLVKhAmT+PgAAgVgACACHIAKdNnCMmEkSj0mq4HAP5gACBHABQOAvcDLRMjr7yQle1wAAIDQADA0KncU68bFfyQoXTR/+eQy9Cgf/+zBrZ41q9nfv+Sp5H/rb2MXhiAAgQBRty4AqIqtLFmRDhtrHnwAAQDg1AGiGySoV8v36VHd9PgxnNLaoQ1pMmqwwn4EQAAQEQ4fjjkNCAyPtmUrnwAAQNkBAFgVKXwkhUkLwxq3Ek+AQKLIEngcYsfUjwNT5vLeEDi3Z5Ljv//2cURRsckX2f/xqnDT/3A/ELwxAC/Km4dXsAIAAgLgACA0BgLwSUhHbWpsdKMxKC2CweeaSmsfd/3w2lAFggEEQYD/TCbGKKIQpKkNxl6AAEAuiAO8PVnN5pYNylPZxULu4M/VySFL/k1W//41o4KcBRhocUvkQAAgBCgy2gtXmh3YYpVfgAAgYgAQc+GusRqq9JF/wSCUL9i14ZKlBYP8eGEXrDxxNg8E2qZ06V+AQAkAjhrw06KxfhUEfXJt89ZFWf+u9Sg/YRfa7ynKHb/K/+1egABAF4wAhoWX9kaH4X6kBk4AANwCgCi4YIJDZuchC4SbyUVG9UI//nDNpHLUc3/vBgAK4aAhC2gQiky6G1SSf//rcGlLous35Tsq5zf1VdF9LddD9/v6n8j/1D6MLwxAAcAAQEgAwYCKkR/nXfmSiczIw6//7wAgACAElvh4m2E8lus3Kev34iBCMqaIAAEBkAdojha14CINW3QEgdljElpr94ABBgC1ZjuAw9+v6L3QFXXoAAIAgAIACQCKSklgMzwQSZejf+402QrZ6lx//qC6rUypN90apw0/9wPxC8MQAvypuHV7ACAAIC4AAgNAYC8ElIR21qbHSjMSgtgsHnmkprH3f98NpQBYIBBEGA/0wmxiiiEKSpDcZegABALogDvD1ZzeaWDcpT2cVC7uDP1ckhS/5NVv/+NaQF60IXCApfFAACAIUAEYoB31SKIpirW+AYpoDTYfDD2gthOYCpalhXtNi6ypSf/W8M4MAMsGQwS1hCXIKsbayjwAAICPMAKAwAYaSUaSgk8UYrDJp5eXb9fuAAgAIDyExZxwKXaPch/UP/sECvt1kTo/964QAAgGiABDgoz/I0/gt3IDFvIAGCAbMCKAMKlyhDc25rs4Seu7Vq1HU6kioklv/eAACA4ABgSEzWOn8ZamsqToRToQJblbDj6WB1PdpGjnv/1ZuNel6P766n15Hp5OTp5HtZOnk7X08jyLJ08nEfgOqeR5Fk6eTiM8AMB1TyPIsnTyLa+nkeRZOnkW19OXkenk5OFnAAQI5mOY5is4ZZZRfgBeSzStv/oAUAwIIIi6VA6eIGZSveNAftnsrf3/mAc8UmwmxO/v3/+tD/j//2CKRSa5IAkaMiWtrjj8P2NgB6ox26h/w3QBAAYYDA6ny/QtgZkzNy/qRJBlGZ6ZsN//bRkj1QAAhlgACD1MgAGAAp+8YAASDoTLZghUSW/HgAFwlQmciUP+1JjUmR/H4bDkALVGO2WD4tYAQAGGAwOp8kKFsDMmZun1SJIMozPTNhv/7aMkeqAAEMsAAQepkAAwAFP3vHgAFwlQmciaH///9gimAAEg6Ey2YIVElsiWtrjj8P2NgBaoz9OHxawAgAMMBgdT5IULYGZMzcvqkSQZRmembDf/20ZI9UAAIZYAAg9TIABgAKfvGAAEg6Ey2YIVElvx4ABcJUJnIlD/tSY1Jkfx+Gw5AC1Rjtlg+LWAEABhgMDqfJChbAzJmbp9UiSDKMz0zYb/+2jJHqgABDLAAEHqZAAMABT97x4ABcJUJnImh////YIpgABIOhMtmCFRJbIlra44/D9jYAWqM/Th8WsAIADDAYHU+SFC2BmTM3L6pEkGUZnpmw3/9tGSPVAACGWAAIPUyAAYACn7xgABIOhMtmCFRJb8eAAXCVCZyJQ/7UmNSZH8fhsOQAtUY7ZYPi1gBAAYYDA6nyQoWwMyZm6fVIkgyjM9M2G//toyR6oAAQywABB6mQADAAU/e8eAAXCVCZyJof///2CKYAASDoTLZghUSWyJa2uOPw/Y2AFqjP04fFrACAAwwGB1PkhQtgZkzNy+qRJBlGZ6ZsN//bRkj1QAAhlgACD1MgAGAAp+8YAASDoTLZghUSW/HgAFwlQmciUP+1JjUmR/H4bDkALVGO2WD4tYAQAGGAwOp8kKFsDMmZun1SJIMozPTNhv/7aMkeqAAEMsAAQepkAAwAFP3vHgAFwlQmciaH///9gimAAEg6Ey2YIVElsiWtrjj8P2NgBaoz9OHxawAgAMMBgdT5IULYGZMzcvqkSQZRmembDf/20ZI9UAAIZYAAg9TIABgAKfvGAAEg6Ey2YIVElvx4ABcJUJnIlD/tSY1JkfCPw2HIAHselkkyzt7ASAYDAmIo4OUEIwYXhbZb8BPmQ9tU0pf/1YOrNAABCtAAEEiUAFhAf/N48H7JnImh/p/TycnTyP//xEYJYAFzE4AAgbclGeAAIH4ABSgH4AIQpo4wWJi7ftUSLlrdYBsKIy/SLBf/z1AACByABwH8pIDTgPnqFCb7QB1PTyf/xEQ8EkAC5icAAQNuSjPAAED8AApQD8AEIU0cYLExdv2qJFy1usA2FEZfpFgv/56gABA5AA4D+UkBpwHz1ChN9oBqnkf//jwSwAEwAQyw0RRECqr01dlhEV+EApJw4wXH1N6Q0fFZG88ADYAAQLTyB5gBwZfClJZVzeNegMAgSNIzGXKAWJzeqqFgDqenk//rPDBBAAQAUAcdQbbGkecQtXXpWa+B4I2RjQjFU2Wslan/3gMgcBSVruAMFyAgnhATrvAABAhgA4UjfZj8rIWtWnLn5PI///WcEsAB4bwYCwoVb3CFtJyY7/9wpAGMcGrT2cdJESPciDBghXUTNokFsYC/j94ACMAgAGab4aBVyBEldVBB/AHU9PJ//WOGGYACYAMY8c6DixXomdhifNhd8YANnAMcCjJWjQkViDWp+KAAMCLAk4CEAfGBrYW5H7+DIilAGAWG8ptRI+ElLegOHAap5H//guMMwA9uOob5+gATCMLCTZAJLrEpu5LCR6Bo4v1nSLFf694AAIFcAAEAeRgS6eCRGVoc8nr6bwCMUM2pKJbamxX9wBOA4VETZGXcYzWXBUZf9oZfN5fJiT99rAAgFBCThgBYUJShBE1l/fGT/12+GfA1BBZAgIw5QOGL5S19ZlX9Vm754kAAIAwAhGPHg8PzUowZ5UW9Gz1+559//P4cBFTyf/1EPhWAA0BsKOIgkSLbPi0fmD0TfIszAAQYL9HIklVIUfhcYVpFknxjR8qIo2fhJigACAjigBpoA4AVaKsYhUQOHTyP//14JYACQzkGAkMFmNNwhcycmO/gdBhMnHDO1IDS90rb+AAEICTwtfcbIR0ale3oa0nwEAAgAQ+NooBOrUhWZMNRJXwDqenk//qQfDMABAGAYEETL7Q44+Wlq9s2d+ECHhDcpZJMuoRtm/gAAgRgUEzNDSqTQ0XjPuvilO0LzSwWZiCU4AcOA1TyPTycnTyP+zIf/DEBSGD07y8FEhK5t+wi9wRDAHZzgW6ZK4VXT/eIAAQEVAAEA0JiIYHQhfNUpNj79J5BWZbZ59+AwDy1YaeT2ZD//hOApDB6d5eCiQlc2/YRe4IhgDs5wLdMlcKrp/vEAAICKgACAaExEMDoQvmqUmx9+k8grMts8+/AYB6eR/4m/+gx8HACEhlc3+A0y115AbyvICAxgZuBtwA6B1VmyXBP8AAEAIMBRaAHzBfhM6iuIU6HxAACAoIMCjxsuLMmk66v/8DA8BabDAdU8nhN//4X+BwMP5vOi7hxvV1MUwDAlFgagWMCMbf3nAAAgAAwIMAfNmNmDibQrTp/eEADDDQcaNlRMkbcruVqEDA8AKnkf8wv/wx8M5AABACCQMi7vP0apdxbU8voAAQCAABAQAtoHHCiQswnXGYV5/ADAOS4W6ABj2q7TIEDLgNugAAgKAEAMNPJn6tdCszWL98BgeAipw08niYF4f4e8AmLX61E2RT/3gBMAGBi27FATJQPmTyjKvTgABgAOaB4dBYrz60rK3F+GJPeAACAIABDjAYIcTcYaIZ2OMqeR/puf+lMm6P/1j/vHbNV4EbZu3MzP2eMAAQH+DAJ6ACkEGWSwInXcZZ8eAfjCX8+gIAK7uUDxR9jJLtN4ABAACAygSC6QGWaPfqQzton0fABAwIKLAVOkfkxFxkR/5+B4BgeRPcf/4T+AdghWoNB74x1BD/HTzcz/Pv54wABAIQDACBpwyMPnlbTFCtqKrdz65AZ56eTzG//8J/YJGBgUGyhFNwbDsroRB8AAEBsAAoLFj+TDsK0UqEPFI9x/AABADAAON0NiUnMcCpWvrxbgiX4AQABA40FEizxx8k/WWqUIYHp5H/zf/hjwBgACAmAlcCfAo4aMgrRLv9p/eAACAGAAUaHhPCtYU9LIRxyS68/xAMEAOfAZG3+7quTbi+m6/AABAVBAXkUMjIwMrCqQk15bgYB4CKbDAdU8nhJ//4T4F9drF1Wv9twP2SxGGyqzP/4AQADAAfAVsmAGmK9pm9MBC6cPABAACA/wJB2oG0SvrjWThBw4QMPTyPTycnHOAAgIVqWMa1CElsKKL//ACwNqrPpG/uQCgAgABADE/HCB276UM/1yBkFRNGKZo//2zSjZOmfv/jD7BBMAAJuRpb+1teH4gIAGw7AA9G66eOd///QAgACBQAA4DSoglIPPAZkylrrrBLnC8/6iVMUite3vhg8pb+ZOh/OsqWv8MfAQYLoAHo3XTxzv//6AEAAQKAAHAaVEEpB54DMmUtddYJc4Xn/USpikVr298Mnof/8AwDYIJg8pb+1teH4gIAGw7AA9G66eOd///QAgACBQAA4DSoglIPPAZkylrrrBLnC8/6iVMUite3vhg8pb+ZOh/OsqWv8MfAQYLoAHo3XTxzv//6AEAAQKAAHAaVEEpB54DMmUtddYJc4Xn/USpikVr298Mnof/8AwDYIJg8pb+1teH4gIAGw7AA9G66eOd///QAgACBQAA4DSoglIPPAZkylrrrBLnC8/6iVMUite3vhg8pb+ZOh/OsqWv8MfAQYLoAHo3XTxzv//6AEAAQKAAHAaVEEpB54DMmUtddYJc4Xn/USpikVr298Mnof/8AwDYIJg8pb+1teH4gIAGw7AA9G66eOd///QAgACBQAA4DSoglIPPAZkylrrrBLnC8/6iVMUite3vhg8pb+ZOh/OsqWv8MfAQYLoAHo3XTxzv//6AEAAQKAAHAaVEEpB54DMmUtddYJc4Xn/USpikVr298Mnof/8AwDYIJg8pb+1teH4gIAGw7AA9G66eOd///QAgACBQAA4DSoglIPPAZkylrrrBLnC8/6iVMUite3vhg8pb+ZOh/OsqWv8MfjYLoAHgOklCRkpiLftgQAAIAADrAAJAZOkjY+cHYhN2gJSF9DW1P5/5Px29mOLOXofkenk5P+H/sP+SAHIg5Hycn///BXkgAAkEynAu1jsfycn///BZyAACQTKcFqbHY/I+Tk///4K8kAAEgmU4F2sdj+Tk///4LOQAASCZTgtTY7H5Hycn///BXkgAAkEynAu1jsfycn///BZyAACQTKcFqbHY/I+Tk///4K8kAAEgmU4F2sdj+Tk///4LOQAASCZTgtTY7H5Hycn///BXkgAAkEynAu1jsfycn///BZ8epkmcpbHY/I+nk5OnMuR/go36VcqgB7cdQ3z9AAmEYWEmyASXWJTdyWEj0DRxfrOkWK/17wAAQK4AAIA8jAl08EiMrQ55PX03iIGEbmkJXvLyP7gDzhgeCRQjm8OxuUkZzWz2gHTNxWdvAJAGArSr5dQooLsydWzMm6P/1j/vHbNV4EbZu3MzP2eMAAQH+DAJ6ACkEGWSwInXcZbAfm9QnTJ/vbwAAQCABwCzQKcU//w4iGE3Ewq8AAgABATKaAaSADib3iMG2qjL/3gxIDDwiH29qyMkBUEmgvj7Wv2iP18wrhTigvk9niZoiVgXU6b+/XgAzgAEZHUAJBIgPgsx07TxZLT/Kgj9//Hz/4ACAwDFBSiSznKszgYyJOZbzJL1kl94AEAXHjxReu43RcreFO1iWLe5LQEP/7wA5/FqU8n1jhEwL5YACYAMY8c6DixXomdhifNhd8YANnAMcCjJWjQkViDWp+KAAMCLAk4CEAfGBrYW5H7+DIilAGAWG8ptRI+ElLegOH4BMWv1qJsin/vACYAMDFt2KAmSgfMnlGVenAADAAc0Dw6CxXn1pWVuL8MSe8AAEAQACHGAwQ4m4w0QzscZSVPI/8f4m8MQAEwAQyw0RRECqr01dlhEV+EApJw4wXH1N6Q0fFZG88ADYAAQLTyB5gBwZfClJZVzeNegMAgSNIzGXKAWJzeqqFvBwAhIZXN/gNMtdeQG8ryAgMYGbgbcAOgdVZslwT/AABACDAUWgB8wX4TOoriFOh8QAAgKCDAo8bLizJpOur//NU4af/h/SGIAe3HUN8/QAJhGFhJsgEl1iU3clhI9A0cX6zpFiv9e8AAECuAACAPIwJdPBIjK0OeT19NMm6P/1j/vHbNV4EbZu3MzP2eMAAQH+DAJ6ACkEGWSwInXcZTWuK7bnuKXgEYoZtSUS21Niv7gCcBwqImyMu4xmsuCoy/7Qy+by+TEn77WABAKCEnDACwoSlCCJrL++4GoILIEBGHKBwxfKWvrMq/qs3fPEgABAGAEIx48Hh+alGDPKi3o2ev3PPv/8+PAPxhL+fQEAFd3KB4o+xkl2m8AAgABAZQJBdIDLNHv1IZ20T6PgAgYEFFgKnSPyYi4yI/8/AOwQrUGg98Y6gh/jp5uZ/n388YAAgEIBgBA04ZGHzytpihW1FVu59cup/I/wVfpu1QA9uOob5+gATCMLCTZAJLrEpu5LCR6Bo4v1nSLFf694AAIFcAAEAeRgS6eCRGVoc8nr6bgEQDiuzQVRnLNH/f4AjBggmbIvHBbZK/UqGSfhNaWQAVjQgJ7wAAQHQABAHAXl8a4JDRaDLxNKvdJMm6P/1j/vHbNV4EbZu3MzP2eMAAQH+DAJ6ACkEGWSwInXcZas5J907+eqSJwrfiun7QAAgABAZIEgimBtkx1j1sly/9vAAGAAIBJIUNkYeV8mCd4ejLl0Dm1x/D8vwQISEFWsPlG3yn2m36NshaXV///ZAjkoV7mG78uYqtuZv/un8/0Od6X23/aZocxLNTffvIAAQIXABwBqjPS53oFyITpn/6h5lzXB1+ARU8n1EPMb/LAAaA2FHEQSJFtnxaPzB6JvkWZgAIMF+jkSSqkKPwuMK0iyT4xo+VEUbPwkxQABARxQA00AcAKtFWMQqIHD+wSMDAoNlCKbg2HZXQiD4AAIDYABQWLH8mHYVopUIeKR7j+AACAGAAcbobEpOY4FStfXi3BEvwAgACBxoKJFnjj5J+stUoSVPI/8f4m8MQAEwAQyw0RRECqr01dlhEV+EApJw4wXH1N6Q0fFZG88ADYAAQLTyB5gBwZfClJZVzeNegMAgSNIzGXKAWJzeqqFvBwAhIZXN/gNMtdeQG8ryAgMYGbgbcAOgdVZslwT/AABACDAUWgB8wX4TOoriFOh8QAAgKCDAo8bLizJpOur//NU4aeT4iIdmQ/heABcxOAAIG3JRngACB+AAUoB+ACEKaOMFiYu37VEi5a3WAbCiMv0iwX/89QAAgcgAcB/KSA04D56hQm+0ApDB6d5eCiQlc2/YRe4IhgDs5wLdMlcKrp/vEAAICKgACAaExEMDoQvmqUmx9+k8grMts8+/EqeR/6z8wvDEAB4bwYCwoVb3CFtJyY7/9wpAGMcGrT2cdJESPciDBghXUTNokFsYC/j94ACMAgAGab4aBVyBEldVBB/eGcgAAgBBIGRd3n6NUu4tqeX0AAIBAAAgIAW0DjhRIWYTrjMK8/gBgHJcLdAAx7VdpkCBlwG3QAAQFACAGGnkz9WuhWZrF++NU4aeT6kHhJ/lgAIAwDAgiZfaHHHy0tXtmzvwgQ8IblLJJl1CNs38AAECMCgmZoaVSaGi8Z918Up2heaWCzMQSnADh8C+u1i6rX+24H7JYjDZVZn/8AIABgAPgK2TADTFe0zemAhdOHgAgABAf4Eg7UDaJX1xrJwg4cJKnLyPTycnTmXI9r7UNPJz4YDqnke1k6eRbUNPI9r5FDTycRhgOqeR7WTp5OfDAdU8j2snTycRhgOqcvI9PJyf8Kf8KQAtjxVJi394Fcr1447/AL9n7bf/7XAYGBaQEz5r8YnTRk/n1x+B/AMA/2HvzAAOIEltra8BDAP9BaABzZpN10P/cBI8+0nT2+/vgNQcnI7V5K//54AAwQBIVTZQ/MG6pB296X/MAAKCZ0szCJOs6WvjhD/h+ABzZpN10P/cBI8+0nT2+/vgNQcnI7V5K//54AAwQBIVTZQ/MG6pB296X8AwD/Ye/MAAKCZ0szGtrwEMA/0FoAHNmk3XQ/9wEjz7SdPb7++A1BycjtXkr//ngADBAEhVNlD8wbqkHb3pf8wAAoJnSzMIk6zpa+OEP+H4AHNmk3XQ/9wEjz7SdPb7++A1BycjtXkr//ngADBAEhVNlD8wbqkHb3pfwDAP9h78wAAoJnSzMa2vAQwD/QWgAc2aTddD/3ASPPtJ09vv74DUHJyO1eSv/+eAAMEASFU2UPzBuqQdvel/zAACgmdLMwiTrOlr44Q/4fgAc2aTddD/3ASPPtJ09vv74DUHJyO1eSv/+eAAMEASFU2UPzBuqQdvel/AMA/2HvzAACgmdLMxra8BDAP9BaABzZpN10P/cBI8+0nT2+/vgNQcnI7V5K//54AAwQBIVTZQ/MG6pB296X/MAAKCZ0szCJOs6WvjhD/h+ABzZpN10P/cBI8+0nT2+/vgNQcnI7V5K//54AAwQBIVTZQ/MG6pB296X8AwD/Ye/MAAKCZ0szGtrwEMA/0FoAHNmk3XQ/9wEjz7SdPb7++A1BycjtXkr//ngADBAEhVNlD8wbqkHb3pf8wAAoJnSzMIk6zpa+OEP9AjgAtEK6/WUv//APTW8j5t/ngIG3TLZt06//aAAYcANgDRSbGRueHqX2V/4iTfgOqeTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5Onk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTp8AAAACCTAAAAANBgEHAAADAgAAAwAEgAAAB6chmgI8ILAszB8AD4VtS25qd/u8AoK0EoPs1FTA+XzPwZnuve/3BzYr/x6gd6cEP4B/0ADPRAgBE/MIDxydT0ZKBt+x47+P4fmd4ty+Wzvzv3mCVQxNC1qpE6WboGGv2zZcANJXK2z/1t+Km1gvAVAQs9gg4x3sw/4WQCQAEpwAIIHVBBSybCUg7Gnw5tpVsfG/Q6X/mB/6C/6wKBxcGFBiIgkkpxf9AGYIKqJVZoQrS7vh+HQAGSpJIAAgNwPaRAC+4ZnHwC4A4CsGRJ5inuNy0SIi2HYwzhix2SxEy8RN2vFw4CoDH8CT5kK3IHS0sGRA/3IAAQAAYPDGqu7gZuDW/kENX9uPW9G8YLuumQdia8Fns8AYPA7BCY7bxQNvD2zt3mYnI6mOhgqGsR+ICKIaSPaYyqTEn/TIMzfCexei+X0FeAIFi/AAvZAQEEjKH4UdmVbWO+ABUtc1/1h/93AwRlvJq7eN7eCzADkFQIZsofw3mWgHJwGAQUeeaFKaM3+wBAkX+AphLEK84N6kQ0ns5VJnvAQSwXNRKY+wJjGUhOixJgHwBgB7GPCUiFtqV7vAG+IePMTHFsAfbmN/AeBDMIHl4aIdz0/0OhxvBHXdI/DugSdA/sBVZIF6HRvma/8KQBAYBhi5lPx4xwiF/XDRz5sRUm5WaKl9kwa4s86udf7gADBRPkEg7tQgYlR3MC33gfN3SHwDQapvjcQAOMrQMeBAp7LwIWMwKhLwwABAARDADgNzNKApw//13gABnKEFMYwNTKmM0rXO/76nwATCseMSLPleOFhso/f392IkXmPV/8IDJFH1RVg4kubnAxg4yJt/zRH/gKujRq90lXd5//OAEYM48BPiYq2YhNsYl9sCH+gIAuBRM1rBwC7nNsDLj4ACgC0LqIf+Xr1gAwjJJB8AAQHkEoPdE6L8D5kJdujwACA1CXuhMkZ3+t8gDLrFor/WU37u25Bto0JNd/xS0AY8AIoAFsACeY6AmaDZP5mm+tt4ABAMzLBgoUeo+GtFiM78AgIfoNQwIxVWaJdoo//gAAQAoBSaAA8D59xGyEnZfZf94BoZuAYEtx3JF5RwiCQYfKBAcMNM8vC8oEDg0AO0Ij/gA8AAIA2AAEAIkBLYJEX5+O67H33+g0cCFmPU8Uiv7aAHhj9TENJNlFrnywWkyNoX/oJfEhAXQNFMYW6YowM0SvgTajHRoPfykJkc3/wYfgTmCkhZxRIXESFNYesRPsPAh9AMUAjgDEAI6E4Awbq/3/n4P4ACaMbOhzdh1Mar1EQkxCZjMQzBh0BoA74mGGADntVvS/vYOpDlZUVR8HwB+KYmAAgQAGFMBaJCqHlpUSLcBEgUTFIj1Z3d/x4AAYAAgIgacHdYtzY+HlyND5ScB1vpZNdW/wGA/wjxfXQNgP6ufVz6ufVz6ufVz6ufVz6ufC110C66L/jfICBsB/YPoCVAP/4T2+geuawaAWTAglsGgFvmsGgFk5bBoBb5rBoBZOWwaAW+evQXhDhOVj9C8CxC/JkZyncylcnRyctg+Xntsf64n26Dsj9+g3wXYyAG9A0fvieh9nffoN8F2MgBvQNH74nofZxJ3MpF8K7HsPbX0MjBGMO8kV7n5PZE4i3YIwSb982RnJy5Gd82RnJy5Gd82RnJy5GcQdzKVzbeTl9AMdy9gSAb5tgsnL2BIBvm2GgUnL2BIBmO5lK5NAHJ3sWXl2LXfsBPk0AcndgrV8mx5O7BWr5KAJkSBZO7BWpubcdLDk5dFvm0WTgksPmFDHNoEwEYFhDrKHTumuT2J8nsB+I0B0375uwdc9WX9d2Bd8Ixi30BoH2AdgfidH93xPZ6CoBvgjoH+k4ns9BUA3wjGLfQGgfYB2B+J0f3fBNsF2PPTHdMFHJYXF89WHX75Ow4V5MpByndNc1gP+XZb5ewDfNyBGub3XLR8/L2AmAj8tH3zdDvm084TdP//euC3sCo9gXScu++Tyg5csv65fQJ8VYFYbTANgGTvoB3xVAH6FJy+gT5ND3xW2gH0fwWU+wL7fpeF61oBddv/h/Z/YD6EvtcndOnfJTpycdY/oftBzh72ArDyhAHrR9F+Gcwh1YDoJgX+rn1c+rnwtYC/YNywf/1c+rnwvYC/YNzYP/1c+rnwSb7nwpoH2D9A9C8IrksHx3JoCy4Ym5dC3zdgmS4nJ5PJ5OzuZdc1AfJy0B+dzLrm0LF8tAfEcmgefiNh+wbARO9AmLO5lzncy5u9A98RsP7Be9grCE8Oewl6+Tl2CY75tgmOTl2CY75tgmOTl2CY75tgmOTl2CY75tgmOTl2CY75tnl5NvBVxXsBt0OTl0Dz90B8/LoExTc2w/xnYIoIA9AKwLsBb4qgF9q+bYf4nsEy2DYCBdw1vrX8EfJYBsBGBY7m0WTlpGF8/L0GwInLQJgHfL0BJAh79DJ3pb79s/dAGwE5ubtScvKJ3zconJy8onfNyicnLyid83KJycvKJ3zconJy8onBlwRUf75dNDvieg2BdDfJosnBPQJgHpfXwT9A5EGh98tAVb4noCS7b5NFi+WgDYCedy8FB3LxPJyZJ3yZfJyZJ3yZfJyZJ3yZfJyZJ3yZfJyZfU6QKcAAAACCTAAAAAMBgEHAAAEAAADAASAAAAHdiGaBDwhxQIX2NAEwAmVfhDT4/G+/4K6PZB9LZfIMoD8vhjJLaBDsCfEfL2D/xfjhReGu8KwgPwWej3ggEYiMAOSr9dtv7v/tswYsn+AWUKAFph/lCDAB0GVNgBsOCkp4AQQABEvBomfrv+wRSmKUghf8OxoNissr/H/dAdkKgvIv0Qt/+wASKYR7FmGqeMRXUR8YDfnKO9VlGgkG7TPLpr/i//AE6gO4NKfZJJABS4FJlNmAJgCmESCXjg23fNu/kBwFGMJqLPznTTMbNhfW36ubr+43P7xdgXqHAC2DIoglYkPF0U34I92DgBCburPv0BibZFM3LfeX+YZDfBRfXoBJ34fo9pmi0Cs2NURhnZ1QCXJ20PxGlRsAmtBfgq7D7GgdAeYvju6FzTYOgXwQ+xaobwCXgg3E5oAHsAGaDhS5ITsUL0hwAkIog5ygYa4UAgiNjQu6CDk+Efwl/yoPmQymXCuSo1BRbvA8FLQAgYOqr6hsuPC4uA4dcMBmACf/eZt9+BjAU/RsVSnM/Grf4amr/wjxffGAAVA4fq59XPq58EfdAFz6ufVz4JPQBc+rn1c+Nq/sCGxYaA/sq5Qg8u/BBsKjs5VXQJRtJpbAWwXwnoVDZ9c3OLScvOLXzc4tPzc4tJw3zi1dBffNYBKABwhwQa5EXYLxWPT8OhtzKb3e+93vWx2OtVxVkwJnQh0CAUB5OJoAo9rQ3xXQGgkGgNg2Eue2eH67yMHYgnxWgPQtBk5b6BPgs5x5hICQLgbNn74nlBD2Bo75b6BPgs5x5hICQLgbNn74nlBD2Bo777DMsYNuVTY7Gx2PY7Gx2OtDod7i+GdD19eHeT1J3RokAUN8lGijAsycK2aAWhdWv4Y5NAJJgyhtzKb3e+93vWx2OtVzUBEVZOXKENBH5bMo7n5aATOgnzdgUnLQCZ0E+bICDaJy0AmdBGDblU2Oxsdj2OxsdjrQ6He65POEAk70dAnyUCt1w3t6sv5eTKG6ETux98mVnJ3Y++SgXJ3Y+bm1/L3vlx4WffNjws+Tgo2CQJgLYpRXzZArk5egFfNkCqAWTl6AV82QKoBZOXoBXzUAkHKaCHWUOht073djdjvd2N2NbHY61XJYJK2+KoaCYmFys+FNgcbBsX+R2y+vm2DarnqZ/9cTYLsFoT4ygNj2DYCORaH+gEPEHpEED4mzZ9D6vidJGgae74UoDY+joD6AWgvfE9aCoBI3xOkjQNPd8ZQGx7BsBHItD/QCHiD0iCB8TZs+h9XwTdgWVnJTBty/1Q1Q/VDVDWh0O9xfL6IO8lANg0FF8Na6oC/vkopAQZO6LvkouTui75KLk7ou+TaYBlDbp3u7G7He7sbsa2Ox1quL9gkAf5eh3y2BUTN81euDD2usui+uWGkFx4K+b2ZOXsNDfN0Dk5YaQXHgr5uxoBPmyhH8XQ2B9A0CYGYNuX+qGqH6odDWhyPvdcFllHrkM1WNJ3ggGATwAP3xNgGg6AVAr4nsCyMWb4qgMozoPMBV1quJ5qsOgNgIwIAvipoaAU4xsCk4nTQ+wkAnxXYD7BScTzVYdAbARgQBfFWDDanOA6TDvio6ACP0bP4KrCewiBj7AWgD6Xir3oNByCPjdGx2Bvkj2FfWgWlSIZJy7TB3zbTBycdQ/sdHQJAw5wX+wOuswpYHZfgw7B8wGqdbsO3Zern1c+rnwTdGl2nPq59XPgn9LtOfVz6ufBP7Ou58OXT8PZM/7v1yXehk79CfJ6GO5NFYM/NoA2BE5aH3zUC5OWheE3Mv7G7G/sbsbrmmEHQETlmEHQFCbmX9jdjf2N2N1zUPk5dAGwJ83oF5aAXfLMIOgIRyaWTuPgMH74jsCWgHYfvffeOAYOYTcq/qxqx+rGrGuToFJ30Cwm5V/VjVj9WNWNckfAYPyd6W+I7Al2GcMSd9ApuHMsKAa9j8nLskO+bZIcnLskO+bZIcnLskO+bZIcnLskO+bZIcnLskO+bRsFBfxVhyAA9jRk4nQBsCpb4roVguTiZhB0BaBXxXMAOwbApOJoXjgGDl8V0KwXfN2BL4U2H8iCgCh8496+KoPs6BoBPm7Al8FdAvQDsO/0F3DWutj/J3NiBIBXydAKTvIFUAt8nQCk7yBVALfJ0ApO8gVQC3ydAKTvIFUAt8mgcpo/NQPk5aB8/LYNKgE+bQBycvlAAvmxpx/lwqd8ugd3zbAJDuTl6BRHJQVA5O6CoHfJ7k77BO+S+gMncw32N8R2HYf92mDQHNydgKTuwEYIA1NzbArDJwR+wYCK+CT2DAFScEfsGAivgk9gwBUnBH7BgIr4JPYMAVJwR+wYCK+CT2DAFScEfsGAivhy769fBfwWWf2H5Rfvl2JjvifKABMN9jfN7vm7D+FMacfCp2H2mDQH6+CzTXsP2PviegEjoJyh996B3fN7k4JqB9BUDnr4rQB30Bk4noFYCMEAawm5f7G7G/sbsbgoCbm/qxqx+rGrGJ4IdCedL5NCeTgh0J50vk0J5OCHQnnS+TQnk4IdCedL5NCeTgh0J50vgisuRIFOAAAAAAgkwAAAADAYBBwAABgAAAwAEgAAABAUhmgY8IcgIX381/4K79gLsgCJ+4P3n7+WTwIME8CBDJwQYAzfK7+f9QwV1CRABN5GQNugqHLUw/AHwGBuDQkSz/RCBVak1N8BFBwj1bW+rjqK1th2GcdUlLGV6ts3aWv83+EB+F4H4cASGYQI/Vchxh3v194AHVClhCdbLM07/YS01gGJDArgANdkGUZMYW4lzAfzQypPmdEV8oYfwUVADNnrJ/62/al66AgAeGhDkcZ+LIW9y9+gQIqI9y2k97vi+GxNtUa/wZHu979H1WExQPzWv4ucPUVr+X2AQ3wUX36DTh4fnDAe/RXc4v7Gga5OhP5LBfxXff8T3tf1qTmmP/y5KP+7CdAoR4vv0n9XPq59XPgj7kDzn1c+rnwSeQPOfVz6ufE3fv+CDQD7/YBYc4t/hPTu/CnPXT+E+CLf1Dobcym93vvd71sdjrVcVoAvTvJxO+ge74rvYCdqurV36b5N8nLfYBfBP6AbAX75d3vlvsAvgn9ANgL98u7330AoR73w7ye5O7sFd8l2Cyd34Y5PaKG3Mpvd773e9bHY61XNRcnL7AZ+W7LPy72Az8u9gM/LvYDGd775LAPXUB1E935+798lAXJ3fm5t/y94rgo2TALD25Un5eg75ug5OXoO+boOTl6DhPrKH+T0J8l7aAfgq3sn9Avr5tpA5OJsuwLTfEXfa2Xib993xPf3fBLd/v3xPewHu+J7+74i77Wy8Tfvu+p6C7koLi+Gt9UH/BBy975bKcPO+a/XBd6B9yFLze5OXoBOK5u8nF3f7iOCygLfYN7AP0T1quXffFdB9lJxOxegGgz8u++S13zbv8FW9ANAvoC9LxV72AmAvwpu93+gHfk8nL2r5u1Jx1/vewCkHOG99KegF/nop9AX+rn1c+rnwTd/QNz6ufVz4JPQNz6ufVz4J/e+58El2LMn3frku9z8nuFebQFk5b8/LT4rmvycugLH8mwefiOgC9BUAve++/d8nIGMnfIGM/ewe++gC5O+QMZuHNAVBL38nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3JxOgLsHviunZcnLyBjPxNP93xXTsu+boAv4K9ALsvYB9fFWAu9K+boAv4KNBUAr/QXcNb63/J3okHfJ0HJ30HfJ0HJ30HfJ0HJ30HfJ0HJ30HfJpZ+alyctLn5bTB75tAsRy9ivl0rn5eiiOSwHyd2A++T3J37vkvz8lAL+6BtPFd2Hubm9AIEfDl317H4L+CK/75dt5ub3JwWdioBdA2n9fBFsT++J6Dfe+9K75vcnBNS7AfPXxWgW/JxPRWHuDLgh03nS+TTeTgh03nS+TTeTgh03nS+TTeTgh03nS+TTeTgh03nS+p0gU4AAAAACCTAAAAAMBgEHAAAIAAADAASAAAADZiGaCDwhAsxQIQB1/zMuPbD+0Om8FoV6XJaV/teGYe697/d+B5hDwAK6MlmijLP74Mg5bqTxT3IeXz4b/bf08DkrlNt31t/0A0BIDQgugB75n1V3ldZVYnfXhIJNW+mvT4fRpH37qB4vbxAIMcHT7LMBABjeSavud6JbH/5fwjwBZ+K92Af4KLjQHX6ALAPfF+jffzUD/moHw5wUX37AScPBRf7udKgWJP038RgAOKvw5SK7Ski2XvQ7x+vUc/f/xXff8T3oH/WpOaUH/y9/vfCPF9+wb+rn1c+rnwR97n1c+rn1c+rn1c+Ju/f8Fugu+w8J+78Kc9dhfCfBFv6h0NuZTe733u962Ox1quK72K8nE76W74rvYboHXVpeTfJy30T4J/QTD/fLu98t9E+Cf0Ew/3y7vffQcI974d5Pcnd93yX5O78McnoGUNuZTe733u962Ox1quawDycvsI/LdAWfl3sI/LvYR+Xewhne+O7vz935+783Nv+XvFcFHoBaFKk/L2Ar5uwFJy9gK+bsBScvYChPrKCLkvQkF4Jd6An/XzaB5OX2J8Rd9A/4m/fd8T393wS3f798T3sLd8T393xF30D/ib9931PQXclgPi+TfBBy975fd81+uC70u/S83uTl9xXN3k4u7/cRwW0C32n6J61XLvvk7AUnE7foJgI/LvvkoH3zbv8EO9BdLxV77D/BVu9378nk5egd83QOTjr/e9EwYc4I99L9WHq59XPq58EPe59XPq59XPq59XPgn977nwSXbyp9365Lvc/J7hnlvz8ti4rmvwnybWfiPewHQfvfffuO72t9+4rnr0Pycve+bvJy975u8nL3vm7ycve+bvJy975t8F/N3cnLtb5OxRfE2L93ydivm9/BXoPoC9gXr4qw+9g75vfwUbAdB3+gu5N8newCwFfJ2ApO+wFfJ2ApO+wFfJ2ApO+wFfJ2ApO+wFfJsHn5rB8nLYPn5aBtYvl7d8uwdx/JYXJ3YXfJ7k793yX5+Sg/7pIG8V3QC3NzegwR8OXfXv4L+CK/75dCebm9ycFnboPpIG/r4Itt/fE9gJ9772Du+b3JwTWD7C56+a/Jy0AtwZcEOxPOl8mxPJwQ7E86XybE8nBDsTzpfJsTycEOxPOl8mxPJwQ7E86X1OkCnAAAAAIJMAAAAAwGAQcAAAoAAAMABIAAAANCIZoKPCHFAhQHJOWn8IeigAGtiUlaOV3/n7+4IA/wn0BaX4czAPW/65PfwUX+QPe+L933XNS4c4KL79hpw8FF/u50rk8AEPzXHJv/+bVP//gCAEAhRp4AQAMq9Kc5gGBXk8PAYHZIoyVLTjOJCW+7cdZ+hgyjqtN3f+gMPPz/W3/J8EL+P8ptuYBEbmtj7AEQ5zwTbbRJcKL0LBq+8ADAAOJcRCbXVdwwVV/HBQGD/ieD0v61Ly9/vfCPF9+0/q59XPq58Efe59XPq59XPq59XPibv3/BbsB99h4T934U567fwnwRb+odDbmU3u997vetjsdariu9u8nE77B7viu9AJ0q6tLyb5OW+wT4J/YDQC/fLu98t9gnwT+wGgF++Xd777AUI974d5Pcnd93yX5O78McnpFDbmU3u997vetjsdarmsC5OX0Az8t+fl3oBn5d6AZ+XegGM73x3d+fu/P3fm5t/y94rgo9B6cqT8vYd83YcnL2HfN2HJy9hwn1lBFyXpsB+CXff9fNpZOX23xF30v4m/fd8T393wS3f798T3oB7vie/u+Iu+l/E377vqegu5LC4vk3wQcve+X3fNfrgu9g+/S83uTl9xXN3k4u7/cRwW0W+gb9E9arl33ydhycToXsBsM/Lvvkpd827/BDvYD6Xir30AvwVbvd+/J5OXpXzdKTjr/e9gmg5wR76X6sPVz6ufVz4Ie9z6ufVz6ufVz6ufBP733PgkuhZU+79cl3ufk9wzy35+W3xXNfhPk0Dz8R72FYC97779x3ege+/cVz16+Tl73zd5OXvfN3k5e983eTl73zd5OXvfNvgv5u7k5dA98nbi+Jt/u+Tt3ze/gh2Avr4qgF3tXze/go2FYCv9Bdyb5O9gmHfJ2HJ32HfJ2HJ32HfJ2HJ32HfJ2HJ32HfJtZ+a1yctrn5aSB4vl6FfLtXH8lAPk7oB98nuTv3fJfn5LAX92DSeK7oPc3N7AQI+HLvr0PwX8EV/3y6bzc3uTgs6FYC7BpP6+CLQn98T2G+997V3ze5OCa10A+evmvyctB7gy4Idt50vk23k4Idt50vk23k4Idt50vk23k4Idt50vk23k4Idt50vqdIFOAAAAAAgkwAAAADAYBBwAADAAAAwAEgAAAA1Yhmgw8IcgIX65tg/z1of65PfwR3/fF+77rmsHw5wUX36AScPBRf7udK5PAAcGABgUCKxSJrMLNzT/xLIioIfgYACfByAAmJHO7GGxb1uUvgAAQAxRCQHwbLlazdnm/9JhsV365Q37veZBncGoZbMGoc5Rev2AVkAs4iC3gAIAAIKwAAgfAASNifFDu/WBmnwIFyHYAGAKUoUeJqIvrkj/9/vhAiUHgCgPlM08MAus1JOAchBUqnYVH/+1E10Xwz6p21uo/0+MD61Ly9/vfCPF9+gb+rn1c+rnwR97n1c+rn1c+rn1c+Ju/f8Fuwu+w8J+78Kc9dBfCfBFv6h0NuZTe733u962Ox1quK70K8nE77W74rvQbsHXVpeTfJy374J/YSD/fLu98t++Cf2Eg/3y7vffYcI974d5Pcnd93yX5O78McnsGUNuZTe733u962Ox1qbl9BH5b8/LvQR+Xegj8u9BDO98d3fn7vz935ubf8veK4KPYC2KVJ+XoBXzdAKTl6AV83QCk5egFCfWUEXJexMLwS77/r5tg8nL6E+Iu+wf8Tfvu+J7+74Jbv9++J70Fu+J7+74i77B/xN++76noLuSgHxfJvgg5e98vu+a/XBd7Xfpeb3Jy+4rm7ycXd/uI4LffSfonrVcu++ToBScTp+wkAj8u++SwffNu/wQ72F0vFXvoP8FW73fvyeTl7B3zdg5OOv976Bhzgj30v1Yern1c+rnwQ97n1c+rn1c+rn1c+Cf3vufBJdPKn3frku9z8nuGeW/Py0Liua/CfJpZ+I96Adh+999+47vS337iuevY/Jy975u8nL3vm7ycve+bvJy975u8nL3vm3wX83dyculvk6FF8TQv3fJ0K+b38EOw/r4qg+9A75vfwUaAdh3+gu5N8nfQCvk6AUnfQCvk6AUnfQCvk6AUnfQCvk6AUnfQCvk0Dz81A+TloHz8tg0sXy9O+XQO4/koLk7oLvk9yd+75L8/JYf92mDeK7sBbm5vYYI+HLvr18F/BFf98uxPNze5OCzp2H2mDf18EWm/viegE+996B3fN7k4JqB9Bc9fNfk5bAW4MuCHQnnS+TQnk4IdCedL5NCeTgh0J50vk0J5OCHQnnS+TQnk4IdCedL6nSBTgAAAAAIJMAAAAAwGAQcAAA4AAAMABIAAAALNIZoOPCHICF++etf1ye/gjv++L933XNa4c4KL79Bpw8FF/u50rk9DQnwrgAIMhSEKQpSFIQpC/wAHANBusEHyMeyVJLEPh/rUvL3+98I8X36T+rn1c+rnwR97n1c+rn1c+rn1c+Ju/f8FugH32HhP3fhTnrp/CfBFv6h0NuZTe733u962Ox1quK707ycTvoHu+K72Anarq0vJvk5b98E/oBsBfvl3e+W/fBP6AbAX75d3vvoBQj3vh3k9yd33fJfk7vwxye0UNuZTe733u962Ox1qbl9gM/Lfn5d7AZ+XewGfl3sBjO98d3fn7vz935ubf8veK4KPYe3Kk/L0HfN0HJy9B3zdBycvQcJ9ZQRcl7aAfgl33/XzbWTl9N8Rd9r+Jv33fE9/d8Et3+/fE97Ae74nv7viLvtfxN++76noLuSguL5N8EHL3vl93zX64LvQPv0vN7k5fcVzd5OLu/3EcFvvsG/RPWq5d98nQcnE7F6AaDPy775LXfNu/wQ70A+l4q99gL8FW73fvyeTl7V83ak46/3vpBzgj30v1Yern1c+rnwQ97n1c+rn1c+rn1c+Cf3vufBJdiyp9365Lvc/J7hnlvz8tPiua/CfJsHn4j3oKgF73337ju9g99+4rnr38nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3Jy7B75OnF8TT/d8nTvm9/BDoBfXxVgLvSvm9/BRoKgFf6C7k3yd9B3ydByd9B3ydByd9B3ydByd9B3ydByd9B3yaWfmpcnLS5+W0weL5exXy6Vx/JYD5O7AffJ7k793yX5+SgF/dA2niu7D3NzegECPhy769j8F/BFf98u283N7k4LOxUAugbT+vgi2J/fE9Bvvfeld83uTgmpdgPnr5r8nLYe4MuCHTedL5NN5OCHTedL5NN5OCHTedL5NN5OCHTedL5NN5OCHTedL6nSBTgAAAAAgkwAAAADAYBBwAAEAAAAwAEgAAAAsghmhA8IE/8MRQIX4QONxffPWx/rk9/BHf98X7vuuagfDnBRffsBJw8FF/u50oK/8AZ3////X//fJ6+tS8vf73wjxffsG/q59XPq58Efe59XPq59XPq59XPibv3/BboLvsPCfu/CnPXYXwnwRb+odDbmU3u997vetjsdariu9ivJxO+lu+K72G6B11aXk3yct++Cf0Ew/3y7vfLfvgn9BMP98u7330HCPe+HeT3J3fd8l+Tu/DHJ6BlDbmU3u997vetjsdam5fYR+W/Py72Efl3sI/LvYQzvfHd35+78/d+bm3/L3iuCj0AtClSfl7AV83YCk5ewFfN2ApOXsBQn1lBFyXoSC8Eu+/6+bQPJy+xPiLvoH/E377vie/u+CW7/fvie9hbvie/u+Iu+gf8Tfvu+p6C7ksB8Xyb4IOXvfL7vmv1wXel36Xm9ycvuK5u8nF3f7iOC332n6J61XLvvk7AUnE7foJgI/LvvkoH3zbv8EO9BdLxV77D/BVu9378nk5egd83QOTjr/e+wYc4I99L9WHq59XPq58EPe59XPq59XPq59XPgn977nwSXbyp9365Lvc/J7hnlvz8ti4rmvwnybWfiPewHQfvfffuO72t9+4rnr0Pycve+bvJy975u8nL3vm7ycve+bvJy975t8F/N3cnLtb5OxRfE2L93ydivm9/BDoP6+KsPvYO+b38FGwHQd/oLuTfJ32Ar5OwFJ32Ar5OwFJ32Ar5OwFJ32Ar5OwFJ32Ar5Ng8/NYPk5bB8/LQNrF8vbvl2DuP5LC5O7C75Pcnfu+S/PyUH/dJA3iu6AW5ub0GCPhy769/BfwRX/fLoTzc3uTgs7dB9JA39fBFtv74nsBPvfewd3ze5OCawfYXPXzX5OWgFuDLgh2J50vk2J5OCHYnnS+TYnk4IdiedL5NieTgh2J50vk2J5OCHYnnS+p0gU4AAAAAgkwAAAADAYBBwAAEgAAAwAEgAAAAsYhmhI8IE/8OSAhfyeGYYhGEJcABzY4qpli1TMzP6Guet/1ye/gjv++L933XNS4c4KL79hpw8FF/u50rk73ye/rUvL3+98I8X37T+rn1c+rnwR97n1c+rn1c+rn1c+Ju/f8FuwH32HhP3fhTnrt/CfBFv6h0NuZTe733u962Ox1quK727ycTvsHu+K70AnSrq0vJvk5b98E/sBoBfvl3e+W/fBP7AaAX75d3vvsBQj3vh3k9yd33fJfk7vwxyekUNuZTe733u962Ox1qbl9AM/Lfn5d6AZ+XegGfl3oBjO98d3fn7vz935ubf8veK4KPQenKk/L2HfN2HJy9h3zdhycvYcJ9ZQRcl6bAfgl33/XzaWTl9t8Rd9L+Jv33fE9/d8Et3+/fE96Ae74nv7viLvpfxN++76noLuSwuL5N8EHL3vl93zX64LvYPv0vN7k5fcVzd5OLu/3EcFvvoG/RPWq5d98nYcnE6F7AbDPy775KXfNu/wQ72A+l4q99AL8FW73fvyeTl6V83Sk46/3vtBzgj30v1Yern1c+rnwQ97n1c+rn1c+rn1c+Cf3vufBJdCyp9365Lvc/J7hnlvz8tviua/CfJoHn4j3sKwF73337ju9A99+4rnr18nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3Jy6B75O3F8Tb/d8nbvm9/BDsBfXxVALvavm9/BRsKwFf6C7k3yd9h3ydhyd9h3ydhyd9h3ydhyd9h3ydhyd9h3ybWfmtcnLa5+WkgeL5ehXy7Vx/JQD5O6AffJ7k793yX5+SwF/dg0niu6D3NzewECPhy769D8F/BFf98um83N7k4LOhWAuwaT+vgi0J/fE9hvvfe1d83uTgmtdAPnr5r8nLQe4MuCHbedL5Nt5OCHbedL5Nt5OCHbedL5Nt5OCHbedL5Nt5OCHbedL6nSBTgAAAAAIJMAAAAAwGAQcAABQAAAMABIAAAAK/IZoUPCHICF/E+ygYCAYfnrQ/1ye/gjv++L933XNYPhzgovv0Ak4eCi/3c6Vyd75Pf1qXl7/e+EeL79A39XPq59XPgj73Pq59XPq59XPq58Td+/4Ldhd9h4T934U566C+E+CLf1Dobcym93vvd71sdjrVcV3oV5OJ32t3xXeg3YOurS8m+Tlv3wT+wkH++Xd75b98E/sJB/vl3e++w4R73w7ye5O77vkvyd34Y5PYMobcym93vvd71sdjrU3L6CPy35+Xegj8u9BH5d6CGd747u/P3fn7vzc2/5e8VwUewFsUqT8vQCvm6AUnL0Ar5ugFJy9AKE+soIuS9iYXgl33/XzbB5OX0J8Rd9g/4m/fd8T393wS3f798T3oLd8T393xF32D/ib9931PQXclAPi+TfBBy975fd81+uC72u/S83uTl9xXN3k4u7/cRwW++k/RPWq5d98nQCk4nT9hIBH5d98lg++bd/gh3sLpeKvfQf4Kt3u/fk8nL2Dvm7Bycdf730DDnBHvpfqw9XPq59XPgh73Pq59XPq59XPq58E/vfc+CS6eVPu/XJd7n5PcM8t+floXFc1+E+TSz8R70A7D97779x3elvv3Fc9ex+Tl73zd5OXvfN3k5e983eTl73zd5OXvfNvgv5u7k5dLfJ0KL4mhfu+ToV83v4Idh/XxVB96B3ze/go0A7Dv9Bdyb5O+gFfJ0ApO+gFfJ0ApO+gFfJ0ApO+gFfJ0ApO+gFfJoHn5qB8nLQPn5bBpYvl6d8ugdx/JQXJ3QXfJ7k793yX5+Sw/7tMG8V3YC3NzewwR8OXfXr4L+CK/75diebm9ycFnTsPtMG/r4ItN/fE9AJ9770Du+b3JwTUD6C56+a/Jy2AtwZcEOhPOl8mhPJwQ6E86XyaE8nBDoTzpfJoTycEOhPOl8mhPJwQ6E86X1OkCnAAAAAIJMAAAAAwGAQcAABYAAAMABIAAAAK2IZoWPCHICF+oEH4GAmCFvHif/J7+CO/74v3fdc1rhzgovv0GnDwUX+7nSuTvfJ7+tS8vf73wjxffpP6ufVz6ufBH3ufVz6ufVz6ufVz4m79/wW6AffYeE/d+FOeun8J8EW/qHQ25lN7vfe73rY7HWq4rvTvJxO+ge74rvYCdqurS8m+Tlv3wT+gGwF++Xd75b98E/oBsBfvl3e++gFCPe+HeT3J3fd8l+Tu/DHJ7RQ25lN7vfe73rY7HWpuX2Az8t+fl3sBn5d7AZ+XewGM73x3d+fu/P3fm5t/y94rgo9h7cqT8vQd83QcnL0HfN0HJy9Bwn1lBFyXtoB+CXff9fNtZOX03xF32v4m/fd8T393wS3f798T3sB7vie/u+Iu+1/E377vqegu5KC4vk3wQcve+X3fNfrgu9A+/S83uTl9xXN3k4u7/cRwW++wb9E9arl33ydBycTsXoBoM/Lvvktd827/BDvQD6Xir32AvwVbvd+/J5OXtXzdqTjr/e+kHOCPfS/Vh6ufVz6ufBD3ufVz6ufVz6ufVz4J/e+58El2LKn3frku9z8nuGeW/Py0+K5r8J8mwefiPegqAXvfffuO72D337iuevfycve+bvJy975u8nL3vm7ycve+bvJy975t8F/N3cnLsHvk6cXxNP93ydO+b38EOgF9fFWAu9K+b38FGgqAV/oLuTfJ30HfJ0HJ30HfJ0HJ30HfJ0HJ30HfJ0HJ30HfJpZ+alyctLn5bTB4vl7FfLpXH8lgPk7sB98nuTv3fJfn5KAX90DaeK7sPc3N6AQI+HLvr2PwX8EV/3y7bzc3uTgs7FQC6BtP6+CLYn98T0G+996V3ze5OCal2A+evmvycth7gy4IdN50vk03k4IdN50vk03k4IdN50vk03k4IdN50vk03k4IdN50vqdIFOAAAAAIJMAAAAAwGAQcAABgAAAMABIAAAAMeIZoYPCHICF++TQLS4gnAAvkfonJ6+u5P+MOIBRPgAFsAAQA/HATMnsVk/f3MdACAMIrBbKjmcx6nDd+AABAwGKAG8BTOb/wp5BalCELg/sAOQHcIfXejFaP2OD4uHAEYACSgUsOlVtFsB6ocizxAj0OUQNrhLLOXlnhuuagfDnBRffsBJw8FF/u50rk73ye/rUvL3+98I8X37Bv6ufVz6ufBH3ufVz6ufVz6ufVz4m79/wW6C77Dwn7vwpz12F8J8EW/qHQ25lN7vfe73rY7HWq4rvYrycTvpbviu9hugddWl5N8nLfvgn9BMP98u73y374J/QTD/fLu999Bwj3vh3k9yd33fJfk7vwxyegZQ25lN7vfe73rY7HWpuX2Eflvz8u9hH5d7CPy72EM73x3d+fu/P3fm5t/y94rgo9ALQpUn5ewFfN2ApOXsBXzdgKTl7AUJ9ZQRcl6EgvBLvv+vm0DycvsT4i76B/xN++74nv7vglu/374nvYW74nv7viLvoH/E377vqegu5LAfF8m+CDl73y+75r9cF3pd+l5vcnL7iubvJxd3+4jgt99p+ietVy775OwFJxO36CYCPy775KB9827/BDvQXS8Ve+w/wVbvd+/J5OXoHfN0Dk46/3vsGHOCPfS/Vh6ufVz6ufBD3ufVz6ufVz6ufVz4J/e+58El28qfd+uS73Pye4Z5b8/LYuK5r8J8m1n4j3sB0H73337ju9rffuK569D8nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3Jy7W+TsUXxNi/d8nYr5vfwQ6D+virD72Dvm9/BRsB0Hf6C7k3yd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TYPPzWD5OWwfPy0DaxfL275dg7j+SwuTuwu+T3J37vkvz8lB/3SQN4rugFubm9Bgj4cu+vfwX8EV/3y6E83N7k4LO3QfSQN/XwRbb++J7AT733sHd83uTgmsH2Fz181+TloBbgy4IdiedL5NieTgh2J50vk2J5OCHYnnS+TYnk4IdiedL5NieTgh2J50vqdIFOAAAAAgkwAAAADAYBBwAAGgAAAwAEgAAAAv8hmho8IcgIX75NgHUCzJABmWcQvcV//+rJxEmvupW7+1RB4UAQDy26rMcdbP9fHd0f83/+hQSwAPGWGENoiXnULfkDxqcpz/f8AIDJQAHLFEQdZGYs2ExJfhZ6JBorocbCSl4A6ualw5wUX37DTh4KL/dzpXJ3vk9/WpeXv974R4vv2n9XPq59XPgj73Pq59XPq59XPq58Td+/4LdgPvsPCfu/CnPXb+E+CLf1Dobcym93vvd71sdjrVcV3t3k4nfYPd8V3oBOlXVpeTfJy374J/YDQC/fLu98t++Cf2A0Av3y7vffYChHvfDvJ7k7vu+S/J3fhjk9Iobcym93vvd71sdjrU3L6AZ+W/Py70Az8u9AM/LvQDGd747u/P3fn7vzc2/5e8VwUeg9OVJ+XsO+bsOTl7Dvm7Dk5ew4T6ygi5L02A/BLvv+vm0snL7b4i76X8Tfvu+J7+74Jbv9++J70A93xPf3fEXfS/ib9931PQXclhcXyb4IOXvfL7vmv1wXewffpeb3Jy+4rm7ycXd/uI4LffQN+ietVy775Ow5OJ0L2A2Gfl33yUu+bd/gh3sB9LxV76AX4Kt3u/fk8nL0r5ulJx1/vfaDnBHvpfqw9XPq59XPgh73Pq59XPq59XPq58E/vfc+CS6FlT7v1yXe5+T3DPLfn5bfFc1+E+TQPPxHvYVgL3vvv3Hd6B779xXPXr5OXvfN3k5e983eTl73zd5OXvfN3k5e982+C/m7uTl0D3yduL4m3+75O3fN7+CHYC+viqAXe1fN7+CjYVgK/0F3Jvk77Dvk7Dk77Dvk7Dk77Dvk7Dk77Dvk7Dk77Dvk2s/Na5OW1z8tJA8Xy9Cvl2rj+SgHyd0A++T3J37vkvz8lgL+7BpPFd0Hubm9gIEfDl316H4L+CK/75dN5ub3JwWdCsBdg0n9fBFoT++J7Dfe+9q75vcnBNa6AfPXzX5OWg9wZcEO286XybbycEO286XybbycEO286XybbycEO286XybbycEO286X1OkCnAAAAAIJMAAAAAwGAQcAABwAAAMABIAAAAMCIZocPCHICF+XhqHYQrcIYBa0//eBDAKfwIM2CB8em9YIgOwYm4/mAONpXMda/FEjixuNWAnAAoMAJDxV7ai7MUm/v+8HbeUqCfeuXp/gQIv8AYACMCBClCTSiBpAw8SDYPhzgovv0Ak4eCi/3c6Vyd75Pf1qXl7/e+EeL79A39XPq59XPgj73Pq59XPq59XPq58Td+/4Ldhd9h4T934U566C+E+CLf1Dobcym93vvd71sdjrVcV3oV5OJ32t3xXeg3YOurS8m+Tlv3wT+wkH++Xd75b98E/sJB/vl3e++w4R73w7ye5O77vkvyd34Y5PYMobcym93vvd71sdjrU3L6CPy35+Xegj8u9BH5d6CGd747u/P3fn7vzc2/5e8VwUewFsUqT8vQCvm6AUnL0Ar5ugFJy9AKE+soIuS9iYXgl33/XzbB5OX0J8Rd9g/4m/fd8T393wS3f798T3oLd8T393xF32D/ib9931PQXclAPi+TfBBy975fd81+uC72u/S83uTl9xXN3k4u7/cRwW++k/RPWq5d98nQCk4nT9hIBH5d98lg++bd/gh3sLpeKvfQf4Kt3u/fk8nL2Dvm7Bycdf730DDnBHvpfqw9XPq59XPgh73Pq59XPq59XPq58E/vfc+CS6eVPu/XJd7n5PcM8t+floXFc1+E+TSz8R70A7D97779x3elvv3Fc9ex+Tl73zd5OXvfN3k5e983eTl73zd5OXvfNvgv5u7k5dLfJ0KL4mhfu+ToV83v4Idh/XxVB96B3ze/go0A7Dv9Bdyb5O+gFfJ0ApO+gFfJ0ApO+gFfJ0ApO+gFfJ0ApO+gFfJoHn5qB8nLQPn5bBpYvl6d8ugdx/JQXJ3QXfJ7k793yX5+Sw/7tMG8V3YC3NzewwR8OXfXr4L+CK/75diebm9ycFnTsPtMG/r4ItN/fE9AJ9770Du+b3JwTUD6C56+a/Jy2AtwZcEOhPOl8mhPJwQ6E86XyaE8nBDoTzpfJoTycEOhPOl8mhPJwQ6E86X1OkCnAAAAACCTAAAAAMBgEHAAAeAAADAASAAAADayGaHjwhyAhfm7sBsC/NlAXqGI+ZGTg/68ycP0wGU2rxH7nwKZy7F1y4un+xCFsFfGg2YAzA64BAgr6PxDod33DwAdABADyRh5EdXOqe7pI+AABAM0MwNQBMAnEMAgQBkcABUDdQUUeiQxJiLX4Gp/Q37KkOcFF9+g04eCi/3c6Vyd75Pf1qS5sABAjMpOe93hWhIc3xxOPw78OpSAAMALDN8FSouT4zeAMAFdgKBMpOo66U5gjoorK66nf984IxeW2fz7+A5/AYF2F/KCxwALJRfJJuUzjZ7f/gh4WjWaNP334CB4l0tYxPnwR4vv0n9XPq59XPgj73Pq59XPq59XPq58Td+/4LdAPvsPCfu/CnPXT+E+CLf1Dobcym93vvd71sdjrVcV3p3k4nfQPd8V3sBO1XVpeTfJy374J/QDYC/fLu98t++Cf0A2Av3y7vffQChHvfDvJ7k7vu+S/J3fhjk9oobcym93vvd71sdjrU3L7AZ+W/Py72Az8u9gM/LvYDGd747u/P3fn7vzc2/5e8VwUew9uVJ+XoO+boOTl6Dvm6Dk5eg4T6ygi5L20A/BLvv+vm2snL6b4i77X8Tfvu+J7+74Jbv9++J72A93xPf3fEXfa/ib9931PQXclBcXyb4IOXvfL7vmv1wXegffpeb3Jy+4rm7ycXd/uI4LffYN+ietVy775Og5OJ2L0A0Gfl33yWu+bd/gh3oB9LxV77AX4Kt3u/fk8nL2r5u1Jx1/vfSDnBHvpfqw9XPq59XPgh73Pq59XPq59XPq58E/vfc+CS7FlT7v1yXe5+T3DPLfn5afFc1+E+TYPPxHvQVAL3vvv3Hd7B779xXPXv5OXvfN3k5e983eTl73zd5OXvfN3k5e982+C/m7uTl2D3ydOL4mn+75OnfN7+CHQC+virAXelfN7+CjQVAK/0F3Jvk76Dvk6Dk76Dvk6Dk76Dvk6Dk76Dvk6Dk76Dvk0s/NS5OWlz8tpg8Xy9ivl0rj+SwHyd2A++T3J37vkvz8lAL+6BtPFd2Hubm9AIEfDl317H4L+CK/75dt5ub3JwWdioBdA2n9fBFsT++J6Dfe+9K75vcnBNS7AfPXzX5OWw9wZcEOm86XyabycEOm86XyabycEOm86XyabycEOm86XyabycEOm86X1OkCnAAAAAAgkwAAAADAYBBwAAIAAAAwAEgAAAAwwhmiA8IcgIX5u7CZaeBRi7gR7zdf9Rw3DUDC/A2wxwCY6Sg2d/gaTIkTJ5e7/8gtju/Df/L/XsL4dUAI1uKIwj9+f4gTiXnZoHJSN3yf/4w+7VV7/12xCZ8N8FF9+wEnDwUX+7nSuTvfJ7+tSc2wf5dfKDh4MYafOm/7yBA8S6WsYnz4I8X37Bv6ufVz6ufBH3ufVz6ufVz6ufVz4m79/wW6C77Dwn7vwpz12F8J8EW/qHQ25lN7vfe73rY7HWq4rvYrycTvpbviu9hugddWl5N8nLfvgn9BMP98u73y374J/QTD/fLu999Bwj3vh3k9yd33fJfk7vwxyegZQ25lN7vfe73rY7HWpuX2Eflvz8u9hH5d7CPy72EM73x3d+fu/P3fm5t/y94rgo9ALQpUn5ewFfN2ApOXsBXzdgKTl7AUJ9ZQRcl6EgvBLvv+vm0DycvsT4i76B/xN++74nv7vglu/374nvYW74nv7viLvoH/E377vqegu5LAfF8m+CDl73y+75r9cF3pd+l5vcnL7iubvJxd3+4jgt99p+ietVy775OwFJxO36CYCPy775KB9827/BDvQXS8Ve+w/wVbvd+/J5OXoHfN0Dk46/3vsGHOCPfS/Vh6ufVz6ufBD3ufVz6ufVz6ufVz4J/e+58El28qfd+uS73Pye4Z5b8/LYuK5r8J8m1n4j3sB0H73337ju9rffuK569D8nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3Jy7W+TsUXxNi/d8nYr5vfwQ6D+virD72Dvm9/BRsB0Hf6C7k3yd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TYPPzWD5OWwfPy0DaxfL275dg7j+SwuTuwu+T3J37vkvz8lB/3SQN4rugFubm9Bgj4cu+vfwX8EV/3y6E83N7k4LO3QfSQN/XwRbb++J7AT733sHd83uTgmsH2Fz181+TloBbgy4IdiedL5NieTgh2J50vk2J5OCHYnnS+TYnk4IdiedL5NieTgh2J50vqdIFOAAAAACCTAAAAAMBgEHAAAiAAADAASAAAACuSGaIjwhyAhfm7oB9cXfsNg+uGPhuAF678iH/a79mugvhvgovv2GnDwUX+7nSuTvfJ7+tSc21+XfCXF9+0/q59XPq58Efe59XPq59XPq59XPibv3/BbsB99h4T934U567fwnwRb+odDbmU3u997vetjsdariu9u8nE77B7viu9AJ0q6tLyb5OW/fBP7AaAX75d3vlv3wT+wGgF++Xd777AUI974d5Pcnd93yX5O78McnpFDbmU3u997vetjsdam5fQDPy35+XegGfl3oBn5d6AYzvfHd35+78/d+bm3/L3iuCj0HpypPy9h3zdhycvYd83YcnL2HCfWUEXJemwH4Jd9/182lk5fbfEXfS/ib993xPf3fBLd/v3xPegHu+J7+74i76X8Tfvu+p6C7ksLi+TfBBy975fd81+uC72D79Lze5OX3Fc3eTi7v9xHBb76Bv0T1quXffJ2HJxOhewGwz8u++Sl3zbv8EO9gPpeKvfQC/BVu9378nk5elfN0pOOv977Qc4I99L9WHq59XPq58EPe59XPq59XPq59XPgn977nwSXQsqfd+uS73Pye4Z5b8/Lb4rmvwnyaB5+I97CsBe999+47vQPffuK569fJy975u8nL3vm7ycve+bvJy975u8nL3vm3wX83dycuge+TtxfE2/3fJ275vfwQ7AX18VQC72r5vfwUbCsBX+gu5N8nfYd8nYcnfYd8nYcnfYd8nYcnfYd8nYcnfYd8m1n5rXJy2uflpIHi+XoV8u1cfyUA+TugH3ye5O/d8l+fksBf3YNJ4rug9zc3sBAj4cu+vQ/BfwRX/fLpvNze5OCzoVgLsGk/r4ItCf3xPYb733tXfN7k4JrXQD56+a/Jy0HuDLgh23nS+TbeTgh23nS+TbeTgh23nS+TbeTgh23nS+TbeTgh23nS+p0gU4AAAAACCTAAAAAMBgEHAAAkAAADAASAAAAC7CGaJDwhyAhfm7oLri79ALrlob3DfBRffoBJw8FF/u50rk73ye/rUhv//gugAIADAIewcdKF/rPqEkSxPxAACAElDAOJD18uf5hi/tDDAW9P64Fkt6G5MCes/+UHDwBrn2B9MvhHi+/QN/Vz6ufVz4I+9z6ufVz6ufVz6ufE3fv+C3YXfYeE/d+FOeugvhPgi39Q6G3Mpvd773e9bHY61XFd6FeTid9rd8V3oN2Drq0vJvk5b98E/sJB/vl3e+W/fBP7CQf75d3vvsOEe98O8nuTu+75L8nd+GOT2DKG3Mpvd773e9bHY61Ny+gj8t+fl3oI/LvQR+Xeghne+O7vz935+783Nv+XvFcFHsBbFKk/L0Ar5ugFJy9AK+boBScvQChPrKCLkvYmF4Jd9/182weTl9CfEXfYP+Jv33fE9/d8Et3+/fE96C3fE9/d8Rd9g/4m/fd9T0F3JQD4vk3wQcve+X3fNfrgu9rv0vN7k5fcVzd5OLu/3EcFvvpP0T1quXffJ0ApOJ0/YSAR+XffJYPvm3f4Id7C6Xir30H+Crd7v35PJy9g75uwcnHX+99Aw5wR76X6sPVz6ufVz4Ie9z6ufVz6ufVz6ufBP733PgkunlT7v1yXe5+T3DPLfn5aFxXNfhPk0s/Ee9AOw/e++/cd3pb79xXPXsfk5e983eTl73zd5OXvfN3k5e983eTl73zb4L+bu5OXS3ydCi+JoX7vk6FfN7+CHYf18VQfegd83v4KNAOw7/QXcm+TvoBXydAKTvoBXydAKTvoBXydAKTvoBXydAKTvoBXyaB5+agfJy0D5+WwaWL5enfLoHcfyUFyd0F3ye5O/d8l+fksP+7TBvFd2Atzc3sMEfDl316+C/giv++XYnm5vcnBZ07D7TBv6+CLTf3xPQCfe+9A7vm9ycE1A+guevmvyctgLcGXBDoTzpfJoTycEOhPOl8mhPJwQ6E86XyaE8nBDoTzpfJoTycEOhPOl9TpApwAAAACCTAAAAAMBgEHAAAmAAADAASAAAACryGaJjwhyAhfm7sB9cXfoPrlu9w3wUX36DTh4KL/dzpXJ3vk9/WpBvAW8HP3nCOEeL79J/Vz6ufVz4I+9z6ufVz6ufVz6ufE3fv+C3QD77Dwn7vwpz10/hPgi39Q6G3Mpvd773e9bHY61XFd6d5OJ30D3fFd7ATtV1aXk3yct++Cf0A2Av3y7vfLfvgn9ANgL98u7330AoR73w7ye5O77vkvyd34Y5PaKG3Mpvd773e9bHY61Ny+wGflvz8u9gM/LvYDPy72Axne+O7vz935+783Nv+XvFcFHsPblSfl6Dvm6Dk5eg75ug5OXoOE+soIuS9tAPwS77/r5trJy+m+Iu+1/E377vie/u+CW7/fvie9gPd8T393xF32v4m/fd9T0F3JQXF8m+CDl73y+75r9cF3oH36Xm9ycvuK5u8nF3f7iOC332DfonrVcu++ToOTidi9ANBn5d98lrvm3f4Id6AfS8Ve+wF+Crd7v35PJy9q+btScdf730g5wR76X6sPVz6ufVz4Ie9z6ufVz6ufVz6ufBP733PgkuxZU+79cl3ufk9wzy35+WnxXNfhPk2Dz8R70FQC97779x3ewe+/cVz17+Tl73zd5OXvfN3k5e983eTl73zd5OXvfNvgv5u7k5dg98nTi+Jp/u+Tp3ze/gh0Avr4qwF3pXze/go0FQCv9Bdyb5O+g75Og5O+g75Og5O+g75Og5O+g75Og5O+g75NLPzUuTlpc/LaYPF8vYr5dK4/ksB8ndgPvk9yd+75L8/JQC/ugbTxXdh7m5vQCBHw5d9ex+C/giv++Xbebm9ycFnYqAXQNp/XwRbE/vieg33vvSu+b3JwTUuwHz181+TlsPcGXBDpvOl8mm8nBDpvOl8mm8nBDpvOl8mm8nBDpvOl8mm8nBDpvOl9TpApwAAAAAIJMAAAAAwGAQcAACgAAAMABIAAAAKvIZooPCHICF+buwuuLv2AuuW73DfBRffsBJw8FF/u50rk73ye/rUL8X37Bv6ufVz6ufBH3ufVz6ufVz6ufVz4m79/wW6C77Dwn7vwpz12F8J8EW/qHQ25lN7vfe73rY7HWq4rvYrycTvpbviu9hugddWl5N8nLfvgn9BMP98u73y374J/QTD/fLu999Bwj3vh3k9yd33fJfk7vwxyegZQ25lN7vfe73rY7HWpuX2Eflvz8u9hH5d7CPy72EM73x3d+fu/P3fm5t/y94rgo9ALQpUn5ewFfN2ApOXsBXzdgKTl7AUJ9ZQRcl6EgvBLvv+vm0DycvsT4i76B/xN++74nv7vglu/374nvYW74nv7viLvoH/E377vqegu5LAfF8m+CDl73y+75r9cF3pd+l5vcnL7iubvJxd3+4jgt99p+ietVy775OwFJxO36CYCPy775KB9827/BDvQXS8Ve+w/wVbvd+/J5OXoHfN0Dk46/3vsGHOCPfS/Vh6ufVz6ufBD3ufVz6ufVz6ufVz4J/e+58El28qfd+uS73Pye4Z5b8/LYuK5r8J8m1n4j3sB0H73337ju9rffuK569D8nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3Jy7W+TsUXxNi/d8nYr5vfwQ6D+virD72Dvm9/BRsB0Hf6C7k3yd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TYPPzWD5OWwfPy0DaxfL275dg7j+SwuTuwu+T3J37vkvz8lB/3SQN4rugFubm9Bgj4cu+vfwX8EV/3y6E83N7k4LO3QfSQN/XwRbb++J7AT733sHd83uTgmsH2Fz181+TloBbgy4IdiedL5NieTgh2J50vk2J5OCHYnnS+TYnk4IdiedL5NieTgh2J50vqdIFOAAAAAAgkwAAAADAYBBwAAKgAAAwAEgAAAEsEhmio8IcgIX5u6AfXF37D65bvcN8FF9+w04eCi/3c6Vyd7hnwxhfi+/af1c+rn1c+CPvc+rn1c+rn1c+rnxN37/gt2A++w8J+78Kc9dv4T4It/UOhtzKb3e+93vWx2OtVxXe3eTid9g93xXegE6VdWl5N8nLfvgn9gNAL98u73y374J/YDQC/fLu999gKEe98O8nuTu+75L8nd+GOT0ihtzKb3e+93vWx2OtTcvoBn5b8/LvQDPy70Az8u9AMZ3vju78/d+fu/Nzb/l7xXBR6D05Un5ew75uw5OXsO+bsOTl7DhPrKCLkvTYD8Eu+/6+bSycvtviLvpfxN++74nv7vglu/374nvQD3fE9/d8Rd9L+Jv33fU9BdyWFxfJvgg5e98vu+a/XBd7B9+l5vcnL7iubvJxd3+4jgt99A36J61XLvvk7Dk4nQvYDYZ+XffJS75t3+CHewH0vFXvoBfgq3e79+TycvSvm6UnHX+99oOcEe+l+rD1c+rn1c+CHvc+rn1c+rn1c+rnwT+99z4JLoWVPu/XJd7n5PcM8t+flt8VzX4T5NA8/Ee9hWAve++/cd3oHvv3Fc9evk5e983eTl73zd5OXvfN3k5e983eTl73zb4L+bu5OXQPfJ24vibf7vk7d83v4IdgL6+KoBd7V83v4KNhWAr/QXcm+TvsO+TsOTvsO+TsOTvsO+TsOTvsO+TsOTvsO+Taz81rk5bXPy0kDxfL0K+XauP5KAfJ3QD75Pcnfu+S/PyWAv7sGk8V3Qe5ub2AgR8OXfXofgv4Ir/vl03m5vcnBZ0KwF2DSf18EWhP74nsN9772rvm9ycE1roB89fNfk5aD3BlwQ7bzpfJtvJwQ7bzpfJtvJwQ7bzpfJtvJwQ7bzpfJtvJwQ7bzpfU6QKcAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgkwAAAADAYBBwAALAAAAwAEgAAAwy8hmiw8IcgIX5u6C64u/QC65bvcN8FF9+gEnDwUX+7nSuTvDfF9+gb+rn1c+rnwR97n1c+rn1c+rn1c+Ju/f8Fuwu+w8J+78Kc9dBfCfBFv6h0NuZTe733u962Ox1quK70K8nE77W74rvQbsHXVpeTfJy374J/YSD/fLu98t++Cf2Eg/3y7vffYcI974d5Pcnd93yX5O78McnsGUNuZTe733u962Ox1qbl9BH5b8/LvQR+Xegj8u9BDO98d3fn7vz935ubf8veK4KPYC2KVJ+XoBXzdAKTl6AV83QCk5egFCfWUEXJexMLwS77/r5tg8nL6E+Iu+wf8Tfvu+J7+74Jbv9++J70Fu+J7+74i77B/xN++76noLuSgHxfJvgg5e98vu+a/XBd7Xfpeb3Jy+4rm7ycXd/uI4LffSfonrVcu++ToBScTp+wkAj8u++SwffNu/wQ72F0vFXvoP8FW73fvyeTl7B3zdg5OOv976Bhzgj30v1Yern1c+rnwQ97n1c+rn1c+rn1c+Cf3vufBJdPKn3frku9z8nuGeW/Py0Liua/CfJpZ+I96Adh+999+47vS337iuevY/Jy975u8nL3vm7ycve+bvJy975u8nL3vm3wX83dyculvk6FF8TQv3fJ0K+b38EOw/r4qg+9A75vfwUaAdh3+gu5N8nfQCvk6AUnfQCvk6AUnfQCvk6AUnfQCvk6AUnfQCvk0Dz81A+TloHz8tg0sXy9O+XQO4/koLk7oLvk9yd+75L8/JYf92mDeK7sBbm5vYYI+HLvr18F/BFf98uxPNze5OCzp2H2mDf18EWm/viegE+996B3fN7k4JqB9Bc9fNfk5bAW4MuCHQnnS+TQnk4IdCedL5NCeTgh0J50vk0J5OCHQnnS+TQnk4IdCedL6nSBTgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIJMAAAAAwGAQcAAC4AAAMABIAAAMMvIZouPCHICF+buwH1xd+g+uW73DfBRffoNOHgov93OlcneG+L79J/Vz6ufVz4I+9z6ufVz6ufVz6ufE3fv+C3QD77Dwn7vwpz10/hPgi39Q6G3Mpvd773e9bHY61XFd6d5OJ30D3fFd7ATtV1aXk3yct++Cf0A2Av3y7vfLfvgn9ANgL98u7330AoR73w7ye5O77vkvyd34Y5PaKG3Mpvd773e9bHY61Ny+wGflvz8u9gM/LvYDPy72Axne+O7vz935+783Nv+XvFcFHsPblSfl6Dvm6Dk5eg75ug5OXoOE+soIuS9tAPwS77/r5trJy+m+Iu+1/E377vie/u+CW7/fvie9gPd8T393xF32v4m/fd9T0F3JQXF8m+CDl73y+75r9cF3oH36Xm9ycvuK5u8nF3f7iOC332DfonrVcu++ToOTidi9ANBn5d98lrvm3f4Id6AfS8Ve+wF+Crd7v35PJy9q+btScdf730g5wR76X6sPVz6ufVz4Ie9z6ufVz6ufVz6ufBP733PgkuxZU+79cl3ufk9wzy35+WnxXNfhPk2Dz8R70FQC97779x3ewe+/cVz17+Tl73zd5OXvfN3k5e983eTl73zd5OXvfNvgv5u7k5dg98nTi+Jp/u+Tp3ze/gh0Avr4qwF3pXze/go0FQCv9Bdyb5O+g75Og5O+g75Og5O+g75Og5O+g75Og5O+g75NLPzUuTlpc/LaYPF8vYr5dK4/ksB8ndgPvk9yd+75L8/JQC/ugbTxXdh7m5vQCBHw5d9ex+C/giv++Xbebm9ycFnYqAXQNp/XwRbE/vieg33vvSu+b3JwTUuwHz181+TlsPcGXBDpvOl8mm8nBDpvOl8mm8nBDpvOl8mm8nBDpvOl8mm8nBDpvOl9TpApwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTAAAAAMBgEHAAAwAAADAASAAADDLyGaMDwhyAhfm7sLri79gLrlu9w3wUX37AScPBRf7udK5O8N8X37Bv6ufVz6ufBH3ufVz6ufVz6ufVz4m79/wW6C77Dwn7vwpz12F8J8EW/qHQ25lN7vfe73rY7HWq4rvYrycTvpbviu9hugddWl5N8nLfvgn9BMP98u73y374J/QTD/fLu999Bwj3vh3k9yd33fJfk7vwxyegZQ25lN7vfe73rY7HWpuX2Eflvz8u9hH5d7CPy72EM73x3d+fu/P3fm5t/y94rgo9ALQpUn5ewFfN2ApOXsBXzdgKTl7AUJ9ZQRcl6EgvBLvv+vm0DycvsT4i76B/xN++74nv7vglu/374nvYW74nv7viLvoH/E377vqegu5LAfF8m+CDl73y+75r9cF3pd+l5vcnL7iubvJxd3+4jgt99p+ietVy775OwFJxO36CYCPy775KB9827/BDvQXS8Ve+w/wVbvd+/J5OXoHfN0Dk46/3vsGHOCPfS/Vh6ufVz6ufBD3ufVz6ufVz6ufVz4J/e+58El28qfd+uS73Pye4Z5b8/LYuK5r8J8m1n4j3sB0H73337ju9rffuK569D8nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3Jy7W+TsUXxNi/d8nYr5vfwQ6D+virD72Dvm9/BRsB0Hf6C7k3yd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TsBSd9gK+TYPPzWD5OWwfPy0DaxfL275dg7j+SwuTuwu+T3J37vkvz8lB/3SQN4rugFubm9Bgj4cu+vfwX8EV/3y6E83N7k4LO3QfSQN/XwRbb++J7AT733sHd83uTgmsH2Fz181+TloBbgy4IdiedL5NieTgh2J50vk2J5OCHYnnS+TYnk4IdiedL5NieTgh2J50vqdIFOAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgkwAAAADAYBBwAAMgAAAwAEgAAAwy8hmjI8IcgIX5ZwoSAFu+rp/v+wtkknVv7+3wPMFXPCI7uCA9cXfsPrlu9w3wUX37DTh4KL/dzpXJ3hvi+/af1c+rn1c+CPvc+rn1c+rn1c+rnxN37/gt2A++w8J+78Kc9dv4T4It/UOhtzKb3e+93vWx2OtVxXe3eTid9g93xXegE6VdWl5N8nLfvgn9gNAL98u73y374J/YDQC/fLu999gKEe98O8nuTu+75L8nd+GOT0ihtzKb3e+93vWx2OtTcvoBn5b8/LvQDPy70Az8u9AMZ3vju78/d+fu/Nzb/l7xXBR6D05Un5ew75uw5OXsO+bsOTl7DhPrKCLkvTYD8Eu+/6+bSycvtviLvpfxN++74nv7vglu/374nvQD3fE9/d8Rd9L+Jv33fU9BdyWFxfJvgg5e98vu+a/XBd7B9+l5vcnL7iubvJxd3+4jgt99A36J61XLvvk7Dk4nQvYDYZ+XffJS75t3+CHewH0vFXvoBfgq3e79+TycvSvm6UnHX+99oOcEe+l+rD1c+rn1c+CHvc+rn1c+rn1c+rnwT+99z4JLoWVPu/XJd7n5PcM8t+flt8VzX4T5NA8/Ee9hWAve++/cd3oHvv3Fc9evk5e983eTl73zd5OXvfN3k5e983eTl73zb4L+bu5OXQPfJ24vibf7vk7d83v4IdgL6+KoBd7V83v4KNhWAr/QXcm+TvsO+TsOTvsO+TsOTvsO+TsOTvsO+TsOTvsO+Taz81rk5bXPy0kDxfL0K+XauP5KAfJ3QD75Pcnfu+S/PyWAv7sGk8V3Qe5ub2AgR8OXfXofgv4Ir/vl03m5vcnBZ0KwF2DSf18EWhP74nsN9772rvm9ycE1roB89fNfk5aD3BlwQ7bzpfJtvJwQ7bzpfJtvJwQ7bzpfJtvJwQ7bzpfJtvJwQ7bzpfU6QKcAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIJMAAAAAwGAQcAADQAAAMABIAAAMMvIZo0PCHICF+XkokD1DPhiLkRdALrlu9w3wUX36AScPBRf7udK5O8N8X36Bv6ufVz6ufBH3ufVz6ufVz6ufVz4m79/wW7C77Dwn7vwpz10F8J8EW/qHQ25lN7vfe73rY7HWq4rvQrycTvtbviu9BuwddWl5N8nLfvgn9hIP98u73y374J/YSD/fLu999hwj3vh3k9yd33fJfk7vwxyewZQ25lN7vfe73rY7HWpuX0Eflvz8u9BH5d6CPy70EM73x3d+fu/P3fm5t/y94rgo9gLYpUn5egFfN0ApOXoBXzdAKTl6AUJ9ZQRcl7EwvBLvv+vm2DycvoT4i77B/xN++74nv7vglu/374nvQW74nv7viLvsH/E377vqegu5KAfF8m+CDl73y+75r9cF3td+l5vcnL7iubvJxd3+4jgt99J+ietVy775OgFJxOn7CQCPy775LB9827/BDvYXS8Ve+g/wVbvd+/J5OXsHfN2Dk46/3voGHOCPfS/Vh6ufVz6ufBD3ufVz6ufVz6ufVz4J/e+58El08qfd+uS73Pye4Z5b8/LQuK5r8J8mln4j3oB2H73337ju9LffuK569j8nL3vm7ycve+bvJy975u8nL3vm7ycve+bfBfzd3Jy6W+ToUXxNC/d8nQr5vfwQ7D+viqD70Dvm9/BRoB2Hf6C7k3yd9AK+ToBSd9AK+ToBSd9AK+ToBSd9AK+ToBSd9AK+TQPPzUD5OWgfPy2DSxfL075dA7j+SguTugu+T3J37vkvz8lh/3aYN4ruwFubm9hgj4cu+vXwX8EV/3y7E83N7k4LOnYfaYN/XwRab++J6AT733oHd83uTgmoH0Fz181+TlsBbgy4IdCedL5NCeTgh0J50vk0J5OCHQnnS+TQnk4IdCedL5NCeTgh0J50vqdIFOAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTAAAAAMBgEHAAA2AAADAASAAADDLyGaNjwhyAhfl5LAu+ag+uW73DfBRffoNOHgov93OlcneG+L79J/Vz6ufVz4I+9z6ufVz6ufVz6ufE3fv+C3QD77Dwn7vwpz10/hPgi39Q6G3Mpvd773e9bHY61XFd6d5OJ30D3fFd7ATtV1aXk3yct++Cf0A2Av3y7vfLfvgn9ANgL98u7330AoR73w7ye5O77vkvyd34Y5PaKG3Mpvd773e9bHY61Ny+wGflvz8u9gM/LvYDPy72Axne+O7vz935+783Nv+XvFcFHsPblSfl6Dvm6Dk5eg75ug5OXoOE+soIuS9tAPwS77/r5trJy+m+Iu+1/E377vie/u+CW7/fvie9gPd8T393xF32v4m/fd9T0F3JQXF8m+CDl73y+75r9cF3oH36Xm9ycvuK5u8nF3f7iOC332DfonrVcu++ToOTidi9ANBn5d98lrvm3f4Id6AfS8Ve+wF+Crd7v35PJy9q+btScdf730g5wR76X6sPVz6ufVz4Ie9z6ufVz6ufVz6ufBP733PgkuxZU+79cl3ufk9wzy35+WnxXNfhPk2Dz8R70FQC97779x3ewe+/cVz17+Tl73zd5OXvfN3k5e983eTl73zd5OXvfNvgv5u7k5dg98nTi+Jp/u+Tp3ze/gh0Avr4qwF3pXze/go0FQCv9Bdyb5O+g75Og5O+g75Og5O+g75Og5O+g75Og5O+g75NLPzUuTlpc/LaYPF8vYr5dK4/ksB8ndgPvk9yd+75L8/JQC/ugbTxXdh7m5vQCBHw5d9ex+C/giv++Xbebm9ycFnYqAXQNp/XwRbE/vieg33vvSu+b3JwTUuwHz181+TlsPcGXBDpvOl8mm8nBDpvOl8mm8nBDpvOl8mm8nBDpvOl8mm8nBDpvOl9TpApwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgkwAAAADAYBBwAAOAAAAwAEgAAAwy8hmjg8IcgIX4jmsBdct3uG+Ci+/YCTh4KL/dzpXJ3hvi+/YN/Vz6ufVz4I+9z6ufVz6ufVz6ufE3fv+C3QXfYeE/d+FOeuwvhPgi39Q6G3Mpvd773e9bHY61XFd7FeTid9Ld8V3sN0Drq0vJvk5b98E/oJh/vl3e+W/fBP6CYf75d3vvoOEe98O8nuTu+75L8nd+GOT0DKG3Mpvd773e9bHY61Ny+wj8t+fl3sI/LvYR+Xewhne+O7vz935+783Nv+XvFcFHoBaFKk/L2Ar5uwFJy9gK+bsBScvYChPrKCLkvQkF4Jd9/182geTl9ifEXfQP+Jv33fE9/d8Et3+/fE97C3fE9/d8Rd9A/4m/fd9T0F3JYD4vk3wQcve+X3fNfrgu9Lv0vN7k5fcVzd5OLu/3EcFvvtP0T1quXffJ2ApOJ2/QTAR+XffJQPvm3f4Id6C6Xir32H+Crd7v35PJy9A75ugcnHX+99gw5wR76X6sPVz6ufVz4Ie9z6ufVz6ufVz6ufBP733Pgku3lT7v1yXe5+T3DPLfn5bFxXNfhPk2s/Ee9gOg/e++/cd3tb79xXPXofk5e983eTl73zd5OXvfN3k5e983eTl73zb4L+bu5OXa3ydii+JsX7vk7FfN7+CHQf18VYfewd83v4KNgOg7/QXcm+TvsBXydgKTvsBXydgKTvsBXydgKTvsBXydgKTvsBXybB5+awfJy2D5+WgbWL5e3fLsHcfyWFyd2F3ye5O/d8l+fkoP+6SBvFd0Atzc3oMEfDl317+C/giv++XQnm5vcnBZ26D6SBv6+CLbf3xPYCfe+9g7vm9ycE1g+wuevmvyctALcGXBDsTzpfJsTycEOxPOl8mxPJwQ7E86XybE8nBDsTzpfJsTycEOxPOl9TpApwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIJMAAAAAwGAQcAADoAAAMABIAAAMMvIZo6PCHICF+I5rD65bvcN8FF9+w04eCi/3c6Vyd4b4vv2n9XPq59XPgj73Pq59XPq59XPq58Td+/4LdgPvsPCfu/CnPXb+E+CLf1Dobcym93vvd71sdjrVcV3t3k4nfYPd8V3oBOlXVpeTfJy374J/YDQC/fLu98t++Cf2A0Av3y7vffYChHvfDvJ7k7vu+S/J3fhjk9Iobcym93vvd71sdjrU3L6AZ+W/Py70Az8u9AM/LvQDGd747u/P3fn7vzc2/5e8VwUeg9OVJ+XsO+bsOTl7Dvm7Dk5ew4T6ygi5L02A/BLvv+vm0snL7b4i76X8Tfvu+J7+74Jbv9++J70A93xPf3fEXfS/ib9931PQXclhcXyb4IOXvfL7vmv1wXewffpeb3Jy+4rm7ycXd/uI4LffQN+ietVy775Ow5OJ0L2A2Gfl33yUu+bd/gh3sB9LxV76AX4Kt3u/fk8nL0r5ulJx1/vfaDnBHvpfqw9XPq59XPgh73Pq59XPq59XPq58E/vfc+CS6FlT7v1yXe5+T3DPLfn5bfFc1+E+TQPPxHvYVgL3vvv3Hd6B779xXPXr5OXvfN3k5e983eTl73zd5OXvfN3k5e982+C/m7uTl0D3yduL4m3+75O3fN7+CHYC+viqAXe1fN7+CjYVgK/0F3Jvk77Dvk7Dk77Dvk7Dk77Dvk7Dk77Dvk7Dk77Dvk2s/Na5OW1z8tJA8Xy9Cvl2rj+SgHyd0A++T3J37vkvz8lgL+7BpPFd0Hubm9gIEfDl316H4L+CK/75dN5ub3JwWdCsBdg0n9fBFoT++J7Dfe+9q75vcnBNa6AfPXzX5OWg9wZcEO286XybbycEO286XybbycEO286XybbycEO286XybbycEO286X1OkCnAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTAAAAAMBgEHAAA8AAADAASAAADDLyGaPDwhyAhfiOagF1y3e4b4KL79AJOHgov93OlcneG+L79A39XPq59XPgj73Pq59XPq59XPq58Td+/4Ldhd9h4T934U566C+E+CLf1Dobcym93vvd71sdjrVcV3oV5OJ32t3xXeg3YOurS8m+Tlv3wT+wkH++Xd75b98E/sJB/vl3e++w4R73w7ye5O77vkvyd34Y5PYMobcym93vvd71sdjrU3L6CPy35+Xegj8u9BH5d6CGd747u/P3fn7vzc2/5e8VwUewFsUqT8vQCvm6AUnL0Ar5ugFJy9AKE+soIuS9iYXgl33/XzbB5OX0J8Rd9g/4m/fd8T393wS3f798T3oLd8T393xF32D/ib9931PQXclAPi+TfBBy975fd81+uC72u/S83uTl9xXN3k4u7/cRwW++k/RPWq5d98nQCk4nT9hIBH5d98lg++bd/gh3sLpeKvfQf4Kt3u/fk8nL2Dvm7Bycdf730DDnBHvpfqw9XPq59XPgh73Pq59XPq59XPq58E/vfc+CS6eVPu/XJd7n5PcM8t+floXFc1+E+TSz8R70A7D97779x3elvv3Fc9ex+Tl73zd5OXvfN3k5e983eTl73zd5OXvfNvgv5u7k5dLfJ0KL4mhfu+ToV83v4Idh/XxVB96B3ze/go0A7Dv9Bdyb5O+gFfJ0ApO+gFfJ0ApO+gFfJ0ApO+gFfJ0ApO+gFfJoHn5qB8nLQPn5bBpYvl6d8ugdx/JQXJ3QXfJ7k793yX5+Sw/7tMG8V3YC3NzewwR8OXfXr4L+CK/75diebm9ycFnTsPtMG/r4ItN/fE9AJ9770Du+b3JwTUD6C56+a/Jy2AtwZcEOhPOl8mhPJwQ6E86XyaE8nBDoTzpfJoTycEOhPOl8mhPJwQ6E86X1OkCnAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADS21vb3YAAABsbXZoZAAAAADdPJ1V3TydVQAAdTAAAHkXAAEAAAEAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIAAAKSdHJhawAAAFx0a2hkAAAAAd08nVXdPJ1VAAAAAQAAAAAAAHkXAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAQAAAAAJ2AAACFAAAAAACLm1kaWEAAAAgbWRoZAAAAADdPJ1V3TydVQAAdTAAAHkXVcQAAAAAAC1oZGxyAAAAAAAAAAB2aWRlAAAAAAAAAAAAAAAAVmlkZW9IYW5kbGVyAAAAAdltaW5mAAAAFHZtaGQAAAABAAAAAAAAAAAAAAAkZGluZgAAABxkcmVmAAAAAAAAAAEAAAAMdXJsIAAAAAEAAAGZc3RibAAAAKVzdHNkAAAAAAAAAAEAAACVYXZjMQAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAAJ2AhQASAAAAEgAAAAAAAAAAQpBVkMgQ29kaW5nAAAAAAAAAAAAAAAAAAAAAAAAAAAAABj//wAAAD9hdmNDAUJAH//hACcnQkAflaAoBF5p8BQIAAADAAgAAAMB50IABbjAAAQBZN73wdocMqABAAUozjyAAAAAABhzdHRzAAAAAAAAAAEAAAAfAAAD6AAAABxzdHNjAAAAAAAAAAEAAAABAAAAHwAAAAEAAACQc3RzegAAAAAAAAAAAAAAHwAAaD4AAAfCAAAHkAAABB8AAAOAAAADXAAAA3AAAALnAAAC4gAAAuAAAALZAAAC0AAAAzgAAAMZAAADHAAAA4UAAAMmAAAC0wAAAwYAAALJAAACyQAAEtsAAMNJAADDSQAAw0kAAMNJAADDSQAAw0kAAMNJAADDSQAAw0kAAAAUc3RjbwAAAAAAAAABAAAAUAAAABRzdHNzAAAAAAAAAAEAAAABAAAARXVkdGEAAAA1bWV0YQAAAAAAAAAhaGRscgAAAAAAAAAAbWRpcgAAAAAAAAAAAAAAAAAAAAAIaWxzdAAAAAhYdHJhUEsHCLR+zCjXowcAAAAAANejBwAAAAAAUEsDBC0ACAAIAMmADVMAAAAAAAAAAAAAAAATAAAAW0NvbnRlbnRfVHlwZXNdLnhtbG2Oyw6CMBBFf6WZPQwaY4yhsPDxBfgBTRlKlT5CK8G/t8DOuJwz98ydsp7NwCYag3aWwy4vgJGVrtVWcXg09+wEdVU2H0+BpagNHPoY/RkxyJ6MCLnzZNOmc6MRMY2jQi/kSyjCfVEcUTobycYsLjegKq/UifcQ2W1OeKt9egXssuWWKg7aLP7K8a9i/OFHmXRLDleeFFxfrr5QSwcIiHoWxJoAAAAAAAAA4AAAAAAAAABQSwECLQAtAAgAAADJgA1Tz0L9Ff//////////GQAcAAAAAAAAAAAAAAD/////Zm9ybWF0cy9saXZpbmcvbGl2aW5nLmpwZwEAGAAguAAAAAAAACC4AAAAAAAAyu8AAAAAAABQSwECLQAtAAgAAADJgA1TtH7MKP//////////GQAcAAAAAAAAAAAAAAD/////Zm9ybWF0cy9saXZpbmcvbGl2aW5nLm1wNAEAGADXowcAAAAAANejBwAAAAAAOagBAAAAAABQSwECLQAtAAgACADJgA1TiHoWxP//////////EwAcAAAAAAAAAAAAAAD/////W0NvbnRlbnRfVHlwZXNdLnhtbAEAGADgAAAAAAAAAJoAAAAAAAAAX0wJAAAAAABQSwYGLAAAAAAAAAAtAC0AAAAAAAAAAAADAAAAAAAAAAMAAAAAAAAAIwEAAAAAAABCTQkAAAAAAFBLBgcAAAAAZU4JAAAAAAABAAAAUEsFBv////////////////////8AAA==)

Figure 6 - Evaluating Pixel Integral Value

![Table

Description automatically generated with low confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADMDMAAJKSAAIAAAADMDMAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTY6MjA6MTIAMjAyMTowODoxMyAxNjoyMDoxMgAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTY6MjA6MTIuMDMxPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAHaAj8DASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6I1DUrHSLCS+1W8t7G0ix5lxcyrHGmSAMsxAGSQPqaxP+Fj+CP+hy8P8A/g0g/wDiqPHn/Iu2v/Ya0r/04W9dJQBzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVXSUUAc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFV0lFAHN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVdJXN+PP+Rdtf8AsNaV/wCnC3oAP+Fj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8Aiq6SigDm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqukooA5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKrpKKAOb/AOFj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8AiqPHn/Iu2v8A2GtK/wDThb10lAHN/wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVdJRQBzf8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXSUUAc3/AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV0lc348/wCRdtf+w1pX/pwt6AD/AIWP4I/6HLw//wCDSD/4qj/hY/gj/ocvD/8A4NIP/iq6SigDm/8AhY/gj/ocvD//AINIP/iqP+Fj+CP+hy8P/wDg0g/+KrpKKAOb/wCFj+CP+hy8P/8Ag0g/+Ko/4WP4I/6HLw//AODSD/4qukooA5v/AIWP4I/6HLw//wCDSD/4qj/hY/gj/ocvD/8A4NIP/iqPHn/Iu2v/AGGtK/8AThb10lAHN/8ACx/BH/Q5eH//AAaQf/FUf8LH8Ef9Dl4f/wDBpB/8VXSUUAc3/wALH8Ef9Dl4f/8ABpB/8VR/wsfwR/0OXh//AMGkH/xVdJRQBzf/AAsfwR/0OXh//wAGkH/xVH/Cx/BH/Q5eH/8AwaQf/FV0lc348/5F21/7DWlf+nC3oAP+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iq6SigDm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iq6SigDm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iq6SigDm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqPHn/ACLtr/2GtK/9OFvXSUAc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VXSUUAc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VXSUUAc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VXSVzfjz/kXbX/sNaV/6cLegA/4WP4I/wChy8P/APg0g/8AiqP+Fj+CP+hy8P8A/g0g/wDiq6SigDm/+Fj+CP8AocvD/wD4NIP/AIqj/hY/gj/ocvD/AP4NIP8A4qukooA5v/hY/gj/AKHLw/8A+DSD/wCKo/4WP4I/6HLw/wD+DSD/AOKrpKKAOb/4WP4I/wChy8P/APg0g/8AiqP+Fj+CP+hy8P8A/g0g/wDiqPHn/Iu2v/Ya0r/04W9dJQBzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVXSUUAc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFV0lFAHN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVdJXN+PP+Rdtf8AsNaV/wCnC3oAP+Fj+CP+hy8P/wDg0g/+Ko/4WP4I/wChy8P/APg0g/8Aiq6SigDm/wDhY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqukooA5v8A4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKrpKKAOftvH3g+8uorWz8WaHPcTOI4ootShZ5GJwFUBskknAAroK5vx5/yLtr/wBhrSv/AE4W9dJQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFFFFABRRRQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFFFFABRRRQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9AHSUUUUAFFFFABRRRQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFFFFABRRRQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFFFFABRRRQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9AHSUUUUAFFFFABRRRQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFFFFABRRRQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFFFFABRRRQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQBzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb10lABRRRQB4lZ2cB+E+h+O1iRfFFxqVpczaiFHnyma7WJ4Wf7xj8tymzoAoGOK9trk7f4eafb3dv/AMTHUpNNtb37fb6S8kf2aGbcWDDCCQgOSwUuVBwccDHWUAFc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9AHSUUUUAFedafo8emftASz/a7u7nvPD80jyXUu/YPtSbY0AwqooOAAPUnJJJ9FrlT4IkPjBfEZ8T6z9qWMwCLZaeWIDIJDDjyM7cgDOd+P4u9AHVUUUUAc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFBIVSWOAOST2oooA8Mj8XaD4g+KPhXxPceINMy+o3NvaW322PdaWv2WZUZ13fK8shB5APMa9Rivc6zdR0K21PWNI1Kd5Vm0maSaBUICszxPEd2Rkja5PBHOPpWlQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFeFRBdGtfDtzcaNqFp41/wCEghh1G/ewlX7SslwY5AborskjZGG1QxwNuANvHutc/H4UD6zBqGra1qWrfZJWmtba68lIYJCCNwWKNNxAJA3lsZyOeaAOgooooA5vx5/yLtr/ANhrSv8A04W9dJXN+PP+Rdtf+w1pX/pwt66SgArj/ilo6av8OdZE93dwxW1hcztFby+Ws5WF9qyEfMVBwdoIBIGcjIPYVkeJdAPiXRptMbVL3ToLhHinNmId0sbKVZCZI3wMHquD70Ac/qOjx638HbW1nu7u3gXSkklS1m8ozqIP9W7D5thJBIUgnGCcEg6fw4/5JZ4U/wCwLZ/+iEoXwhMvhRdBXxNq4iUeWLnZa+b5OzZ5X+o27cc527s/xdqueGPD3/CL6Fb6TFqd7qFtaxpDbm8EW6KNFCqgMaJkADq2T70AbFc348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb0AdJRRRQBx/xS0dNX+HOsie7u4YrawuZ2it5fLWcrC+1ZCPmKg4O0EAkDORkHnfFCLN4K8DQm2j1YvJb/wDEhkGRqY+znKngrhMiTL4TKDcRwa7vxLoB8S6NNpjape6dBcI8U5sxDuljZSrITJG+Bg9VwfesseA4xp2mQf2/q/2vSXJsdQH2cTQoUCGPAh8tlIH8SE55zwMAGb8JDGug6tAkK6fJHq0xfRlVlXStwUiBQQBg/wCsyo2EyHbkc13tZGgeHLfQFvHS6ur67vp/Pu7y7ZTLO+0KM7FVQAqqoCqBgeuSdegDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKwvFlh4an0lr/xlb2k+nacrTsL5fMhTjG4xnKs2MgHBIyQOpzu1z/inwlH4qbTjNqt/Yf2fcfaY1tPJZXkH3WdZY3VtvVeODz1AIAPNpNOurT4c+D7LUNPa9Mmqyy2/ha7JZrm2bzWigbIIHkxsj/vMIpQKSMCus+EhjXQdWgSFdPkj1aYvoyqyrpW4KRAoIAwf9ZlRsJkO3I5rXuvBjXsdlJdeItXk1GwmeW11MC2WaMOu1o9qwiNlI7MhOec8DF/QPDlvoC3jpdXV9d30/n3d5dsplnfaFGdiqoAVVUBVAwPXJIBr1zfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb0AdJRRRQBgeLdMsNRsbdtS8Mv4mWGXKWQELKpKkeYUmdIzgcA8kbjjqa870bwrdeJPhz4ctorXS9SbRdYnlu9I1OR1igGJlFoS0TkmLzUAymMKNvG016frGjTapJby2mtalpM0AYb7FoyJFbGQySo6H7owduRzggEg5sHgmOx0yG10jXNW06ZZ5Lie8hkieW7kk++0okjZGJODwo24AXA4oAZ4B1CwudKvrCx0K20CbS76S0u7C0C+SkoAbchVVDKysrZKg88gYrqay/D/h+08OWMtvaPNPJcTtc3NzcPuluJWxudyABnAAwAAAAAAABWpQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFcP8AEXxHYWf9n+HLzWLTSP7YZvtV1dXKwCO0THm7HJH7xsqi4ORuZv4K7iigDxXw1oUHjH4W+FYdCi0PWYdF1SaW50+9uB5LL+/VUbbHJg4kRgCvTB9K9B8A6hYXOlX1hY6FbaBNpd9JaXdhaBfJSUANuQqqhlZWVslQeeQMVJB4MWw0Ox0zR9d1bTVsnkZJrd4WaQSMWZXWSNkYZbj5cjHB650fD/h+08OWMtvaPNPJcTtc3NzcPuluJWxudyABnAAwAAAAAAABQBqVzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb0AdJRRRQBx3jzwpc+JL7QrmDTNJ1aHTZ5ZJ7HVpCkUweIoOkUgyCQeV7Vy9z430i28H2ug2K6f4LuLu/n024RpooIbDyiDcvG3yqxwwCEAEtIrEcGvRNY0afVJrea01zUtIlgV1zZGIrIG2k7kljdSRtGDjIywBwxBd4f0Cz8N6StjYGWQF2lmnnffLcSscvI7d2Y8nGB2AAAAAOQ+C1zpLeA3stEurWWGz1G9RYreYP5UZuZTHnBOAUwRnqOa9CrM0DQrbw7pr2Nk80kTXM9yTMQW3SytIw4A4y5x7Y61p0Ac348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAUUUUAFFFFABXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAUUUUAFFFFABXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAUUUUAFFFFABXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQBy3xFiefwlFFFPJbPJq2mKs0QUvGTfwAMu4FcjqMgj1BqX/hF9X/6HvxB/340//wCRaPHn/Iu2v/Ya0r/04W9dJQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/Itc/wCNPDmqQ6DbNJ401ycHVtNUJJDYgAm+gAb5bYHKkhh2yBkEZB9Erm/Hn/Iu2v8A2GtK/wDThb0AH/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQB53408OapDoNs0njTXJwdW01QkkNiACb6ABvltgcqSGHbIGQRkHoP+EX1f/oe/EH/fjT//AJFo8ef8i7a/9hrSv/Thb10lAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i1z/AI08OapDoNs0njTXJwdW01QkkNiACb6ABvltgcqSGHbIGQRkH0Sub8ef8i7a/wDYa0r/ANOFvQAf8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHnfjTw5qkOg2zSeNNcnB1bTVCSQ2IAJvoAG+W2BypIYdsgZBGQeg/4RfV/+h78Qf9+NP/8AkWjx5/yLtr/2GtK/9OFvXSUAc3/wi+r/APQ9+IP+/Gn/APyLR/wi+r/9D34g/wC/Gn//ACLXSUUAc3/wi+r/APQ9+IP+/Gn/APyLR/wi+r/9D34g/wC/Gn//ACLXSUUAc3/wi+r/APQ9+IP+/Gn/APyLXP8AjTw5qkOg2zSeNNcnB1bTVCSQ2IAJvoAG+W2BypIYdsgZBGQfRK5vx5/yLtr/ANhrSv8A04W9AB/wi+r/APQ9+IP+/Gn/APyLR/wi+r/9D34g/wC/Gn//ACLXSUUAc3/wi+r/APQ9+IP+/Gn/APyLR/wi+r/9D34g/wC/Gn//ACLXSUUAc3/wi+r/APQ9+IP+/Gn/APyLR/wi+r/9D34g/wC/Gn//ACLXSUUAed+NPDmqQ6DbNJ401ycHVtNUJJDYgAm+gAb5bYHKkhh2yBkEZB6D/hF9X/6HvxB/340//wCRaPHn/Iu2v/Ya0r/04W9dJQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/Itc/wCNPDmqQ6DbNJ401ycHVtNUJJDYgAm+gAb5bYHKkhh2yBkEZB9Erm/Hn/Iu2v8A2GtK/wDThb0AH/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQBzf/CL6v8A9D34g/78af8A/ItH/CL6v/0PfiD/AL8af/8AItdJRQB53408OapDoNs0njTXJwdW01QkkNiACb6ABvltgcqSGHbIGQRkHoP+EX1f/oe/EH/fjT//AJFo8ef8i7a/9hrSv/Thb10lAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i1z/AI08OapDoNs0njTXJwdW01QkkNiACb6ABvltgcqSGHbIGQRkH0Sub8ef8i7a/wDYa0r/ANOFvQAf8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHN/8Ivq/wD0PfiD/vxp/wD8i0f8Ivq//Q9+IP8Avxp//wAi10lFAHn/AIs0HUbLS7G4ufFmsahEmtaXutrmKzEb5v4ByY4FbjOeGHI7jivQK5vx5/yLtr/2GtK/9OFvXSUAc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFFFFABRXnU2vXtr8QtK0rTPFo126ub2ZdS0mOK32WNuEZt52L5kZVvLUeY53FsdenotABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lFFFABRXL/EO88Qaf4L1C88L3FpaT21tNPLc3CGRo0SJm/dpjDMWAHzHABJw2MGLU7/AMRT/DO2vtDubSHUpbBJpru6jLCIeVuZ0jAwz5xhThecnONpAOtorE8Fahdav4B8P6lqEvnXd5pltPPJtC73eJWY4AAGSTwBitugDm/Hn/Iu2v8A2GtK/wDThb10lc348/5F21/7DWlf+nC3rpKACiis3WNO1DUlgjsNauNIjRi0r2sETyycYCgyq6qvJJ+Uk4GCOcgGlRXlujeL9e13RvCumJqQiutYur1ZNZt4E3S2tqzASxoylA0mI+SpXDMQOVx1Pg/U9Sl1LxBoesXRvptGvEjivWREeeKSJZU3hAF3LuKkqqg4HHWgDqa5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooAKKwPFtzFaWNvNeeLE8L2glxJdE26tKxU7UDzqyDuSNpJwMEAHPO6P4x1f/hV+nX9yn2zW9Tme10sSReUbzLuIZmTA2gxKJWxj5QxAHAoA9BorlPhtqWp6p4NWXXL46hexXt3bPcmJIzIIriSNTtQBRwo6CuroA5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3rpKACiisDxbcxWljbzXnixPC9oJcSXRNurSsVO1A86sg7kjaScDBAByAb9FeW6X4q8Qatofg+yudSk0+fXbi6B1QWqLNNBFuaJljdSiPKgRuVIxuwBkY6fwLrV7qP9uabql2L650XU3svtYRVM6bEkVmCgKHAfacADK5wM4AB1dc348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb0AdJRRRQAUVx3jy/1ayvtCTT7vVrKwmnlXULjSdO+2SooiJT5fJlwC+0Z296afFcVv4HtrnQdUl8RX9/MbTT3ukRJJbhieJFRECCMBmYbVIWM556gHZ0Vynw21LU9U8GrLrl8dQvYr27tnuTEkZkEVxJGp2oAo4UdBXV0Ac348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb10lABRRXG+O/FEuj6houj211PZS6rJKz3NrZtdzpFEoLCKJVbc5LIMlWCruJBxQB2VFea6pr18/h/RZfD3iLXr62bVnt9UvoNJSW8t0WOTKPAtt8hEioOYgeR65rr/CWo2mp6EJrHW7nWlWZ43uLuJIpkdTho3jWOPYynsVB9aANuub8ef8AIu2v/Ya0r/04W9dJXN+PP+Rdtf8AsNaV/wCnC3oA6SiiigAorjfiFrl1of8AY8j6lNoujT3Ri1HVYIEka1ypEQO9XVFaQgF2UgcDI3ZHP6T4r8QazY+HtLi1KWL+3L28e31k20azy6fANySiNl2B5MxjJTG0k7QSMAHqVFct4P1PUpdS8QaHrF0b6bRrxI4r1kRHnikiWVN4QBdy7ipKqoOBx1rqaAOb8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt66SgAoorkfFOqX7eMfD/AIcsNTfSU1OO6nlu4o42lbyVTEUfmKyAneWJKk4Q4xnIAOuorydvFfiO70e2t01HUC2neJLjSdU1HSNNW5meGONyshiEUgUljEGwmAc9M4He+EtRtNT0ITWOt3OtKszxvcXcSRTI6nDRvGscexlPYqD60Abdc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvQB0lFFFABRXD+HNW8SyfE/WtJ8RXdo1vHp8N3bWtnH8kAeaVADIwDOxVFJJwMkgKMZJp2q+Jh8Yp9K1i7tBpkmkyXVtZWsedm24VFd5GG5nKtyBhRwACRuIB3FFcLr9zr3h7XtDnXxFJenVNYW0bSmtYVh8ht5JTC+YGjQBixcglTwAwUd1QBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lAHN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb10lABRRRQBxOo6D4n8R6hpCa3Do9rb6XqKXwvrO4leabyydqrG0YEW8EBv3j/KWXnOR21FFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9AHSUUUUAYHjSx1fVvCl/pehW9lLLqFtLau95dPCsSuhXcNsb7iCenH1qhHY+KY/h9HpI07SDqC24siP7TlEXleVt8zf9nzuz/Btxj+LtXXUUAc94G07VtF8G6bo+uQWUc2m2sNoj2dy8yyrHGq7zujQqSQfl5x610NFFAHN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9dJQAVyvj3SfEOu6Zb6doP2M2U0hGppPeSWsk0OP9UkiRuVDdGOAduQMZyOqooA4m78Pa9ONB1Oz07R7DUtBleO3sI72R7aS2eMIyeYIVKEYBGI2A2Ad+NXwrod9ps+r6nrT251LWLsXE0dszNFAixrHHGrMAWwqAltq5JPAroaKACub8ef8i7a/wDYa0r/ANOFvXSVzfjz/kXbX/sNaV/6cLegDpKKKKAMvWJNfikt38P22m3aYYTw31xJbnPG1lkVH6YYFSvOQcjGDzWi/DWzj06NteaUX63dzeINLvri1jtDcMC8UZjZCV+UckDJ3HA3EV3NFAHLeAPCL+DtCuLOed5pZr24nJN3NOoR5nZMeYeG2sN2By2SSTyepoooA5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3rpKACsvWJNfikt38P22m3aYYTw31xJbnPG1lkVH6YYFSvOQcjGDqUUAcFZ+DL2w8Iyadc6LoOuyXmoS31xYXszR2lsZCW2xZhkyFPcquSWbjOK2fBPhVPCmk3MXl2kVxfXLXdxFYxeXBExVVEca/3VVFUHjOCcDOB0lFABXN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb0AdJRRRQBlaxL4ghmt38P2mm3kW1xPFe3Ulu2fl2MrrHJwPnBUrzlSCMEHnNH+GtmLNbjxDJNJq0l5c38kumXtxaJDJcFTIiGN1ZlARVy3JwTgZIruKKAOW8AeEX8HaFcWc87zSzXtxOSbuadQjzOyY8w8NtYbsDlskknk9TRRQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lABXM+J9C1K71zRdd0L7JJfaUZkNveSNFHNFMoDjzFVipBRCDtOcY75rpqKAOL0jRPE/h61u7myi0i9vtV1GW/v7ea5kgjiLIiKscojYttEagkoN2Sfl6VpeD/D11ocOp3OpyQPqGr3731yltnyomKqgRCQCwCoPmIBJJOB0HRUUAFc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9AHSUUUUAct4p0HVL7xDoWtaRHY3r6UZwbHUJnhjYyKAJVdUfEi7cDKnh25HfntP+HusaQ9rrGnDS01WDVrm+XTRLIlpHDcRrG8CSBCw+4sm7y8Fs/KAa9KooA57wrod9ps+r6nrT251LWLsXE0dszNFAixrHHGrMAWwqAltq5JPAroaKKAOb8ef8i7a/wDYa0r/ANOFvXSVzfjz/kXbX/sNaV/6cLeukoAKwfFmly6vZQWy+HdE1+FZPMaHWJiiRsBgMo8mXJwWHQYB963qKAOM0Pw3rXg7w/Da+HrbR7uaa5lub2GR3soVL8qsOxJNqoAqBSpyoByD10fB/h660OHU7nU5IH1DV79765S2z5UTFVQIhIBYBUHzEAkknA6DoqKACub8ef8AIu2v/Ya0r/04W9dJXN+PP+Rdtf8AsNaV/wCnC3oA6SiiigDiNP0jxXH8S7rxBd6foyWd3Zw2LLFqcryRrHJI3mAG3AYnzMbcjGPvGhtJ8Vt8To/EP9n6N9iSybTtv9qS+YY2mV/Nx9nxuwv3M4yfvd67eigDg7XRfFyeObvXtS07Rb9txt7Bzqs0f2K0JGQsX2YgyNjLNu5wFBCiu8oooA5vx5/yLtr/ANhrSv8A04W9dJXN+PP+Rdtf+w1pX/pwt66SgDm/Hn/Iu2v/AGGtK/8AThb10lct8RYEuvCUVvKZFSbVtMRjFI0bgG/gB2upDKfQggjqDUv/AAgekf8AP54g/wDCj1D/AOP0AdJRXN/8IHpH/P54g/8ACj1D/wCP0f8ACB6R/wA/niD/AMKPUP8A4/QB0lFc3/wgekf8/niD/wAKPUP/AI/R/wAIHpH/AD+eIP8Awo9Q/wDj9AHSVzfjz/kXbX/sNaV/6cLej/hA9I/5/PEH/hR6h/8AH65/xp4K0u20G2eO61wk6tpqESa/fOMNfQKeGmIzgnB6g4IIIBoA9Eorm/8AhA9I/wCfzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/x+gDpKK5v/AIQPSP8An88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8foA6Siub/wCED0j/AJ/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/H6ADx5/yLtr/wBhrSv/AE4W9dJXnfjTwVpdtoNs8d1rhJ1bTUIk1++cYa+gU8NMRnBOD1BwQQQDXQf8IHpH/P54g/8ACj1D/wCP0AdJRXN/8IHpH/P54g/8KPUP/j9H/CB6R/z+eIP/AAo9Q/8Aj9AHSUVzf/CB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wAKPUP/AI/QB0lc348/5F21/wCw1pX/AKcLej/hA9I/5/PEH/hR6h/8frn/ABp4K0u20G2eO61wk6tpqESa/fOMNfQKeGmIzgnB6g4IIIBoA9Eorm/+ED0j/n88Qf8AhR6h/wDH6P8AhA9I/wCfzxB/4Ueof/H6AOkorm/+ED0j/n88Qf8AhR6h/wDH6P8AhA9I/wCfzxB/4Ueof/H6AOkorm/+ED0j/n88Qf8AhR6h/wDH6P8AhA9I/wCfzxB/4Ueof/H6ADx5/wAi7a/9hrSv/Thb10led+NPBWl22g2zx3WuEnVtNQiTX75xhr6BTw0xGcE4PUHBBBANdB/wgekf8/niD/wo9Q/+P0AdJRXN/wDCB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wo9Q/+P0AdJRXN/wDCB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wo9Q/+P0AdJXN+PP8AkXbX/sNaV/6cLej/AIQPSP8An88Qf+FHqH/x+uf8aeCtLttBtnjutcJOraahEmv3zjDX0CnhpiM4JweoOCCCAaAPRKK5v/hA9I/5/PEH/hR6h/8AH6P+ED0j/n88Qf8AhR6h/wDH6AOkorm/+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfoA6Siub/4QPSP+fzxB/4Ueof/AB+j/hA9I/5/PEH/AIUeof8Ax+gA8ef8i7a/9hrSv/Thb10led+NPBWl22g2zx3WuEnVtNQiTX75xhr6BTw0xGcE4PUHBBBANdB/wgekf8/niD/wo9Q/+P0AdJRXN/8ACB6R/wA/niD/AMKPUP8A4/R/wgekf8/niD/wo9Q/+P0AdJRXN/8ACB6R/wA/niD/AMKPUP8A4/R/wgekf8/niD/wo9Q/+P0AdJXN+PP+Rdtf+w1pX/pwt6P+ED0j/n88Qf8AhR6h/wDH65/xp4K0u20G2eO61wk6tpqESa/fOMNfQKeGmIzgnB6g4IIIBoA9Eorm/wDhA9I/5/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/AB+gDpKK5v8A4QPSP+fzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/wAfoA6Siub/AOED0j/n88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8AH6ADx5/yLtr/ANhrSv8A04W9dJXnfjTwVpdtoNs8d1rhJ1bTUIk1++cYa+gU8NMRnBOD1BwQQQDXQf8ACB6R/wA/niD/AMKPUP8A4/QB0lFc3/wgekf8/niD/wAKPUP/AI/R/wAIHpH/AD+eIP8Awo9Q/wDj9AHSUVzf/CB6R/z+eIP/AAo9Q/8Aj9H/AAgekf8AP54g/wDCj1D/AOP0AdJXN+PP+Rdtf+w1pX/pwt6P+ED0j/n88Qf+FHqH/wAfrn/GngrS7bQbZ47rXCTq2moRJr984w19Ap4aYjOCcHqDggggGgD0Siub/wCED0j/AJ/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/H6AOkorm/8AhA9I/wCfzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/x+gDpKK5v/AIQPSP8An88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8foAPHn/Iu2v/AGGtK/8AThb10lef+LPCWnaZpdjd21zrDyx61pe1bnW7y4jOb+AcxySsp69wcHnqK9AoA5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3rpKACiiigAooooAK5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooAKKKKACiiigDm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3rpKACiiigAooooAK5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3oA6SiiigAooooAKKKKAOb8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt66SgAooooAKKKKACub8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLegDpKKKKACiiigAooooA5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt66SgAooooAKKKKACub8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt6AOkooooAKKKKACiiigDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKKKKACiiigArm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SiiigAooooAKKKKAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoA5vx5/wAi7a/9hrSv/Thb10lc348/5F21/wCw1pX/AKcLeukoAKKKCMqQe/ocUAeczeLdYv8A4naHHplz5PhyW+udOdPKVvt0sVvM8jhiMhUkRUG3GSr5yMV6NXn8/wAKtOt9b8NTaLLfW9jpNxJJLA+s3jbUMLooiBkIX5mXONuV3A5BIPoFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lFFFAGbrGnahqSwR2GtXGkRoxaV7WCJ5ZOMBQZVdVXkk/KScDBHOeO0TxDd6t8NLHVdc8Ww6LGt1NE+sKkEX2yNJZI43XzQY0LhVY/Kc87QARjZ8e6T4h13TLfTtB+xmymkI1NJ7yS1kmhx/qkkSNyoboxwDtyBjORNF/wlVpo9pHp+jaDbvA3kmwGoy+UIAmEKSiAFSCMbPLIx/EMYoAi+Her6hrfhT7ZqU7Xa/a50tL14hG15bLIRFMVAAG5QDwACMEAZrqa5vwZ4dutAtdTl1BrdbnVNQlvpLa0JMFsXAGxCQC33dzNhdzMxwM10lAHN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvXSUAFYHi25itLG3mvPFieF7QS4kuibdWlYqdqB51ZB3JG0k4GCADnfrL1iTX4pLd/D9tpt2mGE8N9cSW5zxtZZFR+mGBUrzkHIxggHOeE5/EPizwBpd3c6zcadNLJIxvIbONZruAO4hkCyKUjLrsc/Ic54C54vfD7WL7WvDk82o3S3xt9QubWC+WMJ9riilKLIQoC5OCDtAGQcVgyeDPFNl4JfSdFn06OfUtRlu9SjS6kt0hhkJZ4LZ1jYrk4G8qDyxABI29j4btryx0eOyvNL0/S47ZRFb2+n3b3EaxgADlooyD2xg/WgDWrm/Hn/ACLtr/2GtK/9OFvXSVzfjz/kXbX/ALDWlf8Apwt6AOkooooA47x5f6tZX2hJp93q1lYTTyrqFxpOnfbJUUREp8vky4BfaM7e9N/teyufBVpfw+P3tLATETavdJbRTOcsPKO+NY42DYBBj3fLjg81vaxL4ghmt38P2mm3kW1xPFe3Ulu2fl2MrrHJwPnBUrzlSCMEHB0XQfEnhnR2bT10m/1HUNQmv9Shmmkt4VeXkiKQI5wpAHzJ8wyflPFAFr4d6vqGt+FPtmpTtdr9rnS0vXiEbXlsshEUxUAAblAPAAIwQBmuprm/Bnh260C11OXUGt1udU1CW+ktrQkwWxcAbEJALfd3M2F3MzHAzXSUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAVla5p9xdxLND4hv9FjgVmlNoluwcdct50T4xg9MdTnPFatYHjXRtQ8ReF59H0yeK3F86Q3UsjspW2LDztmAcsU3AA4HPUUActpOo+Mb34TS6vZapHJd3jzXVrd6nAm+3ssMYmCRIivIVVWAIA+fnO3aet8Fahdav4B8P6lqEvnXd5pltPPJtC73eJWY4AAGSTwBina/Z6h/wjUmn+HLKxkeSI24jurlreOKMoVyCsb5I4+XAGM8jHNfwNp2raL4N03R9cgso5tNtYbRHs7l5llWONV3ndGhUkg/Lzj1oA6Gub8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLegDpKKKKAON+IWuXWh/2PI+pTaLo090YtR1WCBJGtcqREDvV1RWkIBdlIHAyN2RzY8X67/wAIHpmq3eqXFtpFxqkiS6+tmnnjT/n8i4MZQom8iMFimArbtq5463xToOqX3iHQta0iOxvX0ozg2OoTPDGxkUASq6o+JF24GVPDtyO/N2vw81nT/sV/bR6TLPBrVxqv9jPNIlnEZI/LURyeWSGTG8N5YG53wFyDQB0Pw61i/wBc8O3N3eXcmoWn26VdN1CaFYpLy1GNsjKoUA7t6ghVyqqcc5PWVy/grw3d6CdZur5LO2l1a/N4bGwdngtjsVDtZlUszbN7NtXljxxk9RQBzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb10lABXD+HNW8SyfE/WtJ8RXdo1vHp8N3bWtnH8kAeaVADIwDOxVFJJwMkgKMZPcVxGn6R4rj+Jd14gu9P0ZLO7s4bFli1OV5I1jkkbzADbgMT5mNuRjH3jQAmnar4mHxin0rWLu0GmSaTJdW1lax52bbhUV3kYbmcq3IGFHAAJG40tV16+sPHGmWGmeLl1bULjVPLvNCjityltaEMSzBV81CilDuZ8M3YBgBebSfFbfE6PxD/AGfo32JLJtO2/wBqS+YY2mV/Nx9nxuwv3M4yfvd6XXdB8TeJ5LPT9Uh0e2sbXU4r1dRtriVrjbFJvQJE0eI3IAUt5jYBbAOcUAdtXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFAHD+HNW8SyfE/WtJ8RXdo1vHp8N3bWtnH8kAeaVADIwDOxVFJJwMkgKMZNKbXr21+IWlaVpni0a7dXN7MupaTHFb7LG3CM287F8yMq3lqPMc7i2OvS9p+keK4/iXdeILvT9GSzu7OGxZYtTleSNY5JG8wA24DE+ZjbkYx940uo6D4n8R6hpCa3Do9rb6XqKXwvrO4leabyydqrG0YEW8EBv3j/KWXnOQAYUnijxFJ4Nn8ewaq62sWoMqaN5EXkPapceQcts8zzCoL5D4zgbcZr1OvOR4G15dGk8Iq+mjw3JqRuftnnSfahbtN9oaDytm3O8mPf5n3DnbnivRqAOb8ef8AIu2v/Ya0r/04W9dJXN+PP+Rdtf8AsNaV/wCnC3rpKACuH8Oat4lk+J+taT4iu7RrePT4bu2tbOP5IA80qAGRgGdiqKSTgZJAUYye4riNP0jxXH8S7rxBd6foyWd3Zw2LLFqcryRrHJI3mAG3AYnzMbcjGPvGgDM8L6/ePriQ+K/Eeu2N9NqVzDb6ddaUlvaTosj+UiTNbDcTGFYbZcn9Kz5vGOuDxk2mrrFzHrx1oQxeHDZx/Z3sN+POEhTeR5StJv8AMwH+Xb/DXS3+heJ/Et3pVv4hi0e0sdN1CK/aeyuJZZLh4W3RqI2jURAnBPzvwMDOcjFl+HetTaTLoMkOjtaSa1/av9tmeT7YH87zA/l+XjzQv7rf5v3e2PloA9Prm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLegDpKKKKAOH8Oat4lk+J+taT4iu7RrePT4bu2tbOP5IA80qAGRgGdiqKSTgZJAUYya+sR67pnizw7pWneL9XvLjULsy3ENxBZeWlpEN0pOy3VuSUQYI5fParOn6R4rj+Jd14gu9P0ZLO7s4bFli1OV5I1jkkbzADbgMT5mNuRjH3jWrpmgXkfjrWfEOqSQSefFFZ6ckbEmC3Ubn3ZAwzyEk4yMKnPFAHKaf43j1nW5bu+8R6lpFlHqb2NtbW2mA2snlymMedcvC6h5GGMCRMAqANxyfTa84k8B662l3fhZZNOHh661U332zzX+0xxNOLhoRDs2k+ZlQ/mcKc7cjFej0Ac348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFFFFABRRRQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFFFFABRRRQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9AHSUUUUAFFFFABRRRQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFFFFABRRRQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFFFFABRRRQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9AHSUUUUAFFFFABRRRQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFFFFABRRRQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFFFFABRRRQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQBy3xFadfCUTWccctwNW0wxRyyFEZvt8GAzAMVBPUgHHoelS/bvG//AEL3h/8A8H0//wAh0ePP+Rdtf+w1pX/pwt66SgDm/t3jf/oXvD//AIPp/wD5Do+3eN/+he8P/wDg+n/+Q66SigDm/t3jf/oXvD//AIPp/wD5Do+3eN/+he8P/wDg+n/+Q66SigDm/t3jf/oXvD//AIPp/wD5Drn/ABpeeMW0G2F1oWhxp/a2mkNHrUzkt9ug2jBtRwWwCc8Ak4OMH0Sub8ef8i7a/wDYa0r/ANOFvQAfbvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHXSUUAc39u8b/9C94f/wDB9P8A/IdH27xv/wBC94f/APB9P/8AIddJRQBzf27xv/0L3h//AMH0/wD8h0fbvG//AEL3h/8A8H0//wAh10lFAHnfjS88YtoNsLrQtDjT+1tNIaPWpnJb7dBtGDajgtgE54BJwcYPQfbvG/8A0L3h/wD8H0//AMh0ePP+Rdtf+w1pX/pwt66SgDm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAOb+3eN/+he8P/wDg+n/+Q65/xpeeMW0G2F1oWhxp/a2mkNHrUzkt9ug2jBtRwWwCc8Ak4OMH0Sub8ef8i7a/9hrSv/Thb0AH27xv/wBC94f/APB9P/8AIdH27xv/ANC94f8A/B9P/wDIddJRQBzf27xv/wBC94f/APB9P/8AIdH27xv/ANC94f8A/B9P/wDIddJRQBzf27xv/wBC94f/APB9P/8AIdH27xv/ANC94f8A/B9P/wDIddJRQB5340vPGLaDbC60LQ40/tbTSGj1qZyW+3QbRg2o4LYBOeAScHGD0H27xv8A9C94f/8AB9P/APIdHjz/AJF21/7DWlf+nC3rpKAOb+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DrpKKAOb+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DrpKKAOb+3eN/8AoXvD/wD4Pp//AJDrn/Gl54xbQbYXWhaHGn9raaQ0etTOS326DaMG1HBbAJzwCTg4wfRK5vx5/wAi7a/9hrSv/Thb0AH27xv/ANC94f8A/B9P/wDIdH27xv8A9C94f/8AB9P/APIddJRQBzf27xv/ANC94f8A/B9P/wDIdH27xv8A9C94f/8AB9P/APIddJRQBzf27xv/ANC94f8A/B9P/wDIdH27xv8A9C94f/8AB9P/APIddJRQB5340vPGLaDbC60LQ40/tbTSGj1qZyW+3QbRg2o4LYBOeAScHGD0H27xv/0L3h//AMH0/wD8h0ePP+Rdtf8AsNaV/wCnC3rpKAOb+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOukooA5v7d43/AOhe8P8A/g+n/wDkOj7d43/6F7w//wCD6f8A+Q66SigDm/t3jf8A6F7w/wD+D6f/AOQ65/xpeeMW0G2F1oWhxp/a2mkNHrUzkt9ug2jBtRwWwCc8Ak4OMH0Sub8ef8i7a/8AYa0r/wBOFvQAfbvG/wD0L3h//wAH0/8A8h0fbvG//QveH/8AwfT/APyHXSUUAc39u8b/APQveH//AAfT/wDyHR9u8b/9C94f/wDB9P8A/IddJRQBzf27xv8A9C94f/8AB9P/APIdH27xv/0L3h//AMH0/wD8h10lFAHnfjS88YtoNsLrQtDjT+1tNIaPWpnJb7dBtGDajgtgE54BJwcYPQfbvG//AEL3h/8A8H0//wAh0ePP+Rdtf+w1pX/pwt66SgDm/t3jf/oXvD//AIPp/wD5Do+3eN/+he8P/wDg+n/+Q66SigDm/t3jf/oXvD//AIPp/wD5Do+3eN/+he8P/wDg+n/+Q66SigDm/t3jf/oXvD//AIPp/wD5Drn/ABpeeMW0G2F1oWhxp/a2mkNHrUzkt9ug2jBtRwWwCc8Ak4OMH0Sub8ef8i7a/wDYa0r/ANOFvQAfbvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHXSUUAc39u8b/9C94f/wDB9P8A/IdH27xv/wBC94f/APB9P/8AIddJRQBzf27xv/0L3h//AMH0/wD8h0fbvG//AEL3h/8A8H0//wAh10lFAHn/AIsu/FUul2Karo2j21oda0vzJbbV5ZpF/wBPgxhGtkB5wPvDA556H0Cub8ef8i7a/wDYa0r/ANOFvXSUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAUUVh+LPF2l+DNGbUdXaZhhvKt7aIyTTFULkKo9FUkk4AAJJAoA3KKwL/wAX2llpek3UVneXk+sFVsbK3VPOlJjMhHzMqLtRWJJYDjqTjNnw74it/Edpcyw21zZz2dy9pdWt0qiSCVcHadrMpyrKwKsQQw56gAGtXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFABRVLV9VtdD0e51LUGZbe2Qu+1dzN6Ko7sTgADqSBWDD8QdOufDWl6rbWN/LNq8zQWWmqkf2mV1LbxgvsAUI7ElwAB1yQCAdXRWT4f8RW3iG3umhguLS5srhra7s7pVEtvIADhtpZTlWVgVYggjnrWtQBzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb10lABRRWH4g8TpoF5ptmumX2p3epyPHbwWZiBJRC7EmWRFA2g96ANyiuf1XxjaaB4Y/tnX7K908sxSOwZUmuZXwxCKsTOrMQpPDYAySQAcaWiarBr2gafq9mkiW+oWsd1EsoAdVdQwDAEjODzgmgC9XN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb0AdJRRRQAUVmavqt5prRCz0HUNX8zO42Uluvl4x97zpU657Z6HOOKwbX4kWV3p8c0Oj6q15Pfy2EGngQNNNJF/rCrCUx7Fw2WLgZUjrjIB2NFZXh7xDa+I7Gae1int5ba4e2ubW5ULLbyr1RgCRnBBBBIIYEEg1q0Ac348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFFFY2u+JYdEurGySyu9R1C/L/ZrOzCb3VAC7kyMqKq5XJZhyygZJAoA2aK5UfEHTZdIsrq0sr+5u727exi0tI0W5FxGGMkbBnCKUCMSS2MDgnIzqeHfEVv4jtLmWG2ubOezuXtLq1ulUSQSrg7TtZlOVZWBViCGHPUAA1q5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooAKK5vQfHej+JPEeoaPpH2iV7CNZHuTFthlBdkPlseXAaNhuA25HBNGm+O9H1fxpc+GdO+0T3NrbvPJciLFvlJBG8aufvMrEZwCB0zkEAA6Siua0zxk+r6ncW2n+HNWltra+kspb8tarCrxttZsGbzCoI7Jn2rpaAOb8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt66SgAoorm9B8d6P4k8R6ho+kfaJXsI1ke5MW2GUF2Q+Wx5cBo2G4DbkcE0AdJRXPXvjXTbLxxp3hZo7ma+vwxEkSAxQERvIBIxIILLE5AAPTnAINUx8RNON8g+waiNMe/OnJrJjj+ytOGKbfv+Zt8wGPfs2bu+MGgDra5vx5/wAi7a/9hrSv/Thb10lc348/5F21/wCw1pX/AKcLegDpKKKKACiub0Hx3o/iTxHqGj6R9olewjWR7kxbYZQXZD5bHlwGjYbgNuRwTVe78dTadd2EOp+E9bs1v7yOyhleSzZTI5OOEuGbAALHAOApPagDrKK5q48axWWsW1pf6Lqtpa3d99gg1GaOMQvN8wA2+Z5oDMhCsUCnKkHDAnpaAOb8ef8AIu2v/Ya0r/04W9dJXN+PP+Rdtf8AsNaV/wCnC3rpKACiiuZsvG8Nzrljpl7o2raW2prI1hNfRRqlzsAYrhXZ4225bbIqHAbjIIoA6aiuSj+ImmyXUJFhqA0u4vfsEGsFI/ssk+4oFGH8zBcFA5QKT3wQTYuPGsVlrFtaX+i6raWt3ffYINRmjjELzfMANvmeaAzIQrFApypBwwJAOlrm/Hn/ACLtr/2GtK/9OFvXSVzfjz/kXbX/ALDWlf8Apwt6AOkooooAKK5my8bw3OuWOmXujatpbamsjWE19FGqXOwBiuFdnjbbltsiocBuMgil/wCE1ii1uzsL/RtVsIr+5e1tL65jiWGeVQxCgCQyLuCMRvRc4+lAHS0VzVx41istYtrS/wBF1W0tbu++wQajNHGIXm+YAbfM80BmQhWKBTlSDhgT0tAHN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9dJQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lABXKfEvVtO0v4c66up39rZtdadcwwC4mWMzSGJsIuSNzH0HNdXRQB5DrGs6Pq3g3wRHHrNna2Cyxrca/Bcj/AIlssdvnYJAdscj52/PlcEgq2QK6H4TuF0rWbW2uI9SsoNTk+z60hLHUwyqzSM5JEjKxMZdTtOzAAAxXe0UAFc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9AHSUUUUAcp4u0nXdU1jRpdNtdNvdPsJTdSWt5eyWxkuFx5LZWKTKplmwQPm2H+GvOfCt3Ppem+BNe8RLaWGlWdzqVtJdC4LxxGYtseRmRRGN6smeR8y8jdivcaKAOL8CyR6n4h8W69YkSadqF/ElpcL925EVvHG0iHoy7wyhhwdvFdpRRQBzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb10lABXKeM28IfadMHjHUl0yWMyy2Vy2oy2O1gArgTI6ckOBtLZI3YBAOOrooA800bxAll8KdVuvEeshLCaa7g0e91SYRyXdsQ3kHc+C5ZQSpPLKAec5rd+FeqWGpfC7w6unX1tdta6XawXAgmVzDIsKZRsH5WHcHmuuooAK5vx5/yLtr/ANhrSv8A04W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooA53x1r8vh3wjdXNkA+oTlbSwj/56XMrBIx/30wJ9ga53VPDml+EtB8LEeKNP0C60MNFBd6ptMN20iYm3qZELMxy+QwIPNeiUUAcN8MLW9+z6/rF9Otwusaq1zbzJbtAk0QijjEixsSVVihK5Jyu05Oc13NFFAHN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvXSUAFcZ44jsbLWtG16TxVpfhy/sxPBE2q7WguYpAu9ChkjJIKxsCrcY5Bzx2dFAHhYt5YdEsJfEN8NLttZ8TXWpDX5I2tDZKEIRowx/cmXadvmlhtYhg5Ndv8ACdwulaza21xHqVlBqcn2fWkJY6mGVWaRnJIkZWJjLqdp2YAAGK72igArm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLegDpKKKKAPNNK8VeH7n47aotvrumSmfR7W2iEd5G3mSrNOWjXB5YZGVHIyKH8V+Hj8fIEGvaZuGiSWRX7ZHkXBukxD1/wBZwfl68dK9LooA8l1i68P22rW0nw71u4PiObXlNzpdvqM0quWlIuvOtWYrGoXzCWKLghcEHGfWqKKAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoAK8z0vxV4fufjrqgtdd0yZp9HtbaEJeRnzJlmnJjGDywyMgcjI4r0yigDxv8AszxTovjHwf8A2npujzaheaxd3VxdRapKftEjWkwOQbcbFSMbUGW4RVPUtUWraeHtE8F+GPFum6tC+txz/wBmwW4lu7NRdrNL5kqSkIiNu5aMHO1M5PPtNFABXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFAHmmleKvD9z8dtUW313TJTPo9rbRCO8jbzJVmnLRrg8sMjKjkZFasLDxN8WppPvWPhSDyl/uvezrliPdIsD/tsfQ121FAHlXirV9O1DxJpM2keJDrep22tRLH4ZlMY8ohikj+WirKhRd7h5SyDGccqR6rRRQBzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb10lAASFUljgDkk9q8w0Txh4f8cfEC11T/AISDS47TTWlt9GsDex/abudgUknMedyrtyqLjJBZjwyivT6KAPEtPu7WX4UaF4DSeOTxLBqVraz2AOZoDDdrJJM6feEeyMtvIwQw5ORnY8Vavp2oeJNJm0jxIdb1O21qJY/DMpjHlEMUkfy0VZUKLvcPKWQYzjlSPVaKACub8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt6AOkoJCqSxwBySe1FFAHmGieMPD/AI4+IFrqn/CQaXHaaa0tvo1gb2P7TdzsCkk5jzuVduVRcZILMeGUVDq2r6bqfjjw9eaL4kPiK9i1XZ/YUhj/ANARgUlmMaKkiNEu7mbcBkjAZgR6rRQB5V4q1fTtQ8SaTNpHiQ63qdtrUSx+GZTGPKIYpI/loqyoUXe4eUsgxnHKkeq0UUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQBzfjz/AJF21/7DWlf+nC3rpK5b4i3MFn4SiuryaOC3h1bTJJZZXCpGov4CWYngAAZJNS/8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lc348/5F21/wCw1pX/AKcLej/hY/gj/ocvD/8A4NIP/iq5/wAaePvB91oNtHa+LNDmddW02QrHqULEKl9AzNgN0CqST2AJ7UAeiUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAB48/5F21/7DWlf+nC3rpK878aePvB91oNtHa+LNDmddW02QrHqULEKl9AzNgN0CqST2AJ7V0H/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJXN+PP+Rdtf8AsNaV/wCnC3o/4WP4I/6HLw//AODSD/4quf8AGnj7wfdaDbR2vizQ5nXVtNkKx6lCxCpfQMzYDdAqkk9gCe1AHolFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQAePP+Rdtf+w1pX/pwt66SvO/Gnj7wfdaDbR2vizQ5nXVtNkKx6lCxCpfQMzYDdAqkk9gCe1dB/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSVzfjz/kXbX/ALDWlf8Apwt6P+Fj+CP+hy8P/wDg0g/+Krn/ABp4+8H3Wg20dr4s0OZ11bTZCsepQsQqX0DM2A3QKpJPYAntQB6JRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAHjz/kXbX/sNaV/6cLeukrzvxp4+8H3Wg20dr4s0OZ11bTZCsepQsQqX0DM2A3QKpJPYAntXQf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lc348/5F21/wCw1pX/AKcLej/hY/gj/ocvD/8A4NIP/iq5/wAaePvB91oNtHa+LNDmddW02QrHqULEKl9AzNgN0CqST2AJ7UAeiUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAB48/5F21/7DWlf+nC3rpK878aePvB91oNtHa+LNDmddW02QrHqULEKl9AzNgN0CqST2AJ7V0H/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJXN+PP+Rdtf8AsNaV/wCnC3o/4WP4I/6HLw//AODSD/4quf8AGnj7wfdaDbR2vizQ5nXVtNkKx6lCxCpfQMzYDdAqkk9gCe1AHolFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQAePP+Rdtf+w1pX/pwt66SvP/ABZ418K6vpdjY6V4l0e+u5da0vy7e2v4pJHxfwE4VWJOACfoK9AoA5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3rpKACiiigAooooAK5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooAKKKKACiiigDm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3rpKACiiigAooooAK5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3oA6SiiigAooooAKKKKAOb8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt66SgAooooAKKKKACub8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLegDpKKKKACiiigAooooA5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt66SgAooooAKKKKACub8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt6AOkooooAKKKKACiiigDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKKKKACiiigArm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SiiigAooooAKKKKAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoA5vx5/wAi7a/9hrSv/Thb10lc348/5F21/wCw1pX/AKcLeukoAKiu7u3sLOW6vriK2toVLyzTOESNR1JY8Ae5qWuR+J+i6frHw71l9TthcfYrC5uYEdm2LIIXCsVzhiM5GQcHBGCAaAOhvNZ0zTtLGpahqVpa2BCkXU86pFhvuneTjnIxzzmprK+tNSsorzTrqG7tZhujngkDo49Qw4NcJPp2pSab4C1jT9NbVoNLgDz2UckayHfbhFkTzGVCVOerDhjipvhg9xJceLnksZNPt216RorWRkYxkwxGQZQlfvlidpI3FuScmgDvK5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3oA6SiiigBskiQxNJK6pGilmdjgKB1JPYVUj1rS5dGOrxalZvpgQyG9WdTDsHVt+duBg857Vy3xBvTLLpuh3FrqTaVeuZdSns9Nnug0KY/0c+UjEGQkA542Bx1Irz/AEG7n1fw38PtL0vZAh1a8djqVjKIfMjWeSP5DsMmCdw2sAGUc5XFAHtOlazpeu2hutE1K01G3VyhmtJ1lQMACV3KSM4I496u1zXhHXdR1O71vTdZFq95o96LZrmzRo4p1aJJVIRmYqQHAI3HkdecDpaAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoAKzNX8S6F4faIa9rWn6YZsmIXt0kPmYxnbuIzjI6eorTrM8Sa5B4a8M6hrF2C0dnA0mwdXb+FR7k4A9zQBCPGHhltIbVV8RaSdOWXyWvBfR+SJMZ2b923dgjjOa0rO9tdRs4rvT7mG6tpl3RzQSB0ceoYcEVyWiWll4I8AW2p+LPLN/EXvrydk3v9rnOXWPuSS/lqByRgVa+HekXeleGJJNRthZXGo3txqDWSni1EshZY/qARnHG4tjigDqq5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooArpqFnLqEthFdwPeQosktusoMkat91mXOQDg4J64qsviLRH1xtFTWLBtVUZaxF0hnHy7uY87unPTpzXGeGtF0/QvjXr1vpdsIEm0a2uJTuLtLK9xcFnZmJZmPqSeAB0Arm7SIN8APDl2wP9qtq9nch8fvDdvfqJD/vHfID7ZFAHqqeJdCl1s6NHrWnPqikg2K3aGcEDcf3ed3Tnp0rTrzjxzFdWV9ok17p1lZeHbHXoLo3NlKXuDNI5AZoiiBA0sp3srOxDHj5mx6PQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lABVdNQs5dQlsIruB7yFFklt1lBkjVvusy5yAcHBPXFWK878NaLp+hfGvXrfS7YQJNo1tcSncXaWV7i4LOzMSzMfUk8ADoBQB2Vt4k0O81iXSbTWdPn1KHd5tnFdI00eOuUB3DHfIpG8S6Euuf2K2tacNVyB9gN2nn5K7h+7zu+7z06c1yupwW2uePNC0fQbWKODw3dtf39zCgVLdmidVt1I43uZNzL2UAnkiuJuWvFsZr0Q+b4HPiv7ZJeCIfblkFzkuF3YaETgJv/1mwEbCPmoA9zrm/Hn/ACLtr/2GtK/9OFvXSVzfjz/kXbX/ALDWlf8Apwt6AOkooooArpqFnLqEthFdwPeQosktusoMkat91mXOQDg4J64rOg8Y+GLrVf7LtvEekzah5hj+yR30TS7xnK7A2cjB4x2rlPDWi6foXxr1630u2ECTaNbXEp3F2lle4uCzszEszH1JPAA6AUiJrfw2OnQG7sNU0fUtcaBohaPDcwm7nZgwfzWVwrPyNi/LznigDvW1CyTUk09ruBb2SMypbGUeYyA4LBc5IBOM9KsV53Loun6Z8e9Mu7K2EdzqOl3011MWLvKwe3UZZiTgAYC9AOgFeiUAc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFV01Czl1CWwiu4HvIUWSW3WUGSNW+6zLnIBwcE9cVYrzvw1oun6F8a9et9LthAk2jW1xKdxdpZXuLgs7MxLMx9STwAOgFAHZxeItFn1qTR4NYsJNTiBMlkl0hmTAycxg7hwR270N4i0RNcXRX1iwXVWGVsTdIJz8u7iPO7pz06c15PPY63oXh3wpod54fmivrLxJbkask0JhuN1wxeRcP5uXjZiwKDgtk8cu8pZf2fby8mH/EyfWJLlpT/rPtY1Iqhz/eyFUe2B0oA9nrm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SiiigDMsPEmh6rqM+n6ZrOn3l7b5862t7pJJIsHadygkjBODnvVv+0bL+1P7N+2QfbhD5/2XzV83yt23fsznbnjOMZ4riRb2utfErRofD9pFFp3g9JknuIYwkSSyReWLSPHB2rh3A4UiMdeBFYaJp+j/AB8d9OthFJe6DPcXMhYu8shuo+WZiScdAM4AAAwBigDqh4x8MHVv7KHiPSTqPm+T9jF9F53mZxs2bs7s8YxmtmvOr1dc+G/mahFd2GpaPqGvb7i0No8VzELqbblJfNKsVZ1OCg3AHkda9FoA5vx5/wAi7a/9hrSv/Thb10lc348/5F21/wCw1pX/AKcLeukoAKzLDxJoeq6jPp+mazp95e2+fOtre6SSSLB2ncoJIwTg571p1wIt7XWviVo0Ph+0ii07wekyT3EMYSJJZIvLFpHjg7Vw7gcKRGOvAAOlg8Y+GLrVf7LtvEekzah5hj+yR30TS7xnK7A2cjB4x2oHjHwwdW/soeI9JOo+b5P2MX0XneZnGzZuzuzxjGa5NE1v4bHToDd2GqaPqWuNA0QtHhuYTdzswYP5rK4Vn5Gxfl5zxRerrnw38zUIruw1LR9Q17fcWhtHiuYhdTbcpL5pVirOpwUG4A8jrQB6LXN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb0AdJRRRQBmWHiTQ9V1GfT9M1nT7y9t8+dbW90kkkWDtO5QSRgnBz3p0XiLRZ9ak0eDWLCTU4gTJZJdIZkwMnMYO4cEdu9ckLe11r4laND4ftIotO8HpMk9xDGEiSWSLyxaR44O1cO4HCkRjrwOUnsdb0Lw74U0O88PzRX1l4ktyNWSaEw3G64YvIuH83LxsxYFBwWyeOQD2FtQsk1JNPa7gW9kjMqWxlHmMgOCwXOSATjPSrFedy6Lp+mfHvTLuythHc6jpd9NdTFi7ysHt1GWYk4AGAvQDoBXolAHN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9dJQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lABWZr3h7T/Emnmx1b7U1swIeO3vZrcSAggq3lOu5SCflOR7Vp0UAYEfgvSYdHi0uGXVorWF98Yj1q8V1+ULt3iXdtAHC52jqBWppelWWi6bFYaXbJbW0QO1E7knJYk8sxJJLHJJJJJJq3RQAVzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvQB0lFFFABWFL4M0GbQLfRmsmWytZvtFuI7iRJIJNxbekqsHVss3IYcMR0OK3aKAKGj6Jp+g2TWulweVG8jSyM8jSSSyN1d3YlnY8fMxJ4HpV+iigDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKo6tothrttDb6rB9ohhuI7lELso8yNgyEgEbgCAcHIOORV6igDI8QeF9K8Tx2iaxFcSfY5xcW7QXc1u0cgBAcNGynIBIHpk1Y0nR7bRbd4bOW9kV23k3l9NdMDjHDSuxA46A4q/RQAVzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvQB0lFFFAHOWvgTQ7PXzrUH9p/2gQA00msXb71BJCMrSlWUFiQpBAyeKfB4F8PW+rrqMVi4lS4a7SJrmVoI52BzKsBby1f5m+YKDlic5JroKKAOej8C6BFqUV6LW4d4bg3UUEl9O9vFKSTvWBnMSsCxIIUYJyMGuhoooA5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt66SgArnLXwJodnr51qD+0/7QIAaaTWLt96gkhGVpSrKCxIUggZPFdHRQBzNh8PtB0u6M+nf2pblrg3TRx61eCN5WbczNH5u1snkgjB707/AIQDw4b43JspsNc/aja/bZ/spmzu3/Z9/lZ3fNnb97nrzXSUUAFc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9AHSUUUUAc5a+BNDs9fOtQf2n/AGgQA00msXb71BJCMrSlWUFiQpBAyeKdY+BdA07UILy3tbh5LUs1slxfTzxWxPUxRO5SM4yAVAwCQMA10NFAHOXPgTQ7vX11qf8AtM6ghbZKusXahAxBZVUShVUlRlQNpwOK6OiigDm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3rpKACuctfAmh2evnWoP7T/tAgBppNYu33qCSEZWlKsoLEhSCBk8V0dFAGLaeEtIs9YXVBHdXF5GXMUl7fz3IgLcMY1ldhGSMjKgcHHTioP+EF8PHWzqv2F/PN19tMX2qX7ObjGPO8jd5W/jO7bnd82d3NdDRQAVzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb0AdJQRlSD39DiiigDmtG8AaD4faD+yP7Ut44HMkcH9s3jQhixY5jaUockknIOSSad/wAIHoZ8QjXD/af9ognE39sXeApfeU2+bt2bgDsxt46V0dFAHPQeBfD8GpR3wtbiSSG4a6hinvp5YIZWLEvHC7mNG+ZsFVGMnGK6GiigDm/Hn/Iu2v8A2GtK/wDThb10lc348/5F21/7DWlf+nC3rpKAAjKkHv6HFc1o3gDQfD7Qf2R/alvHA5kjg/tm8aEMWLHMbSlDkkk5BySTXS0UAc9Y+BdA07UILy3tbh5LUs1slxfTzxWxPUxRO5SM4yAVAwCQMA0QeBfD8GpR3wtbiSSG4a6hinvp5YIZWLEvHC7mNG+ZsFVGMnGK6GigArm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SgjKkHv6HFFFAHNaN4A0Hw+0H9kf2pbxwOZI4P7ZvGhDFixzG0pQ5JJOQckk1btPCWkWesLqgjuri8jLmKS9v57kQFuGMayuwjJGRlQODjpxW1RQBzlz4E0O719dan/tM6ghbZKusXahAxBZVUShVUlRlQNpwOK6OiigDm/Hn/Iu2v8A2GtK/wDThb10lc348/5F21/7DWlf+nC3rpKAOW+Itwlr4SiuJRIyQ6tpjsIo2kcgX8BO1FBZj6AAk9AKl/4TzSP+fPxB/wCE5qH/AMYo8ef8i7a/9hrSv/Thb10lAHN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFdJRQBzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxXSUUAc3/wnmkf8+fiD/wnNQ/+MVz/AI08aaXc6DbJHa64CNW01yZNAvkGFvoGPLQgZwDgdScAAkgV6JXN+PP+Rdtf+w1pX/pwt6AD/hPNI/58/EH/AITmof8Axij/AITzSP8Anz8Qf+E5qH/xiukooA5v/hPNI/58/EH/AITmof8Axij/AITzSP8Anz8Qf+E5qH/xiukooA5v/hPNI/58/EH/AITmof8Axij/AITzSP8Anz8Qf+E5qH/xiukooA878aeNNLudBtkjtdcBGraa5MmgXyDC30DHloQM4BwOpOAASQK6D/hPNI/58/EH/hOah/8AGKPHn/Iu2v8A2GtK/wDThb10lAHN/wDCeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wnNQ/+MV0lFAHN/wDCeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wnNQ/+MV0lFAHN/wDCeaR/z5+IP/Cc1D/4xXP+NPGml3Og2yR2uuAjVtNcmTQL5Bhb6Bjy0IGcA4HUnAAJIFeiVzfjz/kXbX/sNaV/6cLegA/4TzSP+fPxB/4Tmof/ABij/hPNI/58/EH/AITmof8AxiukooA5v/hPNI/58/EH/hOah/8AGKP+E80j/nz8Qf8AhOah/wDGK6SigDm/+E80j/nz8Qf+E5qH/wAYo/4TzSP+fPxB/wCE5qH/AMYrpKKAPO/GnjTS7nQbZI7XXARq2muTJoF8gwt9Ax5aEDOAcDqTgAEkCug/4TzSP+fPxB/4Tmof/GKPHn/Iu2v/AGGtK/8AThb10lAHN/8ACeaR/wA+fiD/AMJzUP8A4xR/wnmkf8+fiD/wnNQ/+MV0lFAHN/8ACeaR/wA+fiD/AMJzUP8A4xR/wnmkf8+fiD/wnNQ/+MV0lFAHN/8ACeaR/wA+fiD/AMJzUP8A4xXP+NPGml3Og2yR2uuAjVtNcmTQL5Bhb6Bjy0IGcA4HUnAAJIFeiVzfjz/kXbX/ALDWlf8Apwt6AD/hPNI/58/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/ABiukooA5v8A4TzSP+fPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/wAYrpKKAOb/AOE80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGK6SigDzvxp400u50G2SO11wEatprkyaBfIMLfQMeWhAzgHA6k4ABJAroP8AhPNI/wCfPxB/4Tmof/GKPHn/ACLtr/2GtK/9OFvXSUAc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFdJRQBzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMV0lFAHN/8J5pH/Pn4g/8ACc1D/wCMVz/jTxppdzoNskdrrgI1bTXJk0C+QYW+gY8tCBnAOB1JwACSBXolc348/wCRdtf+w1pX/pwt6AD/AITzSP8Anz8Qf+E5qH/xij/hPNI/58/EH/hOah/8YrpKKAOb/wCE80j/AJ8/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/GK6SigDm/8AhPNI/wCfPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/xiukooA878aeNNLudBtkjtdcBGraa5MmgXyDC30DHloQM4BwOpOAASQK6D/hPNI/58/EH/AITmof8Axijx5/yLtr/2GtK/9OFvXSUAc3/wnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8ACc1D/wCMV0lFAHN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFdJRQBzf/CeaR/z5+IP/Cc1D/4xXP8AjTxppdzoNskdrrgI1bTXJk0C+QYW+gY8tCBnAOB1JwACSBXolc348/5F21/7DWlf+nC3oAP+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GK6SigDm/+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GK6SigDm/+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GK6SigDz/xZ4t07U9LsbS2ttYSWTWtL2tc6JeW8YxfwHmSSJVHTuRk8dTXoFc348/5F21/7DWlf+nC3rpKAOb8ef8AIu2v/Ya0r/04W9dJXN+PP+Rdtf8AsNaV/wCnC3rpKACiiqOq63pWg2q3WuanZ6bbu4jWW8uFhRmIJCgsQM4BOPY0AXqKyb3xX4d02xtb3Ude0y0tbxd1tPPeRpHOMA5RicMMEHj1qfSdd0nXrd59D1Sy1KGNtjyWdwkyq2M4JUkA4I4oAv1zfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAFFZ+ra/o+gQxy67q1jpkcrbY3vLlIQ564BYjJqvL4v8ADcOkQ6rN4h0qPTp3McV497GIZGGcqr7tpPyngHsfSgDYoqppmradrVkLzR7+11C1LFRPazLKhI6jcpIzVugDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKKKp6nq+m6JZ/a9Z1C10+23BfOu51iTJ6DcxAzQBcorMm8S6Fb6NHq9xrWnRaZKQI717pFhfPTDk7T0PftVyyvrTUrKK8066hu7WYbo54JA6OPUMODQBPXN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9AHSUUUUAFFV01Czl1CWwiu4HvIUWSW3WUGSNW+6zLnIBwcE9cVVtvEmh3msS6Taazp8+pQ7vNs4rpGmjx1ygO4Y75FAGlRWc3iLRE1xdFfWLBdVYZWxN0gnPy7uI87unPTpzWjQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lABRRVdNQs5dQlsIruB7yFFklt1lBkjVvusy5yAcHBPXFAFiisaDxj4YutV/su28R6TNqHmGP7JHfRNLvGcrsDZyMHjHap4/Emhza22jRazp76omd1it0hnXAycx53dOenSgDSrm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SiiigAoqumoWcuoS2EV3A95CiyS26ygyRq33WZc5AODgnriseHx94PubqO1t/Fmhy3EriOOKPUoWd2JwFADZJJ4xQB0FFZjeJdCXXP7FbWtOGq5A+wG7Tz8ldw/d53fd56dOa06AOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoAKKKzLDxJoeq6jPp+mazp95e2+fOtre6SSSLB2ncoJIwTg570AadFV/7Rsv7U/s37ZB9uEPn/AGXzV83yt23fsznbnjOMZ4qsPEWiHXTog1iwOrDk2H2pPPHy7v8AV53fd+bp05oA0a5vx5/yLtr/ANhrSv8A04W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooAKKzLDxJoeq6jPp+mazp95e2+fOtre6SSSLB2ncoJIwTg571DB4x8MXWq/2XbeI9Jm1DzDH9kjvoml3jOV2Bs5GDxjtQBs0VjDxj4YOrf2UPEeknUfN8n7GL6LzvMzjZs3Z3Z4xjNbNAHN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb10lABRRWZYeJND1XUZ9P0zWdPvL23z51tb3SSSRYO07lBJGCcHPegDTorOi8RaLPrUmjwaxYSanECZLJLpDMmBk5jB3Dgjt3quPGPhg6t/ZQ8R6SdR83yfsYvovO8zONmzdndnjGM0AbNc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9AHSUUUUAFFZlh4l0LVNSm07TNa068vrcMZrW3u0kljCkK25ASRgkA56E4qzNqlhbajbafcX1tFe3YY29tJMqyTBRltik5bA5OOlAFqisy+8S6FpmqQabqWtafaX9xtMNrcXSRyy7mKrtQnJyQQMDkjFadAHN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb10lAHN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvXSUAFZPiLVNK8P2H9tatGGa2Bjg2Rb5ndyAIoh1LOQoCjqcela1Y2veFNJ8SzWUurR3LS2DtJbSW17NbNEzDaWBidTnHHPQE+poAxPCkJ8A/Cx7rxCkdn9mW51G5t4mylsJJHmMKeu0Nt46kcdau/D7SrvTvCiXOrLt1XVpW1K/Un7k0uDs/4AoVB7IKuSeENHn0J9HvEu72xkmWd47zULidmZWVly7uW25UHbnb7cmtugArm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SiiigDnfE3h2/wBX1TRtS0nUrexu9JmlkT7TZtcRyeZGYyCqyRkcMT1rnbRdY8fafZ3LXVlpmseGdcnjkk+yvcW9w8aPESqeYjBSJM43EgjHPWuv1jw3p2uzW818LpJrZXSKa0vZrWRVfaWXdE6kqSikgnGVHpVVvBGgHS7HT4LWa0gsN32c2V5NbSLu+8TJG6uxbqxYnceTk80AQ+C/EF/rcOrW2sRW632kajJYTS2oYRT4VXV1ViSvyyLlSTg55NdLVHSNG0/QdOWx0m2FvArFyNxZnYnLMzMSzMTyWYknuavUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAVwnj03beLPCg8PrFNr8M089vb3S/wCjtBsCTtI4+aMgSKFZQxycbSCxHd1la14b0vxA1q+pRTedZuz29xbXMttNEWXawWSJlYAjqM4OBkcCgDjfAC3n/CK3rW+l2lx4jtNZuGv7e9f7NDb3UmHk8l0SUhNkg2nBLA8kEkVofC39zo2sWdz8mpW+s3J1CJVAiimkYS7YsE5j2yLgnBPUhTkDW/4QTw+NPhs4ra4gWGd7hZ7e+niuGkfO9mnVxI5bPO5jnAz0GNPR9FsNBsPselW/kxGRpXLOzvI7HLO7sSzsTyWYkn1oAvVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUUUUAed+GtF0/QvjXr1vpdsIEm0a2uJTuLtLK9xcFnZmJZmPqSeAB0AqfU4LbXPHmhaPoNrFHB4bu2v7+5hQKluzROq26kcb3Mm5l7KATyRW1a+BNDs9fOtQf2n/aBADTSaxdvvUEkIytKVZQWJCkEDJ4plh8PtB0u6M+nf2pblrg3TRx61eCN5WbczNH5u1snkgjB70AefeUsv7Pt5eTD/iZPrEly0p/1n2sakVQ5/vZCqPbA6V7PXPf8IL4eOtnVfsL+ebr7aYvtUv2c3GMed5G7yt/Gd23O75s7ua6GgDm/Hn/ACLtr/2GtK/9OFvXSVzfjz/kXbX/ALDWlf8Apwt66SgArzvw1oun6F8a9et9LthAk2jW1xKdxdpZXuLgs7MxLMx9STwAOgFeiVzlr4E0Oz1861B/af8AaBADTSaxdvvUEkIytKVZQWJCkEDJ4oA51E1v4bHToDd2GqaPqWuNA0QtHhuYTdzswYP5rK4Vn5Gxfl5zxU/iG3tdZ8XaJ4a0K0hVtJ1FNZ1CeGMKlmMswXI482VmJI6lS7HqCd2x8C6Bp2oQXlva3DyWpZrZLi+nnitiepiidykZxkAqBgEgYBqK3+H+g2l9cXdn/altLc3LXcwg1q8RJJWOSxQShTnA4xjAx0oA6aub8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt6AOkooooA878NaLp+hfGvXrfS7YQJNo1tcSncXaWV7i4LOzMSzMfUk8ADoBV/WSfEfxM0rREJay0NBq19joZjlLZD+Ikkx6op9K0rXwJodnr51qD+0/7QIAaaTWLt96gkhGVpSrKCxIUggZPFatjothpuoahfWdvsudSlWW7lLsxlZUCL1JwAqgADA9qAPGrlrxbGa9EPm+Bz4r+2SXgiH25ZBc5Lhd2GhE4Cb/9ZsBGwj5q9zrm/wDhAPDhvjcmymw1z9qNr9tn+ymbO7f9n3+Vnd82dv3uevNdJQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQAVwIt7XWviVo0Ph+0ii07wekyT3EMYSJJZIvLFpHjg7Vw7gcKRGOvA74jKkHv6HFc1o3gDQfD7Qf2R/alvHA5kjg/tm8aEMWLHMbSlDkkk5BySTQBg2Giafo/x8d9OthFJe6DPcXMhYu8shuo+WZiScdAM4AAAwBiuY1ux1rQvBkej3Xh+Y3q+Joru31mKaExzSS3wdXxv83eUkKEbOmecV6P/wAIHoZ8QjXD/af9ognE39sXeApfeU2+bt2bgDsxt46VZi8I6RHrK6q8d3c3SSNJF9sv57iOF26tHHI7JGcEgFQMAkDAOKANqub8ef8AIu2v/Ya0r/04W9dJXN+PP+Rdtf8AsNaV/wCnC3oA6SiigjKkHv6HFAHAi3tda+JWjQ+H7SKLTvB6TJPcQxhIklki8sWkeODtXDuBwpEY68CBE1v4bHToDd2GqaPqWuNA0QtHhuYTdzswYP5rK4Vn5Gxfl5zxXQaN4A0Hw+0H9kf2pbxwOZI4P7ZvGhDFixzG0pQ5JJOQckk1JY+BdA07UILy3tbh5LUs1slxfTzxWxPUxRO5SM4yAVAwCQMA0Ac3errnw38zUIruw1LR9Q17fcWhtHiuYhdTbcpL5pVirOpwUG4A8jrXotc9B4F8PwalHfC1uJJIbhrqGKe+nlghlYsS8cLuY0b5mwVUYycYroaAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoAK4EW9rrXxK0aHw/aRRad4PSZJ7iGMJEkskXli0jxwdq4dwOFIjHXgd8RlSD39Diua0bwBoPh9oP7I/tS3jgcyRwf2zeNCGLFjmNpShySScg5JJoA87nsdb0Lw74U0O88PzRX1l4ktyNWSaEw3G64YvIuH83LxsxYFBwWyeOekvV1z4b+ZqEV3Yalo+oa9vuLQ2jxXMQuptuUl80qxVnU4KDcAeR1rq7TwlpFnrC6oI7q4vIy5ikvb+e5EBbhjGsrsIyRkZUDg46cVBB4F8PwalHfC1uJJIbhrqGKe+nlghlYsS8cLuY0b5mwVUYycYoA6Gub8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt6AOkoopGVXUq4DKwwQRkEUAec6rHdad8QvCEur6bZaZpNpcXFlpn9myGYtJJCwRJFKJ5SFEb5UEg3BckAAnl49ZjuviR4W1/WLLWIdTvNTuF8ifRrpDa2wtZ0hhUmL5j8299pIBdj91c16fpngfQdI1C2vbO2uGmtEaO1FzfT3CWqsACIkkdlj+UbflA+XI6EitS70myvtQsL26h8y406R5bV97Dy2ZGjY4BwcqzDnPX1oA8q0PXNe0Hwxqvirfpc1vJr88d7avbOLqXN59nH74SBQVXYFUoeFAzzx7DXPt4G8PPrTao1i5ne5F20X2mX7O04AAlMG7yi/AO4rnIDZyM10FAHN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvXSUAc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFFFFABRRRQAVzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb10lABRRRQAUUUUAFc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvQB0lFFFABRRRQAUUUUAc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFFFFABRRRQAVzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb10lABRRRQAUUUUAFc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvQB0lFFFABRRRQAUUUUAc348/wCRdtf+w1pX/pwt66Sub8ef8i7a/wDYa0r/ANOFvXSUAFFFFABRRRQAVzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb10lAHLfEWBLrwlFbymRUm1bTEYxSNG4Bv4AdrqQyn0III6g1L/wgekf8/niD/wAKPUP/AI/R48/5F21/7DWlf+nC3rpKAOb/AOED0j/n88Qf+FHqH/x+j/hA9I/5/PEH/hR6h/8AH66SigDm/wDhA9I/5/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/AB+ukooA5v8A4QPSP+fzxB/4Ueof/H65/wAaeCtLttBtnjutcJOraahEmv3zjDX0CnhpiM4JweoOCCCAa9Erm/Hn/Iu2v/Ya0r/04W9AB/wgekf8/niD/wAKPUP/AI/R/wAIHpH/AD+eIP8Awo9Q/wDj9dJRQBzf/CB6R/z+eIP/AAo9Q/8Aj9H/AAgekf8AP54g/wDCj1D/AOP10lFAHN/8IHpH/P54g/8ACj1D/wCP0f8ACB6R/wA/niD/AMKPUP8A4/XSUUAed+NPBWl22g2zx3WuEnVtNQiTX75xhr6BTw0xGcE4PUHBBBANdB/wgekf8/niD/wo9Q/+P0ePP+Rdtf8AsNaV/wCnC3rpKAOb/wCED0j/AJ/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/H66SigDm/8AhA9I/wCfzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/x+ukooA5v/AIQPSP8An88Qf+FHqH/x+uf8aeCtLttBtnjutcJOraahEmv3zjDX0CnhpiM4JweoOCCCAa9Erm/Hn/Iu2v8A2GtK/wDThb0AH/CB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wAKPUP/AI/XSUUAc3/wgekf8/niD/wo9Q/+P0f8IHpH/P54g/8ACj1D/wCP10lFAHN/8IHpH/P54g/8KPUP/j9H/CB6R/z+eIP/AAo9Q/8Aj9dJRQB53408FaXbaDbPHda4SdW01CJNfvnGGvoFPDTEZwTg9QcEEEA10H/CB6R/z+eIP/Cj1D/4/R48/wCRdtf+w1pX/pwt66SgDm/+ED0j/n88Qf8AhR6h/wDH6P8AhA9I/wCfzxB/4Ueof/H66SigDm/+ED0j/n88Qf8AhR6h/wDH6P8AhA9I/wCfzxB/4Ueof/H66SigDm/+ED0j/n88Qf8AhR6h/wDH65/xp4K0u20G2eO61wk6tpqESa/fOMNfQKeGmIzgnB6g4IIIBr0Sub8ef8i7a/8AYa0r/wBOFvQAf8IHpH/P54g/8KPUP/j9H/CB6R/z+eIP/Cj1D/4/XSUUAc3/AMIHpH/P54g/8KPUP/j9H/CB6R/z+eIP/Cj1D/4/XSUUAc3/AMIHpH/P54g/8KPUP/j9H/CB6R/z+eIP/Cj1D/4/XSUUAed+NPBWl22g2zx3WuEnVtNQiTX75xhr6BTw0xGcE4PUHBBBANdB/wAIHpH/AD+eIP8Awo9Q/wDj9Hjz/kXbX/sNaV/6cLeukoA5v/hA9I/5/PEH/hR6h/8AH6P+ED0j/n88Qf8AhR6h/wDH66SigDm/+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfrpKKAOb/4QPSP+fzxB/4Ueof/AB+uf8aeCtLttBtnjutcJOraahEmv3zjDX0CnhpiM4JweoOCCCAa9Erm/Hn/ACLtr/2GtK/9OFvQAf8ACB6R/wA/niD/AMKPUP8A4/R/wgekf8/niD/wo9Q/+P10lFAHN/8ACB6R/wA/niD/AMKPUP8A4/R/wgekf8/niD/wo9Q/+P10lFAHN/8ACB6R/wA/niD/AMKPUP8A4/R/wgekf8/niD/wo9Q/+P10lFAHnfjTwVpdtoNs8d1rhJ1bTUIk1++cYa+gU8NMRnBOD1BwQQQDXQf8IHpH/P54g/8ACj1D/wCP0ePP+Rdtf+w1pX/pwt66SgDm/wDhA9I/5/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/AB+ukooA5v8A4QPSP+fzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/wAfrpKKAOb/AOED0j/n88Qf+FHqH/x+uf8AGngrS7bQbZ47rXCTq2moRJr984w19Ap4aYjOCcHqDggggGvRK5vx5/yLtr/2GtK/9OFvQAf8IHpH/P54g/8ACj1D/wCP0f8ACB6R/wA/niD/AMKPUP8A4/XSUUAc3/wgekf8/niD/wAKPUP/AI/R/wAIHpH/AD+eIP8Awo9Q/wDj9dJRQBzf/CB6R/z+eIP/AAo9Q/8Aj9H/AAgekf8AP54g/wDCj1D/AOP10lFAHn/izwlp2maXY3dtc6w8setaXtW51u8uIzm/gHMckrKevcHB56ivQK5vx5/yLtr/ANhrSv8A04W9dJQBzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb10lABRRWB4thsXsbeTVZ9bS2jl/1Wjfat8jFTjd9mHm7Rz3C5Izk7aAN+ivMfD3iPV3+GGk2trdtda7q1xNbWLzyrNLbRCRvnnYE5eKLG7PO8KrfMa3fhZJcv4HCXl7dX0kGoXsAnvJmllZUupEXc7cnCqBQB2Nc348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb0AdJRRRQAUVw3j/WbyHXPD2gWUWpTJqbXE1xFpcqxXEscKr+7WRmQRgmRSW3qcLgHJrn77xFpht9Fsmv9Z0PQ11O5tNZkvtSlWe2njj3JDJdeaxRWJDArJgjaAcEigD1miuH+GWtf2pb6/aQak+q2Om6q8FjevMZjJA0ccigyHJk2l2AYkkgLyep7igDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKKK4Dw0NYtPi9rtjq+uXGpo2l290kZXy4YC80wCxxgkKAqqMkliRknsADv6K8ftdQ1NvhzpHxCGq351O81C2mmga7kNs1vNcrD5Agz5agI6/MF3bl3ZyTnU8QTrpvjjRY9L1LXk1CfWlW7mv5riOweBw5MCiTbbucFVRYwXyoJJIYkA9Mrm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLegDpKKKKACiuA8NDWLT4va7Y6vrlxqaNpdvdJGV8uGAvNMAscYJCgKqjJJYkZJ7DNOtaprPxM8MavBfXMGh3V/dWVnaxzFY7yKO1mZp3UcMGkUbM5G1FYfeoA9Rorx97/U5/hzcfEFdVv01WPUHligF3ILUW6XRh8gwZ8sgxqfmK7tx3ZyBXsFAHN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvXSUAFFFcB4aGsWnxe12x1fXLjU0bS7e6SMr5cMBeaYBY4wSFAVVGSSxIyT2AB39FeKWGvXbeMtOspdS1RNbPiCaK6vn1Bjpc1urN+4jXeYjIUZEEap5iupLYwSesYaxZ/HGxS8124ubK+027ljsEXy4IFR4Avygne/zMS7E9cAKOKAO/rm/Hn/Iu2v8A2GtK/wDThb10lc348/5F21/7DWlf+nC3oA6SiiigAorz4WcmifE7w9p2k6xq17LNb3M2sR3l7JcI0G3CSlGOyJjMAF8tUBHmADAwHaeusWnxxmt9R124vra50SW4jtAvlW9uBcoECxgnLBSQXJJOewwoAO/orz7xHZyaN4r8OnSdY1abV9R1bdLby3skkUlp8xmzBny0RFKgMqg52ZJJJPoNAHN+PP8AkXbX/sNaV/6cLeukrm/Hn/Iu2v8A2GtK/wDThb10lABRRXnws5NE+J3h7TtJ1jVr2Wa3uZtYjvL2S4RoNuElKMdkTGYAL5aoCPMAGBgAHoNFeSeHPFEeoGz8R+JbfxIsV/qjQWt9HfGKwgBmaOGIwRzKWXIUF3iOWY5O3GL/AIgnXTfHGix6XqWvJqE+tKt3NfzXEdg8DhyYFEm23c4KqixgvlQSSQxIB6ZXN+PP+Rdtf+w1pX/pwt66Sub8ef8AIu2v/Ya0r/04W9AHSUUUUAFFeZWk62PxS0Ow0nUtebzFu01I61NcLFebUyPJSfCM4cbswKFCbuikVmWuoam3w50j4hDVb86neahbTTQNdyG2a3muVh8gQZ8tQEdfmC7ty7s5JyAewUV594js5NG8V+HTpOsatNq+o6tult5b2SSKS0+YzZgz5aIilQGVQc7Mkkkn0GgDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKKK8ytJ1sfilodhpOpa83mLdpqR1qa4WK82pkeSk+EZw43ZgUKE3dFIoA9Nory7Qnk8Pa1bnxta+JYLu81eeG01CXWHlsZDJK5gj8pLhguUKqA0YGcDriqD3+pz/Dm4+IK6rfpqseoPLFALuQWot0ujD5Bgz5ZBjU/MV3bjuzkCgD2Cub8ef8AIu2v/Ya0r/04W9dJXN+PP+Rdtf8AsNaV/wCnC3oA6Siikd1jjZ5GCIoJZmOAB6mgBaK8w0zV9W1b4n6Fq0l5dQaTq0F6LLT/ADSI2t4li8uZ06F3Lu4J6IUHUGs611DU2+HOkfEIarfnU7zULaaaBruQ2zW81ysPkCDPlqAjr8wXduXdnJOQD2CivPvEdnJo3ivw6dJ1jVptX1HVt0tvLeySRSWnzGbMGfLREUqAyqDnZkkkk+g0Ac348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAFZesWetXElvJoOrW1g0YYSx3dibmOUHGDhXjYMuDghsYY5B4I1KKAOT074daEmmmHxFYWOv3ct1NeTXF7ZRuDNKQXKIwby1O1RgE8KMknmrPgrwZYeCdInstPitgZ7qad5ILZYdweRmRCBnIRWCD2HAHSujooAK5vx5/yLtr/ANhrSv8A04W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooAwPEfhy41bUNL1TStQTT9T0t5DDLNbmeJ0kXa6OgZCQcKeGBBUfSquneGNY0TTbhdJ1mz/tK/vXvb+6vdPaVJXZQuEjWZCigKoALNwvJJ5rqaKAMjw5oK6BYTI9y15d3c7XV5dMgQzTMACwUcKAFVQOcKoBJPJ16KKAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoAK4+x8K+Ibfx5P4kuNe0yUXNvHaS20ekyJ+6jd2Xa5uDhv3hySCOBwK7CigDhrX4d3MEFnpEmtRv4csb9b6CwWy2zfLIZUiebeVaNXwcCMEhVBbrm3qXhLWdckis9c8QW9zo0V6l2YI9O8u4kEcnmRxtMJCu0MFyVjUkLjIyTXXUUAFc348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb0AdJRRRQBx1l4T8QQeO7jxFda7pky3VtHaTWqaTImYUd2ADG4OG/eEEkEcD5aZefCrwrNrui6jY6Fo9ium3DzSQw6ZEBc5iZFBIAxtZg44PKjp1HaUUAcN/wru6EL6ONbjHhh9RN+dOFl+/5l84w+fvx5Zly2PL3bSV3d67miigDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAK4+x8K+Ibfx5P4kuNe0yUXNvHaS20ekyJ+6jd2Xa5uDhv3hySCOBwK7CigDgbb4cXsWmafoM+uW8vh7T75buK3XT9t0wSUyxo0/mFcBtuSIwzAEZBJar194V8Q3Xju08RRa9pka2cMttDbNpMjHyZGRmDP9oGW/dgBgAOT8tdhRQAVzfjz/kXbX/sNaV/6cLeukrm/Hn/Iu2v/AGGtK/8AThb0AdJQc7Tt4PbIoooA4vwv4Q8ReHr+4ubrX9L1CS+uPPv7l9IkS5uf7q+Z9pKqqrhVATAA6ZJJkPhXxC3j9PEp17TNqW7WQtf7Jkz9nMokI3/aP9Z8oG7GO+3tXYUUAcVY+EPEVj4r1HXBr+lXM99IF33OjyNLDbA5W3jcXICqOT93liWOTXa0UUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQAHO07eD2yK4vwv4Q8ReHr+4ubrX9L1CS+uPPv7l9IkS5uf7q+Z9pKqqrhVATAA6ZJJ7SigDhoPh3cxxQaVLrav4cttS/tGGxFpicMJTMsTTbyDGJDnGwNgAbuObepeEtZ1ySKz1zxBb3OjRXqXZgj07y7iQRyeZHG0wkK7QwXJWNSQuMjJNddRQAVzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9AHSUjAspAYqSMBh1H50tFAHJL4T1jUNV0mfxRr1vqNtpE32m3ittONs8s4Qoskr+YwOFdztRUBYg9Btqna/Du5ggs9Ik1qN/DljfrfQWC2W2b5ZDKkTzbyrRq+DgRgkKoLdc9zRQBxVj4Q8RWPivUdcGv6Vcz30gXfc6PI0sNsDlbeNxcgKo5P3eWJY5NdrRRQBzfjz/AJF21/7DWlf+nC3rpK5vx5/yLtr/ANhrSv8A04W9dJQAjAspAYqSMBh1H51ya+E9Y1DVdJn8Ua9b6jbaRN9pt4rbTjbPLOEKLJK/mMDhXc7UVAWIPQba62igDkZfCWs6re6ePEviC3vrDTrtLyKG307yJZZYzmMyyeYwIU84REyQOg4NT/hXd0IX0ca3GPDD6ib86cLL9/zL5xh8/fjyzLlseXu2kru713NFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lMlijnheGeNZIpFKujrlWB4IIPUU+igDjX+F3hiPxXpGtadoukWP9miUmCDTYl8122FH3ADDIUJBwTluMVBa/Du5ggs9Ik1qN/DljfrfQWC2W2b5ZDKkTzbyrRq+DgRgkKoLdc9zRQBxVj4Q8RWPivUdcGv6Vcz30gXfc6PI0sNsDlbeNxcgKo5P3eWJY5NdrRRQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lAHN+PP8AkXbX/sNaV/6cLeukrlviLbQXnhKK1vIY57ebVtMjlilQMkim/gBVgeCCDgg1L/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSVzfjz/kXbX/ALDWlf8Apwt6P+FceCP+hN8P/wDgrg/+Jrn/ABp4B8H2ug20lr4T0OF21bTYy0emwqSr30CsuQvQqxBHcEjvQB6JRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AHjz/kXbX/sNaV/6cLeukrzvxp4B8H2ug20lr4T0OF21bTYy0emwqSr30CsuQvQqxBHcEjvXQf8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lc348/5F21/wCw1pX/AKcLej/hXHgj/oTfD/8A4K4P/ia5/wAaeAfB9roNtJa+E9DhdtW02MtHpsKkq99ArLkL0KsQR3BI70AeiUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAB48/5F21/7DWlf+nC3rpK878aeAfB9roNtJa+E9DhdtW02MtHpsKkq99ArLkL0KsQR3BI710H/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJXN+PP+Rdtf8AsNaV/wCnC3o/4Vx4I/6E3w//AOCuD/4muf8AGngHwfa6DbSWvhPQ4XbVtNjLR6bCpKvfQKy5C9CrEEdwSO9AHolFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQAePP+Rdtf+w1pX/pwt66SvO/GngHwfa6DbSWvhPQ4XbVtNjLR6bCpKvfQKy5C9CrEEdwSO9dB/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSVzfjz/kXbX/ALDWlf8Apwt6P+FceCP+hN8P/wDgrg/+Jrn/ABp4B8H2ug20lr4T0OF21bTYy0emwqSr30CsuQvQqxBHcEjvQB6JRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AHjz/kXbX/sNaV/6cLeukrzvxp4B8H2ug20lr4T0OF21bTYy0emwqSr30CsuQvQqxBHcEjvXQf8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAHSUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lc348/5F21/wCw1pX/AKcLej/hXHgj/oTfD/8A4K4P/ia5/wAaeAfB9roNtJa+E9DhdtW02MtHpsKkq99ArLkL0KsQR3BI70AeiUVzf/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTQB0lFc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE0AdJRXN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAB48/5F21/7DWlf+nC3rpK8/8AFngrwrpGl2N9pXhrR7G7i1rS/LuLawijkTN/ADhlUEZBI+hr0CgDm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLeukoAKKKKACiiigArm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SiiigAooooAKKKKAOb8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLeukoAKKKKACiiigArm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLegDpKKKKACiiigAooooA5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3rpKACiiigAooooAK5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt6AOkooooAKKKKACiiigDm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3rpKACiiigAooooAK5vx5/yLtr/2GtK/9OFvXSVzfjz/AJF21/7DWlf+nC3oA6SiiigAooooAKKKKAOb8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt66SgAooooAKKKKACub8ef8i7a/8AYa0r/wBOFvXSVzfjz/kXbX/sNaV/6cLegDpKKKKACiiigAooooA5vx5/yLtr/wBhrSv/AE4W9dJXN+PP+Rdtf+w1pX/pwt66SgDm/Hn/ACLtr/2GtK/9OFvXSVzfjz/kXbX/ALDWlf8Apwt66SgArm/F+pXax2mg6LKY9V1dzGkqEbrSAY8645/uggL6u6DoTXSVl6t4Z0HX5In13RNO1N4QRG15aRzFAeoG4HFAHmNl4h1UeA/BulJPq17Pq95dRXMltcA3k0MJmYossjDaTtQFy6kKDgg4I73wTf6dc2N9aWEWq209jdGK7tdWu3uZ4ZCqsBvaSQFSpVhtcrz65rGsPhbBonh/Sbbw/d22n6ppV695FepYDZMX3qyyxKylgY32/fBG1SDgYrovDXh19DOo3V7e/btS1S5+03dwsXlIWCKiqiZYqqoigAsx6kmgDcrm/Hn/ACLtr/2GtK/9OFvXSVzfjz/kXbX/ALDWlf8Apwt6AOkooooA4X4lX8thN4faaW/bS5b1or200q4eK8n3IRGUEbLI6q3zMsZ3Y5wQrCuSsPFGp3PhXw/Y2tzql5FrmrXYjjtrtHv47KNXkW3eVmGyXhAzFwyDI3bgDXoviHw3d6nrela1o+ow2Oo6as0SG6tTcwyRShd4KB0IbKIQwYdCCDnjHT4czwQx3ttrKR6+uryasb37H+4aSSPynj8gOD5ZjAGN+7IDbjyCAavgm/065sb60sItVtp7G6MV3a6tdvczwyFVYDe0kgKlSrDa5Xn1zXS1h+GvDr6GdRur29+3alqlz9pu7hYvKQsEVFVEyxVVRFABZj1JNblAHN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvXSUAFcB4aGsWnxe12x1fXLjU0bS7e6SMr5cMBeaYBY4wSFAVVGSSxIyT2Hf1x9j4V8Q2/jyfxJca9pkoubeO0lto9JkT91G7su1zcHDfvDkkEcDgUAZ2q2kmjePfDcGj6xq1zqV/dzS38FxeyTRNZhGLsYifLiAcxKpRV5OOcmsbT/E8d/dT+I/Ett4kFimrPaQXdrfmGxtUS4MUYeKOZWkywBZmjcZbBO1cDpdG8IeI9J8QXuqPr+lXkt/cB7iWbR5PO8kH5YUcXO1VUZA+XqSxBJOYpPh3culzpX9tqvhu61I6jJYC0/fhjIJjEJ9+BGZRuI8vdgld3cAHdVzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb0AdJRRRQBwHhoaxafF7XbHV9cuNTRtLt7pIyvlwwF5pgFjjBIUBVUZJLEjJPYV9Z0OGDx34c0fQ9Q1uO5kmbUb5n1y9lVbWHGVKPKVO+RkXkdN9a9j4V8Q2/jyfxJca9pkoubeO0lto9JkT91G7su1zcHDfvDkkEcDgVqaX4cNj4r1rXrm7+1XGpCGKJfK2i2giU4jByc5ZnYnjJbpwKAOP8QTrpvjjRY9L1LXk1CfWlW7mv5riOweBw5MCiTbbucFVRYwXyoJJIYn0yuR1LwlrOuSRWeueILe50aK9S7MEeneXcSCOTzI42mEhXaGC5KxqSFxkZJrrqAOb8ef8i7a/9hrSv/Thb10lc348/wCRdtf+w1pX/pwt66SgArz4WcmifE7w9p2k6xq17LNb3M2sR3l7JcI0G3CSlGOyJjMAF8tUBHmADAwPQTnadvB7ZFcX4X8IeIvD1/cXN1r+l6hJfXHn39y+kSJc3P8AdXzPtJVVVcKoCYAHTJJIBS1W0k0bx74bg0fWNWudSv7uaW/guL2SaJrMIxdjET5cQDmJVKKvJxzk1n2sknh7xJNdeNLTxNEl1rsiWWpDWHexRJJD9nVoUuDtU/KvzRbQWAbArc0bwh4j0nxBe6o+v6VeS39wHuJZtHk87yQflhRxc7VVRkD5epLEEk5nv/CWs65LDba/4gt7rSIL5bwW8GneTPLsk3xRyS+YVKghc7Y1LbByMnIB11c348/5F21/7DWlf+nC3rpK5vx5/wAi7a/9hrSv/Thb0AdJRRQc7Tt4PbIoA8+FnJonxO8PadpOsateyzW9zNrEd5eyXCNBtwkpRjsiYzABfLVAR5gAwMDP0J5PD2tW58bWviWC7vNXnhtNQl1h5bGQySuYI/KS4YLlCqgNGBnA64rd8L+EPEXh6/uLm61/S9Qkvrjz7+5fSJEubn+6vmfaSqqq4VQEwAOmSSZpfCWs6re6ePEviC3vrDTrtLyKG307yJZZYzmMyyeYwIU84REyQOg4IB59P4sWzsTrFx4kuo/F8OviK40WS/cL9na68kRC03bNnksrB9uScNuya9vrmb3w1qut6jCNf1e0m0m3uluorK009ondkcNEJZGlcMqkAkKqZIHQZU9NQBzfjz/kXbX/ALDWlf8Apwt66Sub8ef8i7a/9hrSv/Thb10lABXmVpOtj8UtDsNJ1LXm8xbtNSOtTXCxXm1MjyUnwjOHG7MChQm7opFemMCykBipIwGHUfnXJr4T1jUNV0mfxRr1vqNtpE32m3ittONs8s4Qoskr+YwOFdztRUBYg9BtoAzdPXWLT44zW+o67cX1tc6JLcR2gXyre3AuUCBYwTlgpILkknPYYUYmn+J47+6n8R+JbbxILFNWe0gu7W/MNjaolwYow8UcytJlgCzNG4y2Cdq4HVHwr4hbx+niU69pm1LdrIWv9kyZ+zmUSEb/ALR/rPlA3Yx329qqyfDu5dLnSv7bVfDd1qR1GSwFp+/DGQTGIT78CMyjcR5e7BK7u4AO6rm/Hn/Iu2v/AGGtK/8AThb10lc348/5F21/7DWlf+nC3oA6SiikYFlIDFSRgMOo/OgDzO0nWx+KWh2Gk6lrzeYt2mpHWprhYrzamR5KT4RnDjdmBQoTd0UiqPhzxRHqBs/EfiW38SLFf6o0FrfR3xisIAZmjhiMEcyllyFBd4jlmOTtxjrl8J6xqGq6TP4o1631G20ib7TbxW2nG2eWcIUWSV/MYHCu52oqAsQeg21Tg+HdzHFBpUutq/hy21L+0YbEWmJwwlMyxNNvIMYkOcbA2ABu45AK/iOzk0bxX4dOk6xq02r6jq26W3lvZJIpLT5jNmDPloiKVAZVBzsySSSfQa4qx8IeIrHxXqOuDX9KuZ76QLvudHkaWG2BytvG4uQFUcn7vLEscmu1oA5vx5/yLtr/ANhrSv8A04W9dJXN+PP+Rdtf+w1pX/pwt66SgBHdY42eRgiKCWZjgAeprzHTNX1bVvifoWrSXl1BpOrQXostP80iNreJYvLmdOhdy7uCeiFB1Br0yWKOeF4Z41kikUq6OuVYHggg9RXIP8LvDEfivSNa07RdIsf7NEpMEGmxL5rtsKPuAGGQoSDgnLcYoApaeusWnxxmt9R124vra50SW4jtAvlW9uBcoECxgnLBSQXJJOewwo4+fxYtnYnWLjxJdR+L4dfEVxosl+4X7O115IiFpu2bPJZWD7ck4bdk1358K+IW8fp4lOvaZtS3ayFr/ZMmfs5lEhG/7R/rPlA3Yx329qtXvhrVdb1GEa/q9pNpNvdLdRWVpp7RO7I4aISyNK4ZVIBIVUyQOgypAOmrm/Hn/Iu2v/Ya0r/04W9dJXN+PP8AkXbX/sNaV/6cLegDpKR3WONnkYIiglmY4AHqaWmSxRzwvDPGskUilXR1yrA8EEHqKAPM9M1fVtW+J+hatJeXUGk6tBeiy0/zSI2t4li8uZ06F3Lu4J6IUHUGrGs6HDB478OaPoeoa3HcyTNqN8z65eyqtrDjKlHlKnfIyLyOm+tV/hd4Yj8V6RrWnaLpFj/ZolJgg02JfNdthR9wAwyFCQcE5bjFa2l+HDY+K9a165u/tVxqQhiiXytotoIlOIwcnOWZ2J4yW6cCgDmvEdnJo3ivw6dJ1jVptX1HVt0tvLeySRSWnzGbMGfLREUqAyqDnZkkkk+g1xVj4Q8RWPivUdcGv6Vcz30gXfc6PI0sNsDlbeNxcgKo5P3eWJY5NdrQBzfjz/kXbX/sNaV/6cLeukrm/Hn/ACLtr/2GtK/9OFvXSUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAUUUUAFFFFABXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQAUUUUAFFFFABXN+PP+Rdtf8AsNaV/wCnC3rpK5vx5/yLtr/2GtK/9OFvQB0lFFFABRRRQAUUUUAc348/5F21/wCw1pX/AKcLeukrm/Hn/Iu2v/Ya0r/04W9dJQAUUUUAFFFFABXN+PP+Rdtf+w1pX/pwt66Sub8ef8i7a/8AYa0r/wBOFvQB0lFFFABRRRQAUUUUAc348/5F21/7DWlf+nC3rpK5vx5/yLtr/wBhrSv/AE4W9dJQBkeJ9Gn17Q/sdndx2dwl1bXUU0sBmRWhnSYBkDKSCY8HDDrVL7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyqOreHPGOs2UdrdeJNDRI7q3ugY9CmB3QzJMo5uzwWjAPtnp1rsqKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAON1bw54x1myjtbrxJoaJHdW90DHoUwO6GZJlHN2eC0YB9s9OtXvsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKo6t4c8Y6zZR2t14k0NEjure6Bj0KYHdDMkyjm7PBaMA+2enWuyooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA43VvDnjHWbKO1uvEmhokd1b3QMehTA7oZkmUc3Z4LRgH2z061e+w+N/+hh8P/wDghn/+TK6SigDm/sPjf/oYfD//AIIZ/wD5Mo+w+N/+hh8P/wDghn/+TK6SigDm/sPjf/oYfD//AIIZ/wD5Mo+w+N/+hh8P/wDghn/+TK6SigDm/sPjf/oYfD//AIIZ/wD5Mqjq3hzxjrNlHa3XiTQ0SO6t7oGPQpgd0MyTKObs8FowD7Z6da7KigDm/sPjf/oYfD//AIIZ/wD5Mo+w+N/+hh8P/wDghn/+TK6SigDm/sPjf/oYfD//AIIZ/wD5Mo+w+N/+hh8P/wDghn/+TK6SigDm/sPjf/oYfD//AIIZ/wD5Mo+w+N/+hh8P/wDghn/+TK6SigDjdW8OeMdZso7W68SaGiR3VvdAx6FMDuhmSZRzdngtGAfbPTrV77D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyqOreHPGOs2UdrdeJNDRI7q3ugY9CmB3QzJMo5uzwWjAPtnp1rsqKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAON1bw54x1myjtbrxJoaJHdW90DHoUwO6GZJlHN2eC0YB9s9OtXvsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKo6t4c8Y6zZR2t14k0NEjure6Bj0KYHdDMkyjm7PBaMA+2enWuyooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5K+8O+KtXW2t9V8QaO1pFe213Ilto0scj+TOkwUM10wXJjAztPBrraKKAP/Z)

Figure 7 - Integral Image

On figure 11, the sum of pixel values in the shaded region will be the corresponding value of that pixel, pixel with value 2, in the integral image. The corresponding value would then be 51. The algorithm goes through all the pixels and performs the same operation. The integral image looks like the one given on figure 12.

Previously we have stated that, for a 24x24 pixel image. There are 180,000 features. Which means that, the algorithm must perform addition for different sized frames again and again to find the means of each side of a feature. This takes a lot of processing time. Here is where the integral image comes in. The integral image reduces the number of additions that needs to be performed to a maximum of four. Whether the dimension of the selected area is 24x24 pixels or 1000x1000 pixels, only four numbers are required to find the area’s sum. To make this clear, let’s use the 10x10 image example used before.

![Text, table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADMzMAAJKSAAIAAAADMzMAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTY6NDM6MjAAMjAyMTowODoxMyAxNjo0MzoyMAAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTY6NDM6MjAuMzI3PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAHUAjgDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD2i+vvEd540vNI0O+0uxt7PT7a6ZrzT5Ll5GmkuFIBWeMAAQDsfvGpfsPjf/oYfD//AIIZ/wD5Mosf+Sp67/2BdN/9H31dJQBzf2Hxv/0MPh//AMEM/wD8mUfYfG//AEMPh/8A8EM//wAmV0lFAHN/YfG//Qw+H/8AwQz/APyZR9h8b/8AQw+H/wDwQz//ACZXSUUAc39h8b/9DD4f/wDBDP8A/JlZsFz43m8VX2jf234fX7JZW13539iT/P5zzpt2/a+MeRnOed3bHPbVzdj/AMlT13/sC6b/AOj76gA+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOJgufG83iq+0b+2/D6/ZLK2u/O/sSf5/OedNu37XxjyM5zzu7Y50vsPjf8A6GHw/wD+CGf/AOTKLH/kqeu/9gXTf/R99XSUAc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JldJRQBzf2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mV0lFAHN/YfG/wD0MPh//wAEM/8A8mVmwXPjebxVfaN/bfh9fsllbXfnf2JP8/nPOm3b9r4x5Gc553dsc9tXN2P/ACVPXf8AsC6b/wCj76gA+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkyukooA5v7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TK6SigDm/sPjf8A6GHw/wD+CGf/AOTKPsPjf/oYfD//AIIZ/wD5MrpKKAOJgufG83iq+0b+2/D6/ZLK2u/O/sSf5/OedNu37XxjyM5zzu7Y50vsPjf/AKGHw/8A+CGf/wCTKLH/AJKnrv8A2BdN/wDR99XSUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZWbBc+N5vFV9o39t+H1+yWVtd+d/Yk/z+c86bdv2vjHkZznnd2xz21c3Y/8lT13/sC6b/6PvqAD7D43/wChh8P/APghn/8Akyj7D43/AOhh8P8A/ghn/wDkyukooA5v7D43/wChh8P/APghn/8Akyj7D43/AOhh8P8A/ghn/wDkyukooA5v7D43/wChh8P/APghn/8Akyj7D43/AOhh8P8A/ghn/wDkyukooA4mC58bzeKr7Rv7b8Pr9ksra787+xJ/n855027ftfGPIznPO7tjnS+w+N/+hh8P/wDghn/+TKLH/kqeu/8AYF03/wBH31dJQBzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJldJRQBzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJldJRQBzf2Hxv/wBDD4f/APBDP/8AJlZsFz43m8VX2jf234fX7JZW13539iT/AD+c86bdv2vjHkZznnd2xz21c3Y/8lT13/sC6b/6PvqAD7D43/6GHw//AOCGf/5Mo+w+N/8AoYfD/wD4IZ//AJMrpKKAOb+w+N/+hh8P/wDghn/+TKPsPjf/AKGHw/8A+CGf/wCTK6SigDm/sPjf/oYfD/8A4IZ//kyj7D43/wChh8P/APghn/8AkyukooA4mC58bzeKr7Rv7b8Pr9ksra787+xJ/n855027ftfGPIznPO7tjnS+w+N/+hh8P/8Aghn/APkyix/5Knrv/YF03/0ffV0lAHN/YfG//Qw+H/8AwQz/APyZR9h8b/8AQw+H/wDwQz//ACZXSUUAc39h8b/9DD4f/wDBDP8A/JlH2Hxv/wBDD4f/APBDP/8AJldJRQBzf2Hxv/0MPh//AMEM/wD8mVmwXPjebxVfaN/bfh9fsllbXfnf2JP8/nPOm3b9r4x5Gc553dsc9tXN2P8AyVPXf+wLpv8A6PvqAD7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5vQdQ1z/AISrVNG1660+7+y2VrdxTWVm9t/rXuEKsrSyZx5AIII6miix/wCSp67/ANgXTf8A0ffUUAFj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFY3ifxCvhzTYZltjd3d3cx2dnbB9nnTSHCgtg7VGCS2DhVJwehANmiue0DxLc6hrmo6HrOnx6fqlhHFOyQXJnilhkztdHKIT8yMpBUYI75roaACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiqWr6l/ZOmS3n2O7vimAtvZReZLISQAAOB1PJJAAySQATWd4J8SSeLvB9lrc9j/AGfLcmRXtfO83yykjIRvAGfu56UAb1FFFAHN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAUUVT1S4v7axZ9JsUvrosqpFLP5KcnlmfDEADJ4Vj6CgC5RXP+GPEk+t3OrWOo2EdjqGk3K29xHDcGeJt0ayKySFVJyrjIKgg10FABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAFFYXi/xDN4Z0NL21so72eW7t7SOGScwqWmlWMEuFYgAtn7pq9pM2rzQOddsbKzlDYRbO9e5Vlx1JaKPBz2wfrQBfooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACiiqeq3F/bWJfSbBL+6Z1VIpJxCgyeWZ8MQAOeFY+1AFyisDwz4juNaudVsNT09dP1LSbhYLiKKfz4mDIsiOkhVSQVYdVBByK36ACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooAKKparLqkNoG0SztLy43gGO7u2t0C4OTuWOQ5zjjb+PrjeF/E2pa3rWt6dqel2lo2kyRQvNZ3zXMckjpvKZaKPBVSmev3sdjQB01FFFAHN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAUUVykvjZ0+Ill4YXRbtYblJv8AiYz/ALuNnjRHKxqRmQYcAtwueAWwcAHV0VxGq/EC7tBrd9puiLfaL4flMWo3Ru/LmLIoebyYthEgRWGSzpkhgOmT2kM0dxBHNCweORQ6MOjAjINAD65ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAoqlqsuqQ2gbRLO0vLjeAY7u7a3QLg5O5Y5DnOONv4+uN4X8Talreta3p2p6XaWjaTJFC81nfNcxySOm8ploo8FVKZ6/ex2NAHTUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVykvjZ0+Ill4YXRbtYblJv+JjP+7jZ40RysakZkGHALcLngFsHAB1dFcRqvxAu7Qa3faboi32i+H5TFqN0bvy5iyKHm8mLYRIEVhks6ZIYDpk9pDNHcQRzQsHjkUOjDowIyDQA+ubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooAKKxvE/iA+H7C2eC0N7eXt0lnaW/mCMSSvnG58HaoCsScE4BwCeKg8OeJJ9W1LVNJ1WwjsNU0tozPFDcGeJo5FJjdHKoSDtYYKggqfYkA6CiiigDm7H/kqeu/9gXTf/R99RRY/wDJU9d/7Aum/wDo++ooALH/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACuR+IVldTWmialaW013/Y2sQ380FvGXkeIK8b7VHLECQtgcnbgAniuuooA43w6J9Y+IWseJFs7u1sDYW2n2pvLZ7d5yjyyO/lyAOqgyqoJAyQ2OME9lRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQBV1HUIdLsXu7lLh40xlba2kuJDk44SNWY9ew461x/winZPAsGm3NlqFnd2ss7Sx3unz2/Ek8jrtMiKG+Ug/KTjIziu6ooAKKKKAObsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgArJ8SXNvbaK/2221Oe2ldY5TpaymaMH+IeSRLjOAdmTz0xkjWooA4b4dWUtlqHiD7Da3tvoE9zHNZHUoZI7mWZlPnu3mgSspOwBpctwwB2ha7miigArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigDG8Uvpg0bZr2jyaxYSSqssCWBvAvcO0QDMwBA6KSCQcYyRz3w90z7HrfiK60rTp9J8O3ckH9n2M1u1sBIqsJpFgYAxqx2cELkqTjnJ7qigAooooA5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgArF8W67ceHfDdxf2OmXWqXQISG2tYHlLOxwCwQFgg6kgE4HAJwDtUUAcf8PI7WHT7wB9QuNTuZ/tepXd7pdxZieZxj5BMi/KoUKFXOAozycnsKKKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAKWtag+laHe38VpPeyW0DypbW8ZeSZgCQiqOSSePxrK8CaJPoXg+1h1D5tSui15qD/3rmUl5PwDNtHsoroqKACiiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACvO/E+rxp8VPDVwNP1mW30yO9jupoNGu5Y0MiRhMMsZDA4PKkgY5xXolFAHlF7HqGk6D438MR6PqV1f61d3UmmyQ2cj28q3SgAtMBsj2Mzbg7KcLkZyM+n6da/YdLtbTdu+zwpFu9dqgZ/SrFFABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAUta1B9K0O9v4rSe9ktoHlS2t4y8kzAEhFUckk8fjWV4E0SfQvB9rDqHzaldFrzUH/vXMpLyfgGbaPZRXRUUAFFFFAHN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAV534n1eNPip4auBp+sy2+mR3sd1NBo13LGhkSMJhljIYHB5UkDHOK9EooA8ovY9Q0nQfG/hiPR9Sur/Wru6k02SGzke3lW6UAFpgNkexmbcHZThcjORn0/TrX7Dpdrabt32eFIt3rtUDP6VYooAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigDnvGun6df6HEdUbUovst1Hc21xpdvJPcQTKfldURHz1IOVK4JzWN4B0a8TxF4g8RXs+qTx6iLe3tpNWhSG4kjhD5cxKieWpaQgKUVvkyR82T3VFABRRRQBzdj/yVPXf+wLpv/o++oosf+Sp67/2BdN/9H31FABY/8lT13/sC6b/6Pvq6SuJudetNE+Ker/bYdQl87RdP2/YtNuLvGJ73O7yUbb14zjPOOhrS/wCE80j/AJ8/EH/hOah/8YoA6Siub/4TzSP+fPxB/wCE5qH/AMYo/wCE80j/AJ8/EH/hOah/8YoA6Siub/4TzSP+fPxB/wCE5qH/AMYo/wCE80j/AJ8/EH/hOah/8YoA6Subsf8Akqeu/wDYF03/ANH31H/CeaR/z5+IP/Cc1D/4xXP2fjTS1+JOs3Btdc2SaTYIANAvi4KzXhOU8ncB8wwSMHkAnacAHolFc3/wnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8ACc1D/wCMUAdJRXN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFAHSUVzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxQAWP/ACVPXf8AsC6b/wCj76ukrzuz8aaWvxJ1m4NrrmyTSbBABoF8XBWa8Jynk7gPmGCRg8gE7TjoP+E80j/nz8Qf+E5qH/xigDpKK5v/AITzSP8Anz8Qf+E5qH/xij/hPNI/58/EH/hOah/8YoA6Siub/wCE80j/AJ8/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/GKAOkrm7H/kqeu/9gXTf/R99R/wnmkf8+fiD/wnNQ/+MVz9n400tfiTrNwbXXNkmk2CADQL4uCs14TlPJ3AfMMEjB5AJ2nAB6JRXN/8J5pH/Pn4g/8ACc1D/wCMUf8ACeaR/wA+fiD/AMJzUP8A4xQB0lFc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFAHSUVzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMUAFj/AMlT13/sC6b/AOj76ukrzuz8aaWvxJ1m4NrrmyTSbBABoF8XBWa8Jynk7gPmGCRg8gE7TjoP+E80j/nz8Qf+E5qH/wAYoA6Siub/AOE80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGKAOkorm/wDhPNI/58/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/ABigDpK5ux/5Knrv/YF03/0ffUf8J5pH/Pn4g/8ACc1D/wCMVz9n400tfiTrNwbXXNkmk2CADQL4uCs14TlPJ3AfMMEjB5AJ2nAB6JRXN/8ACeaR/wA+fiD/AMJzUP8A4xR/wnmkf8+fiD/wnNQ/+MUAdJRXN/8ACeaR/wA+fiD/AMJzUP8A4xR/wnmkf8+fiD/wnNQ/+MUAdJRXN/8ACeaR/wA+fiD/AMJzUP8A4xR/wnmkf8+fiD/wnNQ/+MUAFj/yVPXf+wLpv/o++rpK87s/Gmlr8SdZuDa65sk0mwQAaBfFwVmvCcp5O4D5hgkYPIBO046D/hPNI/58/EH/AITmof8AxigDpKK5v/hPNI/58/EH/hOah/8AGKP+E80j/nz8Qf8AhOah/wDGKAOkorm/+E80j/nz8Qf+E5qH/wAYo/4TzSP+fPxB/wCE5qH/AMYoA6Subsf+Sp67/wBgXTf/AEffUf8ACeaR/wA+fiD/AMJzUP8A4xXP2fjTS1+JOs3Btdc2SaTYIANAvi4KzXhOU8ncB8wwSMHkAnacAHolFc3/AMJ5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/Cc1D/4xQB0lFc3/AMJ5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/Cc1D/4xQB0lFc3/AMJ5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/Cc1D/4xQAWP/JU9d/7Aum/+j76ukrzuz8aaWvxJ1m4NrrmyTSbBABoF8XBWa8Jynk7gPmGCRg8gE7TjoP8AhPNI/wCfPxB/4Tmof/GKAOkorm/+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GKAOkorm/+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GKAOkrm7H/AJKnrv8A2BdN/wDR99R/wnmkf8+fiD/wnNQ/+MVz9n400tfiTrNwbXXNkmk2CADQL4uCs14TlPJ3AfMMEjB5AJ2nAB6JRXN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFAHSUVzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxQB0lFc3/wnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8ACc1D/wCMUAFj/wAlT13/ALAum/8Ao++oqj4c1e21n4k6/cWcd5Gi6TpyEXllNavnzr08JKqsRz1Ax1GeDRQBesf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6Pvq6SgAooooAKKKKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooAKKKKACiiigDm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76ukoAKKKKACiiigArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiiigAooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACiiigAooooAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SiiigAooooAKKKKAObsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgAooooAKKKKACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACiiigDm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76ukoAKKKKACiiigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiiigAooooA5ux/5Knrv/YF03/0ffUUWP8AyVPXf+wLpv8A6PvqKACx/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgAqnqmq2mjWLXeoO6xBlQCKJ5XdmOAqogLMST0AJq5VPU55IrTy7a9tLK7nYRW0l2nmIZOuNgdCxwDwGB49qAIdE8Qab4ht5pdKmkf7PKYZ45oJIJInAB2vHIqspwQeQMgg1pVwngETW3i3xjZalIl7qgu4Lm61CBdkUm+ICOJY+TGY0jUFSzn5g275sDu6ACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKAKWq6rb6PaC5u47uRC4QC0sprp8kE/ciVmxx1xj86p6J4r0rxBeXdppzXYubJUa4hu7Ce1ZA+dpxKik52np6VpX17b6bp9zfXsixW1rE000jHARFBLE/QA1y/w4s528PzeINRjKah4inOozK33o42AEEZ/wB2IRjHrmgDr6KKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAKrahqNnpOnzX+p3MVpaW675ZpmCqg9STVmuH+KwlbQdHCXX2OE69Yie42hvKXzRtbByvD7CNwK5xkEcUAdPpGuWmtpK1nFfxiIgN9t06e1Jz6CVF3dO2cVo1x/hfUNTj8ca/4evdVl1m2sILWeO6uIoklieUPuibykRTwiuPlBAfknIx2FABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAUtX1iw0LTnvtVuBBbqwXO0szMxwqqqgszEkAKAST0FRaL4g03xBDPJpc0jm3k8qeKaCSCWF8A4eORVZeCCMgZByKz/GWhX+tWWnSaPJbre6ZqMN9FHdFlim2bgUZlBK5VjhgDggcGsHwO2pXnxI8ZajqEVlCuyytHSxuGuIxNGshZfMZEJYLImRtGNwHbNAHoFFFFAHN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAVT1TVbTRrFrvUHdYgyoBFE8ruzHAVUQFmJJ6AE1cqnqc8kVp5dte2lldzsIraS7TzEMnXGwOhY4B4DA8e1AEOieINN8Q280ulTSP8AZ5TDPHNBJBJE4AO145FVlOCDyBkEGtKuE8Aia28W+MbLUpEvdUF3Bc3WoQLsik3xARxLHyYzGkagqWc/MG3fNgd3QAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQBS1bV7HQ9Ne/1SfyLdCqltpZmZiAqqqgszEkAKASScAVBoviPTPEH2ldNmlMto4juILi2kt5oiVDLujkVWAIOQcYPbpWB8UGV/DVjaJuS+vNVtYdPuBKIxbXO/dHKxKsCAV+7g7iQv8WRT8Bre2PjjxVp2vTpqWsYtrmbUoQEjeFg6xReUP9UU2OcEsW3bi3IAAO/ooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACobu8ttPs5bu/uIrW2hUvLNM4REUdSWPAH1qaoLuytdQg8i/tobmLer+XNGHXcpDKcHuCAQexANAFXQNe03xPodtrGh3P2qwugxhm8tk3YYqeGAI5BHIrRrivhF/yTDTv+u93/AOlUtdrQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQBS1bV7HQ9Ne/wBUn8i3QqpbaWZmYgKqqoLMxJACgEknAFQaL4j0zxB9pXTZpTLaOI7iC4tpLeaIlQy7o5FVgCDkHGD26VgfFBlfw1Y2ibkvrzVbWHT7gSiMW1zv3RysSrAgFfu4O4kL/FkU/Aa3tj448Vadr06alrGLa5m1KEBI3hYOsUXlD/VFNjnBLFt24tyAADv6KKKAObsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKz9b13T/AA7ppv8AVpZIrfzEiBjgeZmd2CqoRAWJLEDAHetCsTxXo1j4g0qHTtQ1CXTy93DLbywPGsnnRuJUC71ZScpnGDkA0AXNJ1m11qB5bOK9jWNtpF5YT2rE4zwsqKSPcDFX64/wdqmpyeKPEuh6hqTavb6U9v5F9JHGkhaRGZ4X8tVQsmFPCg4cZrsKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAKWravY6Hpr3+qT+RboVUttLMzMQFVVUFmYkgBQCSTgCoNF8R6Z4g+0rps0pltHEdxBcW0lvNESoZd0ciqwBByDjB7dKwPigyv4asbRNyX15qtrDp9wJRGLa537o5WJVgQCv3cHcSF/iyKfgNb2x8ceKtO16dNS1jFtczalCAkbwsHWKLyh/qimxzgli27cW5AAB39FFFAHN2P/ACVPXf8AsC6b/wCj76iix/5Knrv/AGBdN/8AR99RQAWP/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFVdR0yw1ixey1ayt760kwXguYlkjbByMqwIOCAatUUAVNM0nTtFshZ6PYWun2oYsILWFYkBPU7VAGat0UUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAQ3dnbahZy2l/bxXVtMpSWGZA6Op6gqeCPrUqqqKFQBVUYAAwAKWigAooooA5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6Pvq6SgAqK7tLe/s5bW+t4rm2mUpLDMgdJFPUFTwR7GpaKAKemaRpuiWf2TRtPtdPttxbybSBYkyep2qAM1coooAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SiiigCpqek6drVkbPWLC11C1LBjBdQrKhI6HawIzT7Gws9LsY7PTLSCztYhiOC3jEaIM54UYA5NWKKACiiigDm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++rpKACquo6ZYaxYvZatZW99aSYLwXMSyRtg5GVYEHBANWqKAKmmaTp2i2Qs9HsLXT7UMWEFrCsSAnqdqgDNW6KKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooAr31hZ6pYyWep2kF5ayjEkFxGJEcZzypyDyKh0rRdK0G1a10PTLPTbd3MjRWdusKMxABYhQBnAAz7Cr1FABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABVXUdMsNYsXstWsre+tJMF4LmJZI2wcjKsCDggGrVFAGZpHhrQvD7SnQdF0/TDNgSmytUh8zGcbtoGcZPX1NadFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFe+sLPVLGSz1O0gvLWUYkguIxIjjOeVOQeRUOlaLpWg2rWuh6ZZ6bbu5kaKzt1hRmIALEKAM4AGfYVeooAKKKKAObsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6Pvq6SgAqpqWlafrNk1nrFhbX9qxBaC6hWVCRyCVYEcVbooAq6bpdho9illpFjbWFqhJWC1hWJFJOThVAAyeatUUUAFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQBXvrCz1Sxks9TtILy1lGJILiMSI4znlTkHkVDpWi6VoNq1roemWem27uZGis7dYUZiACxCgDOABn2FXqKACiiigDm7H/kqeu/9gXTf/R99RRY/wDJU9d/7Aum/wDo++ooAzbnVLvTfinq/wBj0LUNX8zRdP3fYpLdfKxPe43edKnXPGM9DnHGdL/hKNX/AOhE8Qf9/wDT/wD5Kosf+Sp67/2BdN/9H31dJQBzf/CUav8A9CJ4g/7/AOn/APyVR/wlGr/9CJ4g/wC/+n//ACVXSUUAc3/wlGr/APQieIP+/wDp/wD8lUf8JRq//QieIP8Av/p//wAlV0lFAHN/8JRq/wD0IniD/v8A6f8A/JVc/Z+I9UHxJ1mUeC9cZ20mwUwiax3oBNeEMf8ASduDuIGCT8pyBxn0Subsf+Sp67/2BdN/9H31AB/wlGr/APQieIP+/wDp/wD8lUf8JRq//QieIP8Av/p//wAlV0lFAHN/8JRq/wD0IniD/v8A6f8A/JVH/CUav/0IniD/AL/6f/8AJVdJRQBzf/CUav8A9CJ4g/7/AOn/APyVR/wlGr/9CJ4g/wC/+n//ACVXSUUAed2fiPVB8SdZlHgvXGdtJsFMImsd6ATXhDH/AEnbg7iBgk/KcgcZ6D/hKNX/AOhE8Qf9/wDT/wD5Kosf+Sp67/2BdN/9H31dJQBzf/CUav8A9CJ4g/7/AOn/APyVR/wlGr/9CJ4g/wC/+n//ACVXSUUAc3/wlGr/APQieIP+/wDp/wD8lUf8JRq//QieIP8Av/p//wAlV0lFAHN/8JRq/wD0IniD/v8A6f8A/JVcnd+PoPDnj7UL7xBoeq6f9t0yzhigf7PJJ+6luSWPlysoB80Ac5yrZAGCfUK8K+N3/I7Wn/YPT/0ZJXPiKkqcOaJ7OS4OljcWqVXazOv/AOF3eG/+fLVP+/Uf/wAco/4Xd4b/AOfLVP8Av1H/APHK1/8AhVfg3/oDf+TU3/xdH/Cq/Bv/AEBv/Jqb/wCLqOXE90dntch/591Pw/zMj/hd3hv/AJ8tU/79R/8Axyj/AIXd4b/58tU/79R//HK1/wDhVfg3/oDf+TU3/wAXR/wqvwb/ANAb/wAmpv8A4ujlxPdB7XIf+fdT8P8AMyP+F3eG/wDny1T/AL9R/wDxyj/hd3hv/ny1T/v1H/8AHK1/+FV+Df8AoDf+TU3/AMXR/wAKr8G/9Ab/AMmpv/i6OXE90Htch/591Pw/zORtvixoUPjTUtXa01A291p9paoojTeGikuGYkb8YxMuOex6cZ1/+F3eG/8Any1T/v1H/wDHKjtPh34Wl8farpr6Xm0t9Msp4o/tEvyvJLdK5zuyciJOCcDbx1Odv/hVfg3/AKA3/k1N/wDF0cuJ7oPa5D/z7qfh/mZH/C7vDf8Az5ap/wB+o/8A45R/wu7w3/z5ap/36j/+OVr/APCq/Bv/AEBv/Jqb/wCLo/4VX4N/6A3/AJNTf/F0cuJ7oPa5D/z7qfh/mZH/AAu7w3/z5ap/36j/APjlH/C7vDf/AD5ap/36j/8Ajla//Cq/Bv8A0Bv/ACam/wDi6P8AhVfg3/oDf+TU3/xdHLie6D2uQ/8APup+H+Zkf8Lu8N/8+Wqf9+o//jlZFt8WNCh8aalq7WmoG3utPtLVFEabw0UlwzEjfjGJlxz2PTjPXf8ACq/Bv/QG/wDJqb/4usS0+HfhaXx9qumvpebS30yynij+0S/K8kt0rnO7JyIk4JwNvHU5OXE90Htch/591Pw/zJP+F3eG/wDny1T/AL9R/wDxyj/hd3hv/ny1T/v1H/8AHK1/+FV+Df8AoDf+TU3/AMXR/wAKr8G/9Ab/AMmpv/i6OXE90Htch/591Pw/zMj/AIXd4b/58tU/79R//HKP+F3eG/8Any1T/v1H/wDHK1/+FV+Df+gN/wCTU3/xdH/Cq/Bv/QG/8mpv/i6OXE90Htch/wCfdT8P8zI/4Xd4b/58tU/79R//AByj/hd3hv8A58tU/wC/Uf8A8crX/wCFV+Df+gN/5NTf/F0f8Kr8G/8AQG/8mpv/AIujlxPdB7XIf+fdT8P8zkbb4saFD401LV2tNQNvdafaWqKI03hopLhmJG/GMTLjnsenGdf/AIXd4b/58tU/79R//HKjtPh34Wl8farpr6Xm0t9Msp4o/tEvyvJLdK5zuyciJOCcDbx1Odv/AIVX4N/6A3/k1N/8XRy4nug9rkP/AD7qfh/mZH/C7vDf/Plqn/fqP/45R/wu7w3/AM+Wqf8AfqP/AOOVr/8ACq/Bv/QG/wDJqb/4uj/hVfg3/oDf+TU3/wAXRy4nug9rkP8Az7qfh/mZH/C7vDf/AD5ap/36j/8AjlH/AAu7w3/z5ap/36j/APjla/8Awqvwb/0Bv/Jqb/4uj/hVfg3/AKA3/k1N/wDF0cuJ7oPa5D/z7qfh/mZH/C7vDf8Az5ap/wB+o/8A45WRbfFjQofGmpau1pqBt7rT7S1RRGm8NFJcMxI34xiZcc9j04z13/Cq/Bv/AEBv/Jqb/wCLrEtPh34Wl8farpr6Xm0t9Msp4o/tEvyvJLdK5zuyciJOCcDbx1OTlxPdB7XIf+fdT8P8yT/hd3hv/ny1T/v1H/8AHKP+F3eG/wDny1T/AL9R/wDxytf/AIVX4N/6A3/k1N/8XR/wqvwb/wBAb/yam/8Ai6OXE90Htch/591Pw/zMj/hd3hv/AJ8tU/79R/8Axyj/AIXd4b/58tU/79R//HK1/wDhVfg3/oDf+TU3/wAXR/wqvwb/ANAb/wAmpv8A4ujlxPdB7XIf+fdT8P8AMyP+F3eG/wDny1T/AL9R/wDxyj/hd3hv/ny1T/v1H/8AHK1/+FV+Df8AoDf+TU3/AMXWd4i+GvhOw8L6rd2mleXPb2c0sT/aZTtZUJBwWweRSaxKV7ouEsinNQUKmunT/Mp6D42OteNNX1fQfD2ralbyafZWrLC1tG8TRyXLZYSTKMESjGCfutnHGeo/4SjV/wDoRPEH/f8A0/8A+Sq4X4Ef8x7/ALd//atevVtQm501Jnl5vhaeExs6NL4Vb8Umc3/wlGr/APQieIP+/wDp/wD8lUf8JRq//QieIP8Av/p//wAlV0lFbHlnN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVXSUUAc3/wAJRq//AEIniD/v/p//AMlVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZ9Erm7H/kqeu/8AYF03/wBH31AB/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVdJRQBzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lV0lFAHN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVXSUUAcb4cv7nUfiTr8t5pN5pTrpOnKIbx4Wdh516dw8qR1xzjk54PHTJV6x/wCSp67/ANgXTf8A0ffUUAFj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFQ3d5bafZy3d/cRWttCpeWaZwiIo6kseAPrQBNRWdoGvab4n0O21jQ7n7VYXQYwzeWybsMVPDAEcgjkVo0AFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQAUVkSeKtEi8Uw+G21GI6xPE0y2a5ZwijJLYGF4PG7Ge2aLrxXodl4osfDlzqMK6xqCu9vZjLOyqpYk4B2jCtgtjOCBkigDXooooA5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6Pvq6SgAooqnqurWWiabLf6pOILaLG5iCxJJwFVRksxJACgEkkAAk0AXKKzNF8RaZr/2gabNIZbVwlxBcW8lvNESNy7o5FVwCDkEjB7Vp0AFeFfG7/kdrT/sHp/6Mkr3WvCvjd/yO1p/2D0/9GSVyYv8AhH0vDP8AyMF6M91ooorrPmgoqlquq2+j2gubuO7kQuEAtLKa6fJBP3IlZscdcY/OqeieK9K8QXl3aac12LmyVGuIbuwntWQPnacSopOdp6elAGzRRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFFFZEnirRIvFMPhttRiOsTxNMtmuWcIoyS2BheDxuxntmgDXorBvfG2g6fqhsLy6mjkE6W7TfY5jbpK+NqNOE8tWO5eCwPzD1reoAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SiiigAoqnqurWei2Ju9RkdIt6oojieV3ZjgKqICzE+gBNQ6J4h03xFbzTaVO8gglMM0csLwyQuOdrxuFZTgg8gcEGgDSooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACiisiTxVokXimHw22oxHWJ4mmWzXLOEUZJbAwvB43Yz2zQBr0Vk634o0fw5LYR6zei2k1G4W2tU8tnMkjEADCg4GSBuOACRk8itagArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiqeq6tZ6LYm71GR0i3qiiOJ5XdmOAqogLMT6AE1DoniHTfEVvNNpU7yCCUwzRywvDJC452vG4VlOCDyBwQaANKsjxb/wAiTrn/AGD7j/0W1a9ZHi3/AJEnXP8AsH3H/otqmfws3w38eHqvzPOPgR/zHv8At3/9q169XkPwI/5j3/bv/wC1a9erDC/wV/XU9biH/kZ1fl/6SgoorIk8VaJF4ph8NtqMR1ieJpls1yzhFGSWwMLweN2M9s10nhGvRWDe+NtB0/VDYXl1NHIJ0t2m+xzG3SV8bUacJ5asdy8FgfmHrW9QAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUVDd3ltp9nLd39xFa20Kl5ZpnCIijqSx4A+tVNA17TfE+h22saHc/arC6DGGby2Tdhip4YAjkEcigDRooooA5ux/5Knrv/AGBdN/8AR99RRY/8lT13/sC6b/6PvqKACx/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6Pvq6SgAqC7srXUIPIv7aG5i3q/lzRh13KQynB7ggEHsQDU9VdR0yw1ixey1ayt760kwXguYlkjbByMqwIOCAaAOU+EX/ACTDTv8Arvd/+lUtdrWZpHhrQvD7SnQdF0/TDNgSmytUh8zGcbtoGcZPX1NadABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAcJrlla2nxg8ISWttDA9ympSztHGFMr+VCNzEdTgAZPYCk8U2Vrb/FLwPcW9tDFPdX9208qRhWmIsZVBYjliFAAz2AFdBe+CPCmo38l7qHhjRru7lbdJcT6fE8jn1LFck8UuoeCvCur38l9qvhrR767lx5lxc2EUkj4AAyzKScAAfQUAbdFIqqihUAVVGAAMACloA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACuK+JHyHwpPKQtrB4jtXuGY4VVKyKhP/AG0aP8cV2tQ3dnbahZy2l/bxXVtMpSWGZA6Op6gqeCPrQByWl7J/jV4hltSCkGj2MFyVPAmMk7gH38tlPsGHrXZ1T0zSNN0Sz+yaNp9rp9tuLeTaQLEmT1O1QBmrlABXhXxu/wCR2tP+wen/AKMkr3WvCvjd/wAjtaf9g9P/AEZJXJi/4R9Lwz/yMF6M91ooorrPmiC+vbfTdPub69kWK2tYmmmkY4CIoJYn6AGuX+HFnO3h+bxBqMZTUPEU51GZW+9HGwAgjP8AuxCMY9c11N3Z22oWctpf28V1bTKUlhmQOjqeoKngj61KqqihUAVVGAAMACgBaKKKAObsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgArhNcsrW0+MHhCS1toYHuU1KWdo4wplfyoRuYjqcADJ7AV3dYd74I8KajfyXuoeGNGu7uVt0lxPp8TyOfUsVyTxQByvxSkupvC15ff2nY3Wg6fcwPeabDGVuLh45VPkifewBL7fk8vJOF3Ddkeiq25A2CMjOCORWXJ4W8Pza2NZm0LTZNUDKwvms4zOCAAD5mN2QAAOegrVoAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAo61rNj4f0efU9Um8q2gGWIGWYk4VVA5ZiSAAOSSBWJ4I0q/h/tbXdbgFrqGu3QuXtAQTbRLGscUbEcFwiAsfUkdBmt3U9I03W7P7JrOn2uoW24N5N3AsqZHQ7WBGag0jw1oXh9pToOi6fphmwJTZWqQ+ZjON20DOMnr6mgDTooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACuE1yytbT4weEJLW2hge5TUpZ2jjCmV/KhG5iOpwAMnsBXd1h3vgjwpqN/Je6h4Y0a7u5W3SXE+nxPI59SxXJPFAHmfjs6yupXOq6t4a1J3/ALa0+10+aOa1MK20d3GwCgzBt8rjcSyj/lmCQFzXssTtJCjvG0TMoJjcjch9DgkZHsSKZdWdtfRLHe28NwiyLIqyoHAdSGVgD3BAIPYipqACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKAKOtazY+H9Hn1PVJvKtoBliBlmJOFVQOWYkgADkkgVieCNKv4f7W13W4Ba6hrt0Ll7QEE20SxrHFGxHBcIgLH1JHQZrd1PSNN1uz+yazp9rqFtuDeTdwLKmR0O1gRmoNI8NaF4faU6Doun6YZsCU2VqkPmYzjdtAzjJ6+poA06yPFv/Ik65/2D7j/ANFtWvWR4t/5EnXP+wfcf+i2qZ/CzfDfx4eq/M84+BH/ADHv+3f/ANq169XkPwI/5j3/AG7/APtWvXqwwv8ABX9dT1uIf+RnV+X/AKSgrhNcsrW0+MHhCS1toYHuU1KWdo4wplfyoRuYjqcADJ7AV3dYd74I8KajfyXuoeGNGu7uVt0lxPp8TyOfUsVyTxXSeEcr8UpLqbwteX39p2N1oOn3MD3mmwxlbi4eOVT5In3sAS+35PLyThdw3ZHoqtuQNgjIzgjkVlyeFvD82tjWZtC02TVAysL5rOMzggAA+ZjdkAADnoK1aACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAgu7K11CDyL+2huYt6v5c0YddykMpwe4IBB7EA1yPwi/wCSYad/13u//SqWur1HTLDWLF7LVrK3vrSTBeC5iWSNsHIyrAg4IBqtpHhrQvD7SnQdF0/TDNgSmytUh8zGcbtoGcZPX1NAGnRRRQBzdj/yVPXf+wLpv/o++oosf+Sp67/2BdN/9H31FABY/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABRRRQAUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRRQAUUUUAFeFfG7/kdrT/ALB6f+jJK91rwr43f8jtaf8AYPT/ANGSVyYv+EfS8M/8jBejPdaKKK6z5oKKKKACiiigDm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76ukoAKKKKACiiigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiiigAooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACiiigAooooAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAooooAKyPFv/ACJOuf8AYPuP/RbVr1keLf8AkSdc/wCwfcf+i2qZ/CzfDfx4eq/M84+BH/Me/wC3f/2rXr1eQ/Aj/mPf9u//ALVr16sML/BX9dT1uIf+RnV+X/pKCiiiuk8IKKKKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKACiiigAooooA5ux/wCSp67/ANgXTf8A0ffUUWP/ACVPXf8AsC6b/wCj76igDNufDmh+IPinq/8Ab2jafqfkaLp/lfbbVJvL3T3udu4HGcDOPQVpf8K48Ef9Cb4f/wDBXB/8TRY/8lT13/sC6b/6Pvq6SgDm/wDhXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImukooA5v8A4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJrpKKAOb/AOFceCP+hN8P/wDgrg/+Jrn7PwD4Pb4k6zat4T0M28ek2EiRHTYdis014GYDbgEhFBPfaPQV6JXN2P8AyVPXf+wLpv8A6PvqAD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImukooA5v8A4Vx4I/6E3w//AOCuD/4mj/hXHgj/AKE3w/8A+CuD/wCJrpKKAOb/AOFceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8Aia6SigDzuz8A+D2+JOs2reE9DNvHpNhIkR02HYrNNeBmA24BIRQT32j0FdB/wrjwR/0Jvh//AMFcH/xNFj/yVPXf+wLpv/o++rpKAOb/AOFceCP+hN8P/wDgrg/+Jo/4Vx4I/wChN8P/APgrg/8Aia6SigDm/wDhXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImukooA5v8A4Vx4I/6E3w//AOCuD/4mvIPixoulaD4rtrXQ9Ms9Nt3skkaKzt1hRmLuCxCgDOABn2FfQdeFfG7/AJHa0/7B6f8AoySuTF/wj6Xhn/kYL0Z6j/wrjwR/0Jvh/wD8FcH/AMTR/wAK48Ef9Cb4f/8ABXB/8TXSUV1nzRzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQB53Z+AfB7fEnWbVvCehm3j0mwkSI6bDsVmmvAzAbcAkIoJ77R6Cug/4Vx4I/wChN8P/APgrg/8AiaLH/kqeu/8AYF03/wBH31dJQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNc/Z+AfB7fEnWbVvCehm3j0mwkSI6bDsVmmvAzAbcAkIoJ77R6CvRK5ux/5Knrv/YF03/0ffUAH/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQB53Z+AfB7fEnWbVvCehm3j0mwkSI6bDsVmmvAzAbcAkIoJ77R6Cug/4Vx4I/wChN8P/APgrg/8AiaLH/kqeu/8AYF03/wBH31dJQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNc/Z+AfB7fEnWbVvCehm3j0mwkSI6bDsVmmvAzAbcAkIoJ77R6CvRK5ux/5Knrv/YF03/0ffUAH/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRQBzf/CuPBH/Qm+H/APwVwf8AxNZniXwD4Ps/CmrXVn4T0OC4hsppIpYtNhV42CEhlIXIIIyCK7esjxb/AMiTrn/YPuP/AEW1TP4Wb4b+PD1X5nk3wf8ADmh+IP7Y/t7RtP1PyPI8r7bapN5e7zM7dwOM4Gcegr0z/hXHgj/oTfD/AP4K4P8A4muF+BH/ADHv+3f/ANq169WGF/gr+up63EP/ACM6vy/9JRzf/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNdJRXSeEc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE10lFAHN/8K48Ef8AQm+H/wDwVwf/ABNc/Z+AfB7fEnWbVvCehm3j0mwkSI6bDsVmmvAzAbcAkIoJ77R6CvRK5ux/5Knrv/YF03/0ffUAH/CuPBH/AEJvh/8A8FcH/wATR/wrjwR/0Jvh/wD8FcH/AMTXSUUAc3/wrjwR/wBCb4f/APBXB/8AE0f8K48Ef9Cb4f8A/BXB/wDE10lFAHN/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNdJRQBxvhzRdK0H4k6/a6Hplnptu+k6dI0VnbrCjMZr0FiFAGcADPsKKvWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKKK4HUxrFn8Z/Dxn1y4lsL+K92adGvlQxrHHHjcASZH3FjubgcAAckgHfUV5b461rVNQ1a3k0e+ubLS9H1ixtJZLeVo/tlxJcRrJGSPvRpG20joXcg/cr1KgArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigAorM8RQwTaHMLyfUYbdSrynTPN89lBB2r5QMnPfZhsZ5Fcz8Nb2W7k8RRpdXsmnW+peXY2+pzSPdwx+Um7zBKTKoZ9zKJMNtIOMEUAdzRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRVPVdNXVrE2kl1d20bOpdrOcwyMAc7d6/MoPcqQfegC5RXF/DyeaafxElve3d9olvqRh02e7nadyFjUSgSuSzoJd4BJPQjPFdpQAV4V8bv+R2tP8AsHp/6Mkr3WvCvjd/yO1p/wBg9P8A0ZJXJi/4R9Lwz/yMF6M91ooorrPmgoqlqulW+sWgtruS7jQOHBtL2a1fIBH34mVsc9M4/KuS+G8LT3Ov6tb3moTaTcXptdOivNQnusRwZR5QZXYjfJv6fwqtAHdUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVS1e2vrzTJbfStQ/s25fAW68gSmMZG7CtxuxkAnIBwSDjBALtFcb8Jri6ufhjpj397c304kuEa4u5TJLIFuJFBZjyTgAV2VABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAFFcl8Qb+7t7TRNNsrmW1OtavDYTTwsVkSIq8j7GHKsVjKhhyN2RggGofDv2jR/iNrHhxLy7utO/s621C2W8uZLiSBneWN1EkhZyp8oNgk4JOOtAHZ0UUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVyHxJ1GbTdBsG+1z2FhPqUEGpXsDlGt7ZidzbxzGC21S4wVDE5HWgDr6K8/wDh9rltd+LfEuj6PrL6zo9mlrcWlw14135ZlEgeMTMWLgGPIyxwSwzxgegUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQAUVS1XSrfWLQW13JdxoHDg2l7NavkAj78TK2OemcflXJfDeFp7nX9Wt7zUJtJuL02unRXmoT3WI4Mo8oMrsRvk39P4VWgDuqyPFv/Ik65/2D7j/0W1a9ZHi3/kSdc/7B9x/6Lapn8LN8N/Hh6r8zzj4Ef8x7/t3/APatevV5D8CP+Y9/27/+1a9erDC/wV/XU9biH/kZ1fl/6Sgooqnqumrq1ibSS6u7aNnUu1nOYZGAOdu9fmUHuVIPvXSeEXKK4v4eTzTT+Ikt727vtEt9SMOmz3c7TuQsaiUCVyWdBLvAJJ6EZ4rtKACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKK4HUxrFn8Z/Dxn1y4lsL+K92adGvlQxrHHHjcASZH3FjubgcAAcks8f2kml/ZtQ0vV9WGv32p28NhbreyeS2XUPH9nBEZjEYdmZlJHJ3cCgD0GiiigDm7H/kqeu/9gXTf/R99RRY/8lT13/sC6b/6PvqKACx/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACuP1rwr4h1Lxjp2uWmvaZbLpgmW1t5NJkkO2VVDb2Fwu4/LwQF69DXYUUAcb4m+F3hjxFGHGi6Ta3bX0V3PdjTYnkn2yiR1Y4BO8AqSSfvHIPSuviijghSGCNY4o1CoiLhVA4AAHQU+igArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKAKOr22pXVmq6LqMen3SSK4kmtvPjcd1ZNykgj+6ykEDnGQc3w74bn0rVdU1fVb+O/1TVPKWaSC3MESRxAiNEQs5GN7EksSS3YAAdBRQAUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVi+LdG1HxB4buNM0nVv7ImuCFe58gyny8/MoAdCNw43AggE4wcEbVFAGL4a0nUtFsRZXtzpclpBGsdrDp2nPaLCozwd00me3TGOeua2qKKACvCvjd/wAjtaf9g9P/AEZJXuteFfG7/kdrT/sHp/6Mkrkxf8I+l4Z/5GC9Ge60UUV1nzRS1qzutR0O9stPvfsF1cQPFFdeX5nkMwIDhcjJGcjmk0PSLbQNAsNIsV229jbpbx+pCqBk+5xk1eooAKKKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAKq6jHfy2LppNzb2t2cbJbm3aeNeecoroTxn+Ifj0q1RQBzPgXwzqfhLQxpN/qtpqNvEzvA0Ni1u6l5HdtxMrhuX4wBgDvXTUUUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQBi+KPD3/AAkWmwRRXX2O8s7qO8s7nyxIIpkPBKkjcpBIIyMgnkdai0Dw5c6drGo6zrGoR6hqmoLFE7wWxgiiiiDbERC7kcu7Eljkt2AAG/RQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABVTU49Rlsiuj3Vra3W4YkurZp0A7jYsiHPvuq3RQBi+H/D8mkz39/qF4L/VNSkV7m4WHykCoNqRomSVRRngsxyzEnnA2qKKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooApa1Z3Wo6He2Wn3v2C6uIHiiuvL8zyGYEBwuRkjORzSaHpFtoGgWGkWK7bext0t4/UhVAyfc4yavUUAFZHi3/AJEnXP8AsH3H/otq16yPFv8AyJOuf9g+4/8ARbVM/hZvhv48PVfmecfAj/mPf9u//tWvXq8h+BH/ADHv+3f/ANq169WGF/gr+up63EP/ACM6vy/9JQVi+LdG1HxB4buNM0nVv7ImuCFe58gyny8/MoAdCNw43AggE4wcEbVFdJ4Ri+GtJ1LRbEWV7c6XJaQRrHaw6dpz2iwqM8HdNJnt0xjnrmtqiigArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKAOP1rwr4h1Lxjp2uWmvaZbLpgmW1t5NJkkO2VVDb2Fwu4/LwQF69DUdz4R8Qt42uvEVrr2ls7xiGzivdIkm+xRYG5Yytwgyx5ZsZPA6AAdpRQAi7go3kFsckDAJ+lLRRQBzdj/AMlT13/sC6b/AOj76iix/wCSp67/ANgXTf8A0ffUUAFj/wAlT13/ALAum/8Ao++rpK4m5g1yb4p6v/YOo6fZY0XT/N+22D3O/wDf3uNu2aPbjnOc5yOmOdL7D43/AOhh8P8A/ghn/wDkygDpKK5v7D43/wChh8P/APghn/8Akyj7D43/AOhh8P8A/ghn/wDkygDpKK5v7D43/wChh8P/APghn/8Akyj7D43/AOhh8P8A/ghn/wDkygDpK5ux/wCSp67/ANgXTf8A0ffUfYfG/wD0MPh//wAEM/8A8mVz9nZ+Mf8AhZOsquu6GLgaTYF5DosxRl8682gL9qyCCGycnORwMEkA9Eorm/sPjf8A6GHw/wD+CGf/AOTKPsPjf/oYfD//AIIZ/wD5MoA6Siub+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkygDpKK5v7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TKACx/5Knrv/YF03/0ffV0led2dn4x/4WTrKrruhi4Gk2BeQ6LMUZfOvNoC/asgghsnJzkcDBJ6D7D43/6GHw//AOCGf/5MoA6Siub+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MoA6Siub+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MoA6SvCvjd/yO1p/2D0/9GSV6j9h8b/8AQw+H/wDwQz//ACZXkHxYi1WHxXbLrl5Z3lx9iQrJZ2jW6Bd74BVpJCTnPOR1HHGTyYv+EfS8M/8AIwXoz6Dorm/sPjf/AKGHw/8A+CGf/wCTKPsPjf8A6GHw/wD+CGf/AOTK6z5o6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoALH/kqeu/9gXTf/R99XSV53Z2fjH/AIWTrKrruhi4Gk2BeQ6LMUZfOvNoC/asgghsnJzkcDBJ6D7D43/6GHw//wCCGf8A+TKAOkorm/sPjf8A6GHw/wD+CGf/AOTKPsPjf/oYfD//AIIZ/wD5MoA6Siub+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkygDpK5ux/5Knrv/YF03/0ffUfYfG//Qw+H/8AwQz/APyZXP2dn4x/4WTrKrruhi4Gk2BeQ6LMUZfOvNoC/asgghsnJzkcDBJAPRKK5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kygDpKK5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kygDpKK5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kygAsf+Sp67/wBgXTf/AEffV0led2dn4x/4WTrKrruhi4Gk2BeQ6LMUZfOvNoC/asgghsnJzkcDBJ6D7D43/wChh8P/APghn/8AkygDpKK5v7D43/6GHw//AOCGf/5Mo+w+N/8AoYfD/wD4IZ//AJMoA6Siub+w+N/+hh8P/wDghn/+TKPsPjf/AKGHw/8A+CGf/wCTKAOkrm7H/kqeu/8AYF03/wBH31H2Hxv/ANDD4f8A/BDP/wDJlc/Z2fjH/hZOsquu6GLgaTYF5DosxRl8682gL9qyCCGycnORwMEkA9Eorm/sPjf/AKGHw/8A+CGf/wCTKPsPjf8A6GHw/wD+CGf/AOTKAOkorm/sPjf/AKGHw/8A+CGf/wCTKPsPjf8A6GHw/wD+CGf/AOTKAOkrI8W/8iTrn/YPuP8A0W1UvsPjf/oYfD//AIIZ/wD5MrM8S2fjFfCmrNea7octuLKYyxxaLMjsuw5CsbpgpI6Eg49D0qZ/CzfDfx4eq/M5j4Ef8x7/ALd//atevV4f8H4Ncm/tj+wdR0+yx5Hm/bbB7nf/AKzG3bNHtxznOc5HTHPpn2Hxv/0MPh//AMEM/wD8mVhhf4K/rqetxD/yM6vy/wDSUdJRXN/YfG//AEMPh/8A8EM//wAmUfYfG/8A0MPh/wD8EM//AMmV0nhHSUVzf2Hxv/0MPh//AMEM/wD8mUfYfG//AEMPh/8A8EM//wAmUAdJXN2P/JU9d/7Aum/+j76j7D43/wChh8P/APghn/8Akyufs7Pxj/wsnWVXXdDFwNJsC8h0WYoy+debQF+1ZBBDZOTnI4GCSAeiUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlAHSUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlAHSUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlABY/wDJU9d/7Aum/wDo++oqj4ci1WH4k6+uuXlneXH9k6cVks7RrdAvnXuAVaSQk5zzkdRxxklAF6x/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACiiigAooooAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAooooAKKKKAObsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6Pvq6SgAooooAKKKKACvCvjd/yO1p/2D0/9GSV7rXhXxu/5Ha0/wCwen/oySuTF/wj6Xhn/kYL0Z7rRRRXWfNBRRRQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABRRRQAUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRRQAUUUUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQAUUUUAFZHi3/AJEnXP8AsH3H/otq16yPFv8AyJOuf9g+4/8ARbVM/hZvhv48PVfmecfAj/mPf9u//tWvXq8h+BH/ADHv+3f/ANq169WGF/gr+up63EP/ACM6vy/9JQUUUV0nhBRRRQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRRRQAUUUUAc3Y/wDJU9d/7Aum/wDo++oosf8Akqeu/wDYF03/ANH31FABY/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABVLV7q+s9Mlm0rT/AO0rsYEdt5ywhiSBku3RRnJIBOAcAnAq7VXUbuaysXnttPuNRkXGLa2aNZHyccGR0Xjryw6fhQBifD3X9Q8T+BbDVtZjto76ZpkmW0VhECkrp8oYk4wvc10tcX8LrXVtK8HxaRrmiXemT2skz75pYHSUSTSONvlyMeAwzuA5PGa7SgArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA6SiiigDmPiD4jufC3hUajZS2cDm8trdp75C0MKSTKjOwDLwoYn7w6Vc8LajLqumPdPr2j67GZCsdzpEJjiGByp/fS5OfcfSrmr3t7p9ok2naVNqr+YFkggmjjkCHOWXzGVSQccFl4zzxg8/4Q0e/i8T+I/EN/p50pdYa3WOweRHkXyVZTJJ5ZZAz7hwGbhVyc8AA6+iiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACuOuvFOu2/wAUNL0GTS7e20e9S52XMku+adokRtyqpwiZfHzZY4PCjGexrgvEf9uS/EjQdSsvCup3dlpKXccs8c9ool81EClA86tgFTncFPoDQBFH41v7v4gavoX/AAknhvSvsV9FbW1jeWzPdXStDG5K/wCkJyS5UYQ9O9ehVwXjq21zxboOp+FofDM0Yu3EUWqy3MBtolDBhNjf5u5cZChPvAc4+au8VdqBck4GMk8mgBa8K+N3/I7Wn/YPT/0ZJXuteFfG7/kdrT/sHp/6Mkrkxf8ACPpeGf8AkYL0Z7rRRRXWfNFPVBqTWLLoj2kV2zKBJdozxoufmOxSCxxnA3Lz3FYng3xBqGsXWu2Gqm0uJtHv/shvLGNo4Zz5aOQEZmKsu/aw3HkVo+JAz6K8X9grr8ErqlxYFogZIz1IEpCMQcHazLxnnIAOJ4F0W90u+1mf+zG0LR7p4vsGjGSM/ZiqnzXCxs0ce9mB2ISPl3HljQB2NFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFYPjLxMvhTw8b8JC80k0dtAtxL5UQd2ADO+DtRRlmOOimt6uX8faJd6zotjJpttHeXWl6lb6ilrIwXz/KfLICeAxUnBPGcZx1oAs+E9Vk1iznuD4j0TX4lkCLNo0OxIzjJVj50uTyD1GPfNb9cj4a0zUZfGmueJdQ059Jiv7e2tYrSaSNpm8rzCZJPLZkBPmbRhicLzjOK66gArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA6SiiigDB8ZeJl8KeHjfhIXmkmjtoFuJfKiDuwAZ3wdqKMsxx0U0nhPVZNYs57g+I9E1+JZAizaNDsSM4yVY+dLk8g9Rj3zVbx9ol3rOi2Mmm20d5daXqVvqKWsjBfP8p8sgJ4DFScE8ZxnHWofDWmajL401zxLqGnPpMV/b21rFaTSRtM3leYTJJ5bMgJ8zaMMThecZxQB11FFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFcx8QfEdz4W8KjUbKWzgc3ltbtPfIWhhSSZUZ2AZeFDE/eHSunqhq97e6faJNp2lTaq/mBZIIJo45Ahzll8xlUkHHBZeM88YIBT8LajLqumPdPr2j67GZCsdzpEJjiGByp/fS5OfcfStuuQ8IaPfxeJ/EfiG/086UusNbrHYPIjyL5Kspkk8ssgZ9w4DNwq5OeB19ABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFLV7q+s9Mlm0rT/7SuxgR23nLCGJIGS7dFGckgE4BwCcCsf4e6/qHifwLYatrMdtHfTNMky2isIgUldPlDEnGF7mtvUbuaysXnttPuNRkXGLa2aNZHyccGR0Xjryw6fhXK/C611bSvB8Wka5ol3pk9rJM++aWB0lEk0jjb5cjHgMM7gOTxmgDtKyPFv/ACJOuf8AYPuP/RbVr1keLf8AkSdc/wCwfcf+i2qZ/CzfDfx4eq/M84+BH/Me/wC3f/2rXr1eQ/Aj/mPf9u//ALVr16sML/BX9dT1uIf+RnV+X/pKCuOuvFOu2/xQ0vQZNLt7bR71LnZcyS75p2iRG3KqnCJl8fNljg8KMZ7GuC8R/wBuS/EjQdSsvCup3dlpKXccs8c9ool81EClA86tgFTncFPoDXSeER6n4z8QtaeJNb0OHTzpPhyaSGS1uIXae+MKhpykgcLFjLKoKPkoSeuB3lrcx3lnDcw5Mc0ayJkYOCMj+decX2heI7LS/F3hvS9Ge6i8QXM8trqf2iJYbZblQsnmqzCTKEuw2q24bRxzj0aztksrG3tYySkESxqT1IUY/pQBNXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAGD4y8TL4U8PG/CQvNJNHbQLcS+VEHdgAzvg7UUZZjjoppPCeqyaxZz3B8R6Jr8SyBFm0aHYkZxkqx86XJ5B6jHvmq3j7RLvWdFsZNNto7y60vUrfUUtZGC+f5T5ZATwGKk4J4zjOOtQ+GtM1GXxprniXUNOfSYr+3trWK0mkjaZvK8wmSTy2ZAT5m0YYnC84zigDrqKKKAObsf+Sp67/wBgXTf/AEffUUWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKKKKACiiigArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA6SiiigAooooAKKKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAKKKKACiiigArwr43f8jtaf9g9P/Rkle614V8bv+R2tP+wen/oySuTF/wAI+l4Z/wCRgvRnutFec/8AC7vDf/Plqn/fqP8A+OUf8Lu8N/8APlqn/fqP/wCOVp9YpfzHB/YuYf8APpno1Fec/wDC7vDf/Plqn/fqP/45R/wu7w3/AM+Wqf8AfqP/AOOUfWKX8wf2LmH/AD6Z6NRXnP8Awu7w3/z5ap/36j/+OUf8Lu8N/wDPlqn/AH6j/wDjlH1il/MH9i5h/wA+mdFY/wDJU9d/7Aum/wDo++rpK8itvixoUPjTUtXa01A291p9paoojTeGikuGYkb8YxMuOex6cZ1/+F3eG/8Any1T/v1H/wDHKPrFL+YP7FzD/n0z0aivOf8Ahd3hv/ny1T/v1H/8co/4Xd4b/wCfLVP+/Uf/AMco+sUv5g/sXMP+fTPRqK85/wCF3eG/+fLVP+/Uf/xyj/hd3hv/AJ8tU/79R/8Axyj6xS/mD+xcw/59M9Grm7H/AJKnrv8A2BdN/wDR99XO/wDC7vDf/Plqn/fqP/45WRbfFjQofGmpau1pqBt7rT7S1RRGm8NFJcMxI34xiZcc9j04yfWKX8wf2LmH/PpnrtFec/8AC7vDf/Plqn/fqP8A+OUf8Lu8N/8APlqn/fqP/wCOUfWKX8wf2LmH/Ppno1Fec/8AC7vDf/Plqn/fqP8A+OUf8Lu8N/8APlqn/fqP/wCOUfWKX8wf2LmH/Ppno1Fec/8AC7vDf/Plqn/fqP8A+OUf8Lu8N/8APlqn/fqP/wCOUfWKX8wf2LmH/PpnRWP/ACVPXf8AsC6b/wCj76ukryK2+LGhQ+NNS1drTUDb3Wn2lqiiNN4aKS4ZiRvxjEy457HpxnX/AOF3eG/+fLVP+/Uf/wAco+sUv5g/sXMP+fTPRqK85/4Xd4b/AOfLVP8Av1H/APHKP+F3eG/+fLVP+/Uf/wAco+sUv5g/sXMP+fTPRqK85/4Xd4b/AOfLVP8Av1H/APHKP+F3eG/+fLVP+/Uf/wAco+sUv5g/sXMP+fTPRq5ux/5Knrv/AGBdN/8AR99XO/8AC7vDf/Plqn/fqP8A+OVkW3xY0KHxpqWrtaagbe60+0tUURpvDRSXDMSN+MYmXHPY9OMn1il/MH9i5h/z6Z67RXnP/C7vDf8Az5ap/wB+o/8A45R/wu7w3/z5ap/36j/+OUfWKX8wf2LmH/Ppno1Fec/8Lu8N/wDPlqn/AH6j/wDjlH/C7vDf/Plqn/fqP/45R9YpfzB/YuYf8+mejVkeLf8AkSdc/wCwfcf+i2rkP+F3eG/+fLVP+/Uf/wAcqhrnxg0DU/Duo2EFnqSy3VrLCheKMKGZCBnD9OaUq9JxeptQyfHxrRk6TsmvzK3wI/5j3/bv/wC1a9eryH4Ef8x7/t3/APatevUsL/BX9dR8Q/8AIzq/L/0lBRRRXSeEFFFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAFFFFABRRRQBzdj/AMlT13/sC6b/AOj76iix/wCSp67/ANgXTf8A0ffUUAZtzpd3qXxT1f7HruoaR5ei6fu+xR27ebme9xu86J+mOMY6nOeMaX/CL6v/AND34g/78af/APItFj/yVPXf+wLpv/o++rpKAOb/AOEX1f8A6HvxB/340/8A+RaP+EX1f/oe/EH/AH40/wD+Ra6SigDm/wDhF9X/AOh78Qf9+NP/APkWj/hF9X/6HvxB/wB+NP8A/kWukooA5v8A4RfV/wDoe/EH/fjT/wD5Frn7Pw5qh+JOsxDxpriuuk2DGYQ2O9wZrwBT/o23A2kjAB+Y5J4x6JXN2P8AyVPXf+wLpv8A6PvqAD/hF9X/AOh78Qf9+NP/APkWj/hF9X/6HvxB/wB+NP8A/kWukooA5v8A4RfV/wDoe/EH/fjT/wD5Fo/4RfV/+h78Qf8AfjT/AP5FrpKKAOb/AOEX1f8A6HvxB/340/8A+RaP+EX1f/oe/EH/AH40/wD+Ra6SigDzuz8OaofiTrMQ8aa4rrpNgxmENjvcGa8AU/6NtwNpIwAfmOSeMdB/wi+r/wDQ9+IP+/Gn/wDyLRY/8lT13/sC6b/6Pvq6SgDm/wDhF9X/AOh78Qf9+NP/APkWj/hF9X/6HvxB/wB+NP8A/kWukooA5v8A4RfV/wDoe/EH/fjT/wD5Fo/4RfV/+h78Qf8AfjT/AP5FrpKKAOb/AOEX1f8A6HvxB/340/8A+Ra4vU/hwvin4hX9nrninXLgWOl2csUoW0R/3kt0GU7bcAgeUCOM8nk8Y9Yrm7H/AJKnrv8A2BdN/wDR99ScVJWaNaVapRlz0pOL7p2OQ/4UHon/AEMXiD/vu1/+MUf8KD0T/oYvEH/fdr/8Yr1Oio9lT/lX3HV/aWO/5/S/8Cf+Z5Z/woPRP+hi8Qf992v/AMYo/wCFB6J/0MXiD/vu1/8AjFep0Ueyp/yr7g/tLHf8/pf+BP8AzPLP+FB6J/0MXiD/AL7tf/jFH/Cg9E/6GLxB/wB92v8A8Yr1Oij2VP8AlX3B/aWO/wCf0v8AwJ/5nitt8GNLm8aalpDeINcFva6faXSMGtt5aWS4VgT5OMYhXHHc9eMa/wDwoPRP+hi8Qf8Afdr/APGK6+x/5Knrv/YF03/0ffV0lHsqf8q+4P7Sx3/P6X/gT/zPLP8AhQeif9DF4g/77tf/AIxR/wAKD0T/AKGLxB/33a//ABivU6KPZU/5V9wf2ljv+f0v/An/AJnln/Cg9E/6GLxB/wB92v8A8Yo/4UHon/QxeIP++7X/AOMV6nRR7Kn/ACr7g/tLHf8AP6X/AIE/8zyz/hQeif8AQxeIP++7X/4xWRbfBjS5vGmpaQ3iDXBb2un2l0jBrbeWlkuFYE+TjGIVxx3PXjHtVc3Y/wDJU9d/7Aum/wDo++o9lT/lX3B/aWO/5/S/8Cf+ZyH/AAoPRP8AoYvEH/fdr/8AGKP+FB6J/wBDF4g/77tf/jFep0Ueyp/yr7g/tLHf8/pf+BP/ADPLP+FB6J/0MXiD/vu1/wDjFH/Cg9E/6GLxB/33a/8AxivU6KPZU/5V9wf2ljv+f0v/AAJ/5nln/Cg9E/6GLxB/33a//GKP+FB6J/0MXiD/AL7tf/jFep0Ueyp/yr7g/tLHf8/pf+BP/M8Vtvgxpc3jTUtIbxBrgt7XT7S6Rg1tvLSyXCsCfJxjEK447nrxjX/4UHon/QxeIP8Avu1/+MV19j/yVPXf+wLpv/o++rpKPZU/5V9wf2ljv+f0v/An/meWf8KD0T/oYvEH/fdr/wDGKP8AhQeif9DF4g/77tf/AIxXqdFHsqf8q+4P7Sx3/P6X/gT/AMzyz/hQeif9DF4g/wC+7X/4xR/woPRP+hi8Qf8Afdr/APGK9Too9lT/AJV9wf2ljv8An9L/AMCf+Z5Z/wAKD0T/AKGLxB/33a//ABisi2+DGlzeNNS0hvEGuC3tdPtLpGDW28tLJcKwJ8nGMQrjjuevGPaq5ux/5Knrv/YF03/0ffUeyp/yr7g/tLHf8/pf+BP/ADOQ/wCFB6J/0MXiD/vu1/8AjFH/AAoPRP8AoYvEH/fdr/8AGK9Too9lT/lX3B/aWO/5/S/8Cf8AmeWf8KD0T/oYvEH/AH3a/wDxij/hQeif9DF4g/77tf8A4xXqdFHsqf8AKvuD+0sd/wA/pf8AgT/zPLP+FB6J/wBDF4g/77tf/jFH/Cg9E/6GLxB/33a//GK9Too9lT/lX3B/aWO/5/S/8Cf+Z5b4Y8BS+H/Gms6Ro3izXLW3XT7K6Zglm7uzyXSkEtbkYAiGMAdTnPGOu/4RfV/+h78Qf9+NP/8AkWix/wCSp67/ANgXTf8A0ffV0lWkoqyOSpUnVk51G231erOb/wCEX1f/AKHvxB/340//AORaP+EX1f8A6HvxB/340/8A+Ra6SimZnN/8Ivq//Q9+IP8Avxp//wAi0f8ACL6v/wBD34g/78af/wDItdJRQBzf/CL6v/0PfiD/AL8af/8AItc/Z+HNUPxJ1mIeNNcV10mwYzCGx3uDNeAKf9G24G0kYAPzHJPGPRK5ux/5Knrv/YF03/0ffUAH/CL6v/0PfiD/AL8af/8AItH/AAi+r/8AQ9+IP+/Gn/8AyLXSUUAc3/wi+r/9D34g/wC/Gn//ACLR/wAIvq//AEPfiD/vxp//AMi10lFAHN/8Ivq//Q9+IP8Avxp//wAi0f8ACL6v/wBD34g/78af/wDItdJRQBxvhywudO+JOvxXmrXmqu2k6cwmvEhV1HnXo2jyo0XHGeRnk89MFXrH/kqeu/8AYF03/wBH31FABY/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVz3jjxDP4Y8NG/tlgVmuIYDcXQJhtVkkCGaTBB2LnJ5H1HWgDoaK5Twd4jv9Z1PXLC/n0/UE0ueOJNR02Jo4ZWZNzR7S74dD1w54ZeAeK6ugArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiqWr3V9Z6ZLNpWn/2ldjAjtvOWEMSQMl26KM5JAJwDgE4FY/w91/UPE/gWw1bWY7aO+maZJltFYRApK6fKGJOML3NAHS0UUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVT1Uam1iV0R7SO7Z1AlvEZ441z8zbFILHHQbl+tAFyiuZ8Ja7qWpX+uaXrQtJLrR7tYDdWSNHFOrxLICEZmKsA+CNx5Ge9dNQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRWD4y8TL4U8PG/CQvNJNHbQLcS+VEHdgAzvg7UUZZjjoppPCeqyaxZz3B8R6Jr8SyBFm0aHYkZxkqx86XJ5B6jHvmgDfooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACiiqWqxapNaBdEvLSzuN4Jku7RrhCuDkbVkjOc453fh6AF2iuS8G61rmraxr9tq1xp93Z6ZcpaQ3VnZvbiWYLumGGlkyFLKucj5gw7V1tABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRVPVBqTWLLoj2kV2zKBJdozxoufmOxSCxxnA3Lz3FYng3xBqGsXWu2Gqm0uJtHv/shvLGNo4Zz5aOQEZmKsu/aw3HkUAdPRRRQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFU9VGptYldEe0ju2dQJbxGeONc/M2xSCxx0G5frQBcormfCWu6lqV/rml60LSS60e7WA3VkjRxTq8SyAhGZirAPgjceRnvXTUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFcddeKddt/ihpegyaXb22j3qXOy5kl3zTtEiNuVVOETL4+bLHB4UYymreKddsfiZoOiJpdtFo2oyzQveTS7pZmW3aUeWinCKCu0l+Sc4UABiAdlRRRQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFc/4w8QXGg6fZJp0UUuoanfRWFoJs+Wkj5JdwCCVVVZiAQTtxkZyADoKK5jw/rmqN4q1Pw54h+yS3dnbw3kN3ZwtDHPDIXXmNncqyvGw+8cgg8ciunoAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAorjrrxTrtv8UNL0GTS7e20e9S52XMku+adokRtyqpwiZfHzZY4PCjGc6Pxrf3fxA1fQv+Ek8N6V9ivora2sby2Z7q6VoY3JX/SE5JcqMIenegD0KiiigDm7H/kqeu/9gXTf/R99RRY/8lT13/sC6b/6PvqKACx/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACuY8e6dqeqaBBBpUUtzGLyF76zgnEMl3ag/vIlckAE5BILKGAKkjdXT0UAcT4F0K70vXNZuYdIl8PaHcCEWmjyyxtslG4yyqkTPHErblG1W5KsSBxntqKKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAKuo3c1lYvPbafcajIuMW1s0ayPk44MjovHXlh0/CuV+F1rq2leD4tI1zRLvTJ7WSZ980sDpKJJpHG3y5GPAYZ3AcnjNdpRQAUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVi+LbzXLLw3cSeFdN/tHVGISGPeihMnBkO9lDbRztyMnAyM5G1RQBy3gSybS9JlsX0TVLCTzDPPd6nJbPJfTOSXkJhlfnIHXAA2gcDA6miigArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKAOX8faJd6zotjJpttHeXWl6lb6ilrIwXz/ACnyyAngMVJwTxnGcdah8NaZqMvjTXPEuoac+kxX9vbWsVpNJG0zeV5hMknlsyAnzNowxOF5xnFddRQAUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABVLWp7620O9m0e0+238cDtbW+9U82TB2qWYgAE4yTV2igDD8G6CfDXhGw0yV/NuUj8y7m/wCetw5Lyv8Ai7Ma3KKKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAMnxIGfRXi/sFdfgldUuLAtEDJGepAlIRiDg7WZeM85ABxPAui3ul32sz/2Y2haPdPF9g0YyRn7MVU+a4WNmjj3swOxCR8u48sa7GigAooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACsXxbea5ZeG7iTwrpv8AaOqMQkMe9FCZODId7KG2jnbkZOBkZyNqigDlvAlk2l6TLYvomqWEnmGee71OS2eS+mckvITDK/OQOuABtA4GB1NFFABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAcF4j/tyX4kaDqVl4V1O7stJS7jlnjntFEvmogUoHnVsAqc7gp9AaXxaNbn8eeG73T/AAvqV9aaLczyzTwz2iiYSWzxjYHmVshnAO4L0OM8Z7yigBFJZQSpUkZKnqPypaKKAObsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgArmPHOj32p2OlXmlQfarvR9Ti1BLbzAhnChkdAzcBikjYyQMgZI6109FAHKeHrDUrvxpq3ibVtPk0xZ7S3sLS0nljeURxtI7O/lsyDLSkABjwuTjOB1dFFABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAcF4j/tyX4kaDqVl4V1O7stJS7jlnjntFEvmogUoHnVsAqc7gp9AaPHVtrni3QdT8LQ+GZoxduIotVluYDbRKGDCbG/zdy4yFCfeA5x81d7RQAirtQLknAxknk0tFFAHN2P/JU9d/7Aum/+j76iix/5Knrv/YF03/0ffUUAFj/yVPXf+wLpv/o++rpK4m51S7034p6v9j0LUNX8zRdP3fYpLdfKxPe43edKnXPGM9DnHGdL/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgDpK5ux/5Knrv/AGBdN/8AR99R/wAJRq//AEIniD/v/p//AMlVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZAPRKK5v/hKNX/6ETxB/wB/9P8A/kqj/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgAsf8Akqeu/wDYF03/ANH31dJXndn4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZ6D/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgDpK5ux/5Knrv/AGBdN/8AR99R/wAJRq//AEIniD/v/p//AMlVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZAPRKK5v/hKNX/6ETxB/wB/9P8A/kqj/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgAsf8Akqeu/wDYF03/ANH31dJXndn4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZ6D/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgDpK5ux/5Knrv/AGBdN/8AR99R/wAJRq//AEIniD/v/p//AMlVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZAPRKK5v/hKNX/6ETxB/wB/9P8A/kqj/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgAsf8Akqeu/wDYF03/ANH31dJXndn4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZ6D/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgDpK5ux/5Knrv/AGBdN/8AR99R/wAJRq//AEIniD/v/p//AMlVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZAPRKK5v/hKNX/6ETxB/wB/9P8A/kqj/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgAsf8Akqeu/wDYF03/ANH31dJXndn4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZ6D/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgDpK5ux/5Knrv/AGBdN/8AR99R/wAJRq//AEIniD/v/p//AMlVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZAPRKK5v/hKNX/6ETxB/wB/9P8A/kqj/hKNX/6ETxB/3/0//wCSqAOkorm/+Eo1f/oRPEH/AH/0/wD+SqP+Eo1f/oRPEH/f/T//AJKoA6Siub/4SjV/+hE8Qf8Af/T/AP5Ko/4SjV/+hE8Qf9/9P/8AkqgAsf8Akqeu/wDYF03/ANH31FUfDl/c6j8SdflvNJvNKddJ05RDePCzsPOvTuHlSOuOccnPB46ZKAL1j/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRRQAUUUUAFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQAUUUUAFFFFAHN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAUUUUAFFFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRRRQAUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUUUAFFFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAFFFFABRRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRRRQAUUUUAc3Y/wDJU9d/7Aum/wDo++oosf8Akqeu/wDYF03/ANH31FABY/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABVLVb640+0E1ppV3qjlwpgtHhVwMH5syyIuOPXPPSrtUta1a10HQ73VtQfZa2UDzyn/ZUEnHqeOBQBm+HvFi6/q2p6a+kahpl1pflfaEvDAwzIpZQDFI4ztAJBxgMvrW/XLfDzS7mw8Jpe6om3VNYlbUr4HqskvzCP8A4Am1P+AV1NABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFLVb640+0E1ppV3qjlwpgtHhVwMH5syyIuOPXPPSs3w94sXX9W1PTX0jUNMutL8r7Ql4YGGZFLKAYpHGdoBIOMBl9a0ta1a10HQ73VtQfZa2UDzyn/ZUEnHqeOBWH8PNLubDwml7qibdU1iVtSvgeqyS/MI/+AJtT/gFAHU0UUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVR1rWbPQNJl1HUndYIyq4jjLu7MwVUVVBLMzEAAdSavVw/xXg8zw1ptxNJPFZWesWlxfS27FWigD4d9w5ULkMWHKgEjGM0AdPpGp3epJKbzRL/SShAVb14GMme48qV+nvjrWjXB+BLtJ/FmvxaDqlzqvhqOK2NvczXr3iC5IfzVindmLDaIiRuIVj2JNd5QAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFAGbr2vWnh3S/tt6JZN0iQQQQqGknlc7UjQEgFmJxyQB1JABNV9C8Twa3e31hJZXem6jYbDcWV4E3qjglHBjZ0ZThhkMcFSDg1i/EofZ7Xw7qs3y2Wla5Bd3kmCRFDskjLnH8KmRWJ7AE9qj8N3lr4g+KGua7o00V3pkWmWlgt5AweKeYSTSOEccNtWRASCcE46ggAHcUUUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABWZr+vWvh7T0urqOadpZkt7e3t0DSTyucKigkDJ9SQAASSAM1p1zHj2zsrjRbS6vtdttBfTr6K7tr67K+Skq5AVwzKGVlZlxuB54PFAF7QfEsGuzXtt9kutPv9PdUurK8CCSPcNyNlGZWVhnBViOCOoIrZrz74ex3uoeLvE3iK41C31K0vEtbS3vLO2aCC4MIkLNGC7llBkC79zAkPg8YHoNABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAZPiXxFB4Y0gX9za3N2HuIbaOC1Cb3klkCIBvZVHzMOSRU+k6jdajA73mjXuksrYEd48DM4x1HlSOMfUg+1Z/jMeHH0FY/GNwttpz3EZEz3D26xyq29GMqFSmGUYYkDOBnJArE+Ht29xrfiJNL1K51Xw1HJB/Zt3PcvcgyFW89UmclpEBCc7iASwB4wADuqKKKAObsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6Pvq6SgArmz470c+OYfCkH2ie/kWQvJHF+5hZFVyjOcDftdTtXJGRnGRnpK818WeKvD1p8X/CaXevaZA1lFfpdLJeRqYGeOLaHyflJ7A9aAN7VfiFp+l3Oof8AEv1G7sdJdY9S1K2SNoLNiAxDZcO21WVm2K2A3qCB1asrqGQhlYZBByCK8evNVstF8LfELw1qEyDW9Rvb02Onk/vr4XSAQmJOrgltpK5xtbOMV6xpVs9lo9naykF4IEjYjplVAP8AKgC1XN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFPVNQbTbFriOxu7+TcqJb2iK0jknH8RVQO5LEADvVLw/4lt/EDX0K2l1YXmnTiC7s7wJ5kTFQ68ozKQVYEEMaf4k1Oy0vRXl1LV20WGR1iGoAJiBj0JZ1ZFB6ZcYyQOpFcr8NJIjq/ihdPvBrWnyXcU6a6WDNeyvHiRCy4jYRhY1BjCqAduMhiQD0CiiigDm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76ukoAKzNf1628O6YLy7jmmLyxwQwQKGknldgqIoJAySRySAOpIFadcV8VpIx4OiguVjitrm/t4Zr+UsF05S+Rc7lKlSrBcNkAEgngEUAbeg+Jotcu7+yewvNNv8AT2QXFpeCPequu5HDRu6MpwRwxIKkECtqvOPhk8KeI/E1vpuqL4jsGkgn/t8yebJNKysDA8q/I/lqqEBAoUOMgE5Po9ABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFLV9XsdC0yXUNVn8i2iwGbaWJJIVVCqCWYkgAAEkkAVV8K+JLXxd4ZtNbsILm3gut+2K7QJKhV2QhgCQDlT3q7qOp2Gj2L3urXtvY2keA89zKsca5OBlmIAySBXEfBbWNM1D4d21rYajaXNxbTXDTwwzq7xB7mUqWUHK5HIz1FAHoNFFFAHN2P8AyVPXf+wLpv8A6PvqKLH/AJKnrv8A2BdN/wDR99RQAWP/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAUUUUAFFFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRRRQAUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUUUAFFFFABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAFFFFABRRRQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFABRRRQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABRRRQAUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQBzdj/yVPXf+wLpv/o++oosf+Sp67/2BdN/9H31FAGbcz65D8U9X/sHTtPvc6Lp/m/bb97bZ+/vcbdsMm7POc4xgdc8aX27xv8A9C94f/8AB9P/APIdFj/yVPXf+wLpv/o++rpKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOufs7zxj/AMLJ1ll0LQzcHSbAPGdamCKvnXm0hvsuSSS2RgYwOTkgeiVzdj/yVPXf+wLpv/o++oAPt3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAOb+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ66SigDzuzvPGP/CydZZdC0M3B0mwDxnWpgir515tIb7LkkktkYGMDk5IHQfbvG//AEL3h/8A8H0//wAh0WP/ACVPXf8AsC6b/wCj76ukoA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOufs7zxj/wsnWWXQtDNwdJsA8Z1qYIq+debSG+y5JJLZGBjA5OSB6JXN2P/ACVPXf8AsC6b/wCj76gA+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOukooA5v7d43/AOhe8P8A/g+n/wDkOj7d43/6F7w//wCD6f8A+Q66SigDm/t3jf8A6F7w/wD+D6f/AOQ6Pt3jf/oXvD//AIPp/wD5DrpKKAPO7O88Y/8ACydZZdC0M3B0mwDxnWpgir515tIb7LkkktkYGMDk5IHQfbvG/wD0L3h//wAH0/8A8h0WP/JU9d/7Aum/+j76ukoA5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOukooA5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOukooA5v7d43/6F7w//wCD6f8A+Q65+zvPGP8AwsnWWXQtDNwdJsA8Z1qYIq+debSG+y5JJLZGBjA5OSB6JXN2P/JU9d/7Aum/+j76gA+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ66SigDm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAPO7O88Y/8LJ1ll0LQzcHSbAPGdamCKvnXm0hvsuSSS2RgYwOTkgdB9u8b/8AQveH/wDwfT//ACHRY/8AJU9d/wCwLpv/AKPvq6SgDm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ66SigDm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ66SigDm/t3jf/AKF7w/8A+D6f/wCQ65+zvPGP/CydZZdC0M3B0mwDxnWpgir515tIb7LkkktkYGMDk5IHolc3Y/8AJU9d/wCwLpv/AKPvqAD7d43/AOhe8P8A/g+n/wDkOj7d43/6F7w//wCD6f8A+Q66SigDm/t3jf8A6F7w/wD+D6f/AOQ6Pt3jf/oXvD//AIPp/wD5DrpKKAOb+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOukooA87s7zxj/wALJ1ll0LQzcHSbAPGdamCKvnXm0hvsuSSS2RgYwOTkgdB9u8b/APQveH//AAfT/wDyHRY/8lT13/sC6b/6Pvq6SgDm/t3jf/oXvD//AIPp/wD5Do+3eN/+he8P/wDg+n/+Q66SigDm/t3jf/oXvD//AIPp/wD5Do+3eN/+he8P/wDg+n/+Q66SigDm/t3jf/oXvD//AIPp/wD5Drn7O88Y/wDCydZZdC0M3B0mwDxnWpgir515tIb7LkkktkYGMDk5IHolc3Y/8lT13/sC6b/6PvqAD7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAOb+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ66SigDm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA43w5Lqs3xJ19tcs7OzuP7J04LHZ3bXCFfOvcEs0cZBznjB6DnnAKvWP8AyVPXf+wLpv8A6PvqKACx/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgAoormz470c+OYfCkH2ie/kWQvJHF+5hZFVyjOcDftdTtXJGRnGRkA6Siua1fxtDod2w1DRtVTTo7iO3k1Tyoxbo7lQMguJCuWUbghXJ68HHS0AFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFZPiXxFB4Y0gX9za3N2HuIbaOC1Cb3klkCIBvZVHzMOSRU+k6jdajA73mjXuksrYEd48DM4x1HlSOMfUg+1AF+iiigDm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76ukoAKKKo61rNnoGky6jqTusEZVcRxl3dmYKqKqglmZiAAOpNAF6is7SNTu9SSU3miX+klCAq3rwMZM9x5Ur9PfHWtGgArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigAormz470c+OYfCkH2ie/kWQvJHF+5hZFVyjOcDftdTtXJGRnGRmvqvxC0/S7nUP+JfqN3Y6S6x6lqVskbQWbEBiGy4dtqsrNsVsBvUEAA6yikVldQyEMrDIIOQRS0Ac3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVzZ8d6OfHMPhSD7RPfyLIXkji/cwsiq5RnOBv2up2rkjIzjIyAdJRXN3XjvR7Xx1Y+Ex9pn1K7LqzQxZit2WIyhZHOAGZASFGTjBIAIJ6SgArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigAoqnqmoNpti1xHY3d/JuVEt7RFaRyTj+IqoHcliAB3ql4f8S2/iBr6FbS6sLzTpxBd2d4E8yJiodeUZlIKsCCGNAGzRRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFFFUda1mz0DSZdR1J3WCMquI4y7uzMFVFVQSzMxAAHUmgC9RWdpGp3epJKbzRL/SShAVb14GMme48qV+nvjrWjQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUVS1W+uNPtBNaaVd6o5cKYLR4VcDB+bMsiLjj1zz0rN8PeLF1/VtT019I1DTLrS/K+0JeGBhmRSygGKRxnaASDjAZfWgDfooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACiiszX9etfD2npdXUc07SzJb29vboGknlc4VFBIGT6kgAAkkAZoA06KxtB8Swa7Ne232S60+/wBPdUurK8CCSPcNyNlGZWVhnBViOCOoIrZoAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAoqlq+r2OhaZLqGqz+RbRYDNtLEkkKqhVBLMSQAACSSAKq+FfElr4u8M2mt2EFzbwXW/bFdoElQq7IQwBIByp70Aa9FFFAHN2P8AyVPXf+wLpv8A6PvqKLH/AJKnrv8A2BdN/wDR99RQAWP/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAV5r4s8VeHrT4v+E0u9e0yBrKK/S6WS8jUwM8cW0Pk/KT2B616VRQB5h4x8X6BrnioeEr7X9M0zTtNnhuNXku72OFp2UiRLaMMQSCQpdugHyg5J2+nKyuoZCGVhkEHIIpaKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAMDxmPDj6CsfjG4W2057iMiZ7h7dY5VbejGVCpTDKMMSBnAzkgVifD27e41vxEml6lc6r4ajkg/s27nuXuQZCreeqTOS0iAhOdxAJYA8YHdUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFcP8V4PM8NabcTSTxWVnrFpcX0tuxVooA+HfcOVC5DFhyoBIxjNdxRQBwfgS7SfxZr8Wg6pc6r4ajitjb3M1694guSH81Yp3Ziw2iIkbiFY9iTXeUUUAFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQB5r4s8VeHrT4v+E0u9e0yBrKK/S6WS8jUwM8cW0Pk/KT2B61j3mq2Wi+FviF4a1CZBreo3t6bHTyf318LpAITEnVwS20lc42tnGK9iooAq6VbPZaPZ2spBeCBI2I6ZVQD/KrVFFAHN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAV5r4s8VeHrT4v+E0u9e0yBrKK/S6WS8jUwM8cW0Pk/KT2B616VRQB5r458UaBYfE/wXFfa5pttJYXl012k13Ghtw9nIFLgn5Qdy4zjOR616SrK6hkIZWGQQcgilooAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAyfEmp2Wl6K8upau2iwyOsQ1ABMQMehLOrIoPTLjGSB1IrlfhpJEdX8ULp94Na0+S7inTXSwZr2V48SIWXEbCMLGoMYVQDtxkMT6BRQAUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABXD/FeDzPDWm3E0k8VlZ6xaXF9LbsVaKAPh33DlQuQxYcqASMYzXcUUAcH4Eu0n8Wa/FoOqXOq+Go4rY29zNeveILkh/NWKd2YsNoiJG4hWPYk13lFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFLWtWtdB0O91bUH2WtlA88p/2VBJx6njgVh/DzS7mw8Jpe6om3VNYlbUr4HqskvzCP8A4Am1P+AV1NFABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABXMePbOyuNFtLq+1220F9Ovoru2vrsr5KSrkBXDMoZWVmXG4Hng8V09FAHn3w9jvdQ8XeJvEVxqFvqVpeJa2lveWds0EFwYRIWaMF3LKDIF37mBIfB4wPQaKKACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKAKuo6nYaPYve6te29jaR4Dz3Mqxxrk4GWYgDJIFcR8FtY0zUPh3bWthqNpc3FtNcNPDDOrvEHuZSpZQcrkcjPUV6DRQAUUUUAc3Y/8lT13/sC6b/6PvqKLH/kqeu/9gXTf/R99RQAWP8AyVPXf+wLpv8A6Pvq6SuJufEeh+H/AIp6v/b2s6fpnn6Lp/lfbbpIfM2z3udu4jOMjOPUVpf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lc3Y/8lT13/sC6b/6PvqP+Fj+CP+hy8P8A/g0g/wDiq5+z8feD1+JOs3TeLNDFvJpNhGkp1KHYzLNeFlB3YJAdSR23D1FAHolFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQAWP/ACVPXf8AsC6b/wCj76ukrzuz8feD1+JOs3TeLNDFvJpNhGkp1KHYzLNeFlB3YJAdSR23D1FdB/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSVzdj/yVPXf+wLpv/o++o/4WP4I/6HLw/wD+DSD/AOKrn7Px94PX4k6zdN4s0MW8mk2EaSnUodjMs14WUHdgkB1JHbcPUUAeiUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVABY/8AJU9d/wCwLpv/AKPvq6SvO7Px94PX4k6zdN4s0MW8mk2EaSnUodjMs14WUHdgkB1JHbcPUV0H/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJXN2P/JU9d/7Aum/+j76j/hY/gj/ocvD/AP4NIP8A4qufs/H3g9fiTrN03izQxbyaTYRpKdSh2MyzXhZQd2CQHUkdtw9RQB6JRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAFj/wAlT13/ALAum/8Ao++rpK87s/H3g9fiTrN03izQxbyaTYRpKdSh2MyzXhZQd2CQHUkdtw9RXQf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lc3Y/8lT13/sC6b/6PvqP+Fj+CP+hy8P8A/g0g/wDiq5+z8feD1+JOs3TeLNDFvJpNhGkp1KHYzLNeFlB3YJAdSR23D1FAHolFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQAWP/ACVPXf8AsC6b/wCj76ukrzuz8feD1+JOs3TeLNDFvJpNhGkp1KHYzLNeFlB3YJAdSR23D1FdB/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVAHSVzdj/yVPXf+wLpv/o++o/4WP4I/6HLw/wD+DSD/AOKrn7Px94PX4k6zdN4s0MW8mk2EaSnUodjMs14WUHdgkB1JHbcPUUAeiUVzf/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVQB0lFc3/wsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFUAdJRXN/8LH8Ef8AQ5eH/wDwaQf/ABVH/Cx/BH/Q5eH/APwaQf8AxVABY/8AJU9d/wCwLpv/AKPvqKo+HNb0rXviTr91oep2epW6aTp0bS2dwsyKwmvSVJUkZwQce4ooA7KiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP/2Q==)

Figure 8 - Selected area

Consider the 3x5 pixels region in the red rectangle. We can see that the sum of the pixel values in this region is 83. Finding this value required 14 addition operations. Let’s see how many addition operations it takes using the integral image.

![Table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADOTYAAJKSAAIAAAADOTYAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTY6NTA6NTQAMjAyMTowODoxMyAxNjo1MDo1NAAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTY6NTA6NTQuOTU5PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAHWAjoDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD3HXNc1Wz1/TtI0PTLO+uLy1uLpmvL5rZI1haFSAVikJJM47D7pqP7d43/AOhe8P8A/g+n/wDkOi+/5KnoX/YF1L/0fY10lAHN/bvG/wD0L3h//wAH0/8A8h0fbvG//QveH/8AwfT/APyHXSUUAc39u8b/APQveH//AAfT/wDyHR9u8b/9C94f/wDB9P8A/IddJRQBzf27xv8A9C94f/8AB9P/APIdUZfEfjGHX7TSG8N6Gbi6tZ7pGGuzbAsTRKwJ+yZzmZccdj04z2Vc3ff8lT0L/sC6l/6PsaAD7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA42XxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM3vt3jf/oXvD//AIPp/wD5Dovv+Sp6F/2BdS/9H2NdJQBzf27xv/0L3h//AMH0/wD8h0fbvG//AEL3h/8A8H0//wAh10lFAHN/bvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHXSUUAc39u8b/9C94f/wDB9P8A/IdUZfEfjGHX7TSG8N6Gbi6tZ7pGGuzbAsTRKwJ+yZzmZccdj04z2Vc3ff8AJU9C/wCwLqX/AKPsaAD7d43/AOhe8P8A/g+n/wDkOj7d43/6F7w//wCD6f8A+Q66SigDm/t3jf8A6F7w/wD+D6f/AOQ6Pt3jf/oXvD//AIPp/wD5DrpKKAOb+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOukooA42XxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM3vt3jf/oXvD/8A4Pp//kOi+/5KnoX/AGBdS/8AR9jXSUAc39u8b/8AQveH/wDwfT//ACHR9u8b/wDQveH/APwfT/8AyHXSUUAc39u8b/8AQveH/wDwfT//ACHR9u8b/wDQveH/APwfT/8AyHXSUUAc39u8b/8AQveH/wDwfT//ACHVGXxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM9lXN33/JU9C/7Aupf+j7GgA+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAONl8R+MYdftNIbw3oZuLq1nukYa7NsCxNErAn7JnOZlxx2PTjN77d43/wChe8P/APg+n/8AkOi+/wCSp6F/2BdS/wDR9jXSUAc39u8b/wDQveH/APwfT/8AyHR9u8b/APQveH//AAfT/wDyHXSUUAc39u8b/wDQveH/APwfT/8AyHR9u8b/APQveH//AAfT/wDyHXSUUAc39u8b/wDQveH/APwfT/8AyHVGXxH4xh1+00hvDehm4urWe6Rhrs2wLE0SsCfsmc5mXHHY9OM9lXN33/JU9C/7Aupf+j7GgA+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ66SigDm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAONl8R+MYdftNIbw3oZuLq1nukYa7NsCxNErAn7JnOZlxx2PTjN77d43/AOhe8P8A/g+n/wDkOi+/5KnoX/YF1L/0fY10lAHN/bvG/wD0L3h//wAH0/8A8h0fbvG//QveH/8AwfT/APyHXSUUAc39u8b/APQveH//AAfT/wDyHR9u8b/9C94f/wDB9P8A/IddJRQBzf27xv8A9C94f/8AB9P/APIdUZfEfjGHX7TSG8N6Gbi6tZ7pGGuzbAsTRKwJ+yZzmZccdj04z2Vc3ff8lT0L/sC6l/6PsaAD7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5vT9e1z/hKrbRte0jT7T7VZT3cU1lqT3P+qeFCrK0EeM+eCCCehrpK5u+/5KnoX/YF1L/0fY10lAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAUUVT1fVrLQtHutU1SYQWdrGZJZCCcAegHJPYAck0AXKK5/R/F0Wp6x/ZN7pWo6NqDW32uK3v1izNFu2llMbuvykgFSQw3DjmugoAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAoqC9vbbTrGe9v5kt7a3jaWWWQ4VFUZJJ9AKyPCfi+w8ZWN5d6XBeQxWl49m32uAxM7KFO4KeQpDAjcAfUCgDeooooA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAooooAKK57w94103xPrmsabpkdzu0kxiS4kQCKcO0i5jIJLANE4yQOnGRzXQ0AFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQAUVR1nV7PQNGudU1KRo7a2Tc5VSzHnAAA5JJIAA6k1n6L4si1bVpdKutMv9I1GOBbkWt+I90kRO3epjd1IB4IzkEjI5FAG9RRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRXN6z470fRPEunaDP9onv7+aOEJbxblg37tjStwFB2NgZ3HBwCASADpKK5vxH470fwzrOmaTe/aZ77UriGBIbaLf5Ilk8tJJDwETdxknJwcA4OOkoAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAKK5vWfHej6J4l07QZ/tE9/fzRwhLeLcsG/dsaVuAoOxsDO44OAQCQmt+NYdI1K6sbXR9T1i4srUXd4tgsX+jxtu27vMkTJbY+FXcflPHTIB0tFV9Pv7bVdLtdR0+XzrS7hSeCQAjejKGU4PIyCOtWKAObvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsa6SgAoormvEXjWLw0bia80TV59Os0R7vUYIYzDApPJwzh3CjBYxq4A9wQADpaK5nWfG8Gl39xZ2Wk6lrM1naLeXQ04QkQRNu2EmSRNxbY+FXcfl6cjO9p9/barpdrqOny+daXcKTwSAEb0ZQynB5GQR1oAsVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFABRXN+I/Gcfhn7RNd6Jq0+n2cayXeoW8cfkwKTySGkV32jk7FbA9wQEv/GX2fxJLoum6DqmsXMNpFdyPZPbKixyM6rzLMmTmNugPagDpaKbGxeJWZGjLKCUbGV9jgkZ+hp1AHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFFFc94w8aab4KsILnU47mczybI4bVA8hA+8+CQAq8ZJPcDqQCAdDRXN6j4wNp4mm0Kw0DVNWu4LWO6lNo1sqIkjOq8yzJk5jboDXRRsXiVmRoyyglGxlfY4JGfoaAHVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFABRXNXfjF4vEV7o2neHdW1W4sY4pLh7RrZEQSBiozLMhJ+U9BUvjHxnp3gjQTqmqxXMwyQltaoryvhSzEAkDCqrMTnAA+gIB0FFNjcSRq69GAIzTqAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACuR+KdncX3w31JLSJ5pInt7kxxqWZ0injkcADknajcd666igDgbbV9N8XfFTRb7w3eQajZ6XpV2bm7tXEkatM8IjjLDgPiN229QByBkZ76iigArm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GgDpKKKKAIrq6t7G0lur2eO3t4ULyzSuESNQMlix4AA7mvP/hb4h0bUdT8W22n6vYXU82vXFzHFBco7PDsiHmAA5KZ43dM16LRQAUUUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABWN4ttNYv/Ct9Z+HJYYNQuEEccs0rRBFJAchlVirbd207ThsHFbNFAHmfgS31LTvidr9hJo+madaW+labF5VnfyTCFF+0CMLuhTdn5s5xjA+9k49MoooAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigDB8baZY6v4M1Gz1XUl0u2ZFc3zOqi3ZGDo5LcYDKpwevSuS8KNe6/wDFI63/AG5p+uWNhpD2ZvdLtDDbtJJKj7AxkkEjARkttbC5TgE8+l0UAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAV5z8UfEWiWGqeFLW+1jT7a4t9et7iaGa6RHji8uUeYwJyFycbjxXo1FAHm3xS8T6DFYeG0l1vTUd9b029VWu4wWt/tCnzgM8x4BO7pwea9EtLu3v7OK6sbiK5tplDxTQuHSRT0IYcEe4qWigArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigDzn4o+ItEsNU8KWt9rGn21xb69b3E0M10iPHF5co8xgTkLk43Hiuf8bzaPrPi3VWv/ABVb+FYP7HhFreJdGMaxG+58ltwEsS/d2x/P8zYcBgD7NRQBi+Dbm5u/A+iz32mrpVw9lEZLJEKLbnaPkCnlQOynkdO1bVFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFeafETxXo2pao/gO613T9JhmjV9Zuru8SAx27c+THuI3SSDgnoqEk8lQfS6KAPGPGsmi6t4q1T7Z4otvCdsNGhWzu47nyl1eN9z8ncBJEv3dsfz/M2HAYA+m+Dbm5u/A+iz32mrpVw9lEZLJEKLbnaPkCnlQOynkdO1bVFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAHmfxR1LRr3TdU0u48WNaXcMCj+wHEYXUX4kRNm0Tyq5KofKcA8r1DCmeKbrwm0Vxe6zqs/h/wAWtpUSfZ7PVJrefdtZo0SJGAnw7sAArAnI9q9PooAy/DEupz+EtJl8QJs1SSyia8XaF2zFAXGBwOc8DitSiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAK8h+J+leIorHxPrM9lpd1bS28NraTHUJEltrcSIzKIvJKlmk5Y7xkBB/Dz69RQB5p4wn8KLLe3Ot6w2h+Lv7OSLytO1i4jlc4ZoliQFPtGHZsfuzkkgjtXb+GJdTn8JaTL4gTZqkllE14u0LtmKAuMDgc54HFalFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFAHmPj258JW0+uXFrrtzpvjBYEihgs9RminuZgga3VbYNtnBMgH3GByw6hsZHxB0vxZJ4R17W9ZsdLuFHh02yM188clnuiDXLLEIWUuzjH3wCsaDjmvZaKAKmkvdPpFq2oQwwXJjHmRwSmVFPsxVSf++RVuiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoA5u+/5KnoX/YF1L/0fY10lcb4j1vStB+JOgXWuanZ6bbvpOoxrLeXCwozGayIUFiBnAJx7Gr3/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSVzd9/wAlT0L/ALAupf8Ao+xo/wCFj+CP+hy8P/8Ag0g/+Krn7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ0AeiUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVABff8lT0L/sC6l/6Psa6SvO7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ10H/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSVzd9/wAlT0L/ALAupf8Ao+xo/wCFj+CP+hy8P/8Ag0g/+Krn7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ0AeiUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVABff8lT0L/sC6l/6Psa6SvO7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ10H/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSVzd9/wAlT0L/ALAupf8Ao+xo/wCFj+CP+hy8P/8Ag0g/+Krn7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ0AeiUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVABff8lT0L/sC6l/6Psa6SvO7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ10H/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSVzd9/wAlT0L/ALAupf8Ao+xo/wCFj+CP+hy8P/8Ag0g/+Krn7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ0AeiUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVABff8lT0L/sC6l/6Psa6SvO7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ10H/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSVzd9/wAlT0L/ALAupf8Ao+xo/wCFj+CP+hy8P/8Ag0g/+Krn7zx94Pb4k6NdL4s0M28ek38byjUodis01mVUndgEhGIHfafQ0AeiUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVABff8lT0L/sC6l/6Psa6SuJtvEeh+IPinpH9g6zp+p+Rouoeb9iukm8vdPZY3bScZwcZ9DXbUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFABRRRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQBzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jXSUAFMmmitreSe4kSKGJS8kkjBVRQMkknoAO9PqC9gW5sZoXt4bkMhHkz/cc9g3B4z7H6UAVtJ1/R9fhkl0LVrHU44m2yPZ3KTBD1wSpODWhXn/h571Pi/qjeI7eCz1O90iE2sFjKZoGt4ZCHZpGVGaTfMBgooC4wW5x6BQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFAFe61CysZLeO9u4Ld7qTyoFllCGV8Z2qCfmOAeBzxReajZaf5H2+8gtftEywQ+fKqebK33UXJ5Y9gOTXCfETRdPXxR4Q1r7MG1F9etbbz3ZmKxhJjtUE4UEnJ2gZwM5wMJ8UtE0+S88M61LbCTUIde023imdifKQ3SkhVJwpPcgAkAAkgDAB6JRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFZl94l0LTNUg03Uta0+0v7jaYbW4ukjll3MVXahOTkggYHJGK064P4lR2uoaJdeFNMs4J9b8TJ5W0Rj5IxtVrmUjkLGuME9WCKOtAHV6t4i0TQWgGu6xYaabjIhF5dJD5uMZ27iM4yM49RWjXB6Haw3XxI8bx6qPPSO1sbRTcc/wCjGF2IyexdpCfU/Sr/AMKnlf4TeGjOzuf7PjCs/Upj5f8Ax3FAHW1zd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQBmX/iXQtL1KHTtT1rTrO+uAphtbi7SOWQMSq7UJBOSCBjqRirOo6nYaPYve6te29jaR4Dz3Mqxxrk4GWYgDJIFcZ8UtP1K58G63b6fpentYXdpu1G8Mv8ApIRT85SIoFkYRr8paVcHHpzx3xS1qDX/AA/qvn2+qnSbHRGm09zplzJFd3E0ORK8ojKBY0bALMMM7k42g0Ae3AhlBU5B5BHeiqmk3cd9pFrcwLMsckYKieF4XH1RwGH4gVboA5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xrpKACsy/8S6FpepQ6dqetadZ31wFMNrcXaRyyBiVXahIJyQQMdSMVp1wXxS0/Urnwbrdvp+l6e1hd2m7Ubwy/6SEU/OUiKBZGEa/KWlXBx6cgHWan4i0XRZ4IdZ1iw0+W5OII7u6SJpeQPlDEZ5I6etaNeYX0VzHdeINaGgza9ouv6PAILlZYFMMSxNuSUTOpCndvyobqeM11nw7N23wz8NHUS5uTpduZDJncT5a/ezzn1z3oA6Oubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkooooAxtT8YeGdFvDaaz4i0nT7kKGMN3fRxOAeh2swOKv6hqmn6Tp732q31tZWaY3XFzMsca5OBlmIAySB+Ncf4k07XfDV94h8Y6Ff6c6PZRy3Fhe2jkuturkhZllAQkM3JRsHFcT8T9eXxL4b1OXULDVbfT7XQzcWcf9mXEkU91PBne0qoYwsSNtBLDDO5ONoNAHuAIZQVOQeQR3oqppN3HfaRa3MCzLHJGConheFx9UcBh+IFW6AObvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsa6SgArP1bxBo2gRxya7q1jpiSkrG15cpCHI6gFiM1oV5dNN4g/4WF451PSbjSYZdKtreKL+0LV5meL7P52xWWRPKUuXyfmye3y8gHcaj4y8MaRNHDq3iPSbGWWMSxpc30UbOh6MAzDIODz04rXjkSaJZInV43UMrqchgehB7ivPWi1y9gPxE8N3lhayaloFs76bqNo8oGxXmC+asqbc+aVJ2NjGcdq7Lw5rC+IfC+l6ykDW66haRXQiY5KB0DYz369aANKubvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsaAOkooooAzNS8S6Fot1Da6xrWnWFxOMxRXV0kTyc4+UMQTzxxTtW8RaJoLQDXdYsNNNxkQi8ukh83GM7dxGcZGceorzDxjFrF34g8bJ4Tt4b20nsIbTXPtMQMkLBM4tvmAkYQSs2x9qhipDHLLWp4E/szWfEniS4Ia40+TSdMhtWuxybF7YuAc9AWeQn3z6UAemUVyXwqeV/hN4aM7O5/s+MKz9SmPl/8dxXW0Ac3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAVnX/iLRdKvrey1TWLCyu7ogQQXN0kckuTgbVYgtzxx3rRryvxbYahpCfEKe+8PSarp+tWIljvopoFWBI7YoUlEjqwCMpcFFf75IG7IoA73VfFvhvQrsWut+INL064ZA4hu72OJypJAbaxBxkHn2rVjkSaJZInV43UMrqchgehB7ivOLfRfE+n6ZF4t03U7BdQfw7aw3VnqVnJJ5jwq7n94sqlCTIQSVbGM812/hzWF8Q+F9L1lIGt11C0iuhExyUDoGxnv160AaVc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUVV1TTbXWdLudO1BGktbqMxzIsjRl1PUblIOD0PPI4oAdZahZ6lbmfTruC7hDtGZIJQ6hlOGXIOMg8EdqbbapYXkdzJaX1tOlrK8Nw0UysIZE+8jEH5WHcHkVxPwx0yzl8DaxpYh8mybWNStxFbsYdkf2h12qUIK4HA2kY7U34aaNpkOneMNHjsLYaauv3MH2MxAxGPyohtKngjHbvQB2OkeIdF19JX0HV7DU1hIEjWVykwQnpnaTjODWjXD+HGTxJ8R9Q8V6dGBpUFj/AGVBdAY+3uJd7yL/AHo1I2q3QkvjIwa7igDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKAObvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsa6SgAqrqWm2mr6bNYahF5tvMuHUMVPXIIZSCpBAIIIIIBBzVqigDI0fwvpWh3U91YxXD3U6LHJc3d3NdSlFyQnmSszBQSTtBxkk4rXoooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAwNc8FaN4jvYbrVhqDy27rJCIdUuYEjdc4dUjkVQ3J+YDPPWm6x4G0TXhaDVP7SmFmI/JC6tdRhWjOUchZBukB58w5bpzwK6GigCK0tks7OK2haVo4lCKZpmlcgeruSzH3JJqWiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAK52+8C6HqGuXGsSjUYb+5RI5prTVrq23qg+VcRyKMDJ7dST1JroqKAOe1PwLoGrvG9/b3LyLaizeSO/uI3nh/55ysrgyr14fd1b1Od6GGK2t44LeNIoYlCRxxqFVFAwAAOgA7U+igArm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GgDpKKKKAOf1PwPoOsX1xdX9tcO10VNzDHfTxw3JUBR5sKuI5PlVVO5TkAA5AxWpqek2OsaNc6TqMAlsbqEwSwhigZCMEZUgjj0Iq5RQAiqEQKowFGAKWiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACuf1PwPoOsX1xdX9tcO10VNzDHfTxw3JUBR5sKuI5PlVVO5TkAA5AxXQUUAYmqeENH1q4WTU47qeMKqm0+3TrbOqnID24cROPUMpB75rbACqAowBwAO1FFABXN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NAHSUUUUAc9qXgbQNXv57rULa4lNzIklzAL6dbe4ZAoBkgDiOThEB3KchQDkCtXVNKsta0e50rUoPOsrqJoZogxXchGCMqQRx6GrlFACKoRAqjAUYApaKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgArB1fwVoOu37XmpWkjTSRCGbyrqWFbiMEkJKqMFlXk/K4YYJHQmt6igDntR8C6Bqtw8t5a3G2WNI5beG+nhgmRRgK8KOI3GOMMpyODxxW/HGkMSxxIqRooVUUYCgdAB2FOooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooA5/VfA2g6zqFzeXtvcrNeRLFdfZr+e3S5RQQBKkbqsnBK/MDxx0GKNU8C+HtXlR7qxeMrbfYyLS6ltleDtE4iZQ6DnCtkDJ45NdBRQAyGGK2t44LeNIoYlCRxxqFVFAwAAOgA7U+iigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACsXUvCWkaxf/atTjurrJUtbSX85tmK4xm33+UcEA8r1GetbVFAGBqvgnQ9bvZrnUYLp2uFVbiKO/nihuAvAEkSOEk44O5TkcHI4rdjjSGJY4kVI0UKqKMBQOgA7CnUUAFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJUF7Zx6hZS2s7TJHKMM0E7wuPo6EMv1BFT0UAc9pHgfRNCtry30sajDFeB/OU6tdPy5yzqWkOxySSXXDZ71DZ/Dzw9YQahDbR6j5WppIl4kmr3cizbwA7ENKfnIAG8fNjjNdPRQBhaJ4O0nw9JEdLfUkSGLyooZtWup4kQDAAjkkZBgDA447Vu0UUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lAHG+I9XttG+JOgXF5HeSI2k6igFnZTXT586yPKRKzAcdSMdBnkVe/4TzSP+fPxB/4Tmof/ABii+/5KnoX/AGBdS/8AR9jXSUAc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFdJRQBzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMV0lFAHN/8J5pH/Pn4g/8ACc1D/wCMVz95400tviTo1wLXXNkek36EHQL4OS01mRhPJ3EfKckDA4BI3DPolc3ff8lT0L/sC6l/6PsaAD/hPNI/58/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/ABiukooA5v8A4TzSP+fPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/wAYrpKKAOb/AOE80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGK6SigDzu88aaW3xJ0a4FrrmyPSb9CDoF8HJaazIwnk7iPlOSBgcAkbhnoP+E80j/nz8Qf8AhOah/wDGKL7/AJKnoX/YF1L/ANH2NdJQBzf/AAnmkf8APn4g/wDCc1D/AOMUf8J5pH/Pn4g/8JzUP/jFdJRQBzf/AAnmkf8APn4g/wDCc1D/AOMUf8J5pH/Pn4g/8JzUP/jFdJRQBzf/AAnmkf8APn4g/wDCc1D/AOMVzuo+N9KT4h6NeG11ry49Kv4mVtDvEclpbQghWiBYfIckZAyM4yM+jVxfir/kfdC/7Bl//wCjbSpk7I2owU6iiyf/AIWTov8Az567/wCCS6/+N0f8LJ0X/nz13/wSXX/xuoqKz52eh9Vpkv8AwsnRf+fPXf8AwSXX/wAbo/4WTov/AD567/4JLr/43UVFHOw+q0yX/hZOi/8APnrv/gkuv/jdH/CydF/589d/8El1/wDG6ioo52H1WmY134+0l/iHpF4LXWfLh0q+iZTo9yHJeW0IIXZkj5DkjgZGeore/wCFk6L/AM+eu/8Agkuv/jdc/df8j7pX/YMvf/RtrW3RzsPqtMl/4WTov/Pnrv8A4JLr/wCN0f8ACydF/wCfPXf/AASXX/xuoqKOdh9Vpkv/AAsnRf8Anz13/wAEl1/8bo/4WTov/Pnrv/gkuv8A43UVFHOw+q0yX/hZOi/8+eu/+CS6/wDjdYN34+0l/iHpF4LXWfLh0q+iZTo9yHJeW0IIXZkj5DkjgZGeorZrEuv+R90r/sGXv/o21o52H1WmdB/wsnRf+fPXf/BJdf8Axuj/AIWTov8Az567/wCCS6/+N1FRRzsPqtMl/wCFk6L/AM+eu/8Agkuv/jdH/CydF/589d/8El1/8bqKijnYfVaZL/wsnRf+fPXf/BJdf/G6P+Fk6L/z567/AOCS6/8AjdRUUc7D6rTMa78faS/xD0i8FrrPlw6VfRMp0e5DkvLaEELsyR8hyRwMjPUVvf8ACydF/wCfPXf/AASXX/xuufuv+R90r/sGXv8A6Nta26Odh9Vpkv8AwsnRf+fPXf8AwSXX/wAbo/4WTov/AD567/4JLr/43UVFHOw+q0yX/hZOi/8APnrv/gkuv/jdH/CydF/589d/8El1/wDG6ioo52H1WmS/8LJ0X/nz13/wSXX/AMbrBu/H2kv8Q9IvBa6z5cOlX0TKdHuQ5Ly2hBC7MkfIckcDIz1FbNYl1/yPulf9gy9/9G2tHOw+q0zoP+Fk6L/z567/AOCS6/8AjdH/AAsnRf8Anz13/wAEl1/8bqKijnYfVaZL/wALJ0X/AJ89d/8ABJdf/G6P+Fk6L/z567/4JLr/AON1FRRzsPqtMl/4WTov/Pnrv/gkuv8A43R/wsnRf+fPXf8AwSXX/wAbqKijnYfVaZlTeOdKufiNpF0lrrQjh0q+jYf2Jds5LzWhGEWIsR8hycYGQD1Gej/4TzSP+fPxB/4Tmof/ABisnTP+Sl6b/wBgi+/9HWld1WkXdHBXgoTsjm/+E80j/nz8Qf8AhOah/wDGKP8AhPNI/wCfPxB/4Tmof/GK6SiqMDm/+E80j/nz8Qf+E5qH/wAYo/4TzSP+fPxB/wCE5qH/AMYrpKKAOb/4TzSP+fPxB/4Tmof/ABiufvPGmlt8SdGuBa65sj0m/Qg6BfByWmsyMJ5O4j5TkgYHAJG4Z9Erm77/AJKnoX/YF1L/ANH2NAB/wnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFdJRQBzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFdJRQBzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFdJRQBxNtr1prfxT0j7FDqEXk6LqG77bptxaZzPZY2+ci7unOM44z1FdtXN33/ACVPQv8AsC6l/wCj7GukoA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiiigAoqrbapYXl9dWVpfW091ZlRcwRTKzwFhld6g5XIBIz1xVqgArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAorMvvEuhaZqkGm6lrWn2l/cbTDa3F0kcsu5iq7UJyckEDA5IxRqXiXQtFuobXWNa06wuJxmKK6ukieTnHyhiCeeOKANOiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACiisy/8S6FpepQ6dqetadZ31wFMNrcXaRyyBiVXahIJyQQMdSMUAadFZuo+JND0e8gtNX1nT7C5uP9TDdXSRPLzj5VYgnnjitKgAri/FX/ACPuhf8AYMv/AP0baV2lcX4q/wCR90L/ALBl/wD+jbSpn8J0Yb+Kh1FFFYHsBRWbfeI9D0y5NvqWs6fZzgBjFcXSRtg9DgnNSXuuaTp00UOoapZ2kswzGk9wiM4zjgE80AXqKKKAMS6/5H3Sv+wZe/8Ao21rbrEuv+R90r/sGXv/AKNta26ACiisq78UaBp909tf65pttcR43xTXcaOuRkZBORwaANWiqz6lYxwW80l5bpFdMqW8jSqFmZvuhTn5iewHWrNABWJdf8j7pX/YMvf/AEba1t1iXX/I+6V/2DL3/wBG2tAG3RRRQAUVRvdb0rTLiODUtTs7SaXmOOe4WNn5xwCeeaNR1vStIaNdW1OzsTICUFzcJHvx1xuIz1oAvUUUUAYl1/yPulf9gy9/9G2tbdYl1/yPulf9gy9/9G2tbdABRRUNreW17CZbK4iuIwxQvE4cBgcEZHcHigCaioIb60uUme3uoZVt5GjmaOQMI3X7ytjoR3B6VDp2s6Zq4kOk6jaXwix5htp1k2Z6Z2k4zg/lQBdrEuv+R90r/sGXv/o21rbrEuv+R90r/sGXv/o21oA26KKKACiq0WoWU9pJdQXcElvHu3zJKpRdv3ssDgYwc+lM0/VtO1aN5NK1C1vkQ7Xa2mWQKfQlScUAXKKpWGs6Zqryppmo2l40OPNW3nWQpnOM4Jx0PX0q7QBX0z/kpem/9gi+/wDR1pXdVwumf8lL03/sEX3/AKOtK7qtobHk4r+IFFFUU1vSpNMm1KPU7NrGDf510twpij2HDbnzgYIOcnirOUvUVl6T4m0HX5JU0LW9O1N4QDItndxzFAehO0nFLpHiXQtfaVdB1rTtTaEAyiyu0mKA9M7ScZwevpQBp1zd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAUVnN4g0ZNJl1R9XsF0+Fikt2blBFGwbaQz5wCG4wT14qHSvFvhvXbs2uieINL1G4VC5htL2OVwoIBbapJxkjn3oA16KzLPxLoWoatPpdhrWn3WoW+4TWkF0jyxbTtbcgORg8HI4NadAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABWN4t1a70PwrfX+mWU19eRoFt4IYHlJdiFUlUBYqCdzYBO0HFbNFAHlHwyk0+x+IniHT7P+05ZJdPsXlubzTLi3eebdctLJJvRdpZnyM4zyFztOPV6pwaTZW2sXmqQw7b29jiinl3sd6x7tgxnAxvboBnPParlABXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSUUUUAcH8So7XUNEuvCmmWcE+t+Jk8raIx8kY2q1zKRyFjXGCerBFHWp/iDpmrT+EdWtNE03T7hb3Tnt7y7uJ8XGwKR8qbNsrBWYqHkQbj1AzWnfeBdD1DXLjWJRqMN/cokc01pq11bb1QfKuI5FGBk9upJ6k0X/AIE0HU3ZryK+YSQLbzKmp3KLcxqCAJlWQCU4JBLhiRwSRQBe8M3dpf8AhPSbvTZJZLOazieB5hh2QoMFvfHWtSmRRRwQpDBGscUahURFwqgcAADoKfQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFcF8UtP1K58G63b6fpentYXdpu1G8Mv+khFPzlIigWRhGvylpVwcenPe1z+p+B9B1i+uLq/trh2uipuYY76eOG5KgKPNhVxHJ8qqp3KcgAHIGKAMHxnf6ff+DDYaLaRX+q+LLEW9nHJH88qMnEspxkJGr7iT0JwOWFdtp1p9g0u1s/MaX7PCkXmN1faoGT7nFY2oeBtD1PWjq86X0N8bdbYzWeqXNr+6UkhMRSKMAknGOprctLZLOzitoWlaOJQimaZpXIHq7ksx9ySaAJa4vxV/yPuhf9gy//APRtpXaVxfir/kfdC/7Bl/8A+jbSpn8J0Yb+Kh1FFFYHsHK61Z6rol1rHiTSruzZWtkea0ubdiWEKscLIHG0kE8lT2pniMX+r+D7mbSdNsymp6d/pEk0mJkQpnATbh2AZsBnUZrVvfCukajdyz3kE0hndXmiF1KsMxUAAvEG2Pwqj5gcgAGl1DwxpWp3Ekt3FPmaMRypDdyxRzKMjDojBX4JHzA8cdKALGh3Fvd+H9PuLJ3e2lto2iaQYYqVGCffFX6bHGkUaxxIqIgCqqjAUDoAKdQBiXX/ACPulf8AYMvf/RtrW3WJdf8AI+6V/wBgy9/9G2tbdABXN+M5pJ7C20O0dkuNZmFsWU8pDjdM4+iAj6sK6Sqj6ZaSatFqbxbryGFoI5Cx+VGIJAGcZJUc4zxigDlvG2j2EbaBerbL9ot9UsbeFiSRFH568KM4XPcgZIAB6Cu0rJ1fw1puuTRSakLpzEVZFivpolVlOVbajgbgf4sZ6c8CtK3gW2t44YzIyRqFBkkaRiB6sxJJ9yc0ASViXX/I+6V/2DL3/wBG2tbdYl1/yPulf9gy9/8ARtrQBt0UUUAeceJI9RuNX8UL4fhiureW0it9U89BvjIXOIOQHPlSE7WwoYg7jkrUc7Xd/c3UvgmJL2ObRLaK4F8n3YyrNGI+RukKOSVOF+7lh0rs7/wrpOpXc1zcwziS4QRz+RdywrOoBADqjAPwSPmB446Ul54U0e9mMj28sDGFYG+yXUtsHjXO1WEbKGABIGc4BoAk8LS2c3hHSX0xpWs/scSwmYfPtCgDd78c+9atR29vDaW0dvaxJDDEoSOONcKijgAAdBUlAGJdf8j7pX/YMvf/AEba1t1iXX/I+6V/2DL3/wBG2tbdAFe+soNSsJrK8VngnQpIquyblPUZUg81zHgaxt5PCupWHl+XbHUr2Hy4SY9qecwwpXBXj0xiuqurZLu1eCVpVSQYJilaNh9GUgj8DWZp3hbTNKguIbAXkSXIbzAdQnbljlmGXO1iTncMH3oAxvBOnWcNj4k06G0gFmNWniFsUHllPLjG0jGMEdaWxe7T4lCXXIIbW6udMMdqlpKZo3RJAz7nKqdwLjA24wTySSK1LXwfo1ml2kUV0yXgYXCTX08qyFsZYh3I3cD5uvHWrWn6Bp+mXb3Vsk73MiCMzXN1LcOEBztDSMxAzzgYBOPSgDSrEuv+R90r/sGXv/o21rbrEuv+R90r/sGXv/o21oA26r31lBqVhNZXis8E6FJFV2Tcp6jKkHmrFRXVsl3avBK0qpIMExStGw+jKQR+BoA5XwNaQjwtqNrFawNCup3qJbsoEeBM2FxggDgduPSud8UTX9vJ4pl1KNLPULnRV8lLKQyR/Z0ciRi5CkvmX+6MDGCecdra+D9Gs7O5tYIrkwXWTLHJfTyAsW3Fxuc7W3c7hg55zViz8OaXZG4KQPO11H5Uz3c8lyzx8/IWkZjt5Py9OTxQBlahbw23jjwuLNFj2291DiPj9yEQgfQMEx6Z966msrSvDWl6LN51hDL5vlCBXnuZJ2SMHIRTIzbV6cDAOB6CtWgCvpn/ACUvTf8AsEX3/o60ruq4XTP+Sl6b/wBgi+/9HWld1W0NjycV/EKuqaba6zpdzp2oI0lrdRmOZFkaMup6jcpBweh55HFec+D/AA3Drnwn8S+G7V49PgutS1SzjaOEFYFM7qMICBgDtkV6Te2ceoWUtrO0yRyjDNBO8Lj6OhDL9QRWBY/D3w7p2n3llaw332a9YvNHJql1IC5feZF3SHa+75t64bPOas5TmPEOu3mn2+v+FvG9zbzWMvh2a7XUNJtnhkRMiFk8tpHy+XUqd2DyCKg8LrrVr8RdCXxtZwWl0dEkt9LNggEbqGRpUn+YlJFVY8Iu6Pl8O3QdvaeCtAtLe+i+xPdDUY/Ju5L+5lu5Jo8Y2F5WZtvJ+XOBknGTS6T4N0XRb5b2zhupLmOIwxS3t9PdNEhxlUMrtsBwM7cZwM9BQBuVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lVdU0211nS7nTtQRpLW6jMcyLI0ZdT1G5SDg9DzyOKtVBe2ceoWUtrO0yRyjDNBO8Lj6OhDL9QRQBxnwkt4bTwpqNvaxRwwQ65qKRxRqFVFFy4CgDgADjFc9rN9d6h4e+IHjeykdRb2E+l6TIp+7FCG82Vfczb+fSJfSu+0Lwbo/hpbhdHW+iW5LNKkupXMylmO5nAkkYBiSSWGCfWrunaDpmk+H4dDsLKOPTIYfIS2bLr5eMFTuzuzk5znOeaAOU0G/wBU8Oa34e8N3f8AZM2nahYytZjTrV4Da+SqHBzI4kUh8bgF57c8d3WFofgzQ/DtwJ9LtZhMsAt43ubua5MMQ6RxmVm8tOnyrgHC56DG7QBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRRRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUUAFFFFABXF+Kv+R90L/sGX/wD6NtK7SuL8Vf8AI+6F/wBgy/8A/RtpUz+E6MN/FQ6iiisD2AooooAKKKKAMS6/5H3Sv+wZe/8Ao21rbrEuv+R90r/sGXv/AKNta26ACiiigAooooAKxLr/AJH3Sv8AsGXv/o21rbrEuv8AkfdK/wCwZe/+jbWgDbooooAKKKKACiiigDEuv+R90r/sGXv/AKNta26xLr/kfdK/7Bl7/wCjbWtugAooooAKKKKACsS6/wCR90r/ALBl7/6Nta26xLr/AJH3Sv8AsGXv/o21oA26KKKACiiigAooooAr6Z/yUvTf+wRff+jrSu6rhdM/5KXpv/YIvv8A0daV3VbQ2PJxX8QKKKKs5QooooAK5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKKKACiiigDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKAON8R6Tbaz8SdAt7yS8jRdJ1FwbO9mtXz51kOXiZWI56E46HHAq9/wgekf8/niD/wAKPUP/AI/Rff8AJU9C/wCwLqX/AKPsa6SgDm/+ED0j/n88Qf8AhR6h/wDH6P8AhA9I/wCfzxB/4Ueof/H66SigDm/+ED0j/n88Qf8AhR6h/wDH6P8AhA9I/wCfzxB/4Ueof/H66SigDm/+ED0j/n88Qf8AhR6h/wDH65+88FaWvxJ0a3F1rmyTSb9yTr98XBWazAw/nbgPmOQDg8Eg7Rj0Subvv+Sp6F/2BdS/9H2NAB/wgekf8/niD/wo9Q/+P0f8IHpH/P54g/8ACj1D/wCP10lFAHN/8IHpH/P54g/8KPUP/j9H/CB6R/z+eIP/AAo9Q/8Aj9dJRQBzf/CB6R/z+eIP/Cj1D/4/R/wgekf8/niD/wAKPUP/AI/XSUUAed3ngrS1+JOjW4utc2SaTfuSdfvi4KzWYGH87cB8xyAcHgkHaMdB/wAIHpH/AD+eIP8Awo9Q/wDj9F9/yVPQv+wLqX/o+xrpKAOb/wCED0j/AJ/PEH/hR6h/8fo/4QPSP+fzxB/4Ueof/H66SigDm/8AhA9I/wCfzxB/4Ueof/H6P+ED0j/n88Qf+FHqH/x+ukooA5v/AIQPSP8An88Qf+FHqH/x+uT8R+EdNtvGujQx3OslZNPvWYya3eOwKyWoGGaUlR8xyAQDxnOBj1CuL8Vf8j7oX/YMv/8A0baVM/hOjDfxUY3/AAienf8APxq//g6vP/jtH/CJ6d/z8av/AODq8/8AjtbdFYHsGJ/wienf8/Gr/wDg6vP/AI7R/wAInp3/AD8av/4Orz/47W3RQBif8Inp3/Pxq/8A4Orz/wCO0f8ACJ6d/wA/Gr/+Dq8/+O1t0UAcbc+GbBfGumwifVNr6fdsSdXui2RJbAYbzMgfMcgHB4z0GNf/AIRPTv8An41f/wAHV5/8douv+R90r/sGXv8A6Nta26AMT/hE9O/5+NX/APB1ef8Ax2j/AIRPTv8An41f/wAHV5/8drbooAxP+ET07/n41f8A8HV5/wDHaP8AhE9O/wCfjV//AAdXn/x2tuigDE/4RPTv+fjV/wDwdXn/AMdrIufDNgvjXTYRPqm19Pu2JOr3RbIktgMN5mQPmOQDg8Z6DHZViXX/ACPulf8AYMvf/RtrQAf8Inp3/Pxq/wD4Orz/AOO0f8Inp3/Pxq//AIOrz/47W3RQBif8Inp3/Pxq/wD4Orz/AOO0f8Inp3/Pxq//AIOrz/47W3RQBif8Inp3/Pxq/wD4Orz/AOO0f8Inp3/Pxq//AIOrz/47W3RQBxtz4ZsF8a6bCJ9U2vp92xJ1e6LZElsBhvMyB8xyAcHjPQY1/wDhE9O/5+NX/wDB1ef/AB2i6/5H3Sv+wZe/+jbWtugDE/4RPTv+fjV//B1ef/HaP+ET07/n41f/AMHV5/8AHa26KAMT/hE9O/5+NX/8HV5/8do/4RPTv+fjV/8AwdXn/wAdrbooAxP+ET07/n41f/wdXn/x2si58M2C+NdNhE+qbX0+7Yk6vdFsiS2Aw3mZA+Y5AODxnoMdlWJdf8j7pX/YMvf/AEba0AH/AAienf8APxq//g6vP/jtH/CJ6d/z8av/AODq8/8AjtbdFAGJ/wAInp3/AD8av/4Orz/47R/wienf8/Gr/wDg6vP/AI7W3RQBif8ACJ6d/wA/Gr/+Dq8/+O0f8Inp3/Pxq/8A4Orz/wCO1t0UAc5YeE9Ol+IOn27XOsBG0u8cldavFfIltQMOJdwHzHIzg8Eg4GOx/wCED0j/AJ/PEH/hR6h/8frJ0z/kpem/9gi+/wDR1pXdVtDY8nFfxDm/+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfrpKKs5Tm/+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfrpKKAOb/4QPSP+fzxB/4Ueof/AB+ufvPBWlr8SdGtxda5sk0m/ck6/fFwVmswMP524D5jkA4PBIO0Y9Erm77/AJKnoX/YF1L/ANH2NAB/wgekf8/niD/wo9Q/+P0f8IHpH/P54g/8KPUP/j9dJRQBzf8Awgekf8/niD/wo9Q/+P0f8IHpH/P54g/8KPUP/j9dJRQBzf8Awgekf8/niD/wo9Q/+P0f8IHpH/P54g/8KPUP/j9dJRQBxNtoNponxT0j7FNqEvnaLqG77bqVxd4xPZY2+c7bevOMZ4z0FdtXN33/ACVPQv8AsC6l/wCj7GukoA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiiuH8aar4l0vxR4b+w3dpbaNd6pBZzRrH5k9wXWQsCWGEUbFxtyxJPK4wQDuKK8y+IHiu90PxBdW974gvPDtn/ZyvpUlnZRz/b7olg0ZLxvyv7rCLtJDsc8cegaNNf3Gg2E2swR2+oyW0b3cMZyscpUF1HJ4DZHU0AXa5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xoA6SiiigAorzv4meLNY063uLTwrcfZZ9OgS91C78pZBGjOEjhAYEb3O5unCoem5TV26u9c8S+Mtd0nR9bm0SDRIIUR7eCGQ3FxKhfMnmo3yKuwALtJLNlumADt6Kw/BWvTeJ/BGka1dQrBPeWySSxp91XxhscnjIOOTxW5QBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRXnHiHXL6w8aaqms+INe0HRIYLY2txZaUktuWbd5pkma2kVQDs5ZlAzQB6PRXCePNY8SaZe+HZ9EvrODSJ9Vsbe5fy/NnuhLMEZBkbUTac7hliTxtxlu7oAK4vxV/wAj7oX/AGDL/wD9G2ldpXF+Kv8AkfdC/wCwZf8A/o20qZ/CdGG/iodRRRWB7AUVyvjA3+m6Zc6hZa7qEU8jJDaWcUdsUaZyERRuiLYLEE5Pr0qrNd6zc3+qWMeumyl0exifcsER+0yMhYySblOEyuMLt/i56YAO0orO8P6oda8N6dqbII2u7aOZkB4UsoJA/GtGgDEuv+R90r/sGXv/AKNta26xLr/kfdK/7Bl7/wCjbWtugAooritT1XVbi88TSWWrfYBoMaNFb+VGyzfuvNLSlgTtOdo2lcBScnsAdrRXnmt+LbhRFc3Gq3Oh2t1pkVzp5t7ZJvtU7gkxkujZIymFG0ncTn07nTZLubSbSTUolhvHgRriJD8qSFRuA5PAOR1oAtViXX/I+6V/2DL3/wBG2tbdYl1/yPulf9gy9/8ARtrQBt0UVXvjeCwm/sxYGu9h8kXDER7uxbAJx9Ovt1oAsUVzPhPUNXv/AAzeSXU8N7qMF3dQRu6eTG5SRlXIUHaOB6n61T0fU9fm8L+J2uroXeqWNzcxWzW9uAAViVkVU5zhjxnJPfNAHZUVy/hXUlubk29zrep3N+LZZZLLUbNbYqCcF0HkxswDAjIJAyM9RXUUAYl1/wAj7pX/AGDL3/0ba1t1iXX/ACPulf8AYMvf/RtrW3QAUVXvjeCwm/sxYGu9h8kXDER7uxbAJx9Ovt1rnvC+uXA8K31/4jvklNjdXSS3AiEa7IpGGdo6cDpyfc0AdTRXn0firXrG38U32oqpe0sILy0sZIwBa+Z5uFcr8zYCIW56hsYrXsb2/wBM8WWGlXmsPq8Go2UkyySxxI0bxlclfLVRsYP0OcbepoA6qsS6/wCR90r/ALBl7/6Nta26xLr/AJH3Sv8AsGXv/o21oA26KKr3xvBYTf2YsDXew+SLhiI93YtgE4+nX260AWKK5fwrc6nrPhm6TUNTkF5HfXFv9rt4Y0YCOUqNqsrKOBjkH655qHTn1aTxNq1nBr1xcWljaCNpbyCAql043DiNEJCJtJGed+OMUAddRXJeHNXlvPFF1aWWttr2lx2iO12RERFOXI2B4lVTleSMEjA55rraAK+mf8lL03/sEX3/AKOtK7quF0z/AJKXpv8A2CL7/wBHWld1W0NjycV/ECiqmp293d6dLBp199guH2gXIiWQxjcNxVW43bcgEggEgkMBg+dXfjDW/DVt40g/tD+3DpD2UVhdXcSKyz3OEMUnlKisEZkfhQcSYJ4zVnKeoUVwv2nxBoXi230C48QyajHqulXM1ve31rDutLiEoC22JYw0ZEoO085X73NM8H6/PqHje+sNN8St4p0SKwjle+YW7CC5MhHlLJAiI2U5IIJXaOfmxQB3tc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRVTU7e7u9Olg06++wXD7QLkRLIYxuG4qrcbtuQCQQCQSGAwQC3RXDaJqOrtq3i/RZ/EP2iDS1gNvq91BFvt2kiLSI4RUjbZhXB2jAkAOcVW8La7f6trXiGx0jxQuu6XbWURt9amigkSC7cPujzCsaSqqiNyBgjdgkZFAHoVFcF4P1+fUPG99Yab4lbxTokVhHK98wt2EFyZCPKWSBERspyQQSu0c/Niu9oA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACuM8b6P4l1rUdGOi2elPbaXqEWob7vUJInlZFdTHtWBwB8+d249OldnRQBwWpeGNek1/VdUi0vQdW/tjTobSa31K8kUWu0NuiVhC3mRMzbsYQk5J6jHT+FdFfw54S0vRZLtrx7C1jtzOwwZNqgZxk4HHAycCtaigArm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GgDpKKKKAOF8Z/DKx1/SdYOlPdWup6m6SSMdUuo4JHGwbnjV9h+VAPu9h6U+Twzr+ga9qV74O+w3EWqWsMUg1W8m8yCaJSiS7tshmBUjIYqTsHzc8dvRQBl+GNCi8M+FdN0SCVpksbdIfNYYMhA5Yjtk5P41qUUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lABXJ+J7HxZrFpqmjWMOirp2oRm3S9muJRNbxOgWQmERlZGGXI/eIDlQcYJPWUUAcJ4p8L69c6ToGj+HLbTZbLR7myuRNfX8kUjm3cHy9qwuMEKPmz1J+XjntrRrl7OJr6KKG5KgyxwymRFbuAxVSw9yo+lS0UAFcX4q/5H3Qv+wZf/wDo20rtK4vxV/yPuhf9gy//APRtpUz+E6MN/FQ6iiisD2DG1LSLnUvEml3Mrxf2dp4efy8ne9wRtQ4xjCqXOc5yRxVTxJoc+tT7E0fRZ/3eyO/vv3ktvk8lY/LOcdQN65PpXSUUAVdNsIdK0q00+1yIbWFIY89dqgAZ/KrVFFAGJdf8j7pX/YMvf/RtrW3WJdf8j7pX/YMvf/RtrW3QAVy3ibw5Nr9xJH/ZGinfEIU1S5/eXEC9yiGPqCTt/eAAnPsepooA5C58M3tpqN7Jptjpmo2t1YxWSx6hO6GBEBGwYjfchzkj5ec9eMb+g6Y2i+HrDTHuGuWtIEhMrDG/aMZxzj6VoUUAFYl1/wAj7pX/AGDL3/0ba1t1iXX/ACPulf8AYMvf/RtrQBt1FdNcJau1lFFLOB8iSyGNWPuwViPyNS0UAcx4Y03XdG0++gvLXTmeW4nuoTFeuQzyOXCNmIbQM43DP0qPQ9N8SaYusmS20tZL65lvIWW7kkCyMqgIw8pfl+Xlgc8/dNdXRQBz1rpWp3niiDWtZS0tvsls8EFvazNNuLsCzM7InZQAoX1Oe1dDRRQBiXX/ACPulf8AYMvf/RtrW3WJdf8AI+6V/wBgy9/9G2tbdAEV01wlq7WUUUs4HyJLIY1Y+7BWI/I1y2ieGb06PfaV4ltbQ2tzdyXYazvpd25pvMC8IhG045B5x0rrqKAOWsPCbaV4h1XU7ZpLlbi1iit4brUZ3DMvmbhIXLfKdy4OGx82AM8mheFFsteGqy6XpWlNFC0MNtpgyp3FSzu+xMn5QANvAzyc8dTRQAViXX/I+6V/2DL3/wBG2tbdYl1/yPulf9gy9/8ARtrQBt1FdNcJau1lFFLOB8iSyGNWPuwViPyNS0UAc34T0zWdHtby31K3sQJbme6ja3u3f5pJC+wgxrgDOM8/SptC0fUNH8MSRebbS6xO0lzPMwYxSTuST6HaOFHfAFb1FAHO2ek6nc+LI9b1aKzs2t7RrZIrOdpjNuYMS7sicLt4XB5YnPauioooAr6Z/wAlL03/ALBF9/6OtK7quF0z/kpem/8AYIvv/R1pXdVtDY8nFfxDL8Sprknh28j8KPZx6u6bbaS9LCKMk4LHCsTgZIGME4zxXIweCNTufAN94XubGw01JQJ476PUpb2Wa7Egl86bdDFuJdQxOfYADGPQqKs5Ti00TxTf6+Nf1RdHtL6x02W10+2hmluITLIyM8kjFIyAfLRQoBwNxyeAJtP0HWr3x5D4l16DTtOa1sHso4NPuXuGuA7qxMkjRx/Ku0bVweWY5HQ9dRQAVzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jQB0lZfiVNck8O3kfhR7OPV3TbbSXpYRRknBY4VicDJAxgnGeK1KKAON8N6R4i0Dw5Pp1npekWsyAzRzyapNdtdzs252nYwRnc/OXG7BP3SBtpttoHiSXxRe+J7iPSdP1H+zDY2trBPJcRStv3h5nKRk4I2qAvyhnOTnFdpRQByOn6DrV748h8S69Bp2nNa2D2UcGn3L3DXAd1YmSRo4/lXaNq4PLMcjoeuoooA5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xrpKAObvv+Sp6F/wBgXUv/AEfY10lcb4jl1WH4k6A2h2dneXH9k6iGjvLtrdAvnWWSGWOQk5xxgdTzxg3vt3jf/oXvD/8A4Pp//kOgDpKK5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOgDpKK5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOgDpK5u+/5KnoX/YF1L/0fY0fbvG//AEL3h/8A8H0//wAh1z95eeMf+Fk6MzaFoYuBpN+EjGtTFGXzrPcS32XIIIXAwc5PIwAQD0Siub+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ6AOkorm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOgDpKK5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDoAL7/AJKnoX/YF1L/ANH2NdJXnd5eeMf+Fk6MzaFoYuBpN+EjGtTFGXzrPcS32XIIIXAwc5PIwAeg+3eN/wDoXvD/AP4Pp/8A5DoA6Siub+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DoA6Siub+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DoA6SuL8Vf8j7oX/YMv/wD0baVofbvG/wD0L3h//wAH0/8A8h1yfiO78Vt410Y3Wi6NHMNPvRGkeryurL5lruJY2wwQduBg5yeRjmZ/CdGG/io3qKxPtXij/oD6R/4Npf8A5Go+1eKP+gPpH/g2l/8AkasD2DborE+1eKP+gPpH/g2l/wDkaj7V4o/6A+kf+DaX/wCRqANuisT7V4o/6A+kf+DaX/5Go+1eKP8AoD6R/wCDaX/5GoALr/kfdK/7Bl7/AOjbWtuuNubnxH/wmumltK0sTDT7sKg1OQqV8y2yS32fgg7cDBzk8jHOv9q8Uf8AQH0j/wAG0v8A8jUAbdFYn2rxR/0B9I/8G0v/AMjUfavFH/QH0j/wbS//ACNQBt0VifavFH/QH0j/AMG0v/yNR9q8Uf8AQH0j/wAG0v8A8jUAbdYl1/yPulf9gy9/9G2tH2rxR/0B9I/8G0v/AMjVkXNz4j/4TXTS2laWJhp92FQanIVK+ZbZJb7PwQduBg5yeRjkA7KisT7V4o/6A+kf+DaX/wCRqPtXij/oD6R/4Npf/kagDborE+1eKP8AoD6R/wCDaX/5Go+1eKP+gPpH/g2l/wDkagDborE+1eKP+gPpH/g2l/8Akaj7V4o/6A+kf+DaX/5GoALr/kfdK/7Bl7/6Nta26425ufEf/Ca6aW0rSxMNPuwqDU5CpXzLbJLfZ+CDtwMHOTyMc6/2rxR/0B9I/wDBtL/8jUAbdFYn2rxR/wBAfSP/AAbS/wDyNR9q8Uf9AfSP/BtL/wDI1AG3RWJ9q8Uf9AfSP/BtL/8AI1H2rxR/0B9I/wDBtL/8jUAbdYl1/wAj7pX/AGDL3/0ba0favFH/AEB9I/8ABtL/API1c34i8Rap4f17TdS1bSrP/j2uLeOO2vmk3bmhYklolxjYOMHO49Mc60aNSvUVOmrtkVKkaceaWx39Febf8Lc/6gn/AJN//YUf8Lc/6gn/AJN//YV6P9j47+T8V/mc317D/wA34P8AyPSaK82/4W5/1BP/ACb/APsKP+Fuf9QT/wAm/wD7Cj+x8d/J+K/zD69h/wCb8H/kek0V5t/wtz/qCf8Ak3/9hR/wtz/qCf8Ak3/9hR/Y+O/k/Ff5h9ew/wDN+D/yPQdM/wCSl6b/ANgi+/8AR1pXdV4v4R8Xar4l8bxXGh6PZm4tNOuEaK81BokZXkgJYMsLnIMYGNvO4nIxg+ifbvG//QveH/8AwfT/APyHXNUw9TDy5Kqs/wCuxw1qkKs+aD0Okorm/t3jf/oXvD//AIPp/wD5Do+3eN/+he8P/wDg+n/+Q6zMTpKK5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOgDpK5u+/5KnoX/YF1L/0fY0fbvG//AEL3h/8A8H0//wAh1z95eeMf+Fk6MzaFoYuBpN+EjGtTFGXzrPcS32XIIIXAwc5PIwAQD0Siub+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ6AOkorm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOgDpKK5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDoAL7/AJKnoX/YF1L/ANH2NdJXE20+uTfFPSP7e07T7LGi6h5X2K/e53/v7LO7dDHtxxjGc5PTHPbUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRRQAUUUUAFcX4q/5H3Qv+wZf/APo20rtK4vxV/wAj7oX/AGDL/wD9G2lTP4Tow38VDqKKKwPYCiiigAooooAxLr/kfdK/7Bl7/wCjbWtusS6/5H3Sv+wZe/8Ao21rboAKKKKACiiigArEuv8AkfdK/wCwZe/+jbWtusS6/wCR90r/ALBl7/6NtaANuiiigAooooAKKKKAMS6/5H3Sv+wZe/8Ao21rbrEuv+R90r/sGXv/AKNta26ACiiigAooooAK82+Ln/MI/wC23/tOvSa82+Ln/MI/7bf+069bJ/8AfofP8mceO/3eXy/NHT6BoGjzeG9Mlm0mxkke0iZna2QliUGSTjk1of8ACOaH/wBAbT//AAFT/Cjw5/yKulf9eUP/AKAK0q461aqqsvee76m1OnDkWhm/8I5of/QG0/8A8BU/wo/4RzQ/+gNp/wD4Cp/hWlRWXt6v8z+8v2cOxm/8I5of/QG0/wD8BU/wo/4RzQ/+gNp//gKn+FaVFHt6v8z+8PZw7Hm/wM/5Hi8/7Bz/APoyOveq8F+Bn/I8Xn/YOf8A9GR171XuZz/vb9EfO0fhCiiivHNQooooAK5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAooooAKKKKAObvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6Psa6SgDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACuU8ReNn0LxNo+kR6Ld3KahdxW0l837qCEyByoDEfvG/dnKrwBjJGQD1def/EjUANT8NQQ2Gq3LWOtQXtw1ppVzOiQhJAW3xxlSQWHygk89KANPWfGGpW2ranZaBocep/2PbrPfPNe/Zz8ylljiGxt77VJ+YoOV55OOh0jVLbW9FstVsGLWt9AlxCzDBKOoYZHY4PSuD8U29qdSvL/QZfFVvqurWUaPbadpriK7OCIxJJNAUhYBsEl4yo64IFdh4R0VvDngvRtGlcSSWFlFbyOvRmVAGI9sg0AbFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQByXjzx2ngy0hMFgdTvJAZWtlmEflwKVV5WbBwAzoo45LAepFvU/Ed8PED6H4c0yDUL6C3S5umurs28MCOWVAWVJGLsUYhduMKSSOAeP8AiJ4P8Ry6b4m1LTb+1vW1FII0tf7KkluEijZdsSOswG0MXc/ITlm9sQ61oFnbeNNYu/G/ht/EialpluLWe00mS4jE8YkWSNUAkMDHchDMccn5uDQB6pbtM1tE11Gkc5QGRI3LqrY5AYgEjPfAz6CpKw/BVlqem+BdFs9fkaTU4LKJLpnk3t5gUZBb+IjpnJzW5QBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABXKeLPEuv+GdP1HVV0fSZ9LsYjL5s2rSxSuAOnli2YAk8Abjnjpmurrj/Ftnda/wCKPD+hC1nOmRzf2pf3HlnymEBBih3dCWlKsV64jPagCTWfE3iLStGfVE8LwyW9rYrd3qyalskU7S0kcSiNt5UA8sY8nGPbpbK7i1DT7e8t8+VcRLKm4YO1hkZ/A1wfxB1OTUtSj8KXFnq8WizwiXVL600u5uBPGTj7LG0KNgsB87cYU4GSfl7yxmhuLCCa1jkiheMGNJIWhZVxwCjAMv0IBFAE9cX4q/5H3Qv+wZf/APo20rtK4vxV/wAj7oX/AGDL/wD9G2lTP4Tow38VDqr312LCwmumhnnESFvKt4zJI/sqjqTViorq5S0tXnlWVkjGSIomkY/RVBJ/AVgewc9ZeMo5fCN5ruo2MloLSaWF7ZXEjlkfYFBGBktgdcZPXvUsHiLUI9SbTtU0hIb6Sze6tY7W7Eqz7CA0e5lTa4LL7c9eK5a1trnU/Aetadb2N8l5/aMt9FFcWcsPmqLoSqAzqASwHTORnnFbUl5Jqvia21e303UvsemafPvElq8Msskpj/dor7SxCxk5HGSACTQBqadrl5L4hk0bVrCC1uRai6je2ujOjpvKkElEKkHHYgg9eDW5XGaDbKvjJrnRINRWwezK3s2qRTh2kDDywjTjzDgb8gHYOO5rs6AMS6/5H3Sv+wZe/wDo21rbrEuv+R90r/sGXv8A6Nta26AK99diwsJrpoZ5xEhbyreMySP7Ko6k1k6J4huda8PXF/HpTRXUM80AszOpJeNyuC/QcjnGcds1s3VylpavPKsrJGMkRRNIx+iqCT+ArjfCmqnTfD2rvLpmqNNFeXd2kH9nTI8yPKzIE3KASQRx1HfFAGmPFctjLqkOv6etrLp1l9vP2SczrLD82cEqh3AoRgj05p+l+I7241i20/VdOgtZLyzN3A1tdmcbVKhg2UXB+dcYyDzzxWFYz3s2ka3f21vdS+Jb62LhJ9OnihiVRhIUMqKrbdxPJ+Yknp0TwrpUGm+J7VvDVrqMVjJZlNR+32TwjeDmMp5iqQSWfKx/IB2HGQDv6xLr/kfdK/7Bl7/6Nta26xLr/kfdK/7Bl7/6NtaANuq99diwsJrpoZ5xEhbyreMySP7Ko6k1YqK6uUtLV55VlZIxkiKJpGP0VQSfwFAHOQeMXk8Ealr82mNBJYG4VrRpwSTExBBcDAzjtkfWtaxvNUaGWbV7G1to1Ten2S5kuGbuRt8pT+WSa5jwvdQx+HNWg1HSdQmRr25ne2m0yUebDJMSCFdQH+VslRk47Z4qXQrS2tvFl1qGhaZcaboq2GyeIWT26zzhgwZYSoYkLuGQvO4AZxwAa/hnxJJ4h/tDztMm05rO4EPlTuDIQUVwWA4U4YfLk4rdrj/CV4H8ReIN1pqEK3t6J4HuNPniV0EMak7nQAcqRg4PFdhQBiXX/I+6V/2DL3/0ba1t1iXX/I+6V/2DL3/0ba1t0AV767FhYTXTQzziJC3lW8Zkkf2VR1JrBs/GQm8I3et3unSWzW08lubUSK7l1k8sLngZLYHoM9T1robq5S0tXnlWVkjGSIomkY/RVBJ/AVw2gxWmoeEta03WLLVIYpby5uCDYXEb7GmLIyfJkt91gBkjuKANd/F7aXJexeJbFLGS1sjfD7NcGdZIlO1gCVQhgSoxjHzDnrixZeIL3+2LTTtb0yOxkvoWltWiuTMCUwWR8ou1gGB43A4bnjnktR8Naj4j/tW5tbjU7sJpTWlq+qwrbtLKzq+1U2RkAeWAWZRkv1IHHQw3UniPxVo93bWF9bW+nwSyzveWrwYkkUKsYDgFj94krkDA55FAHV15t8XP+YR/22/9p16TXm3xc/5hH/bb/wBp162T/wC/Q+f5M48d/u8vl+aO38Of8irpX/XlD/6AKtX01zBZvJY2v2u4GAkRkEYJJAyWPQDOTwTgHAJwDV8Of8irpX/XlD/6AKfrepNpGjXN9FZXN/JCuUtrWMvJI3QAAA9zyewya86v/Fl6s6afwL0KGn+IppbjVrXVNPNvd6WiSvHaO1yssbqSpT5VYnKsNu3OR3zVfT/F0l74b1vVZtKktH0qSdDbSzAu4jQONxAIUkHkDdj1NReFpobe3v728+3Talcf6TeynTLmJeBhY4ldAWVRwAMseuMmqfhu+iSHxKt3pepSR3F7PdLDLpky+fCUQYAdQGJwRs6n0rIs6PRr3Vr6JJ9RsLO1gliEkZgvXmY5wcEGJAOD6mtSuL0TT7VfGyXnhrSpdL0xbFo7zNk1nHPJvBjAjZVLMo3ndt6NjPUV2lAHm/wM/wCR4vP+wc//AKMjr3qvBfgZ/wAjxef9g5//AEZHXvVfQ5z/AL2/RHzVH4SpqdxeWunSy6ZZfb7obRHbmYRBiWAyznO1RnJIBOAcBjgHkrj4g3em6X4rfWNEjh1Hw3apdvb296ZYbmJ0ZkKymNSDlHUgpwV7g10niXWX8P8Ah281OHTbzVJbdMx2dlE0kszE4CgKCep5OOBk9q43w1JYR6FrV1rlhqetalqWJ9XR9Buo45FOEEMUc0a7440OAoyzAE4JOK8c1Ohk17XdO8N6rrGuaPp0MdjZSXcUdnqbzmUohYqxaBNvTqN3XpVnw7qWvapBHc6vpWnWNtNAssTWuovcOSwBAZWgjA4PUE/1ri9I0/T7TxTq+qeH/DF5aeFxozQ3unLpTWy38+8EbLV1UuRHvUnb824KNxGBZ8NaTZL8So9R8GaHPoeirpjw6iDpr6fFdTGQGECF1Qs6DzCX28BwNxyQAD0eubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKqancXlrp0sumWX2+6G0R25mEQYlgMs5ztUZySATgHAY4Bt1l+JdZfw/4dvNTh0281SW3TMdnZRNJLMxOAoCgnqeTjgZPagDnj8QZNOt/EKeIdI+zX2hrbu0Fnc/aI7lZ+IvLdlQ5LhkIZRgjOSDV3TPFl7/b0+i+JNJj0++SxOoRCyuWvEmhDbXx+7Rt6sVG0Kc7hgmua0jTtJ1fwrr8XiVdYutQ1YC51WePRr232lSPLS3DxBiIsKFABY43EcmpvDWm3U3jufxPc3mv32n6fpT2cU2r2Qgmld3WRhHAkUbkKIwMlMsXwC23gA3/AAX4xl8Xf2t9o0a40d9Ouxb+RdSKZWBjSQM6rwhw4yuTjuc8V1FefeAdREni/wAWb7DVrddR1Fbm1ku9KuYEkjFvEhO6SMAHcrDBIJx0r0GgDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAooooAKKKKACubvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsaAOkooooAKKKKACiiigDm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GukoAKKKKACiiigAri/FX/I+6F/2DL/AP8ARtpXaVxfir/kfdC/7Bl//wCjbSpn8J0Yb+Kh1FFFYHsBRRRQAUUUUAYl1/yPulf9gy9/9G2tbdYl1/yPulf9gy9/9G2tbdABRRRQAUUUUAFYl1/yPulf9gy9/wDRtrW3WJdf8j7pX/YMvf8A0ba0AbdFFFABRRRQAUUUUAYl1/yPulf9gy9/9G2tbdYl1/yPulf9gy9/9G2tbdABRRRQAUUUUAFebfFz/mEf9tv/AGnXpNebfFz/AJhH/bb/ANp162T/AO/Q+f5M48d/u8vl+aO38Of8irpX/XlD/wCgCtKuN0Xxz4dtNA0+2uNR2Sw2scci+RIcMFAIyF9avf8ACwfDH/QT/wDJeX/4msK2DxLqSapy3fRlwr0lBe8vvR0lFc3/AMLB8Mf9BP8A8l5f/iaP+Fg+GP8AoJ/+S8v/AMTWf1LFf8+5fcy/rFH+ZfejpKK5v/hYPhj/AKCf/kvL/wDE0f8ACwfDH/QT/wDJeX/4mj6liv8An3L7mH1ij/MvvRzfwM/5Hi8/7Bz/APoyOveq8F+Bn/I8Xn/YOf8A9GR171XrZz/vb9EeBR+EKKKK8c1CiiigArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigAooooAKKKKAObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoA43xHFqs3xJ0BdDvLOzuP7J1EtJeWjXCFfOssgKskZBzjnJ6HjnIvfYfG/wD0MPh//wAEM/8A8mUX3/JU9C/7Aupf+j7GukoA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukooA5v7D43/6GHw//wCCGf8A+TK5+8s/GP8AwsnRlbXdDNwdJvykg0WYIq+dZ7gV+1ZJJK4ORjB4OQR6JXN33/JU9C/7Aupf+j7GgA+w+N/+hh8P/wDghn/+TKPsPjf/AKGHw/8A+CGf/wCTK6SigDm/sPjf/oYfD/8A4IZ//kyj7D43/wChh8P/APghn/8AkyukooA5v7D43/6GHw//AOCGf/5Mo+w+N/8AoYfD/wD4IZ//AJMrpKKAPO7yz8Y/8LJ0ZW13QzcHSb8pINFmCKvnWe4FftWSSSuDkYweDkEdB9h8b/8AQw+H/wDwQz//ACZRff8AJU9C/wCwLqX/AKPsa6SgDm/sPjf/AKGHw/8A+CGf/wCTKPsPjf8A6GHw/wD+CGf/AOTK6SigDm/sPjf/AKGHw/8A+CGf/wCTKPsPjf8A6GHw/wD+CGf/AOTK6SigDm/sPjf/AKGHw/8A+CGf/wCTK5nV9K8XXfxA0a3n17RfOOl3zpImiyhVUS2gYFTdHJJZcHIxg8HPHpVc3ff8lT0L/sC6l/6PsaNyoycXdGZ/wifi7/oZdF/8EUv/AMl0f8In4u/6GXRf/BFL/wDJddvRU8qNPb1O5xH/AAifi7/oZdF/8EUv/wAl0f8ACJ+Lv+hl0X/wRS//ACXXb0UcqD29TucR/wAIn4u/6GXRf/BFL/8AJdH/AAifi7/oZdF/8EUv/wAl129FHKg9vU7nll34b8Ur8QNJt28QaOZpNLvnWQaNKFVVltAQV+1ckllwcjG08HPG5/wifi7/AKGXRf8AwRS//Jdad9/yVPQv+wLqX/o+xrpKOVB7ep3OI/4RPxd/0Mui/wDgil/+S6P+ET8Xf9DLov8A4Ipf/kuu3oo5UHt6nc4j/hE/F3/Qy6L/AOCKX/5Lo/4RPxd/0Mui/wDgil/+S67eijlQe3qdziP+ET8Xf9DLov8A4Ipf/kusO78N+KV+IGk27eINHM0ml3zrINGlCqqy2gIK/auSSy4ORjaeDnj1Oubvv+Sp6F/2BdS/9H2NHKg9vU7mZ/wifi7/AKGXRf8AwRS//JdH/CJ+Lv8AoZdF/wDBFL/8l129FHKg9vU7nEf8In4u/wChl0X/AMEUv/yXR/wifi7/AKGXRf8AwRS//JddvRRyoPb1O5xH/CJ+Lv8AoZdF/wDBFL/8l0f8In4u/wChl0X/AMEUv/yXXb0UcqD29TueWXfhvxSvxA0m3bxBo5mk0u+dZBo0oVVWW0BBX7VySWXByMbTwc8bn/CJ+Lv+hl0X/wAEUv8A8l1p33/JU9C/7Aupf+j7Guko5UHt6nc4j/hE/F3/AEMui/8Agil/+S6P+ET8Xf8AQy6L/wCCKX/5Lrt6KOVB7ep3OI/4RPxd/wBDLov/AIIpf/kuj/hE/F3/AEMui/8Agil/+S67eijlQe3qdziP+ET8Xf8AQy6L/wCCKX/5LrkfFXgDxB4g8VaRo1/4j01d9ld3aTQ6PIu3y3t0KlTcnOfNBzkY2988ey1zd9/yVPQv+wLqX/o+xrSlOVKanB2aJnUnOPLJ6Hmv/DP2pf8AQ32v/gnb/wCSKP8Ahn7Uv+hvtf8AwTt/8kV7dRXb/aOL/wCfjMPZx7HiP/DP2pf9Dfa/+Cdv/kij/hn7Uv8Aob7X/wAE7f8AyRXt1FH9o4v/AJ+MPZx7HiP/AAz9qX/Q32v/AIJ2/wDkij/hn7Uv+hvtf/BO3/yRXt1FH9o4v/n4w9nHseN+G/AHiDwT4+tbbTPEemzy6hpl1IZLjR5CqLFLbjG0XIySZRznjb0OePQPsPjf/oYfD/8A4IZ//kyi+/5KnoX/AGBdS/8AR9jXSVy1as60uao7spJLRHN/YfG//Qw+H/8AwQz/APyZR9h8b/8AQw+H/wDwQz//ACZXSUVkM5v7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TK6SigDm/sPjf8A6GHw/wD+CGf/AOTK5+8s/GP/AAsnRlbXdDNwdJvykg0WYIq+dZ7gV+1ZJJK4ORjB4OQR6JXN33/JU9C/7Aupf+j7GgA+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOJtoNch+Kekf29qOn3udF1DyvsVg9ts/f2Wd26aTdnjGMYweueO2rm77/kqehf9gXUv/R9jXSUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUVyvizxTrPhm1vtTi8PxXej6dEJrmdr8Rzsg5kMUQRg21efndCSCBxgkA6qiuY8R+Idb0XT7vVbTTNIn0i1tjctcXWqywSFAu5vkW3cfT5ufbpWzol9canoNhf3tn9huLq3jmktTJvMLMoJQtgZIzjOKAL1c3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFcpceJtduPFup6JoOi6fcjTYYJJZ73U3t93mhyAqrBJ02HqR2ovfE+tnxlc+H9D0bT7p7Wxhu5ZrzUntx+8eRQqhYJM48s8nHWgDq6KbGXMSmVVWQqNyq24A9wDgZHvgU6gDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAKKK4zXvHN9pt/rkWlaPb3sHh+0S61CS5v/s7bWRnxEvlsGIVCcsUGTjPBIAOzork9e8Watpuhy65pmgw3elW9gL+aW5v/ALPIU2l2VEEbgsFGTuZBkgAnkjprO6jvrGC7g3CO4jWVNwwcMMjI9eaAJq5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xoA6SiiquqX66XpdzfNb3N0IIy/kWkJllkPZVUdSenp6kDmgC1RXL+GvF174k8JXeqxaHJBe29zcWo043SFjJFIUwZPujkc4yBzjd3qN4/fR5tag8YabHp0uk6eupM1ldG6jmgJZflZkjO/chG0r3HPNAHZ0Vyum+LNS/4SGw0jxLokWly6pbPPZNBem4BMeC8cmY02OAwOBuBw3PHPVUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABRVXVL9dL0u5vmt7m6EEZfyLSEyyyHsqqOpPT09SBzXJWvxElm+Gms+K7jRWtpdKa7V9Pe5DEtAzKQXUEAkr2BA9T1oA7eisOy1HxG1hc3Op6HYqyQ+ZbQafqRnedsZ2HzIolXPAySRzziq2keJtRm8Vy+Htf0m3sLz7F9tgks7w3MUsYfYwLNHGVYErxtIIbrQB0tc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRVXVL9dL0u5vmt7m6EEZfyLSEyyyHsqqOpPT09SBzQBaorlvDXirUvFHhO51Kz0aK11CG7mtRY3d7hQ0UpRt0qI2OhPCsM8ZI5qg3j3UdM1fVrXxHotpDDpGkNqt1NpuoPdFFBO1NrQx/MwSQjnovOMigDuKK5LQ/GGpXfiCz0jXdHtbGbUNPa/tXs9QN0uxSgZXzGm0/vFwRuB554562gDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKACiqmp3F5a6dLLpll9vuhtEduZhEGJYDLOc7VGckgE4BwGOAcLSfF9zNda9Y63pDWl/okcU8kVhI14s8UiMyGM7Fdmyjrt2A5XjOaAOooritJ+I8d14R8Q+INZ0i50uLQ7qeCS1Z1lmcRqrDgfKHbeBt3EA/wAXermkeKtTfxJBofibRoNLvLuzN3am2vjdI4RgJEYmNNrrvQ8AqQeDxQB1Nc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRVTU7i8tdOll0yy+33Q2iO3MwiDEsBlnOdqjOSQCcA4DHAIBborh7j4g3em6X4rfWNEjh1Hw3apdvb296ZYbmJ0ZkKymNSDlHUgpwV7g1pya9runeG9V1jXNH06GOxspLuKOz1N5zKUQsVYtAm3p1G7r0oA6WisPw7qWvapBHc6vpWnWNtNAssTWuovcOSwBAZWgjA4PUE/1rcoA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAoqpqdxeWunSy6ZZfb7obRHbmYRBiWAyznO1RnJIBOAcBjgHlT8QZNOt/EKeIdI+zX2hrbu0Fnc/aI7lZ+IvLdlQ5LhkIZRgjOSDQB2tFcVL47v8AS21a18Q6JBaahY6RLq8EVrfGeO4ij4Zd5jQqwbaD8pHzAgnkVs+HdS17VII7nV9K06xtpoFlia11F7hyWAIDK0EYHB6gn+tAG5XN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NAHSUUVV1Ke7ttPll02zF9dDAigaYRKxJAyzkHaozkkAnAOATgEAtUVznh3xNdapq+saRrGnw6fqGkmFpPs90biF45ULIwcohzlXBUqMYByc1l6F8S7TWJ/Ec09n9j0rRraO8ivmm3fard/N/ehMDaP3JK8ncGB46UAdvRWHoWqa9qjLcajotrp2nzRmSEm/MlzgkbRJEIgikrycSNg8c9a3KAObvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsa6SgDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAK858dan/bGvr4X1Gw1eLw/GI59RuLbSLq5F/yGW2Roo2ATgGRs5I+QdWI9GooA4vxhFceJ5/D2h21pdHTNQuFvdRne3dFS3hxIIn3AFWd/LG04OA/ArtKKKACubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKKKKAPN/iDa6DqserWreD7y88SGIQaffQ6O7M0pQGKRLxV2xhXbks67djHGMEs8T2Oi3OjnT/ABP4Uuta8RJpkcEd/DozztNIUxmO6VCIyHJOWZNpOeBzXpdFAGX4YttRs/CWk22uTG41OGyiS7lLbt8oQBznvznnvWpRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABXj3jrQ4NY8V67N4l0zV5Lm3tYk0CXS9MknSRABJiR0Rlc+eh/dznYBtIA3Fj7DRQB5l4nEeq+F4tP8YaX4hl1waXGzJpcFzLaz3BTJXbHut2xIuMTjb0z8pzXe6ANSXw3pw14RDUxaxi7EONgl2jfjHGM56VoUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSVBe3ken2Ut1OszxxDLLBA8zn6IgLN9ADU9FAHmngTXG0bwjr8k2ja41xDqN9fx2p0i4jkuI5J2aMR70AZmBHyg5GecYNZTaXc+LvBvilWh1BvFeuWYcpc6XdWsEKxcxWqSTRopAJOTkFizN06ewUUAcJb30vjDxz4f1Cz0vU7K00m2nnupNRsZbUrLKiokKiRQXIG8sVyo2jn5hXd0UUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQBBe3ken2Ut1OszxxDLLBA8zn6IgLN9ADXnPgi+t4vB+vWur6Dq1xG+pXtzJZ3Gizjz7eW4YghZEAk+VtxQZbGflzxXptFAHmeg29ppPjHU9d8L+H7/TfDsGkFLizg0uS1N5dBwymK2ZVZmCbl3bQCXAycHFvwFef2nrl3ret22pxa9qUQUQT6TdwQ2FspJS3EskaqzAsSzZ+ZicDAFeg0UAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSVBe3ken2Ut1OszxxDLLBA8zn6IgLN9ADU9FAHAfC698vSNWtrmx1S1l/tS+vALvTLiANFJO7IVLoAxKkHaMt7VBpNn4gX4c+I/EFtp7J4m17zrxLO6iG6JduyCEq3GVjVflPG4sDxXo1FAHlHgbQ7XRvGti/g2y1iDTJdOaPWDqunSW48xSDEYzKilWLNJlIv3QHRV4z6vRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAZfiXWX8P8Ah281OHTbzVJbdMx2dlE0kszE4CgKCep5OOBk9q5jwNc29paarqOo/wBp3Os3Z+2alO2iXkCHAwsUCyRBnVF+VVGWPJIya7uigDy3w0NP1bS/G+l69pWtJZanqN1d7ZdIu4jLbNHGuUJjBL5Bwg+fjgVZ8N6Pd6l8QLDWP7Q8QX+n6RYT26XGu2i2ztLKY/lRPKicgKhLOynJKgE4OPSaKACubvv+Sp6F/wBgXUv/AEfY10lc3ff8lT0L/sC6l/6PsaAOkrL8S6y/h/w7eanDpt5qktumY7OyiaSWZicBQFBPU8nHAye1alFAHnPhqSwj0LWrrXLDU9a1LUsT6uj6DdRxyKcIIYo5o13xxocBRlmAJwScVV0jT9PtPFOr6p4f8MXlp4XGjNDe6culNbLfz7wRstXVS5Ee9Sdvzbgo3EYHqFFAHnHhrSbJfiVHqPgzQ59D0VdMeHUQdNfT4rqYyAwgQuqFnQeYS+3gOBuOSB6PRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAZfiXWX8P8Ah281OHTbzVJbdMx2dlE0kszE4CgKCep5OOBk9q4bSNO0nV/CuvxeJV1i61DVgLnVZ49GvbfaVI8tLcPEGIiwoUAFjjcRya9NooA8u0zTJrjxRf8AiXUP+Eg13SrHRpLER6rp6RzXfmOryJHbiKIsAqYO5MuXwN2KteGtJsl+JUeo+DNDn0PRV0x4dRB019PiupjIDCBC6oWdB5hL7eA4G45IHo9FABXN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NAHSVna/cxWuiTvcW1/cQMBHKunBzOqsdpdfLIf5Qc/J82BwCa0aKAPKdO8M3mst4q0/w1Lf6ToepwW6m71mznNxLcZInA80pO8Zi2JuduCTsIwcVb/wd4s1C88eac0li6X2g21rbm202S1indVuAkcbNMyrtzhuvDr93HPsFFAHmPhfTrSfxto2oeFvDd1oNvDp8o1lptPey86RwnlxsHVfPdWWQlxuA/vfOM+nUUUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQBzd9/yVPQv+wLqX/o+xrpK43xHq9to3xJ0C4vI7yRG0nUUAs7Ka6fPnWR5SJWYDjqRjoM8ir3/CeaR/z5+IP/AAnNQ/8AjFAHSUVzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxQB0lFc3/wnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8ACc1D/wCMUAdJXN33/JU9C/7Aupf+j7Gj/hPNI/58/EH/AITmof8AxiufvPGmlt8SdGuBa65sj0m/Qg6BfByWmsyMJ5O4j5TkgYHAJG4ZAPRKK5v/AITzSP8Anz8Qf+E5qH/xij/hPNI/58/EH/hOah/8YoA6Siub/wCE80j/AJ8/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/GKAOkorm/8AhPNI/wCfPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/xigAvv+Sp6F/2BdS/9H2NdJXnd5400tviTo1wLXXNkek36EHQL4OS01mRhPJ3EfKckDA4BI3DPQf8ACeaR/wA+fiD/AMJzUP8A4xQB0lFc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFAHSUVzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMUAdJXN33/ACVPQv8AsC6l/wCj7Gj/AITzSP8Anz8Qf+E5qH/xiufvPGmlt8SdGuBa65sj0m/Qg6BfByWmsyMJ5O4j5TkgYHAJG4ZAPRKK5v8A4TzSP+fPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/wAYoA6Siub/AOE80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGKAOkorm/wDhPNI/58/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/ABigAvv+Sp6F/wBgXUv/AEfY10led3njTS2+JOjXAtdc2R6TfoQdAvg5LTWZGE8ncR8pyQMDgEjcM9B/wnmkf8+fiD/wnNQ/+MUAdJRXN/8ACeaR/wA+fiD/AMJzUP8A4xR/wnmkf8+fiD/wnNQ/+MUAdJRXN/8ACeaR/wA+fiD/AMJzUP8A4xR/wnmkf8+fiD/wnNQ/+MUAdJXN33/JU9C/7Aupf+j7Gj/hPNI/58/EH/hOah/8Yrn7zxppbfEnRrgWuubI9Jv0IOgXwclprMjCeTuI+U5IGBwCRuGQD0Siub/4TzSP+fPxB/4Tmof/ABij/hPNI/58/EH/AITmof8AxigDpKK5v/hPNI/58/EH/hOah/8AGKP+E80j/nz8Qf8AhOah/wDGKAOkorm/+E80j/nz8Qf+E5qH/wAYo/4TzSP+fPxB/wCE5qH/AMYoAL7/AJKnoX/YF1L/ANH2NdJXnd5400tviTo1wLXXNkek36EHQL4OS01mRhPJ3EfKckDA4BI3DPQf8J5pH/Pn4g/8JzUP/jFAHSUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFAHSUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFAHSVzd9/yVPQv+wLqX/o+xo/4TzSP+fPxB/4Tmof/ABiufvPGmlt8SdGuBa65sj0m/Qg6BfByWmsyMJ5O4j5TkgYHAJG4ZAPRKK5v/hPNI/58/EH/AITmof8Axij/AITzSP8Anz8Qf+E5qH/xigDpKK5v/hPNI/58/EH/AITmof8Axij/AITzSP8Anz8Qf+E5qH/xigDpKK5v/hPNI/58/EH/AITmof8Axij/AITzSP8Anz8Qf+E5qH/xigAvv+Sp6F/2BdS/9H2NdJXnd5400tviTo1wLXXNkek36EHQL4OS01mRhPJ3EfKckDA4BI3DPQf8J5pH/Pn4g/8ACc1D/wCMUAdJRXN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFAHSUVzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxQB0lc3ff8lT0L/sC6l/6PsaP+E80j/nz8Qf8AhOah/wDGK5+88aaW3xJ0a4FrrmyPSb9CDoF8HJaazIwnk7iPlOSBgcAkbhkA9Eorm/8AhPNI/wCfPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/xigDpKK5v/AITzSP8Anz8Qf+E5qH/xij/hPNI/58/EH/hOah/8YoA6Siub/wCE80j/AJ8/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/GKAC+/5KnoX/YF1L/0fY10lcTba9aa38U9I+xQ6hF5Oi6hu+26bcWmcz2WNvnIu7pzjOOM9RXbUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRRRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAVgax420HQLx7fVbmeIxBDNMlnNJDbhzhfNlRCkfr87DAIJ4INb9cF8T0u9S8Ha7HaazpsemWlsRqdo0eJ2AAkaLz95WEvGQBmJjh8jqMAHUeI/E2keEtHfVfEN4LOzRgpk2M5JPYKoLHueBwAT0BrUVg6BlOQwyDXi3xIl1TU/Des6ndeGdSGlW+gMumMstuI4GmhzLLIrSiTcoIjACEgB8Z316/pM8lzpFrNPaTWcjxgtBOULp7EozL+RNAFuubvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsaAOkooooAyNW8U6Vot5HZ3ktxLdyR+aLays5rqUJnG8pEjMq543EAZ4zVbVvHGgaHMItSu5kkEAuZVjs5pfs8R/jl2IfKXg8vtHB9Djib0X8fjT4h30XiafRHsba2uIRHDAytELYkNJ5sbEoJBJwhXq3OSMSFvEFloeo+MZYdHFrr2i21xqEV/dSW5sZFgIYLiN96/N90lTnjPOaAPUI5EmiWSJ1eN1DK6nIYHoQe4p1c78PrK6034beHLLUFZLm30y3jlRuqMI1G0+46fhXRUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQBHcXENpbS3F1KkMEKF5JZGCqigZLEngADnNZWl+LdB1rw9LrunanDLpUJk8y8bKRqIyQ5ywHAweenetO8srXUbOS01C2huraUYkhnjDo468qeDXjlwjP8AA3xVgZjTxFcyTjt5K6iGlz7bA2fagD0mx8ceH7+O7dLyS2+x2v2yZb60mtWWDn96FlRSycH5gCPep9H8V6Trl/PY2UlzHeQRLM9teWU1rJ5bEgOElRSy5UjIBGRiud1u8tB8XNDuI7qCIWmh3s91O8gCJE8kAiLHIG0sr4552n0qHTU1Cx+Msaa/dW+p315or+RNYwG3S0ijmXcrRMzn52YEOX5KbdoxkgHoNc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJUdxcQ2ltLcXUqQwQoXklkYKqKBksSeAAOc1JUN5ZWuo2clpqFtDdW0oxJDPGHRx15U8GgCloHiLSvFOlDUtAvFvbMyPGJkVgGZThsZAyMjr0PaobHxdoWpahq9lZ6jG82i4/tDcrIkGd3V2AU42ODgnBUg4rivDE2swfDPxG3hm1a61Rtc1FLdVZAULXbqXG9lUlQS2CRnbjPNcXqsFxZ6V8QtJsPDuq2MMXh2xD/AGma3d1RDcM7OY5WLNIC5yM5IbdtyMgHs2jeMdE1+8+yadczfaDCLiOO5tJrczRE48yPzEXzF5HzLkDI9RncriNWmtb74neCv7NkjlMdne3OYSCBbNHGobj+Es0eOxxx0rt6AObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoAjuLiG0tpbi6lSGCFC8ksjBVRQMliTwABzmsnTfGGgat4bm8QWGpwyaTB5nmXjAoi+WSHOWA4GDz0PbNal5ZWuo2clpqFtDdW0oxJDPGHRx15U8GvJ7a4sbb4KeMX1W3e5tW1bUo3jSbyiS92yg7yDsALAlsHABODjFAHomjeLdH168ls7Ca4S6jiWc293ZTWshjYkB1WVFLLkEbhkA/Wn+H/FWh+Ko7uTw7qMOoRWc5t5pYMlA+AcBsYYYI5Uke9cR4esdUsPiYdM8bXcPiG9v9CYQ3CIqJBAjossTwgYO93U+YT823AVAMVq/D+GK28TeOILeNIoYtXjSOONQqootIAAAOgA7UAdzXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSVU1PU7TR9OlvtRl8q3j2gsEZySzBVVVUEsxYgBQCSSAASat1V1TU7LRdLuNS1W5jtbO1jMk00hwEUf56dTQBT0fxRpOupeGwuXD2LhLqG6t5LaWAlQw3xyqrKCpyCRgjp0qHS/Gnh3WdFv9Y0zVoJ9N06WSK5uxkRo0YBchiAGUAg7hkEdCayPCujT6rPruv+I9NWAeIRHEumXUYYx2kYZY1mXkb2DuzLzjcFPSoPh48FkvjSSRo7e3g8RXLMzEKkaLFFyT0AAFAHQ6P4r0jXb6eysZbhLy3jWWS2vLOa1lCMSA4SVFYrkEZAIzxWzXFeFln8S+Lbnxo8LW2nvZiw0lJF2vcQb97XDDqA5C7Aedq5wN2K7WgDm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xrpKAKmp6naaPp0t9qMvlW8e0FgjOSWYKqqqglmLEAKASSQACTVPSfFWj61FevZXTIdPYLeR3cEltJb5UOC6SqrKCpyCRgjoeKu6pqdloul3Gparcx2tnaxmSaaQ4CKP89OpryrxPYapP8OPHPiq/tX0+41q2iVLKVCZLeyhJA80KfvsjyMy5+UNtzxQB6FZeM9Fv7W5u4JrpLO2tzcveT2E8NuYgMl1ldAjrjkFScjkcc1Jo/ivSdcv57GykuY7yCJZntryymtZPLYkBwkqKWXKkZAIyMVzdrq95oPjqHSrrxMdU0y50eS/kmvkt0FmUkRUcNEkY8tw7DDZ+5wRzmPTU1Cx+Msaa/dW+p315or+RNYwG3S0ijmXcrRMzn52YEOX5KbdoxkgHoNc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSVV1LUrXSNPlvtQkMcEWNxVGdiSQqqqqCWYkgBQCSSABk1aqrqNx9nsX2XdtZzSERQS3S7kErHagK7lLZYgbQwJ6A0AZ+n+MND1Kz1C5ivGt00w/wCmrfQSWr2w2BwzpKqsqlTkMRg84PBqGy8deHr6O6db2S2Fnbfa5lv7Wa0ZYOf3oWVVLJwfmAIry/xZFd2yePLTVZYtRv3g0q9vL20Ty4UtVuMGFoiWMZCJK3LvuVyflxiu41a6tW+MGhTxzxKtnod9cXkvmAKkDvAI2Y9NpKORn+6x7GgDf0fxXpGu309lYy3CXlvGsslteWc1rKEYkBwkqKxXIIyARnitmuK8LLP4l8W3PjR4WttPezFhpKSLte4g372uGHUByF2A87VzgbsV2tAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQBV1LUrXSNPlvtQkMcEWNxVGdiSQqqqqCWYkgBQCSSABk1kw+OfD82k6pqJu5oYNIG6/S5s5oZbcbA4LROgfBU5B2884zg1rajcfZ7F9l3bWc0hEUEt0u5BKx2oCu5S2WIG0MCegNeb2+mQ3viXxx4f8XX8c02q6fafatTsiII44pPMijgCPu8pwdxG5n3788cCgDutO8UabqcVxLEL62ht4/Nllv9OuLNAvXO6ZFBAAycHjvUejeMdE1+8+yadczfaDCLiOO5tJrczRE48yPzEXzF5HzLkDI9RnzXx9ca3Zab4q8LDVrjXbMeHGvneeKJZ7UrKqmMmFEUq8e8gEZ+Q84rr9Wmtb74neCv7NkjlMdne3OYSCBbNHGobj+Es0eOxxx0oA7eubvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsaAOkoorA8atrX/CLzxeG7a4nvbhlhLWskaSwRscPInmMqlgudoJHOKAJLDxl4f1KLVZbPU4mh0eRo76ZwyRwlQScswAIAB5BI461FZeOvD19HdOt7JbCztvtcy39rNaMsHP70LKqlk4PzAEV5DqCtBoPj7Tbbw7e6VYWsmll453gZYYIltg8beXK2SYgzZGRtByQeK9G1a6tW+MGhTxzxKtnod9cXkvmAKkDvAI2Y9NpKORn+6x7GgDf0fxXpGu309lYy3CXlvGsslteWc1rKEYkBwkqKxXIIyARnitmuK8LLP4l8W3PjR4WttPezFhpKSLte4g372uGHUByF2A87VzgbsV2tAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQBzd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jXSUAFZV74X8P6lqkepajoWm3d/Ft8u6ns43lTacrhyMjB5HPFatFAEV3aW9/Zy2t9bxXNtMpSWGZA6SKeoKngj2NSgBVAUYA4AHaiigArm77/AJKnoX/YF1L/ANH2NdJXN33/ACVPQv8AsC6l/wCj7GgDpKKKKAM7UfDui6veW93q2j2F9c2xzBNc2qSPFzn5WYErzzxTbrw1oV9q8Wq3ui6dcajCVMV5LaI80ZU5Xa5G4YPIweK06KACiiigDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAgvbG01Kyls9RtYbu1mG2SCeMOjj0Kng1Q0zwn4d0Vpm0bQNL09p08uU2lnHEZF/uttAyPY1rUUAZmn+GdB0mzuLTStE06ytroYuIba0jjSYYxhlUANwSOadpHh3RPD6yjQdHsNME2DKLK1SHzMZxu2gZxk9fU1o0UAFc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY0AdJUF7Y2mpWUtnqNrDd2sw2yQTxh0cehU8Gp6KAMrSfC3h/QJpJtC0LTdMlkXa72dnHCzjrglQMir6WdtFeTXcVvElzOqpLMqAPIq52hm6kDc2M9Mn1qaigDN0jw5ofh/zv7B0bT9M8/b5v2K1SHzNucbtoGcZOM+prSoooA5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xrpKAIL2xtNSspbPUbWG7tZhtkgnjDo49Cp4NZ2n+EPDWkrcDSvD2lWQuYzFOLayjj81D1VtqjcPY8VsUUAZWneFfD2kW91BpOhaZYw3ihLmO2s441nUAjDhQNwwzcH1PrUemeD/DOi3gu9G8O6Tp9yFKia0sY4nAPUblUHFbNFABXN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NAHSVV1HTLDWLF7LVrK3vrSTBeC5iWSNsHIyrAg4IBq1RQBi2fgzwvp0VzHp/hvSLWO7iMNwkFjEgmjPVHAX5l9jxTLXwP4TsfO+xeF9Gt/tETQTeTp8SeZGeqNheVOBkHjit2igDG0zwf4Z0W8F3o3h3SdPuQpUTWljHE4B6jcqg4rZoooA5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xrpKAKuo6ZYaxYvZatZW99aSYLwXMSyRtg5GVYEHBANU9L8KeHtDklfRdB0zTnmTZK1pZxxF19CVAyPY1rUUAZmn+GdB0mzuLTStE06ytroYuIba0jjSYYxhlUANwSOadpHh3RPD6yjQdHsNME2DKLK1SHzMZxu2gZxk9fU1o0UAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSVBe2NpqVlLZ6jaw3drMNskE8YdHHoVPBqeigChpug6Ro1jJZaPpVlYWsrF5ILW3SKN2IAJKqACSAB9AKgs/Cnh7T9PubGw0HTLWzuxi5t4LONI5hjGHUDDccc1rUUAY2meD/DOi3gu9G8O6Tp9yFKia0sY4nAPUblUHFbNFFAHN33/ACVPQv8AsC6l/wCj7Gukrm77/kqehf8AYF1L/wBH2NdJQBBe2NpqVlLZ6jaw3drMNskE8YdHHoVPBqla+GdBsdJn0qy0TTrfTrkkz2cNpGkMpIAJZAMHIAHI7CtSigChpOhaToNu8Gh6XZabDI2947O3SFWbGMkKACcAc0zSPDmh+H/O/sHRtP0zz9vm/YrVIfM25xu2gZxk4z6mtKigArm77/kqehf9gXUv/R9jXSVzd9/yVPQv+wLqX/o+xoA6SiiigCBbC0SW5kS1gWS7x9ocRgGbC7RvP8WFGOe3FULPwp4e0/T7mxsNB0y1s7sYubeCzjSOYYxh1Aw3HHNa1FAGNpng/wAM6LeC70bw7pOn3IUqJrSxjicA9RuVQcVs0UUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQBxviO/udO+JOgS2ek3mqu2k6iphs3hV1HnWR3HzZEXHGODnkcdcXv+Eo1f/oRPEH/AH/0/wD+SqL7/kqehf8AYF1L/wBH2NdJQBzf/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHN/8JRq//QieIP8Av/p//wAlVz954j1Q/EnRpT4L1xXXSb9RCZrHe4M1mSw/0nbgbQDkg/MMA849Erm77/kqehf9gXUv/R9jQAf8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQBzf/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHnd54j1Q/EnRpT4L1xXXSb9RCZrHe4M1mSw/0nbgbQDkg/MMA846D/hKNX/6ETxB/wB/9P8A/kqi+/5KnoX/AGBdS/8AR9jXSUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHN/8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQBzf/CUav/0IniD/AL/6f/8AJVc/eeI9UPxJ0aU+C9cV10m/UQmax3uDNZksP9J24G0A5IPzDAPOPRK5u+/5KnoX/YF1L/0fY0AH/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHN/8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQB53eeI9UPxJ0aU+C9cV10m/UQmax3uDNZksP9J24G0A5IPzDAPOOg/4SjV/+hE8Qf8Af/T/AP5Kovv+Sp6F/wBgXUv/AEfY10lAHN/8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQBzf/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAc3/wlGr/9CJ4g/wC/+n//ACVXP3niPVD8SdGlPgvXFddJv1EJmsd7gzWZLD/SduBtAOSD8wwDzj0Subvv+Sp6F/2BdS/9H2NAB/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHN/8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQBzf/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAed3niPVD8SdGlPgvXFddJv1EJmsd7gzWZLD/SduBtAOSD8wwDzjoP+Eo1f/oRPEH/AH/0/wD+SqL7/kqehf8AYF1L/wBH2NdJQBzf/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHN/8JRq//QieIP8Av/p//wAlVz954j1Q/EnRpT4L1xXXSb9RCZrHe4M1mSw/0nbgbQDkg/MMA849Erm77/kqehf9gXUv/R9jQAf8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQBzf/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHnd54j1Q/EnRpT4L1xXXSb9RCZrHe4M1mSw/0nbgbQDkg/MMA846D/hKNX/6ETxB/wB/9P8A/kqi+/5KnoX/AGBdS/8AR9jXSUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHN/8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQBzf/CUav/0IniD/AL/6f/8AJVc/eeI9UPxJ0aU+C9cV10m/UQmax3uDNZksP9J24G0A5IPzDAPOPRK5u+/5KnoX/YF1L/0fY0AH/CUav/0IniD/AL/6f/8AJVH/AAlGr/8AQieIP+/+n/8AyVXSUUAc3/wlGr/9CJ4g/wC/+n//ACVR/wAJRq//AEIniD/v/p//AMlV0lFAHN/8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRQBxNtql3qXxT0j7ZoWoaR5ei6ht+2yW7ebmeyzt8mV+mOc46jGecdtXN33/JU9C/7Aupf+j7GukoA5u+/wCSp6F/2BdS/wDR9jXSVzd9/wAlT0L/ALAupf8Ao+xrpKACiisnxD4n0fwpYR3mv3q2kEsohjOxnLuQTgKoJPAJ6cAEmgDWorJ1fxNpeh3ENvfSzPczKXjtrS1lupio6v5cSswUEgbsYyQM5IrSt51ubaKeMSBJUDqJI2jYAjPKsAVPsQCO9AElc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFYGseNtB0G8mttSuphJbxLNcmCzmnW2jbOGlaNGWIHaxy5HAJ6Cp9T8VaRpL28dzcSzTXSebDBZW0t3K8f/AD0CQqzbOQN2MZIGeRQBsUVHbzrc20U8YkCSoHUSRtGwBGeVYAqfYgEd6koA5u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6Psa6SgAoqO4uIbS2luLqVIYIULySyMFVFAyWJPAAHOayNP8Y6BqvhuXxBp+oxz6VCXDXIRguUOGwCMtyMDAOeMZzQBt0Vj6P4q0jXJrqGxnmSezCtcQXdrLayxqwyGKSqrbTg4bGODzxSaR4r0rXrpodKa7nUKzLc/YJ1t5QDjKTsgjcHsVY5HIyOaANmubvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsaAOkooqO4uIbS2luLqVIYIULySyMFVFAyWJPAAHOaAJKKxNP8YaJq/hx9d0i5l1DTkkaPzLS1lmZmVtp2oql257gEY56c1Xt/H3h+e7ntnmvbSW3tJL2UX+m3NoFgQgPJmWNRgZFAHR0VjaP4r0nXL+exspLmO8giWZ7a8sprWTy2JAcJKillypGQCMjFbNAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAFFVNT1O00fTpb7UZfKt49oLBGckswVVVVBLMWIAUAkkgAEms2z8Z6Fe2Go3cV48SaYQL2O5tpYJoCVDLuikVX+YEFfl+btmgDdorAtfG2g3drqU6XU8I0qHz72K6s5reWGPaW3mKRFcrhTggHOCBzVjRfE+na+5GnR6iB5YkD3Wl3NsjKehVpY1VuvQEnvQBr1zd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRVTU9TtNH06W+1GXyrePaCwRnJLMFVVVQSzFiAFAJJIABJoAt0Vz8Pjnw/NpOqaj9skhg0cbr9Li0mhmthsDgtE6CQAqcj5ee2ansPFel6hb3NwpvbS3tYvOmn1HT7izjVACS26ZEBAAJODwOTQBs0ViaH4w0XxFcvb6XcT+esC3Hk3VnNbO8TEhZFWVFLJkY3LkfmK26AObvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GukoAKKq6lqVrpGny32oSGOCLG4qjOxJIVVVVBLMSQAoBJJAAyap6P4o0nXUvDYXEitYuEuorq3ktpISVDAtHKqsAVOQcYPODwaANaisnQfFOieKLG5vdA1GK9tbW4e2lnjBCB0wWwxADDBB3DKnPBNM0jxXpWvXTQ6U13OoVmW5+wTrbygHGUnZBG4PYqxyORkc0AbNc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUVV1LUrXSNPlvtQkMcEWNxVGdiSQqqqqCWYkgBQCSSABk0AWqKyNJ8VaPrUV69ncvGdPYLdx3lvJayQZUOC6SqrBSpyGIweeeDUFn400S+tLi7hnuUsraA3L3txYzw27RAZ3pM6BHXHIKk5HI45oA3qKxtH8V6Rrt9PZWMtwl5bxrLJbXlnNayhGJAcJKisVyCMgEZ4rZoA5u+/5KnoX/AGBdS/8AR9jXSVzd9/yVPQv+wLqX/o+xrpKACiisjSPFWi67JqK6Vfpcf2ZMYLttjKsbjr8zABhweQSPegDXorF0fxh4f17Sb3VNJ1W3uNPsJpIbm7yVijaMAud7YBUAg7wSpHINJofjDRfEVy9vpdxP56wLceTdWc1s7xMSFkVZUUsmRjcuR+YoA265u+/5KnoX/YF1L/0fY10lc3ff8lT0L/sC6l/6PsaAOkooooAKKwbTxroWoQanLp11NerpU/2e7W1s5pmV84wqqhL/AFQEdfSoYPH/AIemup7eSe8s5Le0e9lGoabc2gWBCAz5ljUYBIoA6SisbR/Feka7fT2VjLcJeW8ayyW15ZzWsoRiQHCSorFcgjIBGeK2aAObvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsa6SgDm77/kqehf8AYF1L/wBH2NdJXN33/JU9C/7Aupf+j7GukoAK8c+Ka6vJF4h1DUfD2oS2ltbR2mmTxT2xgjRnjaWVlaUOHZgE+4cKg/vNXsdQ3dnbX9q9tfW8VzbycPFMgdW5zyDweRQB5mRf3/xJ8T3Mut3vheaPRbKeOMx2zukQ88tvLrIu1X3Z2HqevSu28Favea/4F0XVtTiWG7vbKKeVEUhQzKDkA9Aev41b1Tw7omuSQSa3o9hqL25Jha7tUlMWcZ2lgcdB09BWjQAVzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jQB0lFFFAHj/i201PVvEHjd/DeoppdtaWUMGtQXDr/p48sSZRipNv8AuWaPzfmBzwoKbyaK8ureKNVv7PW7vwtCfDWmXdpEscLtHbbJjhzMj/KjEg7cc9TXpep+FfD2tXsd5rOhaZqF1GoRJ7qzjldFBJADMCQASTj1JqTVPDuia5JBJrej2GovbkmFru1SUxZxnaWBx0HT0FAFTwVq95r/AIF0XVtTiWG7vbKKeVEUhQzKDkA9Aev41uUUUAc3ff8AJU9C/wCwLqX/AKPsa6Subvv+Sp6F/wBgXUv/AEfY10lAEN5ZWuo2clpqFtDdW0oxJDPGHRx15U8GuJ+HF5b6f4Q1y8vp47e2t9b1OSWWRtqoouZCST2AFdre2NpqVlLZ6jaw3drMNskE8YdHHoVPBrKtvBHhSzguIbPwxo0EV0nl3EcWnxKsy5ztYBfmGRnBoA4HX7fU9a8H+N/GYt5bQ32htZ6XbspWb7KiyOZHHUM5kYheqgDPJIG1o2oX+meLvDmmW+vya1p2raZNcmKWGFRbJGIzG8ZiRSEO/bhy3bB4NdTpXhLw3oV2brRPD+l6dcMhQzWllHE5UkEruUA4yBx7VNpPh3RNBac6Fo9hppuMGY2dqkPm4zjdtAzjJxn1NAGjXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lQ3lla6jZyWmoW0N1bSjEkM8YdHHXlTwamqC9sbTUrKWz1G1hu7WYbZIJ4w6OPQqeDQByHws/5F3Vv+w/qX/pU9Q+DbqDU7jXvHl5cQw219J9lsJ5mASOygLKrZJAAeQyP15DLXTaZ4T8O6K0zaNoGl6e06eXKbSzjiMi/wB1toGR7GrsenWUOmDTobO3jsVi8kWqxKIhHjGzZjG3HGMYoA4fTU1Cx+Msaa/dW+p315or+RNYwG3S0ijmXcrRMzn52YEOX5Kbdoxk+g1naR4d0Tw+so0HR7DTBNgyiytUh8zGcbtoGcZPX1NaNAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQBV1TU7LRdLuNS1W5jtbO1jMk00hwEUf56dTXK+F0mtpdf8beJIxpC6msbLb3JCNaWkCt5Zl7ByHd2H8O4L/DXVajplhrFi9lq1lb31pJgvBcxLJG2DkZVgQcEA1m23gjwpZwXENn4Y0aCK6Ty7iOLT4lWZc52sAvzDIzg0AczYaavig+IfE3iHfpem6xpo0y0WUiKVLP5yZnLcKztKSFI+UBc8kgT6RNqfh34i2XhX+2p9a06bSGuCl3FCJrExuqI26JEBRwxXDAnMeQeorfs/BPhXT/AD/sHhnR7X7RC1vN5FhEnmxN95GwvKnuDwauaT4f0bQI5I9C0mx0xJSGkWztkhDkdCQoGaANCubvv+Sp6F/2BdS/9H2NdJXN33/JU9C/7Aupf+j7GgDpKq6pqdloul3Gparcx2tnaxmSaaQ4CKP89Opq1VXUdMsNYsXstWsre+tJMF4LmJZI2wcjKsCDggGgDhrLw8PEGk+KNV8XCTRofFMcdotu7LHNbWqhkiDk5AlYyMxU5wXVeSKparpur6tq2t/D2TxBLqNpfaCZ1urqCHzbKXzAio3lIisrgk4Iz8jcmu1tPBfhawhuYrHw1o9tHdR+VcJDYRIJk/usAvzD2NT2fhjQdO0y407T9E061sbrP2i1gtI0imyMHcgGGyOOR0oA4u2fXtQ+Mmif2za6Zbz6fpF01yNOvHuPlkeELv3xps3MjFRz91ueK9IqjpOh6ToNs9voel2emwO+94rO3SFWbAG4hQATgAZ9qvUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQBV1G4+z2L7Lu2s5pCIoJbpdyCVjtQFdylssQNoYE9Aa4fwzZsfiF4u0nxGLXWLu9srSa6uIodtsYSJUW3aFi2wjDthnfcHzx0ru72xtNSspbPUbWG7tZhtkgnjDo49Cp4NU7Pw1oWn6TPpdhoun2un3O4z2kNqiRS7gFbcgGGyAAcjkCgDzORJ4/hj8Vk01Ski6jfiNYhggfZ48gY9s1v6NqF/pni7w5plvr8mtadq2mTXJilhhUWyRiMxvGYkUhDv24ct2weDXU6V4S8N6Fdm60Tw/penXDIUM1pZRxOVJBK7lAOMgce1TaT4d0TQWnOhaPYaabjBmNnapD5uM43bQM4ycZ9TQBo1zd9/wAlT0L/ALAupf8Ao+xrpK5u+/5KnoX/AGBdS/8AR9jQB0lVdRuPs9i+y7trOaQiKCW6XcglY7UBXcpbLEDaGBPQGrVQXtjaalZS2eo2sN3azDbJBPGHRx6FTwaAPGPFYv7Ky+JNpfzxX2qTaXZ3VzfWsTJClvudPJaHLMhCrK2C7Fg5Py9K7Ox1W90Tx9BpV14jfV9LuNGl1CWW7SBPsYR0CuHiRF8tgz/ez9zIPBz1mmaFpOiWT2ejaXZafayMXeC0t0iRmIAJKqACSABn2FQWfhTw9p+n3NjYaDplrZ3Yxc28FnGkcwxjDqBhuOOaAMDwss/iXxbc+NHha2097MWGkpIu17iDfva4YdQHIXYDztXOBuxXa1jaZ4P8M6LeC70bw7pOn3IUqJrSxjicA9RuVQcVs0Ac3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQBgeNW1r/hF54vDdtcT3twywlrWSNJYI2OHkTzGVSwXO0EjnFcd8PbaB/E/jDQ5fC9zY6YFtITbXv2eSNEW1jQROEkfcWXnuMZyQeK9QqpLpOnTreLNYWsi367bsPCpFwNu3EnHzjbxznjigDzrR/Dv/CSeE/iJoFvMtn9s1u6gjkCZWP8AdQ4+X09vSrFs+vah8ZNE/tm10y3n0/SLprkadePcfLI8IXfvjTZuZGKjn7rc8V1lp4I8KWHn/YfDGjW32iFoJvJ0+JPNjb7yNheVOBkHg1e0nQ9J0G2e30PS7PTYHfe8VnbpCrNgDcQoAJwAM+1AF6ubvv8Akqehf9gXUv8A0fY10lc3ff8AJU9C/wCwLqX/AKPsaAOkrA8atrX/AAi88Xhu2uJ724ZYS1rJGksEbHDyJ5jKpYLnaCRzit+igDzX4aH7L4y8Vabb+Hr3SLSA2aRpO8DCEJaxqsZ8uVyWI+YEZGOpB4rR8Ezw6tea747u5US1vpDb2M0jALHY25YBsngKz+bJn0KmuyWwtEluZEtYFku8faHEYBmwu0bz/FhRjntxUf8AZOnf2R/ZX2C1/s7yvJ+x+Svk+XjGzZjbtxxjGKAOV8LLP4l8W3PjR4WttPezFhpKSLte4g372uGHUByF2A87VzgbsV2tY2meD/DOi3gu9G8O6Tp9yFKia0sY4nAPUblUHFbNAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY10lABRRRQAUUUUAFc3ff8lT0L/sC6l/6Psa6Subvv8Akqehf9gXUv8A0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jQB0lFFFABRRRQAUUUUAc3ff8lT0L/sC6l/6Psa6Subvv+Sp6F/2BdS/9H2NdJQAUUUUAFFFFABXN33/JU9C/7Aupf+j7Gukrm77/AJKnoX/YF1L/ANH2NAHSUUUUAFFFFABRRRQBzd9/yVPQv+wLqX/o+xrpK5u+/wCSp6F/2BdS/wDR9jXSUAFFFFABRRRQAVzd9/yVPQv+wLqX/o+xrpK5u+/5KnoX/YF1L/0fY0AdJRRRQAUUUUAFFFFAHN33/JU9C/7Aupf+j7Gukrm77/kqehf9gXUv/R9jXSUAZur+HND8QeT/AG9o2n6n5G7yvttqk3l7sZ27gcZwM49BWb/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAB/wrjwR/0Jvh//AMFcH/xNH/CuPBH/AEJvh/8A8FcH/wATRRQAf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0UUAH/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNFFAF3SvCfhzQbprrQ9A0vTbh0MbS2dlHC7KSCVJUA4yAcewrXoooA/9k=)

Figure 9 – Selected Region Shaded

Clearly the value inside the blue square is not the right answer. This is because, it is the sum of all the pixels the left and top of it. That means it contains pixel values to the left and top of the shaded region. To get the right value, we need to subtract the sum of the regions outside of the shaded one.

![Table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADMDEAAJKSAAIAAAADMDEAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTY6NTk6MTMAMjAyMTowODoxMyAxNjo1OToxMwAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTY6NTk6MTMuMDExPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAHUAjgDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD2LVdV1+Txfd6ZpF7Y2kFrZ285NzZNOzNI0oIyJEwB5Q9etN8zxh/0HNI/8FEn/wAkUSf8lI1j/sG2P/oy5rSrz5zlzPU9KEIuK0M3zPGH/Qc0j/wUSf8AyRR5njD/AKDmkf8Agok/+SK0qKnnl3K9nDsZvmeMP+g5pH/gok/+SKPM8Yf9BzSP/BRJ/wDJFaVFHPLuHs4djN8zxh/0HNI/8FEn/wAkVSi1TxhLr11pv9r6QPs9tDceZ/ZUnzeY0q4x5/GPK6553e3O/WLa/wDI+ar/ANg2y/8ARt1Rzy7h7OHYseZ4w/6Dmkf+CiT/AOSKPM8Yf9BzSP8AwUSf/JFaVFHPLuHs4djN8zxh/wBBzSP/AAUSf/JFHmeMP+g5pH/gok/+SK0qKOeXcPZw7Gb5njD/AKDmkf8Agok/+SKPM8Yf9BzSP/BRJ/8AJFaVFHPLuHs4djAi1TxhLr11pv8Aa+kD7PbQ3Hmf2VJ83mNKuMefxjyuued3tzd8zxh/0HNI/wDBRJ/8kVXtf+R81X/sG2X/AKNuq2qOeXcPZw7Gb5njD/oOaR/4KJP/AJIo8zxh/wBBzSP/AAUSf/JFaVFHPLuHs4djN8zxh/0HNI/8FEn/AMkUeZ4w/wCg5pH/AIKJP/kitKijnl3D2cOxm+Z4w/6Dmkf+CiT/AOSKpRap4wl16603+19IH2e2huPM/sqT5vMaVcY8/jHldc87vbnfrFtf+R81X/sG2X/o26o55dw9nDsWPM8Yf9BzSP8AwUSf/JFHmeMP+g5pH/gok/8AkitKijnl3D2cOxm+Z4w/6Dmkf+CiT/5Io8zxh/0HNI/8FEn/AMkVpUUc8u4ezh2M3zPGH/Qc0j/wUSf/ACRR5njD/oOaR/4KJP8A5IrSoo55dw9nDsYEWqeMJdeutN/tfSB9ntobjzP7Kk+bzGlXGPP4x5XXPO725u+Z4w/6Dmkf+CiT/wCSKr2v/I+ar/2DbL/0bdVtUc8u4ezh2M3zPGH/AEHNI/8ABRJ/8kUeZ4w/6Dmkf+CiT/5IrSoo55dw9nDsZvmeMP8AoOaR/wCCiT/5Io8zxh/0HNI/8FEn/wAkVpUUc8u4ezh2M3zPGH/Qc0j/AMFEn/yRVKLVPGEuvXWm/wBr6QPs9tDceZ/ZUnzeY0q4x5/GPK6553e3O/WLa/8AI+ar/wBg2y/9G3VHPLuHs4dix5njD/oOaR/4KJP/AJIo8zxh/wBBzSP/AAUSf/JFaVFHPLuHs4djN8zxh/0HNI/8FEn/AMkUeZ4w/wCg5pH/AIKJP/kitKijnl3D2cOxm+Z4w/6Dmkf+CiT/AOSKPM8Yf9BzSP8AwUSf/JFaVFHPLuHs4djAi1TxhLr11pv9r6QPs9tDceZ/ZUnzeY0q4x5/GPK6553e3N3zPGH/AEHNI/8ABRJ/8kVXtf8AkfNV/wCwbZf+jbqtqjnl3D2cOxm+Z4w/6Dmkf+CiT/5Io8zxh/0HNI/8FEn/AMkVpUUc8u4ezh2M3zPGH/Qc0j/wUSf/ACRR5njD/oOaR/4KJP8A5IrSoo55dw9nDsZvmeMP+g5pH/gok/8AkiqUWqeMJdeutN/tfSB9ntobjzP7Kk+bzGlXGPP4x5XXPO72536xbX/kfNV/7Btl/wCjbqjnl3D2cOxY8zxh/wBBzSP/AAUSf/JFHmeMP+g5pH/gok/+SK0qKOeXcPZw7Gb5njD/AKDmkf8Agok/+SKPM8Yf9BzSP/BRJ/8AJFaVFHPLuHs4djN8zxh/0HNI/wDBRJ/8kUeZ4w/6Dmkf+CiT/wCSK0qKOeXcPZw7GHYah41vvE1/pEes6Ggs7O2ufNfRpmL+a8y7cC6GMeRnPOd3bHOv9h8b/wDQw+H/APwQz/8AyZVPw/8A8lK1/wD7BGnf+jr2uwrvptuCuefUSU3Y5v7D43/6GHw//wCCGf8A+TKPsPjf/oYfD/8A4IZ//kyukoqzM5v7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TK6SigDm/sPjf8A6GHw/wD+CGf/AOTKzYLnxvN4qvtG/tvw+v2Sytrvzv7En+fznnTbt+18Y8jOc87u2Oe2rm7H/kqeu/8AYF03/wBH31AB9h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc3oOoa5/wlWqaNr11p939lsrW7imsrN7b/AFr3CFWVpZM48gEEEdTRRY/8lT13/sC6b/6PvqKAKUn/ACUjWP8AsG2P/oy5rSrNk/5KRrH/AGDbH/0Zc1pV5s/iZ6lP4EFFFZuuawNGso5FhNxcXE6W1tAG2+ZK5wAW5wOpJwcAHg9Kgs0qKx9J1ua81S80vUrRLS/tEjlKxTGWOSN87WViqnqrAgqMEd81sUAFYtr/AMj5qv8A2DbL/wBG3VbVYtr/AMj5qv8A2DbL/wBG3VAG1RRRQAUVW1C9/s+xe5+zXF0VwBDbR75HJOAAOnfqSAOpIFU/DGtP4h8O22py2v2N5i4aDzPM2FXZSN2Bn7vpQBq0UUUAYtr/AMj5qv8A2DbL/wBG3VbVYtr/AMj5qv8A2DbL/wBG3VbVABRRVe/mu4bUtp9qt1cFgFjeXy15PJZsEgAc8An2oAsUVkaHrUuqTaha3lolreafOIZkim82M5RXUq+1SeGHBAwa16ACsW1/5HzVf+wbZf8Ao26rarFtf+R81X/sG2X/AKNuqANqiiigAorK8RaxJomlrcwWy3UslxDbpG8pjXdJIEBLBWwBuz0NWtPk1GSJjqtra20gb5VtrlpgR6ktGmD7YNAFuiiigDFtf+R81X/sG2X/AKNuq2qxbX/kfNV/7Btl/wCjbqtqgAooqtfzXcFqW0+0W7nLBVjeXy1GTyWbBIA9gT7UAWaKydE1qbU57+0vbNbS90+YRTRpL5qHcodWV9qkghh1Awc1rUAFYtr/AMj5qv8A2DbL/wBG3VbVYtr/AMj5qv8A2DbL/wBG3VAG1RRRQAUVWv5L6O3B0y2t7ibdgpcXDQrt9dwRznpxj8azdC1u91TUtTs72xt7c6e8cbSW900yO7LuK5MacgFc9fve1AG3RRRQBi2v/I+ar/2DbL/0bdVtVi2v/I+ar/2DbL/0bdVtUAFFFYEnidl8ZW2hjTLgRzrL/pkvyIWRVYhFIy4+YfNwM9M4OADformL/wAXXFuNUurLS1utM0h/LvJzcbJMqA0nlx7SHCqR1ZckMB0yeljkSaJJImDI6hlYdwehoAdWLa/8j5qv/YNsv/Rt1W1WLa/8j5qv/YNsv/Rt1QBtUUUUAFFVr+S+jtwdMtre4m3YKXFw0K7fXcEc56cY/Gs3QtbvdU1LU7O9sbe3OnvHG0lvdNMjuy7iuTGnIBXPX73tQBt0UUUAZ3h//kpWv/8AYI07/wBHXtdhXH+H/wDkpWv/APYI07/0de12FejT+BHmVfjYUUVykvjZ0+Ill4YXRbtYblJv+JjP+7jZ40RysakZkGHALcLngFsHGhmdXRXEar8QLu0Gt32m6It9ovh+UxajdG78uYsih5vJi2ESBFYZLOmSGA6ZPaQzR3EEc0LB45FDow6MCMg0APrm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACisbxP4gPh+wtngtDe3l7dJZ2lv5gjEkr5xufB2qArEnBOAcAnioPDniSfVtS1TSdVsI7DVNLaMzxQ3BniaORSY3RyqEg7WGCoIKn2JAOgooooA5ux/5Knrv/YF03/0ffUUWP8AyVPXf+wLpv8A6PvqKAKUn/JSNY/7Btj/AOjLmtKs2T/kpGsf9g2x/wDRlzWlXmz+JnqU/gQVz3i+1nkt9LvbeCW4/s3UY7qSKFNzsgVkbao5JAfOByccV0NFQWc3owl1HxhqWtC2uILQ2kFnAbiFoWlKtI7tscBgAZAOQM4Pbk9JRRQAVi2v/I+ar/2DbL/0bdVtVi2v/I+ar/2DbL/0bdUAbVFFFAEF5eR2Nq1xOszIuMiCB5n5OOFQFj+ArnPh5Ky+FYrKe2vLa4gklZ0ubSWHh5XZcF1Abgg8ZxnmuqooAKKKKAMW1/5HzVf+wbZf+jbqtqsW1/5HzVf+wbZf+jbqtqgAqhrU8UGmt9phvpYZGCSGwEhlQH+IeWd+M4+7k8+mav0UAct4NtXtrzV/stvcw6TLMklqb2N0nkkIPms3mDzGGdoBfng9gK6miigArFtf+R81X/sG2X/o26rarFtf+R81X/sG2X/o26oA2qKKKAM3XmsRpu3VdNfUbR5FWSJbQ3OO4YxgEkAgdAcZH1rH8H2P2bU9ZnsLKXT9GuHi+x2skJgAdVIkdYiAUDHbwQM7Scc5PVUUAFFFFAGLa/8AI+ar/wBg2y/9G3VbVYtr/wAj5qv/AGDbL/0bdVtUAFZniHVZtG0Wa7tbG4v5xhYoIImcljwCQoJCjqSAeBxk4FadFAHO+D0gis7kBrya+nl+0Xtxc2E1sJZG4+USKPlAUKAM4AGevPRUUUAFYtr/AMj5qv8A2DbL/wBG3VbVYtr/AMj5qv8A2DbL/wBG3VAG1RRRQBW1K7aw0u6u47eW5eCJnWCFCzyEDIUAdSTxVDwppkuleHbeO85vZy1zdt6zSHc/4AnA9gK2KKACiiigDFtf+R81X/sG2X/o26rarFtf+R81X/sG2X/o26raoAK47XNQRfHmiTC01KSGxS5SeWLTbiRFLqm3DKhDZweRnHeuxooA4G5S80/SfFGhpp17Pd6ncXD2Tx2ztFILgYBaQDam0ls7iOB3yK7izg+y2MFvnd5Uapn1wMVNRQAVi2v/ACPmq/8AYNsv/Rt1W1WLa/8AI+ar/wBg2y/9G3VAG1RRRQBW1K7aw0u6u47eW5eCJnWCFCzyEDIUAdSTxVDwppkuleHbeO85vZy1zdt6zSHc/wCAJwPYCtiigAooooAzvD//ACUrX/8AsEad/wCjr2uwrj/D/wDyUrX/APsEad/6Ova7CvRp/AjzKvxsK878T6vGnxU8NXA0/WZbfTI72O6mg0a7ljQyJGEwyxkMDg8qSBjnFeiUVoZnlF7HqGk6D438MR6PqV1f61d3UmmyQ2cj28q3SgAtMBsj2Mzbg7KcLkZyM+n6da/YdLtbTdu+zwpFu9dqgZ/SrFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAHPeNdP06/0OI6o2pRfZbqO5trjS7eSe4gmU/K6oiPnqQcqVwTmsbwDo14niLxB4ivZ9Unj1EW9vbSatCkNxJHCHy5iVE8tS0hAUorfJkj5snuqKACiiigDm7H/kqeu/9gXTf/R99RRY/wDJU9d/7Aum/wDo++ooApSf8lI1j/sG2P8A6Mua0qwNU1a30v4kap9pjvH8zTbLb9msprjGJLnr5att698Z5x0NS/8ACV6f/wA++r/+CW7/APjVebP4mepT+BG1RWL/AMJXp/8Az76v/wCCW7/+NUf8JXp//Pvq/wD4Jbv/AONVBZtUVi/8JXp//Pvq/wD4Jbv/AONUf8JXp/8Az76v/wCCW7/+NUAbVYtr/wAj5qv/AGDbL/0bdUf8JXp//Pvq/wD4Jbv/AONVkW3iaxHjTUpjBqm19PtFAGk3RbIkuScr5eQPmGCRg846HAB2NFYv/CV6f/z76v8A+CW7/wDjVH/CV6f/AM++r/8Aglu//jVAG1RWL/wlen/8++r/APglu/8A41R/wlen/wDPvq//AIJbv/41QBtUVi/8JXp//Pvq/wD4Jbv/AONUf8JXp/8Az76v/wCCW7/+NUAFr/yPmq/9g2y/9G3VbVcdbeJrEeNNSmMGqbX0+0UAaTdFsiS5Jyvl5A+YYJGDzjoca/8Awlen/wDPvq//AIJbv/41QBtUVi/8JXp//Pvq/wD4Jbv/AONUf8JXp/8Az76v/wCCW7/+NUAbVFYv/CV6f/z76v8A+CW7/wDjVH/CV6f/AM++r/8Aglu//jVAG1WLa/8AI+ar/wBg2y/9G3VH/CV6f/z76v8A+CW7/wDjVZFt4msR401KYwaptfT7RQBpN0WyJLknK+XkD5hgkYPOOhwAdjRWL/wlen/8++r/APglu/8A41R/wlen/wDPvq//AIJbv/41QBtUVi/8JXp//Pvq/wD4Jbv/AONUf8JXp/8Az76v/wCCW7/+NUAbVFYv/CV6f/z76v8A+CW7/wDjVH/CV6f/AM++r/8Aglu//jVABa/8j5qv/YNsv/Rt1W1XHW3iaxHjTUpjBqm19PtFAGk3RbIkuScr5eQPmGCRg846HGv/AMJXp/8Az76v/wCCW7/+NUAbVFYv/CV6f/z76v8A+CW7/wDjVH/CV6f/AM++r/8Aglu//jVAG1RWL/wlen/8++r/APglu/8A41R/wlen/wDPvq//AIJbv/41QBtVi2v/ACPmq/8AYNsv/Rt1R/wlen/8++r/APglu/8A41WRbeJrEeNNSmMGqbX0+0UAaTdFsiS5Jyvl5A+YYJGDzjocAHY0Vi/8JXp//Pvq/wD4Jbv/AONUf8JXp/8Az76v/wCCW7/+NUAbVFYv/CV6f/z76v8A+CW7/wDjVH/CV6f/AM++r/8Aglu//jVAG1RWL/wlen/8++r/APglu/8A41R/wlen/wDPvq//AIJbv/41QAWv/I+ar/2DbL/0bdVtVx1t4msR401KYwaptfT7RQBpN0WyJLknK+XkD5hgkYPOOhxr/wDCV6f/AM++r/8Aglu//jVAG1RWL/wlen/8++r/APglu/8A41R/wlen/wDPvq//AIJbv/41QBtUVi/8JXp//Pvq/wD4Jbv/AONUf8JXp/8Az76v/wCCW7/+NUAbVYtr/wAj5qv/AGDbL/0bdUf8JXp//Pvq/wD4Jbv/AONVkW3iaxHjTUpjBqm19PtFAGk3RbIkuScr5eQPmGCRg846HAB2NFYv/CV6f/z76v8A+CW7/wDjVH/CV6f/AM++r/8Aglu//jVAG1RWL/wlen/8++r/APglu/8A41R/wlen/wDPvq//AIJbv/41QBtUVi/8JXp//Pvq/wD4Jbv/AONUf8JXp/8Az76v/wCCW7/+NUAWfD//ACUrX/8AsEad/wCjr2uwrzPR/F2m23xD1qaS21llk0qwVRHol5IwKy3ZOVWIlR8wwSADzjODjqP+E80j/nz8Qf8AhOah/wDGK9Gn8CPMq/GzpKK5v/hPNI/58/EH/hOah/8AGKP+E80j/nz8Qf8AhOah/wDGK0MzpKK5v/hPNI/58/EH/hOah/8AGKP+E80j/nz8Qf8AhOah/wDGKAOkrm7H/kqeu/8AYF03/wBH31H/AAnmkf8APn4g/wDCc1D/AOMVz9n400tfiTrNwbXXNkmk2CADQL4uCs14TlPJ3AfMMEjB5AJ2nAB6JRXN/wDCeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wnNQ/+MUAdJRXN/wDCeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wnNQ/+MUAdJRXN/wDCeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wnNQ/+MUAFj/yVPXf+wLpv/o++oqj4c1e21n4k6/cWcd5Gi6TpyEXllNavnzr08JKqsRz1Ax1GeDRQAsn/ACUjWP8AsG2P/oy5rSrNk/5KRrH/AGDbH/0Zc1pV5s/iZ6lP4EFFFFQWFFFFABWLa/8AI+ar/wBg2y/9G3VbVYtr/wAj5qv/AGDbL/0bdUAbVFFFABRRRQAUUUUAYtr/AMj5qv8A2DbL/wBG3VbVYtr/AMj5qv8A2DbL/wBG3VbVABRRRQAUUUUAFYtr/wAj5qv/AGDbL/0bdVtVi2v/ACPmq/8AYNsv/Rt1QBtUUUUAFFFFABRRRQBi2v8AyPmq/wDYNsv/AEbdVtVi2v8AyPmq/wDYNsv/AEbdVtUAFFFFABRRRQAVi2v/ACPmq/8AYNsv/Rt1W1WLa/8AI+ar/wBg2y/9G3VAG1RRRQAUUUUAFFFFAGLa/wDI+ar/ANg2y/8ARt1W1WLa/wDI+ar/ANg2y/8ARt1W1QAUUUUAFFFFABWLa/8AI+ar/wBg2y/9G3VbVYtr/wAj5qv/AGDbL/0bdUAbVFFFABRRRQAUUUUAZ3h//kpWv/8AYI07/wBHXtdhXH+H/wDkpWv/APYI07/0de12FejT+BHmVfjYUUUVoZhRRRQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFABRRRQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvqKLH/kqeu/8AYF03/wBH31FAFKT/AJKRrH/YNsf/AEZc1pVmyf8AJSNY/wCwbY/+jLmtKvNn8TPUp/Agqvf39vptqbi7ZljDBQEjaRmJOAFVQSx9gDViq99K8dvsgure2uJW2QvcLvUv1xtDKWOAeARUFkWmavZaxDLJYSM3kyGOVJInieNsA4ZHAYHBB5Hertcr4SEkHiDxHa3rrc3wuIpri7iG2N90eEQJzsKKg4LMfmBzzgdVQAVi2v8AyPmq/wDYNsv/AEbdVtVi2v8AyPmq/wDYNsv/AEbdUAbVFFFAFa/v4dNtxNcJcOpbbi3tpJ2z/uxqxxx1xiq2ma/Yavc3FvZNcCa2CmWO4tJYGUNnbxIq9dp6elXbq5hsrOa6uXEcMEbSSOeiqoyT+QrD8GW0raRJq94hW81iU3sgbqiMAIkP+7GEGPXNAHQ0UUUAYtr/AMj5qv8A2DbL/wBG3VbVYtr/AMj5qv8A2DbL/wBG3VbVABUN5eW2n2ct3fTx29vEu6SWRsKo9zU1ct4+Eh0nTQs/2eI6raiWbaD5a+YMNzxw23rkZxnNAG7p+qW+pq7W0d2gjIB+02ctvnPoJFXP4VcrnNCvL5PFGraPc38mpQ2kUEqTzIiyRs+7MbbFVTwqsOM/N34ro6ACsW1/5HzVf+wbZf8Ao26rarFtf+R81X/sG2X/AKNuqANqiiigCtqGo2mlWbXV/MIolIXO0sWJOAoUZLEngAAk1Hpmr2WrxytYyMxhfy5Y5YnikjbGcMjgMOCDyOQaqeJNKu9TtbJ9OeEXNjeR3UaTkhJduQVJAJGQx5wcEDisnwsb258aeJLy8jtoxttrdltZjMgkRXLDeVXLAOueBjIHagDrqKKKAMW1/wCR81X/ALBtl/6Nuq2qxbX/AJHzVf8AsG2X/o26raoAKr39/b6bam4u2ZYwwUBI2kZiTgBVUEsfYA1YqvfSvHb7ILq3triVtkL3C71L9cbQyljgHgEUARaZq9lrEMslhIzeTIY5UkieJ42wDhkcBgcEHkd6u1yvhISQeIPEdreutzfC4imuLuIbY33R4RAnOwoqDgsx+YHPOB1VABWLa/8AI+ar/wBg2y/9G3VbVYtr/wAj5qv/AGDbL/0bdUAbVFFFAFbUNRtdLsmur+XyoVIGdpYkk4ACjJJJIAABJNRaZrVjq/niykk8y3YJNFNC8MkZIyMo4DAEHIOMGsjx0Q2iWtuu5bq5v4IrSYSBBBNuyjkkEYBHTB3cL3zVbwoLq18U69Z6tKt7qOIJ5L2PCo0bBhHH5Y/1e3a3GWJ3ZzQB11FFFAGLa/8AI+ar/wBg2y/9G3VbVYtr/wAj5qv/AGDbL/0bdVtUAFR3FzBaW8lxdzRwQxrueSVgqqPUk8AVJUVxbQXcXlXcEc8e4NslQMMg5Bwe4IBHuKAINJ1ay1zS4dR0ubz7ScExybGXdgkHhgD1B7Vcrmfh5/yI1n/11uP/AEfJXTUAFYtr/wAj5qv/AGDbL/0bdVtVi2v/ACPmq/8AYNsv/Rt1QBtUUUUAVtQ1G10uya6v5fKhUgZ2liSTgAKMkkkgAAEk1FpmtWOr+eLKSTzLdgk0U0LwyRkjIyjgMAQcg4wayPHRDaJa267lurm/gitJhIEEE27KOSQRgEdMHdwvfNVvCgurXxTr1nq0q3uo4gnkvY8KjRsGEcflj/V7drcZYndnNAHXUUUUAZ3h/wD5KVr/AP2CNO/9HXtdhXH+H/8AkpWv/wDYI07/ANHXtdhXo0/gR5lX42FZ+t67p/h3TTf6tLJFb+YkQMcDzMzuwVVCICxJYgYA71oVieK9GsfEGlQ6dqGoS6eXu4ZbeWB41k86NxKgXerKTlM4wcgGtDMuaTrNrrUDy2cV7GsbbSLywntWJxnhZUUke4GKv1x/g7VNTk8UeJdD1DUm1e30p7fyL6SONJC0iMzwv5aqhZMKeFBw4zXYUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAUtW1ex0PTXv8AVJ/It0KqW2lmZmICqqqCzMSQAoBJJwBUGi+I9M8QfaV02aUy2jiO4guLaS3miJUMu6ORVYAg5Bxg9ulYHxQZX8NWNom5L681W1h0+4EojFtc790crEqwIBX7uDuJC/xZFPwGt7Y+OPFWna9Ompaxi2uZtShASN4WDrFF5Q/1RTY5wSxbduLcgAA7+iiigDm7H/kqeu/9gXTf/R99RRY/8lT13/sC6b/6PvqKAKUn/JSNY/7Btj/6Mua0qzZP+Skax/2DbH/0Zc1pV5s/iZ6lP4EFQXljaajatbahaw3Vu+N0U8YdGwcjIPHWp6Kgsr2Wn2emWwt9NtILSAEkRQRCNQT1OAMVYoooAKxbX/kfNV/7Btl/6Nuq2qxbX/kfNV/7Btl/6NuqANqiiigCO4toLu3kt7uGOeGRdrxyoGVh6EHgipAAqhVAAAwAO1FFABRRRQBi2v8AyPmq/wDYNsv/AEbdVtVi2v8AyPmq/wDYNsv/AEbdVtUAFR3FvDd28lvdQxzQyKVeORQyuD1BB4IqSigCvY6fZaZbfZ9Ns4LODJbyreJY1yepwBirFFFABWLa/wDI+ar/ANg2y/8ARt1W1WLa/wDI+ar/ANg2y/8ARt1QBtUUUUAV73T7PU7Y2+pWkF3ASCYp4hIpI6HBGKfa2ltY2qW1lbxW0EYwkUKBFXvwBwKlooAKKKKAMW1/5HzVf+wbZf8Ao26rarFtf+R81X/sG2X/AKNuq2qACoLyxtNRtWttQtYbq3fG6KeMOjYORkHjrU9FAFey0+z0y2FvptpBaQAkiKCIRqCepwBirFFFABWLa/8AI+ar/wBg2y/9G3VbVYtr/wAj5qv/AGDbL/0bdUAbVFFFAEV1aW19avbXtvFcwSDDxTIHVu/IPBqKw0yw0q3aDS7K2soWbe0dtEsalsAZwoHOAOfarVFABRRRQBi2v/I+ar/2DbL/ANG3VbVYtr/yPmq/9g2y/wDRt1W1QAVBeWNpqNq1tqFrDdW743RTxh0bByMg8danooApadoulaQZDpOmWdiZceYba3WPfjpnaBnGT+dXaKKACsW1/wCR81X/ALBtl/6Nuq2qxbX/AJHzVf8AsG2X/o26oA2qKKKAIrq0tr61e2vbeK5gkGHimQOrd+QeDUVhplhpVu0Gl2VtZQs29o7aJY1LYAzhQOcAc+1WqKACiiigDO8P/wDJStf/AOwRp3/o69rsK4/w/wD8lK1//sEad/6Ova7CvRp/AjzKvxsKqalpWn6zZNZ6xYW1/asQWguoVlQkcglWBHFW6K0Myrpul2Gj2KWWkWNtYWqElYLWFYkUk5OFUADJ5q1RRQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFAFe+sLPVLGSz1O0gvLWUYkguIxIjjOeVOQeRUOlaLpWg2rWuh6ZZ6bbu5kaKzt1hRmIALEKAM4AGfYVeooAKKKKAObsf+Sp67/2BdN/9H31FFj/AMlT13/sC6b/AOj76igDE1S8vrT4maolhod9qxbSrF3+xyW6+UPNugN3myp1wemenOOKn/tbXf8AoRtc/wDAiw/+Sa1LH/kqeu/9gXTf/R99XSVi6MG7myrTSscP/a2u/wDQja5/4EWH/wAk0f2trv8A0I2uf+BFh/8AJNdxRR7CA/bzOH/tbXf+hG1z/wACLD/5Jo/tbXf+hG1z/wACLD/5JruKKPYQD28zh/7W13/oRtc/8CLD/wCSaxrXV9Y/4TrVAvg3Wml/s2z3Qiey3Ivm3WGJ+0YwTuAwSflOQOM+o1zdj/yVPXf+wLpv/o++o9hAPbzMv+1td/6EbXP/AAIsP/kmj+1td/6EbXP/AAIsP/kmu4oo9hAPbzOH/tbXf+hG1z/wIsP/AJJo/tbXf+hG1z/wIsP/AJJruKKPYQD28zh/7W13/oRtc/8AAiw/+SaP7W13/oRtc/8AAiw/+Sa7iij2EA9vM8utdX1j/hOtUC+DdaaX+zbPdCJ7Lci+bdYYn7RjBO4DBJ+U5A4zs/2trv8A0I2uf+BFh/8AJNalj/yVPXf+wLpv/o++rpKPYQD28zh/7W13/oRtc/8AAiw/+SaP7W13/oRtc/8AAiw/+Sa7iij2EA9vM4f+1td/6EbXP/Aiw/8Akmj+1td/6EbXP/Aiw/8Akmu4oo9hAPbzOH/tbXf+hG1z/wACLD/5Jrmr3xknh7xfdz6/oupae91YWyRQSGCRyEknJY+XKy4O/A5zweBxn12vCvjd/wAjtaf9g9P/AEZJXPiIKnDmiezktOONxapVdrM3P+FuaD/z6aj/AN+o/wD4uj/hbmg/8+mo/wDfqP8A+Lrqv+FV+Df+gN/5NTf/ABdH/Cq/Bv8A0Bv/ACam/wDi6j6vW7o7PrmSfyT/AA/zOV/4W5oP/PpqP/fqP/4uj/hbmg/8+mo/9+o//i66r/hVfg3/AKA3/k1N/wDF0f8ACq/Bv/QG/wDJqb/4uj6vW7oPrmSfyT/D/M5X/hbmg/8APpqP/fqP/wCLo/4W5oP/AD6aj/36j/8Ai66r/hVfg3/oDf8Ak1N/8XR/wqvwb/0Bv/Jqb/4uj6vW7oPrmSfyT/D/ADOEh+JmjR+Jr3UWtr7ybizt4FURpuDRvMxJ+fpiVcfQ1o/8Lc0H/n01H/v1H/8AF1ftPh34Wl8farpr6Xm0t9Msp4o/tEvyvJLdK5zuyciJOCcDbx1Odv8A4VX4N/6A3/k1N/8AF0fV63dB9cyT+Sf4f5nK/wDC3NB/59NR/wC/Uf8A8XR/wtzQf+fTUf8Av1H/APF11X/Cq/Bv/QG/8mpv/i6P+FV+Df8AoDf+TU3/AMXR9Xrd0H1zJP5J/h/mcr/wtzQf+fTUf+/Uf/xdH/C3NB/59NR/79R//F11X/Cq/Bv/AEBv/Jqb/wCLo/4VX4N/6A3/AJNTf/F0fV63dB9cyT+Sf4f5nK/8Lc0H/n01H/v1H/8AF1nQ/EzRo/E17qLW195NxZ28CqI03Bo3mYk/P0xKuPoa7v8A4VX4N/6A3/k1N/8AF1iWnw78LS+PtV019LzaW+mWU8Uf2iX5Xklulc53ZOREnBOBt46nJ9Xrd0H1zJP5J/h/mUP+FuaD/wA+mo/9+o//AIuj/hbmg/8APpqP/fqP/wCLrqv+FV+Df+gN/wCTU3/xdH/Cq/Bv/QG/8mpv/i6Pq9bug+uZJ/JP8P8AM5X/AIW5oP8Az6aj/wB+o/8A4uj/AIW5oP8Az6aj/wB+o/8A4uuq/wCFV+Df+gN/5NTf/F0f8Kr8G/8AQG/8mpv/AIuj6vW7oPrmSfyT/D/M5X/hbmg/8+mo/wDfqP8A+Lo/4W5oP/PpqP8A36j/APi66r/hVfg3/oDf+TU3/wAXR/wqvwb/ANAb/wAmpv8A4uj6vW7oPrmSfyT/AA/zOEh+JmjR+Jr3UWtr7ybizt4FURpuDRvMxJ+fpiVcfQ1o/wDC3NB/59NR/wC/Uf8A8XV+0+HfhaXx9qumvpebS30yynij+0S/K8kt0rnO7JyIk4JwNvHU52/+FV+Df+gN/wCTU3/xdH1et3QfXMk/kn+H+Zyv/C3NB/59NR/79R//ABdH/C3NB/59NR/79R//ABddV/wqvwb/ANAb/wAmpv8A4uj/AIVX4N/6A3/k1N/8XR9Xrd0H1zJP5J/h/mcr/wALc0H/AJ9NR/79R/8AxdH/AAtzQf8An01H/v1H/wDF11X/AAqvwb/0Bv8Ayam/+Lo/4VX4N/6A3/k1N/8AF0fV63dB9cyT+Sf4f5nK/wDC3NB/59NR/wC/Uf8A8XWdD8TNGj8TXuotbX3k3FnbwKojTcGjeZiT8/TEq4+hru/+FV+Df+gN/wCTU3/xdYlp8O/C0vj7VdNfS82lvpllPFH9ol+V5JbpXOd2TkRJwTgbeOpyfV63dB9cyT+Sf4f5lD/hbmg/8+mo/wDfqP8A+Lo/4W5oP/PpqP8A36j/APi66r/hVfg3/oDf+TU3/wAXR/wqvwb/ANAb/wAmpv8A4uj6vW7oPrmSfyT/AA/zOV/4W5oP/PpqP/fqP/4uj/hbmg/8+mo/9+o//i66r/hVfg3/AKA3/k1N/wDF0f8ACq/Bv/QG/wDJqb/4uj6vW7oPrmSfyT/D/M5X/hbmg/8APpqP/fqP/wCLo/4W5oP/AD6aj/36j/8Ai66r/hVfg3/oDf8Ak1N/8XWd4i+GvhOw8L6rd2mleXPb2c0sT/aZTtZUJBwWweRSdCsle6LhislnNQUJ66dP8zM8K+L31LxdrGq6J4e1XU4JLGztmWBrZGiaOS5bLCWZBgiUYwT91s44z1//AAlGr/8AQieIP+/+n/8AyVXC/Aj/AJj3/bv/AO1a9errw8nKkmzxs4w9PDY6dKnsrfikzm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqukorc8k5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+Sq6SigDm/wDhKNX/AOhE8Qf9/wDT/wD5Krn7PxHqg+JOsyjwXrjO2k2CmETWO9AJrwhj/pO3B3EDBJ+U5A4z6JXN2P8AyVPXf+wLpv8A6PvqAD/hKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KrpKKAOb/AOEo1f8A6ETxB/3/ANP/APkqj/hKNX/6ETxB/wB/9P8A/kqukooA5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+Sq6SigDjfDl/c6j8SdflvNJvNKddJ05RDePCzsPOvTuHlSOuOccnPB46ZKvWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgAooqG7vLbT7OW7v7iK1toVLyzTOERFHUljwB9aAJqKztA17TfE+h22saHc/arC6DGGby2Tdhip4YAjkEcitGgArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigAorIk8VaJF4ph8NtqMR1ieJpls1yzhFGSWwMLweN2M9s0XXivQ7LxRY+HLnUYV1jUFd7ezGWdlVSxJwDtGFbBbGcEDJFAGvRRRQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFU9V1ay0TTZb/VJxBbRY3MQWJJOAqqMlmJIAUAkkgAEmgC5RWZoviLTNf8AtA02aQy2rhLiC4t5LeaIkbl3RyKrgEHIJGD2rToAK8K+N3/I7Wn/AGD0/wDRkle614V8bv8AkdrT/sHp/wCjJK5MX/CPpeGf+RgvRnutFFFdZ80FFUtV1W30e0Fzdx3ciFwgFpZTXT5IJ+5ErNjjrjH51T0TxXpXiC8u7TTmuxc2So1xDd2E9qyB87TiVFJztPT0oA2aKKKAObsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKKKyJPFWiReKYfDbajEdYniaZbNcs4RRklsDC8HjdjPbNAGvRWDe+NtB0/VDYXl1NHIJ0t2m+xzG3SV8bUacJ5asdy8FgfmHrW9QAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUVT1XVrPRbE3eoyOkW9UURxPK7sxwFVEBZifQAmodE8Q6b4it5ptKneQQSmGaOWF4ZIXHO143CspwQeQOCDQBpUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABRRWRJ4q0SLxTD4bbUYjrE8TTLZrlnCKMktgYXg8bsZ7ZoA16Kydb8UaP4clsI9ZvRbSajcLbWqeWzmSRiABhQcDJA3HABIyeRWtQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUVT1XVrPRbE3eoyOkW9UURxPK7sxwFVEBZifQAmodE8Q6b4it5ptKneQQSmGaOWF4ZIXHO143CspwQeQOCDQBpVkeLf+RJ1z/sH3H/AKLatesjxb/yJOuf9g+4/wDRbVM/hZvhv48PVfmecfAj/mPf9u//ALVr16vIfgR/zHv+3f8A9q169WGF/gr+up63EP8AyM6vy/8ASUFFFZEnirRIvFMPhttRiOsTxNMtmuWcIoyS2BheDxuxntmuk8I16Kwb3xtoOn6obC8upo5BOlu032OY26SvjajThPLVjuXgsD8w9a3qACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKACiobu8ttPs5bu/uIrW2hUvLNM4REUdSWPAH1qpoGvab4n0O21jQ7n7VYXQYwzeWybsMVPDAEcgjkUAaNFFFAHN2P8AyVPXf+wLpv8A6PvqKLH/AJKnrv8A2BdN/wDR99RQAWP/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAVBd2VrqEHkX9tDcxb1fy5ow67lIZTg9wQCD2IBqequo6ZYaxYvZatZW99aSYLwXMSyRtg5GVYEHBANAHKfCL/kmGnf9d7v/wBKpa7WszSPDWheH2lOg6Lp+mGbAlNlapD5mM43bQM4yevqa06ACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooA4TXLK1tPjB4QktbaGB7lNSlnaOMKZX8qEbmI6nAAyewFJ4psrW3+KXge4t7aGKe6v7tp5UjCtMRYyqCxHLEKABnsAK6C98EeFNRv5L3UPDGjXd3K26S4n0+J5HPqWK5J4pdQ8FeFdXv5L7VfDWj313LjzLi5sIpJHwABlmUk4AA+goA26KRVVFCoAqqMAAYAFLQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFcV8SPkPhSeUhbWDxHavcMxwqqVkVCf+2jR/jiu1qG7s7bULOW0v7eK6tplKSwzIHR1PUFTwR9aAOS0vZP8avEMtqQUg0exguSp4ExkncA+/lsp9gw9a7OqemaRpuiWf2TRtPtdPttxbybSBYkyep2qAM1coAK8K+N3/I7Wn/YPT/0ZJXuteFfG7/kdrT/ALB6f+jJK5MX/CPpeGf+RgvRnutFFFdZ80QX17b6bp9zfXsixW1rE000jHARFBLE/QA1y/w4s528PzeINRjKah4inOozK33o42AEEZ/3YhGMeua6m7s7bULOW0v7eK6tplKSwzIHR1PUFTwR9alVVRQqAKqjAAGABQAtFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFcJrlla2nxg8ISWttDA9ympSztHGFMr+VCNzEdTgAZPYCu7rDvfBHhTUb+S91Dwxo13dytukuJ9PieRz6liuSeKAOV+KUl1N4WvL7+07G60HT7mB7zTYYytxcPHKp8kT72AJfb8nl5Jwu4bsj0VW3IGwRkZwRyKy5PC3h+bWxrM2habJqgZWF81nGZwQAAfMxuyAABz0FatABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFHWtZsfD+jz6nqk3lW0AyxAyzEnCqoHLMSQABySQKxPBGlX8P8Aa2u63ALXUNduhcvaAgm2iWNY4o2I4LhEBY+pI6DNbup6Rput2f2TWdPtdQttwbybuBZUyOh2sCM1BpHhrQvD7SnQdF0/TDNgSmytUh8zGcbtoGcZPX1NAGnRRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFcJrlla2nxg8ISWttDA9ympSztHGFMr+VCNzEdTgAZPYCu7rDvfBHhTUb+S91Dwxo13dytukuJ9PieRz6liuSeKAPM/HZ1ldSudV1bw1qTv/bWn2unzRzWphW2ju42AUGYNvlcbiWUf8swSAua9lidpIUd42iZlBMbkbkPocEjI9iRTLqztr6JY723huEWRZFWVA4DqQysAe4IBB7EVNQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFAFHWtZsfD+jz6nqk3lW0AyxAyzEnCqoHLMSQABySQKxPBGlX8P9ra7rcAtdQ126Fy9oCCbaJY1jijYjguEQFj6kjoM1u6npGm63Z/ZNZ0+11C23BvJu4FlTI6HawIzUGkeGtC8PtKdB0XT9MM2BKbK1SHzMZxu2gZxk9fU0AadZHi3/kSdc/7B9x/6Latesjxb/wAiTrn/AGD7j/0W1TP4Wb4b+PD1X5nnHwI/5j3/AG7/APtWvXq8h+BH/Me/7d//AGrXr1YYX+Cv66nrcQ/8jOr8v/SUFcJrlla2nxg8ISWttDA9ympSztHGFMr+VCNzEdTgAZPYCu7rDvfBHhTUb+S91Dwxo13dytukuJ9PieRz6liuSeK6TwjlfilJdTeFry+/tOxutB0+5ge802GMrcXDxyqfJE+9gCX2/J5eScLuG7I9FVtyBsEZGcEcisuTwt4fm1sazNoWmyaoGVhfNZxmcEAAHzMbsgAAc9BWrQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFAEF3ZWuoQeRf20NzFvV/LmjDruUhlOD3BAIPYgGuR+EX/JMNO/673f/AKVS11eo6ZYaxYvZatZW99aSYLwXMSyRtg5GVYEHBANVtI8NaF4faU6Doun6YZsCU2VqkPmYzjdtAzjJ6+poA06KKKAObsf+Sp67/wBgXTf/AEffUUWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKKKKACiiigArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA6SiiigAooooAKKKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAKKKKACiiigArwr43f8jtaf9g9P/Rkle614V8bv+R2tP+wen/oySuTF/wAI+l4Z/wCRgvRnutFFFdZ80FFFFABRRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRRRQAVkeLf+RJ1z/sH3H/AKLatesjxb/yJOuf9g+4/wDRbVM/hZvhv48PVfmecfAj/mPf9u//ALVr16vIfgR/zHv+3f8A9q169WGF/gr+up63EP8AyM6vy/8ASUFFFFdJ4QUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQBzdj/yVPXf+wLpv/o++oosf+Sp67/2BdN/9H31FAGbc+HND8QfFPV/7e0bT9T8jRdP8r7bapN5e6e9zt3A4zgZx6CtL/hXHgj/AKE3w/8A+CuD/wCJosf+Sp67/wBgXTf/AEffV0lAHN/8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E10lFAHN/8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E10lFAHN/8K48Ef9Cb4f8A/BXB/wDE1z9n4B8Ht8SdZtW8J6GbePSbCRIjpsOxWaa8DMBtwCQignvtHoK9Erm7H/kqeu/9gXTf/R99QAf8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E10lFAHN/8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E10lFAHN/8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E10lFAHndn4B8Ht8SdZtW8J6GbePSbCRIjpsOxWaa8DMBtwCQignvtHoK6D/hXHgj/AKE3w/8A+CuD/wCJosf+Sp67/wBgXTf/AEffV0lAHN/8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E10lFAHN/8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E10lFAHN/8K48Ef9Cb4f8A/BXB/wDE15B8WNF0rQfFdta6Hplnptu9kkjRWdusKMxdwWIUAZwAM+wr6Drwr43f8jtaf9g9P/RklcmL/hH0vDP/ACMF6M9R/wCFceCP+hN8P/8Agrg/+Jo/4Vx4I/6E3w//AOCuD/4mukorrPmjm/8AhXHgj/oTfD//AIK4P/iaP+FceCP+hN8P/wDgrg/+JrpKKAOb/wCFceCP+hN8P/8Agrg/+Jo/4Vx4I/6E3w//AOCuD/4mukooA87s/APg9viTrNq3hPQzbx6TYSJEdNh2KzTXgZgNuASEUE99o9BXQf8ACuPBH/Qm+H//AAVwf/E0WP8AyVPXf+wLpv8A6Pvq6SgDm/8AhXHgj/oTfD//AIK4P/iaP+FceCP+hN8P/wDgrg/+JrpKKAOb/wCFceCP+hN8P/8Agrg/+Jo/4Vx4I/6E3w//AOCuD/4mukooA5v/AIVx4I/6E3w//wCCuD/4mufs/APg9viTrNq3hPQzbx6TYSJEdNh2KzTXgZgNuASEUE99o9BXolc3Y/8AJU9d/wCwLpv/AKPvqAD/AIVx4I/6E3w//wCCuD/4mj/hXHgj/oTfD/8A4K4P/ia6SigDm/8AhXHgj/oTfD//AIK4P/iaP+FceCP+hN8P/wDgrg/+JrpKKAOb/wCFceCP+hN8P/8Agrg/+Jo/4Vx4I/6E3w//AOCuD/4mukooA87s/APg9viTrNq3hPQzbx6TYSJEdNh2KzTXgZgNuASEUE99o9BXQf8ACuPBH/Qm+H//AAVwf/E0WP8AyVPXf+wLpv8A6Pvq6SgDm/8AhXHgj/oTfD//AIK4P/iaP+FceCP+hN8P/wDgrg/+JrpKKAOb/wCFceCP+hN8P/8Agrg/+Jo/4Vx4I/6E3w//AOCuD/4mukooA5v/AIVx4I/6E3w//wCCuD/4mufs/APg9viTrNq3hPQzbx6TYSJEdNh2KzTXgZgNuASEUE99o9BXolc3Y/8AJU9d/wCwLpv/AKPvqAD/AIVx4I/6E3w//wCCuD/4mj/hXHgj/oTfD/8A4K4P/ia6SigDm/8AhXHgj/oTfD//AIK4P/iaP+FceCP+hN8P/wDgrg/+JrpKKAOb/wCFceCP+hN8P/8Agrg/+JrM8S+AfB9n4U1a6s/CehwXENlNJFLFpsKvGwQkMpC5BBGQRXb1keLf+RJ1z/sH3H/otqmfws3w38eHqvzPJvg/4c0PxB/bH9vaNp+p+R5HlfbbVJvL3eZnbuBxnAzj0Femf8K48Ef9Cb4f/wDBXB/8TXC/Aj/mPf8Abv8A+1a9erDC/wAFf11PW4h/5GdX5f8ApKOb/wCFceCP+hN8P/8Agrg/+Jo/4Vx4I/6E3w//AOCuD/4mukorpPCOb/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JrpKKAOb/4Vx4I/6E3w/wD+CuD/AOJrn7PwD4Pb4k6zat4T0M28ek2EiRHTYdis014GYDbgEhFBPfaPQV6JXN2P/JU9d/7Aum/+j76gA/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JrpKKAOb/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JrpKKAOb/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JrpKKAON8OaLpWg/EnX7XQ9Ms9Nt30nTpGis7dYUZjNegsQoAzgAZ9hRV6x/wCSp67/ANgXTf8A0ffUUAFj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFcDqY1iz+M/h4z65cS2F/Fe7NOjXyoY1jjjxuAJMj7ix3NwOAAOSQDvqK8t8da1qmoatbyaPfXNlpej6xY2kslvK0f2y4kuI1kjJH3o0jbaR0LuQfuV6lQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFABRWZ4ihgm0OYXk+ow26lXlOmeb57KCDtXygZOe+zDYzyK5n4a3st3J4ijS6vZNOt9S8uxt9Tmke7hj8pN3mCUmVQz7mUSYbaQcYIoA7miiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACiiqeq6aurWJtJLq7to2dS7Wc5hkYA5271+ZQe5Ug+9AFyiuL+Hk800/iJLe9u77RLfUjDps93O07kLGolAlclnQS7wCSehGeK7SgArwr43f8jtaf9g9P/Rkle614V8bv+R2tP+wen/oySuTF/wAI+l4Z/wCRgvRnutFFFdZ80FFUtV0q31i0FtdyXcaBw4NpezWr5AI+/EytjnpnH5VyXw3hae51/Vre81CbSbi9Nrp0V5qE91iODKPKDK7Eb5N/T+FVoA7qiiigDm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76ukoAKKKpavbX15pktvpWof2bcvgLdeQJTGMjdhW43YyATkA4JBxggF2iuN+E1xdXPwx0x7+9ub6cSXCNcXcpklkC3Eigsx5JwAK7KgArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiuS+IN/d29pomm2VzLanWtXhsJp4WKyJEVeR9jDlWKxlQw5G7IwQDUPh37Ro/xG1jw4l5d3Wnf2dbahbLeXMlxJAzvLG6iSQs5U+UGwScEnHWgDs6KKKAObsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6Pvq6SgAoorkPiTqM2m6DYN9rnsLCfUoINSvYHKNb2zE7m3jmMFtqlxgqGJyOtAHX0V5/8Ptctrvxb4l0fR9ZfWdHs0tbi0uGvGu/LMokDxiZixcAx5GWOCWGeMD0CgArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiqWq6Vb6xaC2u5LuNA4cG0vZrV8gEffiZWxz0zj8q5L4bwtPc6/q1veahNpNxem106K81Ce6xHBlHlBldiN8m/p/Cq0Ad1WR4t/wCRJ1z/ALB9x/6Latesjxb/AMiTrn/YPuP/AEW1TP4Wb4b+PD1X5nnHwI/5j3/bv/7Vr16vIfgR/wAx7/t3/wDatevVhhf4K/rqetxD/wAjOr8v/SUFFFU9V01dWsTaSXV3bRs6l2s5zDIwBzt3r8yg9ypB966Twi5RXF/DyeaafxElve3d9olvqRh02e7nadyFjUSgSuSzoJd4BJPQjPFdpQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRXA6mNYs/jP4eM+uXEthfxXuzTo18qGNY448bgCTI+4sdzcDgADklnj+0k0v7NqGl6vqw1++1O3hsLdb2TyWy6h4/s4IjMYjDszMpI5O7gUAeg0UUUAc3Y/8AJU9d/wCwLpv/AKPvqKLH/kqeu/8AYF03/wBH31FABY/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVx+teFfEOpeMdO1y017TLZdMEy2tvJpMkh2yqobewuF3H5eCAvXoa7CigDjfE3wu8MeIow40XSbW7a+iu57sabE8k+2USOrHAJ3gFSST945B6V18UUcEKQwRrHFGoVERcKoHAAA6Cn0UAFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQBR1e21K6s1XRdRj0+6SRXEk1t58bjurJuUkEf3WUggc4yDm+HfDc+larqmr6rfx3+qap5SzSQW5giSOIERoiFnIxvYkliSW7AADoKKACiiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACsXxbo2o+IPDdxpmk6t/ZE1wQr3PkGU+Xn5lADoRuHG4EEAnGDgjaooAxfDWk6lotiLK9udLktII1jtYdO057RYVGeDumkz26Yxz1zW1RRQAV4V8bv+R2tP8AsHp/6Mkr3WvCvjd/yO1p/wBg9P8A0ZJXJi/4R9Lwz/yMF6M91ooorrPmilrVndajod7Zafe/YLq4geKK68vzPIZgQHC5GSM5HNJoekW2gaBYaRYrtt7G3S3j9SFUDJ9zjJq9RQAUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVV1GO/lsXTSbm3tbs42S3Nu08a885RXQnjP8Q/HpVqigDmfAvhnU/CWhjSb/AFW01G3iZ3gaGxa3dS8ju24mVw3L8YAwB3rpqKKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooAxfFHh7/hItNgiiuvsd5Z3Ud5Z3PliQRTIeCVJG5SCQRkZBPI61FoHhy507WNR1nWNQj1DVNQWKJ3gtjBFFFEG2IiF3I5d2JLHJbsAAN+igAooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACqmpx6jLZFdHurW1utwxJdWzToB3GxZEOffdVuigDF8P8Ah+TSZ7+/1C8F/qmpSK9zcLD5SBUG1I0TJKoozwWY5ZiTzgbVFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAFLWrO61HQ72y0+9+wXVxA8UV15fmeQzAgOFyMkZyOaTQ9IttA0Cw0ixXbb2NulvH6kKoGT7nGTV6igArI8W/8iTrn/YPuP8A0W1a9ZHi3/kSdc/7B9x/6Lapn8LN8N/Hh6r8zzj4Ef8AMe/7d/8A2rXr1eQ/Aj/mPf8Abv8A+1a9erDC/wAFf11PW4h/5GdX5f8ApKCsXxbo2o+IPDdxpmk6t/ZE1wQr3PkGU+Xn5lADoRuHG4EEAnGDgjaorpPCMXw1pOpaLYiyvbnS5LSCNY7WHTtOe0WFRng7ppM9umMc9c1tUUUAFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQBx+teFfEOpeMdO1y017TLZdMEy2tvJpMkh2yqobewuF3H5eCAvXoajufCPiFvG114itde0tneMQ2cV7pEk32KLA3LGVuEGWPLNjJ4HQADtKKAEXcFG8gtjkgYBP0paKKAObsf+Sp67/2BdN/9H31FFj/yVPXf+wLpv/o++ooALH/kqeu/9gXTf/R99XSVxNzBrk3xT1f+wdR0+yxoun+b9tsHud/7+9xt2zR7cc5znOR0xzpfYfG//Qw+H/8AwQz/APyZQB0lFc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JlAHSUVzf2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mUAdJXN2P/JU9d/7Aum/+j76j7D43/6GHw//AOCGf/5Mrn7Oz8Y/8LJ1lV13QxcDSbAvIdFmKMvnXm0BftWQQQ2Tk5yOBgkgHolFc39h8b/9DD4f/wDBDP8A/JlH2Hxv/wBDD4f/APBDP/8AJlAHSUVzf2Hxv/0MPh//AMEM/wD8mUfYfG//AEMPh/8A8EM//wAmUAdJRXN/YfG//Qw+H/8AwQz/APyZR9h8b/8AQw+H/wDwQz//ACZQAWP/ACVPXf8AsC6b/wCj76ukrzuzs/GP/CydZVdd0MXA0mwLyHRZijL515tAX7VkEENk5OcjgYJPQfYfG/8A0MPh/wD8EM//AMmUAdJRXN/YfG//AEMPh/8A8EM//wAmUfYfG/8A0MPh/wD8EM//AMmUAdJRXN/YfG//AEMPh/8A8EM//wAmUfYfG/8A0MPh/wD8EM//AMmUAdJXhXxu/wCR2tP+wen/AKMkr1H7D43/AOhh8P8A/ghn/wDkyvIPixFqsPiu2XXLyzvLj7EhWSztGt0C73wCrSSEnOecjqOOMnkxf8I+l4Z/5GC9GfQdFc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JldZ80dJRXN/YfG/wD0MPh//wAEM/8A8mUfYfG//Qw+H/8AwQz/APyZQB0lFc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JlABY/8lT13/sC6b/6Pvq6SvO7Oz8Y/8LJ1lV13QxcDSbAvIdFmKMvnXm0BftWQQQ2Tk5yOBgk9B9h8b/8AQw+H/wDwQz//ACZQB0lFc39h8b/9DD4f/wDBDP8A/JlH2Hxv/wBDD4f/APBDP/8AJlAHSUVzf2Hxv/0MPh//AMEM/wD8mUfYfG//AEMPh/8A8EM//wAmUAdJXN2P/JU9d/7Aum/+j76j7D43/wChh8P/APghn/8Akyufs7Pxj/wsnWVXXdDFwNJsC8h0WYoy+debQF+1ZBBDZOTnI4GCSAeiUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlAHSUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlAHSUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlABY/wDJU9d/7Aum/wDo++rpK87s7Pxj/wALJ1lV13QxcDSbAvIdFmKMvnXm0BftWQQQ2Tk5yOBgk9B9h8b/APQw+H//AAQz/wDyZQB0lFc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZQB0lFc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZQB0lc3Y/wDJU9d/7Aum/wDo++o+w+N/+hh8P/8Aghn/APkyufs7Pxj/AMLJ1lV13QxcDSbAvIdFmKMvnXm0BftWQQQ2Tk5yOBgkgHolFc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JlAHSUVzf2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mUAdJWR4t/5EnXP+wfcf+i2ql9h8b/8AQw+H/wDwQz//ACZWZ4ls/GK+FNWa813Q5bcWUxlji0WZHZdhyFY3TBSR0JBx6HpUz+Fm+G/jw9V+ZzHwI/5j3/bv/wC1a9erw/4Pwa5N/bH9g6jp9ljyPN+22D3O/wD1mNu2aPbjnOc5yOmOfTPsPjf/AKGHw/8A+CGf/wCTKwwv8Ff11PW4h/5GdX5f+ko6Siub+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkyuk8I6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Subsf8Akqeu/wDYF03/ANH31H2Hxv8A9DD4f/8ABDP/APJlc/Z2fjH/AIWTrKrruhi4Gk2BeQ6LMUZfOvNoC/asgghsnJzkcDBJAPRKK5v7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TKAOkorm/sPjf8A6GHw/wD+CGf/AOTKPsPjf/oYfD//AIIZ/wD5MoA6Siub+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkygAsf+Sp67/2BdN/9H31FUfDkWqw/EnX11y8s7y4/snTislnaNboF869wCrSSEnOecjqOOMkoAvWP/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRRRQAUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABRRRQAUUUUAFeFfG7/kdrT/sHp/6Mkr3WvCvjd/yO1p/2D0/9GSVyYv8AhH0vDP8AyMF6M91ooorrPmgooooAKKKKAObsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgAooooAKKKKACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACiiigDm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76ukoAKKKKACiiigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiiigArI8W/8iTrn/YPuP8A0W1a9ZHi3/kSdc/7B9x/6Lapn8LN8N/Hh6r8zzj4Ef8AMe/7d/8A2rXr1eQ/Aj/mPf8Abv8A+1a9erDC/wAFf11PW4h/5GdX5f8ApKCiiiuk8IKKKKACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiiigAooooA5ux/5Knrv/YF03/0ffUUWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgAqlq91fWemSzaVp/9pXYwI7bzlhDEkDJduijOSQCcA4BOBV2quo3c1lYvPbafcajIuMW1s0ayPk44MjovHXlh0/CgDE+Huv6h4n8C2GrazHbR30zTJMtorCIFJXT5QxJxhe5rpa4v4XWuraV4Pi0jXNEu9MntZJn3zSwOkokmkcbfLkY8BhncByeM12lABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAHMfEHxHc+FvCo1Gyls4HN5bW7T3yFoYUkmVGdgGXhQxP3h0q54W1GXVdMe6fXtH12MyFY7nSITHEMDlT++lyc+4+lXNXvb3T7RJtO0qbVX8wLJBBNHHIEOcsvmMqkg44LLxnnjB5/who9/F4n8R+Ib/AE86UusNbrHYPIjyL5Kspkk8ssgZ9w4DNwq5OeAAdfRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABXHXXinXbf4oaXoMml29to96lzsuZJd807RIjblVThEy+PmyxweFGM9jXBeI/7cl+JGg6lZeFdTu7LSUu45Z457RRL5qIFKB51bAKnO4KfQGgCKPxrf3fxA1fQv+Ek8N6V9ivora2sby2Z7q6VoY3JX/SE5JcqMIenevQq4Lx1ba54t0HU/C0PhmaMXbiKLVZbmA20Shgwmxv83cuMhQn3gOcfNXeKu1AuScDGSeTQAteFfG7/AJHa0/7B6f8AoySvda8K+N3/ACO1p/2D0/8ARklcmL/hH0vDP/IwXoz3Wiiius+aKeqDUmsWXRHtIrtmUCS7RnjRc/MdikFjjOBuXnuKxPBviDUNYutdsNVNpcTaPf8A2Q3ljG0cM58tHICMzFWXftYbjyK0fEgZ9FeL+wV1+CV1S4sC0QMkZ6kCUhGIODtZl4zzkAHE8C6Le6XfazP/AGY2haPdPF9g0YyRn7MVU+a4WNmjj3swOxCR8u48saAOxooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACsHxl4mXwp4eN+EheaSaO2gW4l8qIO7ABnfB2ooyzHHRTW9XL+PtEu9Z0Wxk022jvLrS9St9RS1kYL5/lPlkBPAYqTgnjOM460AWfCeqyaxZz3B8R6Jr8SyBFm0aHYkZxkqx86XJ5B6jHvmt+uR8NaZqMvjTXPEuoac+kxX9vbWsVpNJG0zeV5hMknlsyAnzNowxOF5xnFddQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQBg+MvEy+FPDxvwkLzSTR20C3EvlRB3YAM74O1FGWY46KaTwnqsmsWc9wfEeia/EsgRZtGh2JGcZKsfOlyeQeox75qt4+0S71nRbGTTbaO8utL1K31FLWRgvn+U+WQE8BipOCeM4zjrUPhrTNRl8aa54l1DTn0mK/t7a1itJpI2mbyvMJkk8tmQE+ZtGGJwvOM4oA66iiigDm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76ukoAK5j4g+I7nwt4VGo2UtnA5vLa3ae+QtDCkkyozsAy8KGJ+8OldPVDV7290+0SbTtKm1V/MCyQQTRxyBDnLL5jKpIOOCy8Z54wQCn4W1GXVdMe6fXtH12MyFY7nSITHEMDlT++lyc+4+lbdch4Q0e/i8T+I/EN/p50pdYa3WOweRHkXyVZTJJ5ZZAz7hwGbhVyc8Dr6ACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAKWr3V9Z6ZLNpWn/wBpXYwI7bzlhDEkDJduijOSQCcA4BOBWP8AD3X9Q8T+BbDVtZjto76ZpkmW0VhECkrp8oYk4wvc1t6jdzWVi89tp9xqMi4xbWzRrI+TjgyOi8deWHT8K5X4XWuraV4Pi0jXNEu9MntZJn3zSwOkokmkcbfLkY8BhncByeM0AdpWR4t/5EnXP+wfcf8Aotq16yPFv/Ik65/2D7j/ANFtUz+Fm+G/jw9V+Z5x8CP+Y9/27/8AtWvXq8h+BH/Me/7d/wD2rXr1YYX+Cv66nrcQ/wDIzq/L/wBJQVx114p123+KGl6DJpdvbaPepc7LmSXfNO0SI25VU4RMvj5sscHhRjPY1wXiP+3JfiRoOpWXhXU7uy0lLuOWeOe0US+aiBSgedWwCpzuCn0BrpPCI9T8Z+IWtPEmt6HDp50nw5NJDJa3ELtPfGFQ05SQOFixllUFHyUJPXA7y1uY7yzhuYcmOaNZEyMHBGR/OvOL7QvEdlpfi7w3pejPdReILmeW11P7REsNstyoWTzVZhJlCXYbVbcNo45x6NZ2yWVjb2sZJSCJY1J6kKMf0oAmrm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKAMHxl4mXwp4eN+EheaSaO2gW4l8qIO7ABnfB2ooyzHHRTSeE9Vk1iznuD4j0TX4lkCLNo0OxIzjJVj50uTyD1GPfNVvH2iXes6LYyabbR3l1pepW+opayMF8/ynyyAngMVJwTxnGcdah8NaZqMvjTXPEuoac+kxX9vbWsVpNJG0zeV5hMknlsyAnzNowxOF5xnFAHXUUUUAc3Y/wDJU9d/7Aum/wDo++oosf8Akqeu/wDYF03/ANH31FABY/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABRRRQAUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRRQAUUUUAFeFfG7/AJHa0/7B6f8AoySvda8K+N3/ACO1p/2D0/8ARklcmL/hH0vDP/IwXoz3WivOf+F3eG/+fLVP+/Uf/wAco/4Xd4b/AOfLVP8Av1H/APHK0+sUv5jg/sXMP+fTPRqK85/4Xd4b/wCfLVP+/Uf/AMco/wCF3eG/+fLVP+/Uf/xyj6xS/mD+xcw/59M9Gorzn/hd3hv/AJ8tU/79R/8Axyj/AIXd4b/58tU/79R//HKPrFL+YP7FzD/n0zorH/kqeu/9gXTf/R99XSV5FbfFjQofGmpau1pqBt7rT7S1RRGm8NFJcMxI34xiZcc9j04zr/8AC7vDf/Plqn/fqP8A+OUfWKX8wf2LmH/Ppno1Fec/8Lu8N/8APlqn/fqP/wCOUf8AC7vDf/Plqn/fqP8A+OUfWKX8wf2LmH/Ppno1Fec/8Lu8N/8APlqn/fqP/wCOUf8AC7vDf/Plqn/fqP8A+OUfWKX8wf2LmH/Ppno1c3Y/8lT13/sC6b/6Pvq53/hd3hv/AJ8tU/79R/8Axysi2+LGhQ+NNS1drTUDb3Wn2lqiiNN4aKS4ZiRvxjEy457Hpxk+sUv5g/sXMP8An0z12ivOf+F3eG/+fLVP+/Uf/wAco/4Xd4b/AOfLVP8Av1H/APHKPrFL+YP7FzD/AJ9M9Gorzn/hd3hv/ny1T/v1H/8AHKP+F3eG/wDny1T/AL9R/wDxyj6xS/mD+xcw/wCfTPRqK85/4Xd4b/58tU/79R//AByj/hd3hv8A58tU/wC/Uf8A8co+sUv5g/sXMP8An0zorH/kqeu/9gXTf/R99XSV5FbfFjQofGmpau1pqBt7rT7S1RRGm8NFJcMxI34xiZcc9j04zr/8Lu8N/wDPlqn/AH6j/wDjlH1il/MH9i5h/wA+mejUV5z/AMLu8N/8+Wqf9+o//jlH/C7vDf8Az5ap/wB+o/8A45R9YpfzB/YuYf8APpno1Fec/wDC7vDf/Plqn/fqP/45R/wu7w3/AM+Wqf8AfqP/AOOUfWKX8wf2LmH/AD6Z6NXN2P8AyVPXf+wLpv8A6Pvq53/hd3hv/ny1T/v1H/8AHKyLb4saFD401LV2tNQNvdafaWqKI03hopLhmJG/GMTLjnsenGT6xS/mD+xcw/59M9dorzn/AIXd4b/58tU/79R//HKP+F3eG/8Any1T/v1H/wDHKPrFL+YP7FzD/n0z0aivOf8Ahd3hv/ny1T/v1H/8co/4Xd4b/wCfLVP+/Uf/AMco+sUv5g/sXMP+fTPRqyPFv/Ik65/2D7j/ANFtXIf8Lu8N/wDPlqn/AH6j/wDjlUNc+MGgan4d1Gwgs9SWW6tZYULxRhQzIQM4fpzSlXpOL1NqGT4+NaMnSdk1+ZW+BH/Me/7d/wD2rXr1eQ/Aj/mPf9u//tWvXqWF/gr+uo+If+RnV+X/AKSgooorpPCCiiigArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigAooooAKKKKAObsf+Sp67/2BdN/9H31FFj/yVPXf+wLpv/o++ooAzbnS7vUvinq/2PXdQ0jy9F0/d9ijt283M97jd50T9McYx1Oc8Y0v+EX1f/oe/EH/AH40/wD+RaLH/kqeu/8AYF03/wBH31dJQBzf/CL6v/0PfiD/AL8af/8AItH/AAi+r/8AQ9+IP+/Gn/8AyLXSUUAc3/wi+r/9D34g/wC/Gn//ACLR/wAIvq//AEPfiD/vxp//AMi10lFAHN/8Ivq//Q9+IP8Avxp//wAi1z9n4c1Q/EnWYh401xXXSbBjMIbHe4M14Ap/0bbgbSRgA/Mck8Y9Erm7H/kqeu/9gXTf/R99QAf8Ivq//Q9+IP8Avxp//wAi0f8ACL6v/wBD34g/78af/wDItdJRQBzf/CL6v/0PfiD/AL8af/8AItH/AAi+r/8AQ9+IP+/Gn/8AyLXSUUAc3/wi+r/9D34g/wC/Gn//ACLR/wAIvq//AEPfiD/vxp//AMi10lFAHndn4c1Q/EnWYh401xXXSbBjMIbHe4M14Ap/0bbgbSRgA/Mck8Y6D/hF9X/6HvxB/wB+NP8A/kWix/5Knrv/AGBdN/8AR99XSUAc3/wi+r/9D34g/wC/Gn//ACLR/wAIvq//AEPfiD/vxp//AMi10lFAHN/8Ivq//Q9+IP8Avxp//wAi0f8ACL6v/wBD34g/78af/wDItdJRQBzf/CL6v/0PfiD/AL8af/8AItcXqfw4XxT8Qr+z1zxTrlwLHS7OWKULaI/7yW6DKdtuAQPKBHGeTyeMesVzdj/yVPXf+wLpv/o++pOKkrNGtKtUoy56UnF907HIf8KD0T/oYvEH/fdr/wDGKP8AhQeif9DF4g/77tf/AIxXqdFR7Kn/ACr7jq/tLHf8/pf+BP8AzPLP+FB6J/0MXiD/AL7tf/jFH/Cg9E/6GLxB/wB92v8A8Yr1Oij2VP8AlX3B/aWO/wCf0v8AwJ/5nln/AAoPRP8AoYvEH/fdr/8AGKP+FB6J/wBDF4g/77tf/jFep0Ueyp/yr7g/tLHf8/pf+BP/ADPFbb4MaXN401LSG8Qa4Le10+0ukYNbby0slwrAnycYxCuOO568Y1/+FB6J/wBDF4g/77tf/jFdfY/8lT13/sC6b/6Pvq6Sj2VP+VfcH9pY7/n9L/wJ/wCZ5Z/woPRP+hi8Qf8Afdr/APGKP+FB6J/0MXiD/vu1/wDjFep0Ueyp/wAq+4P7Sx3/AD+l/wCBP/M8s/4UHon/AEMXiD/vu1/+MUf8KD0T/oYvEH/fdr/8Yr1Oij2VP+VfcH9pY7/n9L/wJ/5nln/Cg9E/6GLxB/33a/8Axisi2+DGlzeNNS0hvEGuC3tdPtLpGDW28tLJcKwJ8nGMQrjjuevGPaq5ux/5Knrv/YF03/0ffUeyp/yr7g/tLHf8/pf+BP8AzOQ/4UHon/QxeIP++7X/AOMUf8KD0T/oYvEH/fdr/wDGK9Too9lT/lX3B/aWO/5/S/8AAn/meWf8KD0T/oYvEH/fdr/8Yo/4UHon/QxeIP8Avu1/+MV6nRR7Kn/KvuD+0sd/z+l/4E/8zyz/AIUHon/QxeIP++7X/wCMUf8ACg9E/wChi8Qf992v/wAYr1Oij2VP+VfcH9pY7/n9L/wJ/wCZ4rbfBjS5vGmpaQ3iDXBb2un2l0jBrbeWlkuFYE+TjGIVxx3PXjGv/wAKD0T/AKGLxB/33a//ABiuvsf+Sp67/wBgXTf/AEffV0lHsqf8q+4P7Sx3/P6X/gT/AMzyz/hQeif9DF4g/wC+7X/4xR/woPRP+hi8Qf8Afdr/APGK9Too9lT/AJV9wf2ljv8An9L/AMCf+Z5Z/wAKD0T/AKGLxB/33a//ABij/hQeif8AQxeIP++7X/4xXqdFHsqf8q+4P7Sx3/P6X/gT/wAzyz/hQeif9DF4g/77tf8A4xWRbfBjS5vGmpaQ3iDXBb2un2l0jBrbeWlkuFYE+TjGIVxx3PXjHtVc3Y/8lT13/sC6b/6PvqPZU/5V9wf2ljv+f0v/AAJ/5nIf8KD0T/oYvEH/AH3a/wDxij/hQeif9DF4g/77tf8A4xXqdFHsqf8AKvuD+0sd/wA/pf8AgT/zPLP+FB6J/wBDF4g/77tf/jFH/Cg9E/6GLxB/33a//GK9Too9lT/lX3B/aWO/5/S/8Cf+Z5Z/woPRP+hi8Qf992v/AMYo/wCFB6J/0MXiD/vu1/8AjFep0Ueyp/yr7g/tLHf8/pf+BP8AzPLfDHgKXw/401nSNG8Wa5a266fZXTMEs3d2eS6UglrcjAEQxgDqc54x13/CL6v/AND34g/78af/APItFj/yVPXf+wLpv/o++rpKtJRVkclSpOrJzqNtvq9Wc3/wi+r/APQ9+IP+/Gn/APyLR/wi+r/9D34g/wC/Gn//ACLXSUUzM5v/AIRfV/8Aoe/EH/fjT/8A5Fo/4RfV/wDoe/EH/fjT/wD5FrpKKAOb/wCEX1f/AKHvxB/340//AORa5+z8OaofiTrMQ8aa4rrpNgxmENjvcGa8AU/6NtwNpIwAfmOSeMeiVzdj/wAlT13/ALAum/8Ao++oAP8AhF9X/wCh78Qf9+NP/wDkWj/hF9X/AOh78Qf9+NP/APkWukooA5v/AIRfV/8Aoe/EH/fjT/8A5Fo/4RfV/wDoe/EH/fjT/wD5FrpKKAOb/wCEX1f/AKHvxB/340//AORaP+EX1f8A6HvxB/340/8A+Ra6SigDjfDlhc6d8SdfivNWvNVdtJ05hNeJCrqPOvRtHlRouOM8jPJ56YKvWP8AyVPXf+wLpv8A6PvqKACx/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgAoornvHHiGfwx4aN/bLArNcQwG4ugTDarJIEM0mCDsXOTyPqOtAHQ0Vyng7xHf6zqeuWF/Pp+oJpc8cSajpsTRwysybmj2l3w6Hrhzwy8A8V1dABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRVLV7q+s9Mlm0rT/wC0rsYEdt5ywhiSBku3RRnJIBOAcAnArH+Huv6h4n8C2GrazHbR30zTJMtorCIFJXT5QxJxhe5oA6WiiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACiiqeqjU2sSuiPaR3bOoEt4jPHGufmbYpBY46Dcv1oAuUVzPhLXdS1K/1zS9aFpJdaPdrAbqyRo4p1eJZAQjMxVgHwRuPIz3rpqACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKACisHxl4mXwp4eN+EheaSaO2gW4l8qIO7ABnfB2ooyzHHRTSeE9Vk1iznuD4j0TX4lkCLNo0OxIzjJVj50uTyD1GPfNAG/RRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRVLVYtUmtAuiXlpZ3G8EyXdo1whXByNqyRnOcc7vw9AC7RXJeDda1zVtY1+21a40+7s9MuUtIbqzs3txLMF3TDDSyZCllXOR8wYdq62gArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiqeqDUmsWXRHtIrtmUCS7RnjRc/MdikFjjOBuXnuKxPBviDUNYutdsNVNpcTaPf/AGQ3ljG0cM58tHICMzFWXftYbjyKAOnooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACiiqeqjU2sSuiPaR3bOoEt4jPHGufmbYpBY46Dcv1oAuUVzPhLXdS1K/1zS9aFpJdaPdrAbqyRo4p1eJZAQjMxVgHwRuPIz3rpqACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKK4668U67b/FDS9Bk0u3ttHvUudlzJLvmnaJEbcqqcImXx82WODwoxlNW8U67Y/EzQdETS7aLRtRlmhe8ml3SzMtu0o8tFOEUFdpL8k5woADEA7KiiigDm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76ukoAKKK5/xh4guNB0+yTToopdQ1O+isLQTZ8tJHyS7gEEqqqzEAgnbjIzkAHQUVzHh/XNUbxVqfhzxD9klu7O3hvIbuzhaGOeGQuvMbO5VleNh945BB45FdPQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRXHXXinXbf4oaXoMml29to96lzsuZJd807RIjblVThEy+PmyxweFGM50fjW/u/iBq+hf8JJ4b0r7FfRW1tY3lsz3V0rQxuSv+kJyS5UYQ9O9AHoVFFFAHN2P/ACVPXf8AsC6b/wCj76iix/5Knrv/AGBdN/8AR99RQAWP/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFcx4907U9U0CCDSopbmMXkL31nBOIZLu1B/eRK5IAJyCQWUMAVJG6unooA4nwLoV3peuazcw6RL4e0O4EItNHlljbZKNxllVImeOJW3KNqtyVYkDjPbUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAVdRu5rKxee20+41GRcYtrZo1kfJxwZHReOvLDp+Fcr8LrXVtK8HxaRrmiXemT2skz75pYHSUSTSONvlyMeAwzuA5PGa7SigAooooA5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgArF8W3muWXhu4k8K6b/aOqMQkMe9FCZODId7KG2jnbkZOBkZyNqigDlvAlk2l6TLYvomqWEnmGee71OS2eS+mckvITDK/OQOuABtA4GB1NFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAcv4+0S71nRbGTTbaO8utL1K31FLWRgvn+U+WQE8BipOCeM4zjrUPhrTNRl8aa54l1DTn0mK/t7a1itJpI2mbyvMJkk8tmQE+ZtGGJwvOM4rrqKACiiigDm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++rpKACqWtT31tod7No9p9tv44Ha2t96p5smDtUsxAAJxkmrtFAGH4N0E+GvCNhpkr+bcpH5l3N/z1uHJeV/xdmNblFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAGT4kDPorxf2CuvwSuqXFgWiBkjPUgSkIxBwdrMvGecgA4ngXRb3S77WZ/7MbQtHuni+waMZIz9mKqfNcLGzRx72YHYhI+XceWNdjRQAUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABWL4tvNcsvDdxJ4V03+0dUYhIY96KEycGQ72UNtHO3IycDIzkbVFAHLeBLJtL0mWxfRNUsJPMM893qcls8l9M5JeQmGV+cgdcADaBwMDqaKKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooA4LxH/bkvxI0HUrLwrqd3ZaSl3HLPHPaKJfNRApQPOrYBU53BT6A0vi0a3P488N3un+F9SvrTRbmeWaeGe0UTCS2eMbA8ytkM4B3BehxnjPeUUAIpLKCVKkjJU9R+VLRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABXMeOdHvtTsdKvNKg+1Xej6nFqCW3mBDOFDI6Bm4DFJGxkgZAyR1rp6KAOU8PWGpXfjTVvE2rafJpiz2lvYWlpPLG8ojjaR2d/LZkGWlIADHhcnGcDq6KKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooA4LxH/bkvxI0HUrLwrqd3ZaSl3HLPHPaKJfNRApQPOrYBU53BT6A0eOrbXPFug6n4Wh8MzRi7cRRarLcwG2iUMGE2N/m7lxkKE+8Bzj5q72igBFXagXJOBjJPJpaKKAObsf8Akqeu/wDYF03/ANH31FFj/wAlT13/ALAum/8Ao++ooALH/kqeu/8AYF03/wBH31dJXE3OqXem/FPV/sehahq/maLp+77FJbr5WJ73G7zpU654xnoc44zpf8JRq/8A0IniD/v/AKf/APJVAHSUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQB0lc3Y/wDJU9d/7Aum/wDo++o/4SjV/wDoRPEH/f8A0/8A+Sq5+z8R6oPiTrMo8F64ztpNgphE1jvQCa8IY/6TtwdxAwSflOQOMgHolFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVAHSUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQAWP/JU9d/7Aum/+j76ukrzuz8R6oPiTrMo8F64ztpNgphE1jvQCa8IY/6TtwdxAwSflOQOM9B/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQB0lFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVAHSVzdj/AMlT13/sC6b/AOj76j/hKNX/AOhE8Qf9/wDT/wD5Krn7PxHqg+JOsyjwXrjO2k2CmETWO9AJrwhj/pO3B3EDBJ+U5A4yAeiUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQB0lFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVABY/8lT13/sC6b/6Pvq6SvO7PxHqg+JOsyjwXrjO2k2CmETWO9AJrwhj/pO3B3EDBJ+U5A4z0H/CUav/ANCJ4g/7/wCn/wDyVQB0lFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVAHSUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAdJXN2P8AyVPXf+wLpv8A6PvqP+Eo1f8A6ETxB/3/ANP/APkqufs/EeqD4k6zKPBeuM7aTYKYRNY70AmvCGP+k7cHcQMEn5TkDjIB6JRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQB0lFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVAHSUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAFj/yVPXf+wLpv/o++rpK87s/EeqD4k6zKPBeuM7aTYKYRNY70AmvCGP+k7cHcQMEn5TkDjPQf8JRq/8A0IniD/v/AKf/APJVAHSUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQB0lc3Y/wDJU9d/7Aum/wDo++o/4SjV/wDoRPEH/f8A0/8A+Sq5+z8R6oPiTrMo8F64ztpNgphE1jvQCa8IY/6TtwdxAwSflOQOMgHolFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVAHSUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQAWP/JU9d/7Aum/+j76ukrzuz8R6oPiTrMo8F64ztpNgphE1jvQCa8IY/6TtwdxAwSflOQOM9B/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQB0lFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVAHSVzdj/AMlT13/sC6b/AOj76j/hKNX/AOhE8Qf9/wDT/wD5Krn7PxHqg+JOsyjwXrjO2k2CmETWO9AJrwhj/pO3B3EDBJ+U5A4yAeiUVzf/AAlGr/8AQieIP+/+n/8AyVR/wlGr/wDQieIP+/8Ap/8A8lUAdJRXN/8ACUav/wBCJ4g/7/6f/wDJVH/CUav/ANCJ4g/7/wCn/wDyVQB0lFc3/wAJRq//AEIniD/v/p//AMlUf8JRq/8A0IniD/v/AKf/APJVABY/8lT13/sC6b/6PvqKo+HL+51H4k6/LeaTeaU66TpyiG8eFnYedencPKkdcc45OeDx0yUAXrH/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACiiigAooooAK5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACiiigDm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++rpKACiiigAooooAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAKKKKACiiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACiiigAooooAK5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACiiigDm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++rpKACiiigAooooAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAKKKKACiiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACiiigAooooAK5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACiiigDm7H/kqeu/9gXTf/R99RRY/8lT13/sC6b/6PvqKACx/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACqWq31xp9oJrTSrvVHLhTBaPCrgYPzZlkRcceueelXapa1q1roOh3urag+y1soHnlP+yoJOPU8cCgDN8PeLF1/VtT019I1DTLrS/K+0JeGBhmRSygGKRxnaASDjAZfWt+uW+Hml3Nh4TS91RNuqaxK2pXwPVZJfmEf/AE2p/wCupoAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAparfXGn2gmtNKu9UcuFMFo8KuBg/NmWRFxx6556Vm+HvFi6/q2p6a+kahpl1pflfaEvDAwzIpZQDFI4ztAJBxgMvrWlrWrWug6He6tqD7LWygeeU/7Kgk49TxwKw/h5pdzYeE0vdUTbqmsStqV8D1WSX5hH/wAATan/AACgDqaKKKAObsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6Pvq6SgAqjrWs2egaTLqOpO6wRlVxHGXd2ZgqoqqCWZmIAA6k1erh/ivB5nhrTbiaSeKys9YtLi+lt2KtFAHw77hyoXIYsOVAJGMZoA6fSNTu9SSU3miX+klCAq3rwMZM9x5Ur9PfHWtGuD8CXaT+LNfi0HVLnVfDUcVsbe5mvXvEFyQ/mrFO7MWG0REjcQrHsSa7ygArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKAM3XtetPDul/bb0SybpEggghUNJPK52pGgJALMTjkgDqSACar6F4ng1u9vrCSyu9N1Gw2G4srwJvVHBKODGzoynDDIY4KkHBrF+JQ+z2vh3VZvlstK1yC7vJMEiKHZJGXOP4VMisT2AJ7VH4bvLXxB8UNc13RporvTItMtLBbyBg8U8wkmkcI44basiAkE4Jx1BAAO4ooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACszX9etfD2npdXUc07SzJb29vboGknlc4VFBIGT6kgAAkkAZrTrmPHtnZXGi2l1fa7baC+nX0V3bX12V8lJVyArhmUMrKzLjcDzweKAL2g+JYNdmvbb7Jdaff6e6pdWV4EEke4bkbKMysrDOCrEcEdQRWzXn3w9jvdQ8XeJvEVxqFvqVpeJa2lveWds0EFwYRIWaMF3LKDIF37mBIfB4wPQaACubsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76gDpKKKKAMnxL4ig8MaQL+5tbm7D3ENtHBahN7ySyBEA3sqj5mHJIqfSdRutRgd7zRr3SWVsCO8eBmcY6jypHGPqQfas/xmPDj6CsfjG4W2057iMiZ7h7dY5VbejGVCpTDKMMSBnAzkgVifD27e41vxEml6lc6r4ajkg/s27nuXuQZCreeqTOS0iAhOdxAJYA8YAB3VFFFAHN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAVzZ8d6OfHMPhSD7RPfyLIXkji/cwsiq5RnOBv2up2rkjIzjIz0lea+LPFXh60+L/hNLvXtMgayiv0ulkvI1MDPHFtD5Pyk9getAG9qvxC0/S7nUP+JfqN3Y6S6x6lqVskbQWbEBiGy4dtqsrNsVsBvUEDq1ZXUMhDKwyCDkEV49earZaL4W+IXhrUJkGt6je3psdPJ/fXwukAhMSdXBLbSVzja2cYr1jSrZ7LR7O1lILwQJGxHTKqAf5UAWq5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAp6pqDabYtcR2N3fyblRLe0RWkck4/iKqB3JYgAd6peH/Etv4ga+hW0urC806cQXdneBPMiYqHXlGZSCrAghjT/Emp2Wl6K8upau2iwyOsQ1ABMQMehLOrIoPTLjGSB1IrlfhpJEdX8ULp94Na0+S7inTXSwZr2V48SIWXEbCMLGoMYVQDtxkMSAegUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVma/r1t4d0wXl3HNMXljghggUNJPK7BURQSBkkjkkAdSQK064r4rSRjwdFBcrHFbXN/bwzX8pYLpyl8i53KVKlWC4bIAJBPAIoA29B8TRa5d39k9heabf6eyC4tLwR71V13I4aN3RlOCOGJBUggVtV5x8MnhTxH4mt9N1RfEdg0kE/wDb5k82SaVlYGB5V+R/LVUICBQocZAJyfR6ACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAKWr6vY6FpkuoarP5FtFgM20sSSQqqFUEsxJAAAJJIAqr4V8SWvi7wzaa3YQXNvBdb9sV2gSVCrshDAEgHKnvV3UdTsNHsXvdWvbextI8B57mVY41ycDLMQBkkCuI+C2saZqHw7trWw1G0ubi2muGnhhnV3iD3MpUsoOVyORnqKAPQaKKKAObsf+Sp67/2BdN/9H31FFj/yVPXf+wLpv/o++ooALH/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76ukoAKKKKACiiigArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiiigAooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACiiigAooooAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SiiigAooooAKKKKAObsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgAooooAKKKKACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACiiigDm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76ukoAKKKKACiiigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKACiiigAooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACiiigAooooAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAooooAKKKKAObsf+Sp67/wBgXTf/AEffUUWP/JU9d/7Aum/+j76igDNuZ9ch+Ker/wBg6dp97nRdP837bfvbbP397jbthk3Z5znGMDrnjS+3eN/+he8P/wDg+n/+Q6LH/kqeu/8AYF03/wBH31dJQBzf27xv/wBC94f/APB9P/8AIdH27xv/ANC94f8A/B9P/wDIddJRQBzf27xv/wBC94f/APB9P/8AIdH27xv/ANC94f8A/B9P/wDIddJRQBzf27xv/wBC94f/APB9P/8AIdc/Z3njH/hZOssuhaGbg6TYB4zrUwRV8682kN9lySSWyMDGByckD0Subsf+Sp67/wBgXTf/AEffUAH27xv/ANC94f8A/B9P/wDIdH27xv8A9C94f/8AB9P/APIddJRQBzf27xv/ANC94f8A/B9P/wDIdH27xv8A9C94f/8AB9P/APIddJRQBzf27xv/ANC94f8A/B9P/wDIdH27xv8A9C94f/8AB9P/APIddJRQB53Z3njH/hZOssuhaGbg6TYB4zrUwRV8682kN9lySSWyMDGByckDoPt3jf8A6F7w/wD+D6f/AOQ6LH/kqeu/9gXTf/R99XSUAc39u8b/APQveH//AAfT/wDyHR9u8b/9C94f/wDB9P8A/IddJRQBzf27xv8A9C94f/8AB9P/APIdH27xv/0L3h//AMH0/wD8h10lFAHN/bvG/wD0L3h//wAH0/8A8h1z9neeMf8AhZOssuhaGbg6TYB4zrUwRV8682kN9lySSWyMDGByckD0Subsf+Sp67/2BdN/9H31AB9u8b/9C94f/wDB9P8A/IdH27xv/wBC94f/APB9P/8AIddJRQBzf27xv/0L3h//AMH0/wD8h0fbvG//AEL3h/8A8H0//wAh10lFAHN/bvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHXSUUAed2d54x/4WTrLLoWhm4Ok2AeM61MEVfOvNpDfZckklsjAxgcnJA6D7d43/6F7w//AOD6f/5Dosf+Sp67/wBgXTf/AEffV0lAHN/bvG//AEL3h/8A8H0//wAh0fbvG/8A0L3h/wD8H0//AMh10lFAHN/bvG//AEL3h/8A8H0//wAh0fbvG/8A0L3h/wD8H0//AMh10lFAHN/bvG//AEL3h/8A8H0//wAh1z9neeMf+Fk6yy6FoZuDpNgHjOtTBFXzrzaQ32XJJJbIwMYHJyQPRK5ux/5Knrv/AGBdN/8AR99QAfbvG/8A0L3h/wD8H0//AMh0fbvG/wD0L3h//wAH0/8A8h10lFAHN/bvG/8A0L3h/wD8H0//AMh0fbvG/wD0L3h//wAH0/8A8h10lFAHN/bvG/8A0L3h/wD8H0//AMh0fbvG/wD0L3h//wAH0/8A8h10lFAHndneeMf+Fk6yy6FoZuDpNgHjOtTBFXzrzaQ32XJJJbIwMYHJyQOg+3eN/wDoXvD/AP4Pp/8A5Dosf+Sp67/2BdN/9H31dJQBzf27xv8A9C94f/8AB9P/APIdH27xv/0L3h//AMH0/wD8h10lFAHN/bvG/wD0L3h//wAH0/8A8h0fbvG//QveH/8AwfT/APyHXSUUAc39u8b/APQveH//AAfT/wDyHXP2d54x/wCFk6yy6FoZuDpNgHjOtTBFXzrzaQ32XJJJbIwMYHJyQPRK5ux/5Knrv/YF03/0ffUAH27xv/0L3h//AMH0/wD8h0fbvG//AEL3h/8A8H0//wAh10lFAHN/bvG//QveH/8AwfT/APyHR9u8b/8AQveH/wDwfT//ACHXSUUAc39u8b/9C94f/wDB9P8A/IdH27xv/wBC94f/APB9P/8AIddJRQB53Z3njH/hZOssuhaGbg6TYB4zrUwRV8682kN9lySSWyMDGByckDoPt3jf/oXvD/8A4Pp//kOix/5Knrv/AGBdN/8AR99XSUAc39u8b/8AQveH/wDwfT//ACHR9u8b/wDQveH/APwfT/8AyHXSUUAc39u8b/8AQveH/wDwfT//ACHR9u8b/wDQveH/APwfT/8AyHXSUUAc39u8b/8AQveH/wDwfT//ACHXP2d54x/4WTrLLoWhm4Ok2AeM61MEVfOvNpDfZckklsjAxgcnJA9Erm7H/kqeu/8AYF03/wBH31AB9u8b/wDQveH/APwfT/8AyHR9u8b/APQveH//AAfT/wDyHXSUUAc39u8b/wDQveH/APwfT/8AyHR9u8b/APQveH//AAfT/wDyHXSUUAc39u8b/wDQveH/APwfT/8AyHR9u8b/APQveH//AAfT/wDyHXSUUAcb4cl1Wb4k6+2uWdnZ3H9k6cFjs7trhCvnXuCWaOMg5zxg9BzzgFXrH/kqeu/9gXTf/R99RQAWP/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFc2fHejnxzD4Ug+0T38iyF5I4v3MLIquUZzgb9rqdq5IyM4yMgHSUVzWr+NodDu2GoaNqqadHcR28mqeVGLdHcqBkFxIVyyjcEK5PXg46WgArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA6SiiigAorJ8S+IoPDGkC/ubW5uw9xDbRwWoTe8ksgRAN7Ko+ZhySKn0nUbrUYHe80a90llbAjvHgZnGOo8qRxj6kH2oAv0UUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVR1rWbPQNJl1HUndYIyq4jjLu7MwVUVVBLMzEAAdSaAL1FZ2kand6kkpvNEv9JKEBVvXgYyZ7jypX6e+OtaNABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAFFc2fHejnxzD4Ug+0T38iyF5I4v3MLIquUZzgb9rqdq5IyM4yM19V+IWn6Xc6h/wAS/Ubux0l1j1LUrZI2gs2IDENlw7bVZWbYrYDeoIAB1lFIrK6hkIZWGQQcgiloA5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgAoormz470c+OYfCkH2ie/kWQvJHF+5hZFVyjOcDftdTtXJGRnGRkA6SiubuvHej2vjqx8Jj7TPqV2XVmhizFbssRlCyOcAMyAkKMnGCQAQT0lABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAFFU9U1BtNsWuI7G7v5NyolvaIrSOScfxFVA7ksQAO9UvD/AIlt/EDX0K2l1YXmnTiC7s7wJ5kTFQ68ozKQVYEEMaANmiiigDm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++rpKACiiqOtazZ6BpMuo6k7rBGVXEcZd3ZmCqiqoJZmYgADqTQBeorO0jU7vUklN5ol/pJQgKt68DGTPceVK/T3x1rRoAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAoqlqt9cafaCa00q71Ry4UwWjwq4GD82ZZEXHHrnnpWb4e8WLr+ranpr6RqGmXWl+V9oS8MDDMillAMUjjO0AkHGAy+tAG/RRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFFFZmv69a+HtPS6uo5p2lmS3t7e3QNJPK5wqKCQMn1JAABJIAzQBp0VjaD4lg12a9tvsl1p9/p7ql1ZXgQSR7huRsozKysM4KsRwR1BFbNABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAFFUtX1ex0LTJdQ1WfyLaLAZtpYkkhVUKoJZiSAAASSQBVXwr4ktfF3hm01uwgubeC637YrtAkqFXZCGAJAOVPegDXooooA5ux/5Knrv/YF03/0ffUUWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgArzXxZ4q8PWnxf8Jpd69pkDWUV+l0sl5GpgZ44tofJ+UnsD1r0qigDzDxj4v0DXPFQ8JX2v6ZpmnabPDcavJd3scLTspEiW0YYgkEhS7dAPlByTt9OVldQyEMrDIIOQRS0UAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAYHjMeHH0FY/GNwttpz3EZEz3D26xyq29GMqFSmGUYYkDOBnJArE+Ht29xrfiJNL1K51Xw1HJB/Zt3PcvcgyFW89UmclpEBCc7iASwB4wO6ooAKKKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAK4f4rweZ4a024mknisrPWLS4vpbdirRQB8O+4cqFyGLDlQCRjGa7iigDg/Al2k/izX4tB1S51Xw1HFbG3uZr17xBckP5qxTuzFhtERI3EKx7Emu8oooAK5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6PvqAOkooooA818WeKvD1p8X/AAml3r2mQNZRX6XSyXkamBnji2h8n5SewPWse81Wy0Xwt8QvDWoTINb1G9vTY6eT++vhdIBCYk6uCW2krnG1s4xXsVFAFXSrZ7LR7O1lILwQJGxHTKqAf5VaoooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACvNfFnirw9afF/wml3r2mQNZRX6XSyXkamBnji2h8n5SewPWvSqKAPNfHPijQLD4n+C4r7XNNtpLC8umu0mu40NuHs5ApcE/KDuXGcZyPWvSVZXUMhDKwyCDkEUtFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAGT4k1Oy0vRXl1LV20WGR1iGoAJiBj0JZ1ZFB6ZcYyQOpFcr8NJIjq/ihdPvBrWnyXcU6a6WDNeyvHiRCy4jYRhY1BjCqAduMhifQKKACiiigDm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++rpKACuH+K8HmeGtNuJpJ4rKz1i0uL6W3Yq0UAfDvuHKhchiw5UAkYxmu4ooA4PwJdpP4s1+LQdUudV8NRxWxt7ma9e8QXJD+asU7sxYbRESNxCsexJrvKKKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAKWtata6Dod7q2oPstbKB55T/sqCTj1PHArD+Hml3Nh4TS91RNuqaxK2pXwPVZJfmEf/AE2p/wCupooAKKKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAK5jx7Z2VxotpdX2u22gvp19Fd219dlfJSVcgK4ZlDKysy43A88HiunooA8++Hsd7qHi7xN4iuNQt9StLxLW0t7yztmgguDCJCzRgu5ZQZAu/cwJD4PGB6DRRQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFAFXUdTsNHsXvdWvbextI8B57mVY41ycDLMQBkkCuI+C2saZqHw7trWw1G0ubi2muGnhhnV3iD3MpUsoOVyORnqK9BooAKKKKAObsf+Sp67/wBgXTf/AEffUUWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXE3PiPQ/D/xT1f+3tZ0/TPP0XT/ACvtt0kPmbZ73O3cRnGRnHqK0v8AhY/gj/ocvD//AINIP/iqAOkorm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqAOkorm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqAOkrm7H/AJKnrv8A2BdN/wDR99R/wsfwR/0OXh//AMGkH/xVc/Z+PvB6/EnWbpvFmhi3k0mwjSU6lDsZlmvCyg7sEgOpI7bh6igD0Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoALH/kqeu/9gXTf/R99XSV53Z+PvB6/EnWbpvFmhi3k0mwjSU6lDsZlmvCyg7sEgOpI7bh6iug/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Subsf8Akqeu/wDYF03/ANH31H/Cx/BH/Q5eH/8AwaQf/FVz9n4+8Hr8SdZum8WaGLeTSbCNJTqUOxmWa8LKDuwSA6kjtuHqKAPRKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgDpKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgDpKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgAsf+Sp67/2BdN/9H31dJXndn4+8Hr8SdZum8WaGLeTSbCNJTqUOxmWa8LKDuwSA6kjtuHqK6D/AIWP4I/6HLw//wCDSD/4qgDpKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgDpKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgDpK5ux/wCSp67/ANgXTf8A0ffUf8LH8Ef9Dl4f/wDBpB/8VXP2fj7wevxJ1m6bxZoYt5NJsI0lOpQ7GZZrwsoO7BIDqSO24eooA9Eorm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqAOkorm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqAOkorm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqACx/5Knrv/YF03/0ffV0led2fj7wevxJ1m6bxZoYt5NJsI0lOpQ7GZZrwsoO7BIDqSO24eoroP8AhY/gj/ocvD//AINIP/iqAOkorm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqAOkorm/+Fj+CP+hy8P8A/g0g/wDiqP8AhY/gj/ocvD//AINIP/iqAOkrm7H/AJKnrv8A2BdN/wDR99R/wsfwR/0OXh//AMGkH/xVc/Z+PvB6/EnWbpvFmhi3k0mwjSU6lDsZlmvCyg7sEgOpI7bh6igD0Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoALH/kqeu/9gXTf/R99XSV53Z+PvB6/EnWbpvFmhi3k0mwjSU6lDsZlmvCyg7sEgOpI7bh6iug/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Siub/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KoA6Subsf8Akqeu/wDYF03/ANH31H/Cx/BH/Q5eH/8AwaQf/FVz9n4+8Hr8SdZum8WaGLeTSbCNJTqUOxmWa8LKDuwSA6kjtuHqKAPRKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgDpKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgDpKK5v/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qgAsf+Sp67/2BdN/9H31FUfDmt6Vr3xJ1+60PU7PUrdNJ06NpbO4WZFYTXpKkqSM4IOPcUUAdlRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH//2Q==)

Figure 10 - Region 1

![Table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADMjkAAJKSAAIAAAADMjkAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTY6NTk6NTcAMjAyMTowODoxMyAxNjo1OTo1NwAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTY6NTk6NTcuMjkzPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAHTAjcDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD1fW9b8Rt41vdK0W/sbO3tbO3nJubFp2ZpGlBGRImAPKHr1qH7Z42/6D+kf+CZ/wD5IovP+So63/2DLH/0O5q9WLbucMpS5nqUftnjb/oP6R/4Jn/+SKPtnjb/AKD+kf8Agmf/AOSKvUUrsnnl3KP2zxt/0H9I/wDBM/8A8kUfbPG3/Qf0j/wTP/8AJFXqKLsOeXco/bPG3/Qf0j/wTP8A/JFUotd8bS69dab/AG1pA+z20Nx5n9kP83mNKuMefxjyuued3tzt1iWv/I+6r/2DLL/0bdUXYc8u5d+2eNv+g/pH/gmf/wCSKPtnjb/oP6R/4Jn/APkir1FF2HPLuUftnjb/AKD+kf8Agmf/AOSKPtnjb/oP6R/4Jn/+SKvUUXYc8u5R+2eNv+g/pH/gmf8A+SKPtnjb/oP6R/4Jn/8Akir1FF2HPLuYkWu+NpdeutN/trSB9ntobjzP7If5vMaVcY8/jHldc87vbm79s8bf9B/SP/BM/wD8kVStf+R91X/sGWX/AKNuq26LsOeXco/bPG3/AEH9I/8ABM//AMkUfbPG3/Qf0j/wTP8A/JFXqKLsOeXco/bPG3/Qf0j/AMEz/wDyRR9s8bf9B/SP/BM//wAkVeoouw55dyj9s8bf9B/SP/BM/wD8kUukah431HXr/TRrehr9ktre48x9Glbd5rTLjAuRjHk9cnO7tjm7TfCv/I+67/2DLD/0bd1UW7mlOUnNXZofYfG//Qw+H/8AwQz/APyZR9h8b/8AQw+H/wDwQz//ACZXSUVqdhzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJldJRQBzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJldJRQBxMFz43m8VX2jf234fX7JZW13539iT/AD+c86bdv2vjHkZznnd2xzpfYfG//Qw+H/8AwQz/APyZRY/8lT13/sC6b/6Pvq6SgDm/sPjf/oYfD/8A4IZ//kyj7D43/wChh8P/APghn/8AkyukooA5v7D43/6GHw//AOCGf/5Mo+w+N/8AoYfD/wD4IZ//AJMrpKKAOb+w+N/+hh8P/wDghn/+TKzYLnxvN4qvtG/tvw+v2Sytrvzv7En+fznnTbt+18Y8jOc87u2Oe2rm7H/kqeu/9gXTf/R99QAfYfG//Qw+H/8AwQz/APyZR9h8b/8AQw+H/wDwQz//ACZXSUUAc39h8b/9DD4f/wDBDP8A/JlH2Hxv/wBDD4f/APBDP/8AJldJRQBzf2Hxv/0MPh//AMEM/wD8mUfYfG//AEMPh/8A8EM//wAmV0lFAHEwXPjebxVfaN/bfh9fsllbXfnf2JP8/nPOm3b9r4x5Gc553dsc6X2Hxv8A9DD4f/8ABDP/APJlFj/yVPXf+wLpv/o++rpKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkyj7D43/6GHw//AOCGf/5MrpKKAOb+w+N/+hh8P/8Aghn/APkys2C58bzeKr7Rv7b8Pr9ksra787+xJ/n855027ftfGPIznPO7tjntq5ux/wCSp67/ANgXTf8A0ffUAH2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mV0lFAHN/YfG/wD0MPh//wAEM/8A8mUfYfG//Qw+H/8AwQz/APyZXSUUAc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JldJRQBxMFz43m8VX2jf234fX7JZW13539iT/P5zzpt2/a+MeRnOed3bHOl9h8b/wDQw+H/APwQz/8AyZRY/wDJU9d/7Aum/wDo++rpKAOb+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkyukooA5v7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TK6SigDm/sPjf8A6GHw/wD+CGf/AOTKzYLnxvN4qvtG/tvw+v2Sytrvzv7En+fznnTbt+18Y8jOc87u2Oe2rm7H/kqeu/8AYF03/wBH31AB9h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZXSUUAc3oOoa5/wlWqaNr11p939lsrW7imsrN7b/AFr3CFWVpZM48gEEEdTRRY/8lT13/sC6b/6PvqKAMO8/5Kjrf/YMsf8A0O5q9VG8/wCSo63/ANgyx/8AQ7mr1YPc8+fxMKKKzdd1gaNZRyLCbi4uJ0traANt8yVzgAtzgdSTg4APB6UiTSorH0nW5rzVLzS9Ss0s7+0SOUrFMZY5I3ztZWKqeqsCCowR3zWxQAViWv8AyPuq/wDYMsv/AEbdVt1iWv8AyPuq/wDYMsv/AEbdUAbdFFFABRVXUb3+z7F7n7NcXRXAENtHvkck4AA6d+pIA6kgVT8Ma2/iLw5banLafY3mLhoPM8zYVdkI3YGfu+lAGtRRRQBiWv8AyPuq/wDYMsv/AEbdVt1iWv8AyPuq/wDYMsv/AEbdVt0AFFFVr+a7htS2n2q3VwWAWN5fLXk8lmwSABzwCfagCzRWRoWtS6pNqFreWiWt5p84hmSKbzYzuRXUq+1SeGHBAwa16ACm+Ff+R913/sGWH/o27p1N8K/8j7rv/YMsP/Rt3VR3NKXxo7SiiitjuCisLxf4hm8M6Gl7a2Ud7PLd29pHDJOYVLTSrGCXCsQAWz901e0mbV5oHOu2NlZyhsItnevcqy46ktFHg57YP1oAv0UUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABRRVPVbi/trEvpNgl/dM6qkUk4hQZPLM+GIAHPCsfagC5RWB4Z8R3GtXOq2Gp6eun6lpNwsFxFFP58TBkWRHSQqpIKsOqgg5Fb9ABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRVLVZdUhtA2iWdpeXG8Ax3d21ugXBydyxyHOccbfx9cbwv4m1LW9a1vTtT0u0tG0mSKF5rO+a5jkkdN5TLRR4KqUz1+9jsaAOmooooA5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgAoorlJfGzp8RLLwwui3aw3KTf8TGf93GzxojlY1IzIMOAW4XPALYOADq6K4jVfiBd2g1u+03RFvtF8PymLUbo3flzFkUPN5MWwiQIrDJZ0yQwHTJ7SGaO4gjmhYPHIodGHRgRkGgB9c3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQAUVS1WXVIbQNolnaXlxvAMd3dtboFwcncschznHG38fXG8L+JtS1vWtb07U9LtLRtJkiheazvmuY5JHTeUy0UeCqlM9fvY7GgDpqKKKAObsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKKK5SXxs6fESy8MLot2sNyk3/Exn/dxs8aI5WNSMyDDgFuFzwC2DgA6uiuI1X4gXdoNbvtN0Rb7RfD8pi1G6N35cxZFDzeTFsIkCKwyWdMkMB0ye0hmjuII5oWDxyKHRh0YEZBoAfXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRWN4n8QHw/YWzwWhvby9uks7S38wRiSV843Pg7VAViTgnAOATxUHhzxJPq2pappOq2EdhqmltGZ4obgzxNHIpMbo5VCQdrDBUEFT7EgHQUUUUAc3Y/8lT13/sC6b/6PvqKLH/kqeu/9gXTf/R99RQBh3n/ACVHW/8AsGWP/odzV6qN5/yVHW/+wZY/+h3NXqwe558/iYVzvjC1nkt9LvbeCW4/s3UY7uSKFN7sgVkbao5JAfOByccV0VFIk5vRhLqPjDUtaFtcQWhtILOA3ELQtKVaR3bY4DAAyAcgZwe3J6SiigArEtf+R91X/sGWX/o26rbrEtf+R91X/sGWX/o26oA26KKKAILy8jsLVridZmRcZEEDzPyccKgLH8BXN/DuVl8KxWU9teW1xBJKzpc2ksPDyuy4LqA3BB4zjPNdXRQAUUUUAYlr/wAj7qv/AGDLL/0bdVt1iWv/ACPuq/8AYMsv/Rt1W3QAVn63PFBprfaob6WGRgkhsBIZUB/iHlnfjOPu5PPpmtCigDlfBtq9reav9kt7qHSJZkktTexuk8khU+azeYPMYZ2gF+eD2ArqqKKACm+Ff+R913/sGWH/AKNu6dTfCv8AyPuu/wDYMsP/AEbd1UdzSl8aO0ooorY7jG8Uvpg0bZr2jyaxYSSqssCWBvAvcO0QDMwBA6KSCQcYyRz3w90z7HrfiK60rTp9J8O3ckH9n2M1u1sBIqsJpFgYAxqx2cELkqTjnJ7qigAooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACsXxbrtx4d8N3F/Y6ZdapdAhIba1geUs7HALBAWCDqSATgcAnAO1RQBx/w8jtYdPvAH1C41O5n+16ld3ul3FmJ5nGPkEyL8qhQoVc4CjPJyewoooAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SiiigClrWoPpWh3t/FaT3sltA8qW1vGXkmYAkIqjkknj8ayvAmiT6F4PtYdQ+bUroteag/965lJeT8AzbR7KK6KigAooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACvO/E+rxp8VPDVwNP1mW30yO9jupoNGu5Y0MiRhMMsZDA4PKkgY5xXolFAHlF7HqGk6D438MR6PqV1f61d3UmmyQ2cj28q3SgAtMBsj2Mzbg7KcLkZyM+n6da/YdLtbTdu+zwpFu9dqgZ/SrFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAUta1B9K0O9v4rSe9ktoHlS2t4y8kzAEhFUckk8fjWV4E0SfQvB9rDqHzaldFrzUH/vXMpLyfgGbaPZRXRUUAFFFFAHN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAV534n1eNPip4auBp+sy2+mR3sd1NBo13LGhkSMJhljIYHB5UkDHOK9EooA8ovY9Q0nQfG/hiPR9Sur/AFq7upNNkhs5Ht5VulABaYDZHsZm3B2U4XIzkZ9P061+w6Xa2m7d9nhSLd67VAz+lWKKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAOe8a6fp1/ocR1RtSi+y3UdzbXGl28k9xBMp+V1REfPUg5UrgnNY3gHRrxPEXiDxFez6pPHqIt7e2k1aFIbiSOEPlzEqJ5alpCApRW+TJHzZPdUUAFFFFAHN2P/ACVPXf8AsC6b/wCj76iix/5Knrv/AGBdN/8AR99RQBh3n/JUdb/7Blj/AOh3NXqxNd1a30v4o6t9pjvH8zTLLb9msprjGHuOvlq23r3xnnHQ0f8ACWad/wA++r/+CW8/+NVg9zz5/EzborE/4SzTv+ffV/8AwS3n/wAao/4SzTv+ffV//BLef/GqRJt0Vif8JZp3/Pvq/wD4Jbz/AONUf8JZp3/Pvq//AIJbz/41QBt1iWv/ACPuq/8AYMsv/Rt1R/wlmnf8++r/APglvP8A41WRbeJrBfGupTGDVNr6faKANIui2RJck5Xy8gfMMEjB5x0OADsqKxP+Es07/n31f/wS3n/xqj/hLNO/599X/wDBLef/ABqgDborE/4SzTv+ffV//BLef/GqP+Es07/n31f/AMEt5/8AGqANuisT/hLNO/599X/8Et5/8ao/4SzTv+ffV/8AwS3n/wAaoALX/kfdV/7Bll/6Nuq264228TWC+NdSmMGqbX0+0UAaRdFsiS5Jyvl5A+YYJGDzjoca/wDwlmnf8++r/wDglvP/AI1QBt0Vif8ACWad/wA++r/+CW8/+NUf8JZp3/Pvq/8A4Jbz/wCNUAbdFYn/AAlmnf8APvq//glvP/jVH/CWad/z76v/AOCW8/8AjVAG3TfCv/I+67/2DLD/ANG3dY3/AAlmnf8APvq//glvP/jVM8OeLtNtvGuszSW2slZNPslUR6JeOwKyXROVWIlR8wwSADzjODio7mlL40eoUVzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMVsdx0lFc3/wAJ5pH/AD5+IP8AwnNQ/wDjFH/CeaR/z5+IP/Cc1D/4xQB0lFc3/wAJ5pH/AD5+IP8AwnNQ/wDjFH/CeaR/z5+IP/Cc1D/4xQAWP/JU9d/7Aum/+j76ukrzuz8aaWvxJ1m4NrrmyTSbBABoF8XBWa8Jynk7gPmGCRg8gE7TjoP+E80j/nz8Qf8AhOah/wDGKAOkorm/+E80j/nz8Qf+E5qH/wAYo/4TzSP+fPxB/wCE5qH/AMYoA6Siub/4TzSP+fPxB/4Tmof/ABij/hPNI/58/EH/AITmof8AxigDpK5ux/5Knrv/AGBdN/8AR99R/wAJ5pH/AD5+IP8AwnNQ/wDjFc/Z+NNLX4k6zcG11zZJpNggA0C+LgrNeE5TydwHzDBIweQCdpwAeiUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFAHSUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFAHSUVzf8Awnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8JzUP/jFABY/8lT13/sC6b/6Pvq6SvO7Pxppa/EnWbg2uubJNJsEAGgXxcFZrwnKeTuA+YYJGDyATtOOg/wCE80j/AJ8/EH/hOah/8YoA6Siub/4TzSP+fPxB/wCE5qH/AMYo/wCE80j/AJ8/EH/hOah/8YoA6Siub/4TzSP+fPxB/wCE5qH/AMYo/wCE80j/AJ8/EH/hOah/8YoA6Subsf8Akqeu/wDYF03/ANH31H/CeaR/z5+IP/Cc1D/4xXP2fjTS1+JOs3Btdc2SaTYIANAvi4KzXhOU8ncB8wwSMHkAnacAHolFc3/wnmkf8+fiD/wnNQ/+MUf8J5pH/Pn4g/8ACc1D/wCMUAdJRXN/8J5pH/Pn4g/8JzUP/jFH/CeaR/z5+IP/AAnNQ/8AjFAHSUVzf/CeaR/z5+IP/Cc1D/4xR/wnmkf8+fiD/wAJzUP/AIxQAWP/ACVPXf8AsC6b/wCj76ukrzuz8aaWvxJ1m4NrrmyTSbBABoF8XBWa8Jynk7gPmGCRg8gE7TjoP+E80j/nz8Qf+E5qH/xigDpKK5v/AITzSP8Anz8Qf+E5qH/xij/hPNI/58/EH/hOah/8YoA6Siub/wCE80j/AJ8/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/GKAOkrm7H/kqeu/9gXTf/R99R/wnmkf8+fiD/wnNQ/+MVz9n400tfiTrNwbXXNkmk2CADQL4uCs14TlPJ3AfMMEjB5AJ2nAB6JRXN/8J5pH/Pn4g/8ACc1D/wCMUf8ACeaR/wA+fiD/AMJzUP8A4xQB0lFc3/wnmkf8+fiD/wAJzUP/AIxR/wAJ5pH/AD5+IP8AwnNQ/wDjFAHSUVzf/CeaR/z5+IP/AAnNQ/8AjFH/AAnmkf8APn4g/wDCc1D/AOMUAFj/AMlT13/sC6b/AOj76iqPhzV7bWfiTr9xZx3kaLpOnIReWU1q+fOvTwkqqxHPUDHUZ4NFAFG8/wCSo63/ANgyx/8AQ7mr1Ubz/kqOt/8AYMsf/Q7mr1YPc8+fxMKKKKRIUUUUAFYlr/yPuq/9gyy/9G3VbdYlr/yPuq/9gyy/9G3VAG3RRRQAUUUUAFFFFAGJa/8AI+6r/wBgyy/9G3VbdYlr/wAj7qv/AGDLL/0bdVt0AFFFFABRRRQAU3wr/wAj7rv/AGDLD/0bd06m+Ff+R913/sGWH/o27qo7mlL40dpRRRWx3BRRRQAUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUUUAFFFFABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAFFFFABRRRQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFABRRRQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvqKLH/kqeu/8AYF03/wBH31FAGHef8lR1v/sGWP8A6Hc1eqjef8lR1v8A7Blj/wCh3NXqwe558/iYVWv7+3021NxdsyxhgoCRtIzEnACqoLMc9gDVmq19K8dvsgure2uJW2QvcLvUv1xtDKWOAeARSJItM1iy1iGWSwkdvJkMcqSRPE8bYBwyOAwOCDyO9Xq5TwiJIPEPiS1vXW5vhcRTXF3ENsb7o8IgTnYUVBwWY/MDnnA6ugArEtf+R91X/sGWX/o26rbrEtf+R91X/sGWX/o26oA26KKKAKt/qEOm24muEuHUttxb20k7Z/3Y1Y4464xVfTNfsNYubi3smuBNbBGmjuLSWBlDZ28SKvXaenpV26uYbKzmurpxHDBG0kjnoqqMk/kKwvBdtK2kSaveoVvNZlN7IG6ojACJD/uxhBj1zQB0VFFFAGJa/wDI+6r/ANgyy/8ARt1W3WJa/wDI+6r/ANgyy/8ARt1W3QAVBeXltp9nLd308dvbwruklkbaqj3NT1y3j8SHSdNCz/Zojq1qJZtoPlr5gw3PHDbeuRnGQaAN3T9Ut9TV2to7tBGQD9ps5bfOfQSKufwq5XOaFeXyeKdX0e6v5NShtIoJUnmRFkjZ92Y22KqnhVYcZ+bnPFdHQAU3wr/yPuu/9gyw/wDRt3Tqb4V/5H3Xf+wZYf8Ao27qo7mlL40dpRRRWx3FLV9YsNC0577VbgQW6sFztLMzMcKqqoLMxJACgEk9BUWi+INN8QQzyaXNI5t5PKnimgkglhfAOHjkVWXggjIGQcis/wAZaFf61ZadJo8lut7pmow30Ud0WWKbZuBRmUErlWOGAOCBwawfA7alefEjxlqOoRWUK7LK0dLG4a4jE0ayFl8xkQlgsiZG0Y3Ads0AegUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVT1TVbTRrFrvUHdYgyoBFE8ruzHAVUQFmJJ6AE1cqnqc8kVp5dte2lldzsIraS7TzEMnXGwOhY4B4DA8e1AEOieINN8Q280ulTSP9nlMM8c0EkEkTgA7XjkVWU4IPIGQQa0q4TwCJrbxb4xstSkS91QXcFzdahAuyKTfEBHEsfJjMaRqCpZz8wbd82B3dABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAUtW1ex0PTXv9Un8i3QqpbaWZmYgKqqoLMxJACgEknAFQaL4j0zxB9pXTZpTLaOI7iC4tpLeaIlQy7o5FVgCDkHGD26VgfFBlfw1Y2ibkvrzVbWHT7gSiMW1zv3RysSrAgFfu4O4kL/FkU/Aa3tj448Vadr06alrGLa5m1KEBI3hYOsUXlD/AFRTY5wSxbduLcgAA7+iiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACobu8ttPs5bu/uIrW2hUvLNM4REUdSWPAH1qaoLuytdQg8i/tobmLer+XNGHXcpDKcHuCAQexANAFXQNe03xPodtrGh3P2qwugxhm8tk3YYqeGAI5BHIrRrivhF/yTDTv+u93/wClUtdrQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQBS1bV7HQ9Ne/1SfyLdCqltpZmZiAqqqgszEkAKASScAVBoviPTPEH2ldNmlMto4juILi2kt5oiVDLujkVWAIOQcYPbpWB8UGV/DVjaJuS+vNVtYdPuBKIxbXO/dHKxKsCAV+7g7iQv8WRT8Bre2PjjxVp2vTpqWsYtrmbUoQEjeFg6xReUP9UU2OcEsW3bi3IAAO/ooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACs/W9d0/w7ppv9Wlkit/MSIGOB5mZ3YKqhEBYksQMAd60KxPFejWPiDSodO1DUJdPL3cMtvLA8ayedG4lQLvVlJymcYOQDQBc0nWbXWoHls4r2NY22kXlhPasTjPCyopI9wMVfrj/B2qanJ4o8S6HqGpNq9vpT2/kX0kcaSFpEZnhfy1VCyYU8KDhxmuwoAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigClq2r2Oh6a9/qk/kW6FVLbSzMzEBVVVBZmJIAUAkk4AqDRfEemeIPtK6bNKZbRxHcQXFtJbzREqGXdHIqsAQcg4we3SsD4oMr+GrG0Tcl9earaw6fcCURi2ud+6OViVYEAr93B3Ehf4sin4DW9sfHHirTtenTUtYxbXM2pQgJG8LB1ii8of6opsc4JYtu3FuQAAd/RRRQBzdj/yVPXf+wLpv/o++oosf+Sp67/2BdN/9H31FAGHef8lR1v8A7Blj/wCh3NXqo3n/ACVHW/8AsGWP/odzV6sHuefP4mFQXljaajatbahaw3Vu+N0U8YdGwcjIPHWp6KRJXsdPs9MthbabaQWkAJIit4hGoJ6nAGKsUUUAFYlr/wAj7qv/AGDLL/0bdVt1iWv/ACPuq/8AYMsv/Rt1QBt0UUUARXFtBeW0lvdwxzwyLteKVAyuPQg8EVIoCqFUAADAA7UtFABRRRQBiWv/ACPuq/8AYMsv/Rt1W3WJa/8AI+6r/wBgyy/9G3VbdABUdxbw3dvJb3UMc8MilXjkUMrg9QQeCKkooArWOnWWmW32fTbO3s4MlvKt4ljXJ6nAGKs0UUAFN8K/8j7rv/YMsP8A0bd06m+Ff+R913/sGWH/AKNu6qO5pS+NHaUUUVsdxU1PSdO1qyNnrFha6halgxguoVlQkdDtYEZp9jYWel2MdnplpBZ2sQxHBbxiNEGc8KMAcmrFFABRRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFVdR0yw1ixey1ayt760kwXguYlkjbByMqwIOCAatUUAVNM0nTtFshZ6PYWun2oYsILWFYkBPU7VAGat0UUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQBXvrCz1Sxks9TtILy1lGJILiMSI4znlTkHkVDpWi6VoNq1roemWem27uZGis7dYUZiACxCgDOABn2FXqKACiiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACquo6ZYaxYvZatZW99aSYLwXMSyRtg5GVYEHBANWqKAMzSPDWheH2lOg6Lp+mGbAlNlapD5mM43bQM4yevqa06KKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooAr31hZ6pYyWep2kF5ayjEkFxGJEcZzypyDyKh0rRdK0G1a10PTLPTbd3MjRWdusKMxABYhQBnAAz7Cr1FABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABVTUtK0/WbJrPWLC2v7ViC0F1CsqEjkEqwI4q3RQBV03S7DR7FLLSLG2sLVCSsFrCsSKScnCqABk81aoooAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigCvfWFnqljJZ6naQXlrKMSQXEYkRxnPKnIPIqHStF0rQbVrXQ9Ms9Nt3cyNFZ26wozEAFiFAGcADPsKvUUAFFFFAHN2P/ACVPXf8AsC6b/wCj76iix/5Knrv/AGBdN/8AR99RQBy2u39xZfFHVvs2lXmo79Mst32Z4V2Ye46+ZInXPbPQ5xxR/buo/wDQqav/AN/bP/4/V28/5Kjrf/YMsf8A0O5q9WD3PPn8TMT+3dR/6FTV/wDv7Z//AB+j+3dR/wChU1f/AL+2f/x+tuikSYn9u6j/ANCpq/8A39s//j9H9u6j/wBCpq//AH9s/wD4/W3RQBif27qP/Qqav/39s/8A4/WRba1fjxrqUg8M6oWbT7RTEJbXcoElzhj++xg5IGCT8pyBxnsqxLX/AJH3Vf8AsGWX/o26oAP7d1H/AKFTV/8Av7Z//H6P7d1H/oVNX/7+2f8A8frbooAxP7d1H/oVNX/7+2f/AMfo/t3Uf+hU1f8A7+2f/wAfrbooAxP7d1H/AKFTV/8Av7Z//H6P7d1H/oVNX/7+2f8A8frbooA4221q/HjXUpB4Z1Qs2n2imIS2u5QJLnDH99jByQMEn5TkDjOv/buo/wDQqav/AN/bP/4/Ra/8j7qv/YMsv/Rt1W3QBif27qP/AEKmr/8Af2z/APj9H9u6j/0Kmr/9/bP/AOP1t0UAYn9u6j/0Kmr/APf2z/8Aj9H9u6j/ANCpq/8A39s//j9bdFAGJ/buo/8AQqav/wB/bP8A+P1n2fjy18MeLdRutc0nUrX7ZY2scUWIXf8AdyXBLHbIQAfMAHOeDwOM9XXlPxQ/5Ge3/wCvNf8A0N6yqzdOPNE9zIcJSxmPjRq7NP8AI9C/4Xd4b/58tU/79R//AByj/hd3hv8A58tU/wC/Uf8A8crX/wCFV+Df+gN/5NTf/F0f8Kr8G/8AQG/8mpv/AIuq5cT3R7ftch/591Pw/wAzI/4Xd4b/AOfLVP8Av1H/APHKP+F3eG/+fLVP+/Uf/wAcrX/4VX4N/wCgN/5NTf8AxdH/AAqvwb/0Bv8Ayam/+Lo5cT3Qe1yH/n3U/D/MyP8Ahd3hv/ny1T/v1H/8co/4Xd4b/wCfLVP+/Uf/AMcrX/4VX4N/6A3/AJNTf/F0f8Kr8G/9Ab/yam/+Lo5cT3Qe1yH/AJ91Pw/zORtvixoUPjTUtXa01A291p9paoojTeGikuGYkb8YxMuOex6cZ1/+F3eG/wDny1T/AL9R/wDxyo7T4d+FpfH2q6a+l5tLfTLKeKP7RL8ryS3Suc7snIiTgnA28dTnb/4VX4N/6A3/AJNTf/F0cuJ7oPa5D/z7qfh/mZH/AAu7w3/z5ap/36j/APjlH/C7vDf/AD5ap/36j/8Ajla//Cq/Bv8A0Bv/ACam/wDi6P8AhVfg3/oDf+TU3/xdHLie6D2uQ/8APup+H+Zkf8Lu8N/8+Wqf9+o//jlH/C7vDf8Az5ap/wB+o/8A45Wv/wAKr8G/9Ab/AMmpv/i6P+FV+Df+gN/5NTf/ABdHLie6D2uQ/wDPup+H+Zkf8Lu8N/8APlqn/fqP/wCOVkW3xY0KHxpqWrtaagbe60+0tUURpvDRSXDMSN+MYmXHPY9OM9d/wqvwb/0Bv/Jqb/4usS0+HfhaXx9qumvpebS30yynij+0S/K8kt0rnO7JyIk4JwNvHU5OXE90Htch/wCfdT8P8yT/AIXd4b/58tU/79R//HKP+F3eG/8Any1T/v1H/wDHK1/+FV+Df+gN/wCTU3/xdH/Cq/Bv/QG/8mpv/i6OXE90Htch/wCfdT8P8zI/4Xd4b/58tU/79R//AByj/hd3hv8A58tU/wC/Uf8A8crX/wCFV+Df+gN/5NTf/F0f8Kr8G/8AQG/8mpv/AIujlxPdB7XIf+fdT8P8zI/4Xd4b/wCfLVP+/Uf/AMco/wCF3eG/+fLVP+/Uf/xytf8A4VX4N/6A3/k1N/8AF0f8Kr8G/wDQG/8AJqb/AOLo5cT3Qe1yH/n3U/D/ADORtvixoUPjTUtXa01A291p9paoojTeGikuGYkb8YxMuOex6cZ1/wDhd3hv/ny1T/v1H/8AHKjtPh34Wl8farpr6Xm0t9Msp4o/tEvyvJLdK5zuyciJOCcDbx1Odv8A4VX4N/6A3/k1N/8AF0cuJ7oPa5D/AM+6n4f5mR/wu7w3/wA+Wqf9+o//AI5R/wALu8N/8+Wqf9+o/wD45Wv/AMKr8G/9Ab/yam/+Lo/4VX4N/wCgN/5NTf8AxdHLie6D2uQ/8+6n4f5mR/wu7w3/AM+Wqf8AfqP/AOOUf8Lu8N/8+Wqf9+o//jla/wDwqvwb/wBAb/yam/8Ai6P+FV+Df+gN/wCTU3/xdHLie6D2uQ/8+6n4f5mR/wALu8N/8+Wqf9+o/wD45WRbfFjQofGmpau1pqBt7rT7S1RRGm8NFJcMxI34xiZcc9j04z13/Cq/Bv8A0Bv/ACam/wDi6xLT4d+FpfH2q6a+l5tLfTLKeKP7RL8ryS3Suc7snIiTgnA28dTk5cT3Qe1yH/n3U/D/ADJP+F3eG/8Any1T/v1H/wDHKP8Ahd3hv/ny1T/v1H/8crX/AOFV+Df+gN/5NTf/ABdH/Cq/Bv8A0Bv/ACam/wDi6OXE90Htch/591Pw/wAzI/4Xd4b/AOfLVP8Av1H/APHKP+F3eG/+fLVP+/Uf/wAcrX/4VX4N/wCgN/5NTf8AxdH/AAqvwb/0Bv8Ayam/+Lo5cT3Qe1yH/n3U/D/MyP8Ahd3hv/ny1T/v1H/8co/4Xd4b/wCfLVP+/Uf/AMcrX/4VX4N/6A3/AJNTf/F1neIvhr4TsPC+q3dppXlz29nNLE/2mU7WVCQcFsHkUmsSle6LhLIpzUFCprp0/wAynoPjY61401fV9B8PatqVvJp9lassLW0bxNHJctlhJMowRKMYJ+62ccZ6j/hKNX/6ETxB/wB/9P8A/kquF+BH/Me/7d//AGrXr1bUJudNSZ5eb4WnhMbOjS+FW/FJnN/8JRq//QieIP8Av/p//wAlUf8ACUav/wBCJ4g/7/6f/wDJVdJRWx5Zzf8AwlGr/wDQieIP+/8Ap/8A8lUf8JRq/wD0IniD/v8A6f8A/JVdJRQBzf8AwlGr/wDQieIP+/8Ap/8A8lVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZ9Erm7H/AJKnrv8A2BdN/wDR99QAf8JRq/8A0IniD/v/AKf/APJVH/CUav8A9CJ4g/7/AOn/APyVXSUUAc3/AMJRq/8A0IniD/v/AKf/APJVH/CUav8A9CJ4g/7/AOn/APyVXSUUAc3/AMJRq/8A0IniD/v/AKf/APJVH/CUav8A9CJ4g/7/AOn/APyVXSUUAcb4cv7nUfiTr8t5pN5pTrpOnKIbx4Wdh516dw8qR1xzjk54PHTJV6x/5Knrv/YF03/0ffUUAYd5/wAlR1v/ALBlj/6Hc1eqjef8lR1v/sGWP/odzV6sHuefP4mFFFRXFzBZ20lxdzRwQxrueWVgqoPUk8AUiSWiqWk6tZa7pUOpaVN59pOCY5NjLuwSDwwB6g9qu0AFYlr/AMj7qv8A2DLL/wBG3VbdYlr/AMj7qv8A2DLL/wBG3VAG3RRRQAUVnPr2lx69ForXkZ1KVDItuuSwUDJJxwvHTOM9qLjX9LttdtdGmvYxqN2rNDbDJYhVLEnH3RgHBOM4OM0AaNFFFAGJa/8AI+6r/wBgyy/9G3VbdYlr/wAj7qv/AGDLL/0bdVt0AFFFVr/ULXS7KS7v5RFDHjLEEkknAAA5JJIAAySTgUAWaKo6ZrNjq/nCykcvbsFmimheGSMkZG5HAYZHIJHPar1ABXlPxQ/5Ge3/AOvNf/Q3r1avKfih/wAjPb/9ea/+hvXPif4Z9Pwr/wAjSHo/yPoiiiivQPKCiqWq6rb6PaC5u47uRC4QC0sprp8kE/ciVmxx1xj86p6J4r0rxBeXdppzXYubJUa4hu7Ce1ZA+dpxKik52np6UAbNFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFZEnirRIvFMPhttRiOsTxNMtmuWcIoyS2BheDxuxntmgDXorBvfG2g6fqhsLy6mjkE6W7TfY5jbpK+NqNOE8tWO5eCwPzD1reoAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAoqnqurWei2Ju9RkdIt6oojieV3ZjgKqICzE+gBNQ6J4h03xFbzTaVO8gglMM0csLwyQuOdrxuFZTgg8gcEGgDSooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACiisiTxVokXimHw22oxHWJ4mmWzXLOEUZJbAwvB43Yz2zQBr0Vk634o0fw5LYR6zei2k1G4W2tU8tnMkjEADCg4GSBuOACRk8itagArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiqeq6tZ6LYm71GR0i3qiiOJ5XdmOAqogLMT6AE1DoniHTfEVvNNpU7yCCUwzRywvDJC452vG4VlOCDyBwQaANKsjxb/yJOuf9g+4/wDRbVr1keLf+RJ1z/sH3H/otqmfws3w38eHqvzPOPgR/wAx7/t3/wDatevV5D8CP+Y9/wBu/wD7Vr16sML/AAV/XU9biH/kZ1fl/wCkoKKKyJPFWiReKYfDbajEdYniaZbNcs4RRklsDC8HjdjPbNdJ4Rr0Vg3vjbQdP1Q2F5dTRyCdLdpvscxt0lfG1GnCeWrHcvBYH5h61vUAFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQAUVDd3ltp9nLd39xFa20Kl5ZpnCIijqSx4A+tVNA17TfE+h22saHc/arC6DGGby2Tdhip4YAjkEcigDRooooA5ux/5Knrv/YF03/0ffUUWP8AyVPXf+wLpv8A6PvqKAMO8/5Kjrf/AGDLH/0O5q9VG8/5Kjrf/YMsf/Q7mr1YPc8+fxMKiuLWC7i8q7gjnj3BtkqBhkHIOD3BAI9xUtQXljaajatbahaw3Vu+N0U8YdGwcjIPHWkSc/8ADv8A5EWz/wCutx/6Pkrp6o6domlaQZDpOmWdiZceYba3WPfjpnaBnGT+dXqACsS1/wCR91X/ALBll/6Nuq26xLX/AJH3Vf8AsGWX/o26oA26KKKAOT1S1gt/iN4deCCOJplvZJWRADI3lxjc2OpwAMn0FGvW0EPjzwtNDBHHLPd3DSuqANIRaOAWPfAAHPYVr3PhfQL27e6vND024uHOXmltI2dj6kkZNLeeGNB1G7e61DRNOuriTG+ae0jd2wMDJIyeAB+FAGpRSKAqhVAAAwAO1LQBiWv/ACPuq/8AYMsv/Rt1W3WJa/8AI+6r/wBgyy/9G3VbdABXMeNfl/4R+WQgW8WswNMzHAA2uFJ/4GU/HFdPUVxbQXltJb3cMc8Mi7XilQMrj0IPBFAHPWG2X4m6xJBgpFp1rFOQeku+VgD77Cp+hHrXTVWsdOstMtvs+m2dvZwZLeVbxLGuT1OAMVZoAK8p+KH/ACM9v/15r/6G9erV5T8UP+Rnt/8ArzX/ANDeufE/wz6fhX/kaQ9H+R9EUUUV6B5RBfXtvpun3N9eyLFbWsTTTSMcBEUEsT9ADXL/AA4s528PzeINRjKah4inOozK33o42AEEZ/3YhGMeua6m7s7bULOW0v7eK6tplKSwzIHR1PUFTwR9alVVRQqAKqjAAGABQAtFFFAHN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAVwmuWVrafGDwhJa20MD3KalLO0cYUyv5UI3MR1OABk9gK7usO98EeFNRv5L3UPDGjXd3K26S4n0+J5HPqWK5J4oA5X4pSXU3ha8vv7TsbrQdPuYHvNNhjK3Fw8cqnyRPvYAl9vyeXknC7huyPRVbcgbBGRnBHIrLk8LeH5tbGszaFpsmqBlYXzWcZnBAAB8zG7IAAHPQVq0AFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAUda1mx8P6PPqeqTeVbQDLEDLMScKqgcsxJAAHJJArE8EaVfw/2trutwC11DXboXL2gIJtoljWOKNiOC4RAWPqSOgzW7qekabrdn9k1nT7XULbcG8m7gWVMjodrAjNQaR4a0Lw+0p0HRdP0wzYEpsrVIfMxnG7aBnGT19TQBp0UUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAVwmuWVrafGDwhJa20MD3KalLO0cYUyv5UI3MR1OABk9gK7usO98EeFNRv5L3UPDGjXd3K26S4n0+J5HPqWK5J4oA8z8dnWV1K51XVvDWpO/9tafa6fNHNamFbaO7jYBQZg2+VxuJZR/yzBIC5r2WJ2khR3jaJmUExuRuQ+hwSMj2JFMurO2voljvbeG4RZFkVZUDgOpDKwB7ggEHsRU1ABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAUda1mx8P6PPqeqTeVbQDLEDLMScKqgcsxJAAHJJArE8EaVfw/2trutwC11DXboXL2gIJtoljWOKNiOC4RAWPqSOgzW7qekabrdn9k1nT7XULbcG8m7gWVMjodrAjNQaR4a0Lw+0p0HRdP0wzYEpsrVIfMxnG7aBnGT19TQBp1keLf8AkSdc/wCwfcf+i2rXrI8W/wDIk65/2D7j/wBFtUz+Fm+G/jw9V+Z5x8CP+Y9/27/+1a9eryH4Ef8AMe/7d/8A2rXr1YYX+Cv66nrcQ/8AIzq/L/0lBXCa5ZWtp8YPCElrbQwPcpqUs7RxhTK/lQjcxHU4AGT2Aru6w73wR4U1G/kvdQ8MaNd3crbpLifT4nkc+pYrkniuk8I5X4pSXU3ha8vv7TsbrQdPuYHvNNhjK3Fw8cqnyRPvYAl9vyeXknC7huyPRVbcgbBGRnBHIrLk8LeH5tbGszaFpsmqBlYXzWcZnBAAB8zG7IAAHPQVq0AFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAQXdla6hB5F/bQ3MW9X8uaMOu5SGU4PcEAg9iAa5H4Rf8kw07/rvd/wDpVLXV6jplhrFi9lq1lb31pJgvBcxLJG2DkZVgQcEA1W0jw1oXh9pToOi6fphmwJTZWqQ+ZjON20DOMnr6mgDTooooA5ux/wCSp67/ANgXTf8A0ffUUWP/ACVPXf8AsC6b/wCj76igDDvP+So63/2DLH/0O5q9VG8/5Kjrf/YMsf8A0O5q9WD3PPn8TCiiikSFFFFABWJa/wDI+6r/ANgyy/8ARt1W3WJa/wDI+6r/ANgyy/8ARt1QBt0UUUAFFFFABRRRQBiWv/I+6r/2DLL/ANG3VbdYlr/yPuq/9gyy/wDRt1W3QAUUUUAFFFFABXlPxQ/5Ge3/AOvNf/Q3r1avKfih/wAjPb/9ea/+hvXPif4Z9Pwr/wAjSHo/yPoiiiivQPKCiiigAooooA5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++rpKACiiigAooooAK5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++oA6SiiigAooooAKKKKAObsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgAooooAKKKKACubsf+Sp67/wBgXTf/AEffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKKKACsjxb/wAiTrn/AGD7j/0W1a9ZHi3/AJEnXP8AsH3H/otqmfws3w38eHqvzPOPgR/zHv8At3/9q169XkPwI/5j3/bv/wC1a9erDC/wV/XU9biH/kZ1fl/6SgooorpPCCiiigArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA6SiiigAooooAKKKKAObsf8Akqeu/wDYF03/ANH31FFj/wAlT13/ALAum/8Ao++ooA5bXdF0vV/ijq39rabZ33laZZeX9pgWTZl7jONwOM4H5Cj/AIQvwv8A9C3pH/gBF/8AE1dvP+So63/2DLH/ANDuavVg9zz5/EzE/wCEL8L/APQt6R/4ARf/ABNH/CF+F/8AoW9I/wDACL/4mtuikSYn/CF+F/8AoW9I/wDACL/4mj/hC/C//Qt6R/4ARf8AxNbdFAGJ/wAIX4X/AOhb0j/wAi/+JrItvCXhxvGupQN4f0swpp9o6xmyj2qzSXIJAxwSFXJ9h6V2VYlr/wAj7qv/AGDLL/0bdUAH/CF+F/8AoW9I/wDACL/4mj/hC/C//Qt6R/4ARf8AxNbdFAGJ/wAIX4X/AOhb0j/wAi/+Jo/4Qvwv/wBC3pH/AIARf/E1t0UAYn/CF+F/+hb0j/wAi/8AiaP+EL8L/wDQt6R/4ARf/E1t0UAcbbeEvDjeNdSgbw/pZhTT7R1jNlHtVmkuQSBjgkKuT7D0rX/4Qvwv/wBC3pH/AIARf/E0Wv8AyPuq/wDYMsv/AEbdVt0AYn/CF+F/+hb0j/wAi/8AiaP+EL8L/wDQt6R/4ARf/E1t0UAYn/CF+F/+hb0j/wAAIv8A4mj/AIQvwv8A9C3pH/gBF/8AE1t0UAYn/CF+F/8AoW9I/wDACL/4mvOviDplhpPiCCDS7G2soWtVdo7aFY1LbmGcKBzgDn2r2CvKfih/yM9v/wBea/8Aob1z4n+GfT8K/wDI0h6P8j2T/hXHgj/oTfD/AP4K4P8A4mj/AIVx4I/6E3w//wCCuD/4mukor0Dyjm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDzuz8A+D2+JOs2reE9DNvHpNhIkR02HYrNNeBmA24BIRQT32j0FdB/wrjwR/0Jvh/wD8FcH/AMTRY/8AJU9d/wCwLpv/AKPvq6SgDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDia5+z8A+D2+JOs2reE9DNvHpNhIkR02HYrNNeBmA24BIRQT32j0FeiVzdj/yVPXf+wLpv/o++oAP+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDzuz8A+D2+JOs2reE9DNvHpNhIkR02HYrNNeBmA24BIRQT32j0FdB/wrjwR/0Jvh/wD8FcH/AMTRY/8AJU9d/wCwLpv/AKPvq6SgDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDia5+z8A+D2+JOs2reE9DNvHpNhIkR02HYrNNeBmA24BIRQT32j0FeiVzdj/yVPXf+wLpv/o++oAP+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/ia6SigDm/+FceCP+hN8P8A/grg/wDiazPEvgHwfZ+FNWurPwnocFxDZTSRSxabCrxsEJDKQuQQRkEV29ZHi3/kSdc/7B9x/wCi2qZ/CzfDfx4eq/M8m+D/AIc0PxB/bH9vaNp+p+R5HlfbbVJvL3eZnbuBxnAzj0Femf8ACuPBH/Qm+H//AAVwf/E1wvwI/wCY9/27/wDtWvXqwwv8Ff11PW4h/wCRnV+X/pKOb/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JrpKK6Twjm/+FceCP8AoTfD/wD4K4P/AImj/hXHgj/oTfD/AP4K4P8A4mukooA5v/hXHgj/AKE3w/8A+CuD/wCJrn7PwD4Pb4k6zat4T0M28ek2EiRHTYdis014GYDbgEhFBPfaPQV6JXN2P/JU9d/7Aum/+j76gA/4Vx4I/wChN8P/APgrg/8AiaP+FceCP+hN8P8A/grg/wDia6SigDm/+FceCP8AoTfD/wD4K4P/AImj/hXHgj/oTfD/AP4K4P8A4mukooA5v/hXHgj/AKE3w/8A+CuD/wCJo/4Vx4I/6E3w/wD+CuD/AOJrpKKAON8OaLpWg/EnX7XQ9Ms9Nt30nTpGis7dYUZjNegsQoAzgAZ9hRV6x/5Knrv/AGBdN/8AR99RQBh3n/JUdb/7Blj/AOh3NXqo3n/JUdb/AOwZY/8AodzV6sHuefP4mFFFcjfDUrb4l6P5uqzSWl3HdbbNBsiRURMZAPztkk5PTjAHOUSddRXB+K9Tv7zUIX066ntrDTdStLeR4ZCn2mZ5kDocdUVDgjoWYj+Gu8oAKxLX/kfdV/7Bll/6Nuq26xLX/kfdV/7Bll/6NuqANuiiigAoqjrMcUmlyC4lvIoVIZzY7/NYA9B5YL8/7POKw/BN09w+sos909nDe7LWG+kdriJNi53hzvUFtxUPzj2IoA6qiiigDEtf+R91X/sGWX/o26rbrEtf+R91X/sGWX/o26rboAKKKrX9kNQtTbvPcQIzAsbeUxuwBzt3D5gD7EH3oAs0VzPg6WSSXWVhuri60uG9MVlLcStKxARfMAdiSyiTcAST0I7V01ABXlPxQ/5Ge3/681/9DevVq8p+KH/Iz2//AF5r/wChvXPif4Z9Pwr/AMjSHo/yPoiiiivQPKCiqWq6Vb6xaC2u5LuNA4cG0vZrV8gEffiZWxz0zj8q5L4bwtPc6/q1veahNpNxem106K81Ce6xHBlHlBldiN8m/p/Cq0Ad1RRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRVLV7a+vNMlt9K1D+zbl8BbryBKYxkbsK3G7GQCcgHBIOMEAu0VxvwmuLq5+GOmPf3tzfTiS4Rri7lMksgW4kUFmPJOABXZUAFc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffUAdJRRRQAUVyXxBv7u3tNE02yuZbU61q8NhNPCxWRIiryPsYcqxWMqGHI3ZGCAah8O/aNH+I2seHEvLu607+zrbULZby5kuJIGd5Y3USSFnKnyg2CTgk460AdnRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRXIfEnUZtN0Gwb7XPYWE+pQQalewOUa3tmJ3NvHMYLbVLjBUMTkdaAOvorz/4fa5bXfi3xLo+j6y+s6PZpa3FpcNeNd+WZRIHjEzFi4BjyMscEsM8YHoFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAFFUtV0q31i0FtdyXcaBw4NpezWr5AI+/EytjnpnH5VyXw3hae51/Vre81CbSbi9Nrp0V5qE91iODKPKDK7Eb5N/T+FVoA7qsjxb/wAiTrn/AGD7j/0W1a9ZHi3/AJEnXP8AsH3H/otqmfws3w38eHqvzPOPgR/zHv8At3/9q169XkPwI/5j3/bv/wC1a9erDC/wV/XU9biH/kZ1fl/6Sgooqnqumrq1ibSS6u7aNnUu1nOYZGAOdu9fmUHuVIPvXSeEXKK4v4eTzTT+Ikt727vtEt9SMOmz3c7TuQsaiUCVyWdBLvAJJ6EZ4rtKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKACiuB1MaxZ/Gfw8Z9cuJbC/ivdmnRr5UMaxxx43AEmR9xY7m4HAAHJLPH9pJpf2bUNL1fVhr99qdvDYW63snktl1Dx/ZwRGYxGHZmZSRyd3AoA9BooooA5ux/5Knrv/AGBdN/8AR99RRY/8lT13/sC6b/6PvqKAMO8/5Kjrf/YMsf8A0O5q9VG8/wCSo63/ANgyx/8AQ7mr1YPc8+fxMK5zU9A1i98SWeq2+rWMK2IlWCF9PdziQKG3MJhk/LxgD8a6OikSc1rngTQ9ZQMNM0+C4a6juJbj7EjPLtkDurHgndggknuetdHHGkUaxxIqIgCqqjAUDoAKdRQAViWv/I+6r/2DLL/0bdVt1iWv/I+6r/2DLL/0bdUAbdFFFAFTUYL2e2A0y8S0nVwweSDzUYd1ZcqcH2YHOOeoNPRtFlsL+/1G/u1u7++8tZXih8qNUjBCKqFmI+8xJLEkn0wK16KACiiigDEtf+R91X/sGWX/AKNuq26xLX/kfdV/7Bll/wCjbqtugArM8Q6beavos1jp+of2fJNgNP5Rc7M/MowykZHGQcjPHPNadFAGZomn3umWotbqewe3iRUgisrJrcRgduZHz29PxrToooAK8p+KH/Iz2/8A15r/AOhvXq1eU/FD/kZ7f/rzX/0N658T/DPp+Ff+RpD0f5H0RRRRXoHlFLWrO61HQ72y0+9+wXVxA8UV15fmeQzAgOFyMkZyOaTQ9IttA0Cw0ixXbb2NulvH6kKoGT7nGTV6igAooooA5ux/5Knrv/YF03/0ffV0lc3Y/wDJU9d/7Aum/wDo++rpKACquox38ti6aTc29rdnGyW5t2njXnnKK6E8Z/iH49KtUUAcz4F8M6n4S0MaTf6raajbxM7wNDYtbupeR3bcTK4bl+MAYA7101FFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAYvijw9/wkWmwRRXX2O8s7qO8s7nyxIIpkPBKkjcpBIIyMgnkdai0Dw5c6drGo6zrGoR6hqmoLFE7wWxgiiiiDbERC7kcu7Eljkt2AAG/RQAUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABVTU49Rlsiuj3Vra3W4YkurZp0A7jYsiHPvuq3RQBi+H/AA/JpM9/f6heC/1TUpFe5uFh8pAqDakaJklUUZ4LMcsxJ5wNqiigArm7H/kqeu/9gXTf/R99XSVzdj/yVPXf+wLpv/o++oA6SiiigClrVndajod7Zafe/YLq4geKK68vzPIZgQHC5GSM5HNJoekW2gaBYaRYrtt7G3S3j9SFUDJ9zjJq9RQAVkeLf+RJ1z/sH3H/AKLatesjxb/yJOuf9g+4/wDRbVM/hZvhv48PVfmecfAj/mPf9u//ALVr16vIfgR/zHv+3f8A9q169WGF/gr+up63EP8AyM6vy/8ASUFYvi3RtR8QeG7jTNJ1b+yJrghXufIMp8vPzKAHQjcONwIIBOMHBG1RXSeEYvhrSdS0WxFle3OlyWkEax2sOnac9osKjPB3TSZ7dMY565raoooAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooA4/WvCviHUvGOna5aa9plsumCZbW3k0mSQ7ZVUNvYXC7j8vBAXr0NR3PhHxC3ja68RWuvaWzvGIbOK90iSb7FFgbljK3CDLHlmxk8DoAB2lFACLuCjeQWxyQMAn6UtFFAHN2P/JU9d/7Aum/+j76iix/5Knrv/YF03/0ffUUAYd5/wAlR1v/ALBlj/6Hc1erE12LVJfijq39k3lnbY0yy8z7TaNPu+e4xjbImO/rnjpjk+y+KP8AoMaR/wCCmX/5JrB7nnz+Jm3RWJ9l8Uf9BjSP/BTL/wDJNH2XxR/0GNI/8FMv/wAk0iTborE+y+KP+gxpH/gpl/8Akmj7L4o/6DGkf+CmX/5JoA26xLX/AJH3Vf8AsGWX/o26o+y+KP8AoMaR/wCCmX/5JrItrbxH/wAJrqQXVdLEw0+0LOdMkKlfMucAL9o4IO7Jyc5HAxyAdlRWJ9l8Uf8AQY0j/wAFMv8A8k0fZfFH/QY0j/wUy/8AyTQBt0VifZfFH/QY0j/wUy//ACTR9l8Uf9BjSP8AwUy//JNAG3RWJ9l8Uf8AQY0j/wAFMv8A8k0fZfFH/QY0j/wUy/8AyTQAWv8AyPuq/wDYMsv/AEbdVt1xttbeI/8AhNdSC6rpYmGn2hZzpkhUr5lzgBftHBB3ZOTnI4GOdf7L4o/6DGkf+CmX/wCSaANuisT7L4o/6DGkf+CmX/5Jo+y+KP8AoMaR/wCCmX/5JoA26KxPsvij/oMaR/4KZf8A5Jo+y+KP+gxpH/gpl/8AkmgDbryn4of8jPb/APXmv/ob13f2XxR/0GNI/wDBTL/8k1518QY7+PxBANUuba5m+yqVe2t2hULubjazvznPOfwrnxP8M+n4V/5GkPR/kfSVFc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JlegeUdJRXN/YfG/wD0MPh//wAEM/8A8mUfYfG//Qw+H/8AwQz/APyZQB0lFc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JlABY/8lT13/sC6b/6Pvq6SvO7Oz8Y/8LJ1lV13QxcDSbAvIdFmKMvnXm0BftWQQQ2Tk5yOBgk9B9h8b/8AQw+H/wDwQz//ACZQB0lFc39h8b/9DD4f/wDBDP8A/JlH2Hxv/wBDD4f/APBDP/8AJlAHSUVzf2Hxv/0MPh//AMEM/wD8mUfYfG//AEMPh/8A8EM//wAmUAdJXN2P/JU9d/7Aum/+j76j7D43/wChh8P/APghn/8Akyufs7Pxj/wsnWVXXdDFwNJsC8h0WYoy+debQF+1ZBBDZOTnI4GCSAeiUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlAHSUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlAHSUVzf2Hxv/wBDD4f/APBDP/8AJlH2Hxv/ANDD4f8A/BDP/wDJlABY/wDJU9d/7Aum/wDo++rpK87s7Pxj/wALJ1lV13QxcDSbAvIdFmKMvnXm0BftWQQQ2Tk5yOBgk9B9h8b/APQw+H//AAQz/wDyZQB0lFc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZQB0lFc39h8b/wDQw+H/APwQz/8AyZR9h8b/APQw+H//AAQz/wDyZQB0lc3Y/wDJU9d/7Aum/wDo++o+w+N/+hh8P/8Aghn/APkyufs7Pxj/AMLJ1lV13QxcDSbAvIdFmKMvnXm0BftWQQQ2Tk5yOBgkgHolFc39h8b/APQw+H//AAQz/wDyZR9h8b/9DD4f/wDBDP8A/JlAHSUVzf2Hxv8A9DD4f/8ABDP/APJlH2Hxv/0MPh//AMEM/wD8mUAdJWR4t/5EnXP+wfcf+i2ql9h8b/8AQw+H/wDwQz//ACZWZ4ls/GK+FNWa813Q5bcWUxlji0WZHZdhyFY3TBSR0JBx6HpUz+Fm+G/jw9V+ZzHwI/5j3/bv/wC1a9erw/4Pwa5N/bH9g6jp9ljyPN+22D3O/wD1mNu2aPbjnOc5yOmOfTPsPjf/AKGHw/8A+CGf/wCTKwwv8Ff11PW4h/5GdX5f+ko6Siub+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkyuk8I6Siub+w+N/8AoYfD/wD4IZ//AJMo+w+N/wDoYfD/AP4IZ/8A5MoA6Subsf8Akqeu/wDYF03/ANH31H2Hxv8A9DD4f/8ABDP/APJlc/Z2fjH/AIWTrKrruhi4Gk2BeQ6LMUZfOvNoC/asgghsnJzkcDBJAPRKK5v7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TKAOkorm/sPjf8A6GHw/wD+CGf/AOTKPsPjf/oYfD//AIIZ/wD5MoA6Siub+w+N/wDoYfD/AP4IZ/8A5Mo+w+N/+hh8P/8Aghn/APkygAsf+Sp67/2BdN/9H31FUfDkWqw/EnX11y8s7y4/snTislnaNboF869wCrSSEnOecjqOOMkoAo3n/JUdb/7Blj/6Hc1eqjef8lR1v/sGWP8A6Hc1erB7nnz+JhRRRSJCiiigArEtf+R91X/sGWX/AKNuq26xLX/kfdV/7Bll/wCjbqgDbooooAKKKKACiiigDEtf+R91X/sGWX/o26rbrEtf+R91X/sGWX/o26rboAKKKKACiiigAryn4of8jPb/APXmv/ob16tXlPxQ/wCRnt/+vNf/AEN658T/AAz6fhX/AJGkPR/kfRFFFFegeUFFFFABRRRQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFABRRRQAVkeLf8AkSdc/wCwfcf+i2rXrI8W/wDIk65/2D7j/wBFtUz+Fm+G/jw9V+Z5x8CP+Y9/27/+1a9eryH4Ef8AMe/7d/8A2rXr1YYX+Cv66nrcQ/8AIzq/L/0lBRRRXSeEFFFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAFFFFABRRRQBzdj/AMlT13/sC6b/AOj76iix/wCSp67/ANgXTf8A0ffUUAYd5/yVHW/+wZY/+h3NXqo3n/JUdb/7Blj/AOh3NXqwe558/iYVV1Ge6trF5LCz+23AwEh80RhiTjJY9AOp4JwOATxVqoLy4ktbVpYLSa8dcYhgKB257b2Vffk0iTL8H6vd654VtNQ1JIEupDIsi24ITKyMnGST/DW3XM+BINQsPDken6pplxYywPI26WSJlk3yuw27HY8AjOQPbNdNQAViWv8AyPuq/wDYMsv/AEbdVt1iWv8AyPuq/wDYMsv/AEbdUAbdFFFAGF4v1qfQdBF5bSW0Tm5hhMt0paONXkVWZgGXgAk9R0qzoN5Jf2LTvq2naqhfCTadHsjGOoP7x8n8R9Ks6jdXVpbrLZ2El+28B4opERwvqN5CnBxwSOM/Q5Hh3TrtNc1nWLu0NgNSaEJaM6s6+WpBd9hK7myOhPCjJ7AA6KiiigDEtf8AkfdV/wCwZZf+jbqtusS1/wCR91X/ALBll/6Nuq26ACubn17VYfHVjpL2EMOnXSTbZnk3SymNVbcADhVy2Ock4PA4z0lclrP9qSeNdJvbbQL64tdPW4SSVJbcCTzFQAqGlBwNpzkD8aAI08TXdx4v1HSv7a0Ww+y3UcMNrcwlp7gNGj5H75ecsQMKeneuxrk/FUGq+IdJvtBj0ORBcMEjv5J4jCi5BEuN3mbhjgbOo645rq1G1QMk4GMnvQAteU/FD/kZ7f8A681/9DevVq8p+KH/ACM9v/15r/6G9c+J/hn0/Cv/ACNIej/I+iKKKK9A8op6oNSaxZdEe0iu2ZQJLtGeNFz8x2KQWOM4G5ee4rE8G+INQ1i612w1U2lxNo9/9kN5YxtHDOfLRyAjMxVl37WG48itHxIGfRXi/sFdfgldUuLAtEDJGepAlIRiDg7WZeM85ABxPAui3ul32sz/ANmNoWj3TxfYNGMkZ+zFVPmuFjZo497MDsQkfLuPLGgDsaKKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAKwfGXiZfCnh434SF5pJo7aBbiXyog7sAGd8HaijLMcdFNb1cv4+0S71nRbGTTbaO8utL1K31FLWRgvn+U+WQE8BipOCeM4zjrQBZ8J6rJrFnPcHxHomvxLIEWbRodiRnGSrHzpcnkHqMe+a365Hw1pmoy+NNc8S6hpz6TFf29taxWk0kbTN5XmEySeWzICfM2jDE4XnGcV11ABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAGD4y8TL4U8PG/CQvNJNHbQLcS+VEHdgAzvg7UUZZjjoppPCeqyaxZz3B8R6Jr8SyBFm0aHYkZxkqx86XJ5B6jHvmq3j7RLvWdFsZNNto7y60vUrfUUtZGC+f5T5ZATwGKk4J4zjOOtQ+GtM1GXxprniXUNOfSYr+3trWK0mkjaZvK8wmSTy2ZAT5m0YYnC84zigDrqKKKAObsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76ukoAK5j4g+I7nwt4VGo2UtnA5vLa3ae+QtDCkkyozsAy8KGJ+8OldPVDV7290+0SbTtKm1V/MCyQQTRxyBDnLL5jKpIOOCy8Z54wQCn4W1GXVdMe6fXtH12MyFY7nSITHEMDlT++lyc+4+lbdch4Q0e/i8T+I/EN/p50pdYa3WOweRHkXyVZTJJ5ZZAz7hwGbhVyc8Dr6ACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooApavdX1npks2laf8A2ldjAjtvOWEMSQMl26KM5JAJwDgE4FY/w91/UPE/gWw1bWY7aO+maZJltFYRApK6fKGJOML3Nbeo3c1lYvPbafcajIuMW1s0ayPk44MjovHXlh0/CuV+F1rq2leD4tI1zRLvTJ7WSZ980sDpKJJpHG3y5GPAYZ3AcnjNAHaVkeLf+RJ1z/sH3H/otq16yPFv/Ik65/2D7j/0W1TP4Wb4b+PD1X5nnHwI/wCY9/27/wDtWvXq8h+BH/Me/wC3f/2rXr1YYX+Cv66nrcQ/8jOr8v8A0lBXHXXinXbf4oaXoMml29to96lzsuZJd807RIjblVThEy+PmyxweFGM9jXBeI/7cl+JGg6lZeFdTu7LSUu45Z457RRL5qIFKB51bAKnO4KfQGuk8Ij1Pxn4ha08Sa3ocOnnSfDk0kMlrcQu098YVDTlJA4WLGWVQUfJQk9cDvLW5jvLOG5hyY5o1kTIwcEZH8684vtC8R2Wl+LvDel6M91F4guZ5bXU/tESw2y3KhZPNVmEmUJdhtVtw2jjnHo1nbJZWNvaxklIIljUnqQox/SgCaubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAMHxl4mXwp4eN+EheaSaO2gW4l8qIO7ABnfB2ooyzHHRTSeE9Vk1iznuD4j0TX4lkCLNo0OxIzjJVj50uTyD1GPfNVvH2iXes6LYyabbR3l1pepW+opayMF8/ynyyAngMVJwTxnGcdah8NaZqMvjTXPEuoac+kxX9vbWsVpNJG0zeV5hMknlsyAnzNowxOF5xnFAHXUUUUAc3Y/8lT13/sC6b/6PvqKLH/kqeu/9gXTf/R99RQBh3n/ACVHW/8AsGWP/odzV6qN5/yVHW/+wZY/+h3NXqwe558/iYUUUUiQooooAKxLX/kfdV/7Bll/6Nuq26xLX/kfdV/7Bll/6NuqANuiiigAooooAKKKKAMS1/5H3Vf+wZZf+jbqtusS1/5H3Vf+wZZf+jbqtugAooooAKKKKACvKfih/wAjPb/9ea/+hvXq1eU/FD/kZ7f/AK81/wDQ3rnxP8M+n4V/5GkPR/kfRFFec/8AC7vDf/Plqn/fqP8A+OUf8Lu8N/8APlqn/fqP/wCOV0/WKX8w/wCxcw/59M9Gorzn/hd3hv8A58tU/wC/Uf8A8co/4Xd4b/58tU/79R//AByj6xS/mD+xcw/59M9Gorzn/hd3hv8A58tU/wC/Uf8A8co/4Xd4b/58tU/79R//AByj6xS/mD+xcw/59M6Kx/5Knrv/AGBdN/8AR99XSV5FbfFjQofGmpau1pqBt7rT7S1RRGm8NFJcMxI34xiZcc9j04zr/wDC7vDf/Plqn/fqP/45R9YpfzB/YuYf8+mejUV5z/wu7w3/AM+Wqf8AfqP/AOOUf8Lu8N/8+Wqf9+o//jlH1il/MH9i5h/z6Z6NRXnP/C7vDf8Az5ap/wB+o/8A45R/wu7w3/z5ap/36j/+OUfWKX8wf2LmH/Ppno1c3Y/8lT13/sC6b/6Pvq53/hd3hv8A58tU/wC/Uf8A8crItvixoUPjTUtXa01A291p9paoojTeGikuGYkb8YxMuOex6cZPrFL+YP7FzD/n0z12ivOf+F3eG/8Any1T/v1H/wDHKP8Ahd3hv/ny1T/v1H/8co+sUv5g/sXMP+fTPRqK85/4Xd4b/wCfLVP+/Uf/AMco/wCF3eG/+fLVP+/Uf/xyj6xS/mD+xcw/59M9Gorzn/hd3hv/AJ8tU/79R/8Axyj/AIXd4b/58tU/79R//HKPrFL+YP7FzD/n0zorH/kqeu/9gXTf/R99XSV5FbfFjQofGmpau1pqBt7rT7S1RRGm8NFJcMxI34xiZcc9j04zr/8AC7vDf/Plqn/fqP8A+OUfWKX8wf2LmH/Ppno1Fec/8Lu8N/8APlqn/fqP/wCOUf8AC7vDf/Plqn/fqP8A+OUfWKX8wf2LmH/Ppno1Fec/8Lu8N/8APlqn/fqP/wCOUf8AC7vDf/Plqn/fqP8A+OUfWKX8wf2LmH/Ppno1c3Y/8lT13/sC6b/6Pvq53/hd3hv/AJ8tU/79R/8Axysi2+LGhQ+NNS1drTUDb3Wn2lqiiNN4aKS4ZiRvxjEy457Hpxk+sUv5g/sXMP8An0z12ivOf+F3eG/+fLVP+/Uf/wAco/4Xd4b/AOfLVP8Av1H/APHKPrFL+YP7FzD/AJ9M9Gorzn/hd3hv/ny1T/v1H/8AHKP+F3eG/wDny1T/AL9R/wDxyj6xS/mD+xcw/wCfTPRqyPFv/Ik65/2D7j/0W1ch/wALu8N/8+Wqf9+o/wD45VDXPjBoGp+HdRsILPUllurWWFC8UYUMyEDOH6c0pV6Ti9Tahk+PjWjJ0nZNfmVvgR/zHv8At3/9q169XkPwI/5j3/bv/wC1a9epYX+Cv66j4h/5GdX5f+koKKKK6TwgooooAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAooooAKKKKAObsf+Sp67/wBgXTf/AEffUUWP/JU9d/7Aum/+j76igDJvNEm1f4p6v9n1m90vy9G08t9kitn80ma8+950UnTb2x15zxi//wAIXe/9DlrX/gJp3/yLU9j/AMlT13/sC6b/AOj76ukoFZHKf8IXe/8AQ5a1/wCAmnf/ACLR/wAIXe/9DlrX/gJp3/yLXV0UWCyOU/4Qu9/6HLWv/ATTv/kWj/hC73/octa/8BNO/wDkWuroosFkcp/whd7/ANDlrX/gJp3/AMi1g2fhK8b4jaxb/wDCW6wDHpVg5lFtYbm3TXY2kfZtuBtyMAH5jknCgek1zdj/AMlT13/sC6b/AOj76iwWRB/whd7/ANDlrX/gJp3/AMi0f8IXe/8AQ5a1/wCAmnf/ACLXV0UWCyOU/wCELvf+hy1r/wABNO/+RaP+ELvf+hy1r/wE07/5Frq6KLBZHKf8IXe/9DlrX/gJp3/yLR/whd7/ANDlrX/gJp3/AMi11dFFgsjzaz8JXjfEbWLf/hLdYBj0qwcyi2sNzbprsbSPs23A25GAD8xyThQN7/hC73/octa/8BNO/wDkWp7H/kqeu/8AYF03/wBH31dJRYLI5T/hC73/AKHLWv8AwE07/wCRaP8AhC73/octa/8AATTv/kWuroosFkcp/wAIXe/9DlrX/gJp3/yLR/whd7/0OWtf+Amnf/ItdXRRYLI5T/hC73/octa/8BNO/wDkWuPv/hnF4k+IF/Zav4m1qVbLS7OaKREs42JlluQwO23AIHlLjjPJyTxj1uubsf8Akqeu/wDYF03/ANH31S4xkrNGtKpOjLnpNxfdaP8AA5D/AIUHon/QxeIP++7X/wCMUf8ACg9E/wChi8Qf992v/wAYr1Oip9lT/lX3HX/aWO/5/S/8Cf8AmeWf8KD0T/oYvEH/AH3a/wDxij/hQeif9DF4g/77tf8A4xXqdFHsqf8AKvuD+0sd/wA/pf8AgT/zPLP+FB6J/wBDF4g/77tf/jFH/Cg9E/6GLxB/33a//GK9Too9lT/lX3B/aWO/5/S/8Cf+Z4rbfBjS5vGmpaQ3iDXBb2un2l0jBrbeWlkuFYE+TjGIVxx3PXjGv/woPRP+hi8Qf992v/xiuvsf+Sp67/2BdN/9H31dJR7Kn/KvuD+0sd/z+l/4E/8AM8s/4UHon/QxeIP++7X/AOMUf8KD0T/oYvEH/fdr/wDGK9Too9lT/lX3B/aWO/5/S/8AAn/meWf8KD0T/oYvEH/fdr/8Yo/4UHon/QxeIP8Avu1/+MV6nRR7Kn/KvuD+0sd/z+l/4E/8zyz/AIUHon/QxeIP++7X/wCMVkW3wY0ubxpqWkN4g1wW9rp9pdIwa23lpZLhWBPk4xiFccdz14x7VXN2P/JU9d/7Aum/+j76j2VP+VfcH9pY7/n9L/wJ/wCZyH/Cg9E/6GLxB/33a/8Axij/AIUHon/QxeIP++7X/wCMV6nRR7Kn/KvuD+0sd/z+l/4E/wDM8s/4UHon/QxeIP8Avu1/+MUf8KD0T/oYvEH/AH3a/wDxivU6KPZU/wCVfcH9pY7/AJ/S/wDAn/meWf8ACg9E/wChi8Qf992v/wAYo/4UHon/AEMXiD/vu1/+MV6nRR7Kn/KvuD+0sd/z+l/4E/8AM8Vtvgxpc3jTUtIbxBrgt7XT7S6Rg1tvLSyXCsCfJxjEK447nrxjX/4UHon/AEMXiD/vu1/+MV19j/yVPXf+wLpv/o++rpKPZU/5V9wf2ljv+f0v/An/AJnln/Cg9E/6GLxB/wB92v8A8Yo/4UHon/QxeIP++7X/AOMV6nRR7Kn/ACr7g/tLHf8AP6X/AIE/8zyz/hQeif8AQxeIP++7X/4xR/woPRP+hi8Qf992v/xivU6KPZU/5V9wf2ljv+f0v/An/meWf8KD0T/oYvEH/fdr/wDGKyLb4MaXN401LSG8Qa4Le10+0ukYNbby0slwrAnycYxCuOO568Y9qrm7H/kqeu/9gXTf/R99R7Kn/KvuD+0sd/z+l/4E/wDM5D/hQeif9DF4g/77tf8A4xR/woPRP+hi8Qf992v/AMYr1Oij2VP+VfcH9pY7/n9L/wACf+Z5Z/woPRP+hi8Qf992v/xij/hQeif9DF4g/wC+7X/4xXqdFHsqf8q+4P7Sx3/P6X/gT/zPLP8AhQeif9DF4g/77tf/AIxR/wAKD0T/AKGLxB/33a//ABivU6KPZU/5V9wf2ljv+f0v/An/AJnlvhjwFL4f8aazpGjeLNctbddPsrpmCWbu7PJdKQS1uRgCIYwB1Oc8Y67/AIRfV/8Aoe/EH/fjT/8A5Fosf+Sp67/2BdN/9H31dJVpKKsjkqVJ1ZOdRtt9Xqzm/wDhF9X/AOh78Qf9+NP/APkWj/hF9X/6HvxB/wB+NP8A/kWukopmZzf/AAi+r/8AQ9+IP+/Gn/8AyLR/wi+r/wDQ9+IP+/Gn/wDyLXSUUAc3/wAIvq//AEPfiD/vxp//AMi1z9n4c1Q/EnWYh401xXXSbBjMIbHe4M14Ap/0bbgbSRgA/Mck8Y9Erm7H/kqeu/8AYF03/wBH31AB/wAIvq//AEPfiD/vxp//AMi0f8Ivq/8A0PfiD/vxp/8A8i10lFAHN/8ACL6v/wBD34g/78af/wDItH/CL6v/AND34g/78af/APItdJRQBzf/AAi+r/8AQ9+IP+/Gn/8AyLR/wi+r/wDQ9+IP+/Gn/wDyLXSUUAcb4csLnTviTr8V5q15qrtpOnMJrxIVdR516No8qNFxxnkZ5PPTBV6x/wCSp67/ANgXTf8A0ffUUAFj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFc9448Qz+GPDRv7ZYFZriGA3F0CYbVZJAhmkwQdi5yeR9R1oA6GiuU8HeI7/WdT1ywv59P1BNLnjiTUdNiaOGVmTc0e0u+HQ9cOeGXgHiuroAK5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6PvqAOkooooAKKpavdX1npks2laf/AGldjAjtvOWEMSQMl26KM5JAJwDgE4FY/wAPdf1DxP4FsNW1mO2jvpmmSZbRWEQKSunyhiTjC9zQB0tFFFAHN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAUUVT1Uam1iV0R7SO7Z1AlvEZ441z8zbFILHHQbl+tAFyiuZ8Ja7qWpX+uaXrQtJLrR7tYDdWSNHFOrxLICEZmKsA+CNx5Ge9dNQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUVg+MvEy+FPDxvwkLzSTR20C3EvlRB3YAM74O1FGWY46KaTwnqsmsWc9wfEeia/EsgRZtGh2JGcZKsfOlyeQeox75oA36KKKAObsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKKKparFqk1oF0S8tLO43gmS7tGuEK4ORtWSM5zjnd+HoAXaK5LwbrWuatrGv22rXGn3dnplylpDdWdm9uJZgu6YYaWTIUsq5yPmDDtXW0AFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFU9UGpNYsuiPaRXbMoEl2jPGi5+Y7FILHGcDcvPcVieDfEGoaxda7YaqbS4m0e/+yG8sY2jhnPlo5ARmYqy79rDceRQB09FFFAHN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAUUVT1Uam1iV0R7SO7Z1AlvEZ441z8zbFILHHQbl+tAFyiuZ8Ja7qWpX+uaXrQtJLrR7tYDdWSNHFOrxLICEZmKsA+CNx5Ge9dNQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUVx114p123+KGl6DJpdvbaPepc7LmSXfNO0SI25VU4RMvj5sscHhRjKat4p12x+Jmg6Iml20WjajLNC95NLulmZbdpR5aKcIoK7SX5JzhQAGIB2VFFFAHN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAUUVz/jDxBcaDp9kmnRRS6hqd9FYWgmz5aSPkl3AIJVVVmIBBO3GRnIAOgormPD+uao3irU/DniH7JLd2dvDeQ3dnC0Mc8MhdeY2dyrK8bD7xyCDxyK6egArm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++oA6SiiigAorjrrxTrtv8AFDS9Bk0u3ttHvUudlzJLvmnaJEbcqqcImXx82WODwoxnOj8a3938QNX0L/hJPDelfYr6K2trG8tme6ulaGNyV/0hOSXKjCHp3oA9CooooA5ux/5Knrv/AGBdN/8AR99RRY/8lT13/sC6b/6PvqKACx/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6Pvq6SgArmPHunanqmgQQaVFLcxi8he+s4JxDJd2oP7yJXJABOQSCyhgCpI3V09FAHE+BdCu9L1zWbmHSJfD2h3AhFpo8ssbbJRuMsqpEzxxK25RtVuSrEgcZ7aiigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKAKuo3c1lYvPbafcajIuMW1s0ayPk44MjovHXlh0/CuV+F1rq2leD4tI1zRLvTJ7WSZ980sDpKJJpHG3y5GPAYZ3AcnjNdpRQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABWL4tvNcsvDdxJ4V03+0dUYhIY96KEycGQ72UNtHO3IycDIzkbVFAHLeBLJtL0mWxfRNUsJPMM893qcls8l9M5JeQmGV+cgdcADaBwMDqaKKACubsf8Akqeu/wDYF03/ANH31dJXN2P/ACVPXf8AsC6b/wCj76gDpKKKKAOX8faJd6zotjJpttHeXWl6lb6ilrIwXz/KfLICeAxUnBPGcZx1qHw1pmoy+NNc8S6hpz6TFf29taxWk0kbTN5XmEySeWzICfM2jDE4XnGcV11FABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABVLWp7620O9m0e0+238cDtbW+9U82TB2qWYgAE4yTV2igDD8G6CfDXhGw0yV/NuUj8y7m/563DkvK/4uzGtyiigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKAMnxIGfRXi/sFdfgldUuLAtEDJGepAlIRiDg7WZeM85ABxPAui3ul32sz/2Y2haPdPF9g0YyRn7MVU+a4WNmjj3swOxCR8u48sa7GigAooooA5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgArF8W3muWXhu4k8K6b/aOqMQkMe9FCZODId7KG2jnbkZOBkZyNqigDlvAlk2l6TLYvomqWEnmGee71OS2eS+mckvITDK/OQOuABtA4GB1NFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAcF4j/tyX4kaDqVl4V1O7stJS7jlnjntFEvmogUoHnVsAqc7gp9AaXxaNbn8eeG73T/C+pX1potzPLNPDPaKJhJbPGNgeZWyGcA7gvQ4zxnvKKAEUllBKlSRkqeo/KloooA5ux/5Knrv/YF03/0ffV0lc3Y/8lT13/sC6b/6Pvq6SgArmPHOj32p2OlXmlQfarvR9Ti1BLbzAhnChkdAzcBikjYyQMgZI6109FAHKeHrDUrvxpq3ibVtPk0xZ7S3sLS0nljeURxtI7O/lsyDLSkABjwuTjOB1dFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAcF4j/tyX4kaDqVl4V1O7stJS7jlnjntFEvmogUoHnVsAqc7gp9AaPHVtrni3QdT8LQ+GZoxduIotVluYDbRKGDCbG/zdy4yFCfeA5x81d7RQAirtQLknAxknk0tFFAHN2P/ACVPXf8AsC6b/wCj76iix/5Knrv/AGBdN/8AR99RQAWP/JU9d/7Aum/+j76ukribnVLvTfinq/2PQtQ1fzNF0/d9ikt18rE97jd50qdc8Yz0OccZ0v8AhKNX/wChE8Qf9/8AT/8A5KoA6Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgDpK5ux/wCSp67/ANgXTf8A0ffUf8JRq/8A0IniD/v/AKf/APJVc/Z+I9UHxJ1mUeC9cZ20mwUwiax3oBNeEMf9J24O4gYJPynIHGQD0Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgDpKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoALH/kqeu/9gXTf/R99XSV53Z+I9UHxJ1mUeC9cZ20mwUwiax3oBNeEMf9J24O4gYJPynIHGeg/wCEo1f/AKETxB/3/wBP/wDkqgDpKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoA6Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkrm7H/AJKnrv8A2BdN/wDR99R/wlGr/wDQieIP+/8Ap/8A8lVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZAPRKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoA6Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgAsf+Sp67/2BdN/9H31dJXndn4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZ6D/AISjV/8AoRPEH/f/AE//AOSqAOkorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgDpKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoA6Subsf8Akqeu/wDYF03/ANH31H/CUav/ANCJ4g/7/wCn/wDyVXP2fiPVB8SdZlHgvXGdtJsFMImsd6ATXhDH/SduDuIGCT8pyBxkA9Eorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgDpKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoA6Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqACx/5Knrv/YF03/0ffV0led2fiPVB8SdZlHgvXGdtJsFMImsd6ATXhDH/SduDuIGCT8pyBxnoP8AhKNX/wChE8Qf9/8AT/8A5KoA6Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgDpK5ux/wCSp67/ANgXTf8A0ffUf8JRq/8A0IniD/v/AKf/APJVc/Z+I9UHxJ1mUeC9cZ20mwUwiax3oBNeEMf9J24O4gYJPynIHGQD0Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgDpKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoALH/kqeu/9gXTf/R99XSV53Z+I9UHxJ1mUeC9cZ20mwUwiax3oBNeEMf9J24O4gYJPynIHGeg/wCEo1f/AKETxB/3/wBP/wDkqgDpKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoA6Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkrm7H/AJKnrv8A2BdN/wDR99R/wlGr/wDQieIP+/8Ap/8A8lVz9n4j1QfEnWZR4L1xnbSbBTCJrHegE14Qx/0nbg7iBgk/KcgcZAPRKK5v/hKNX/6ETxB/3/0//wCSqP8AhKNX/wChE8Qf9/8AT/8A5KoA6Siub/4SjV/+hE8Qf9/9P/8Akqj/AISjV/8AoRPEH/f/AE//AOSqAOkorm/+Eo1f/oRPEH/f/T//AJKo/wCEo1f/AKETxB/3/wBP/wDkqgAsf+Sp67/2BdN/9H31FUfDl/c6j8SdflvNJvNKddJ05RDePCzsPOvTuHlSOuOccnPB46ZKAL1j/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99QB0lFFFABRRRQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABRRRQAUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABRRRQAUUUUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQAUUUUAFFFFAHN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31dJQAUUUUAFFFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRRRQAUUUUAc3Y/8lT13/sC6b/6PvqKLH/kqeu/9gXTf/R99RQAWP8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAVS1W+uNPtBNaaVd6o5cKYLR4VcDB+bMsiLjj1zz0q7VLWtWtdB0O91bUH2WtlA88p/2VBJx6njgUAZvh7xYuv6tqemvpGoaZdaX5X2hLwwMMyKWUAxSOM7QCQcYDL61v1y3w80u5sPCaXuqJt1TWJW1K+B6rJL8wj/4Am1P+AV1NABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAUtVvrjT7QTWmlXeqOXCmC0eFXAwfmzLIi449c89KzfD3ixdf1bU9NfSNQ0y60vyvtCXhgYZkUsoBikcZ2gEg4wGX1rS1rVrXQdDvdW1B9lrZQPPKf9lQScep44FYfw80u5sPCaXuqJt1TWJW1K+B6rJL8wj/4Am1P+AUAdTRRRQBzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffV0lABVHWtZs9A0mXUdSd1gjKriOMu7szBVRVUEszMQAB1Jq9XD/ABXg8zw1ptxNJPFZWesWlxfS27FWigD4d9w5ULkMWHKgEjGM0AdPpGp3epJKbzRL/SShAVb14GMme48qV+nvjrWjXB+BLtJ/FmvxaDqlzqvhqOK2NvczXr3iC5IfzVindmLDaIiRuIVj2JNd5QAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFAGbr2vWnh3S/tt6JZN0iQQQQqGknlc7UjQEgFmJxyQB1JABNV9C8Twa3e31hJZXem6jYbDcWV4E3qjglHBjZ0ZThhkMcFSDg1i/EofZ7Xw7qs3y2Wla5Bd3kmCRFDskjLnH8KmRWJ7AE9qj8N3lr4g+KGua7o00V3pkWmWlgt5AweKeYSTSOEccNtWRASCcE46ggAHcUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABWZr+vWvh7T0urqOadpZkt7e3t0DSTyucKigkDJ9SQAASSAM1p1zHj2zsrjRbS6vtdttBfTr6K7tr67K+Skq5AVwzKGVlZlxuB54PFAF7QfEsGuzXtt9kutPv9PdUurK8CCSPcNyNlGZWVhnBViOCOoIrZrz74ex3uoeLvE3iK41C31K0vEtbS3vLO2aCC4MIkLNGC7llBkC79zAkPg8YHoNABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFAGT4l8RQeGNIF/c2tzdh7iG2jgtQm95JZAiAb2VR8zDkkVPpOo3WowO95o17pLK2BHePAzOMdR5UjjH1IPtWf4zHhx9BWPxjcLbac9xGRM9w9uscqtvRjKhUphlGGJAzgZyQKxPh7dvca34iTS9SudV8NRyQf2bdz3L3IMhVvPVJnJaRAQnO4gEsAeMAA7qiiigDm7H/AJKnrv8A2BdN/wDR99XSVzdj/wAlT13/ALAum/8Ao++rpKACubPjvRz45h8KQfaJ7+RZC8kcX7mFkVXKM5wN+11O1ckZGcZGekrzXxZ4q8PWnxf8Jpd69pkDWUV+l0sl5GpgZ44tofJ+UnsD1oA3tV+IWn6Xc6h/xL9Ru7HSXWPUtStkjaCzYgMQ2XDttVlZtitgN6ggdWrK6hkIZWGQQcgivHrzVbLRfC3xC8NahMg1vUb29Njp5P76+F0gEJiTq4JbaSucbWzjFesaVbPZaPZ2spBeCBI2I6ZVQD/KgC1XN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAU9U1BtNsWuI7G7v5NyolvaIrSOScfxFVA7ksQAO9UvD/iW38QNfQraXVheadOILuzvAnmRMVDryjMpBVgQQxp/iTU7LS9FeXUtXbRYZHWIagAmIGPQlnVkUHplxjJA6kVyvw0kiOr+KF0+8GtafJdxTprpYM17K8eJELLiNhGFjUGMKoB24yGJAPQKKKKAObsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKzNf1628O6YLy7jmmLyxwQwQKGknldgqIoJAySRySAOpIFadcV8VpIx4OiguVjitrm/t4Zr+UsF05S+Rc7lKlSrBcNkAEgngEUAbeg+Jotcu7+yewvNNv9PZBcWl4I96q67kcNG7oynBHDEgqQQK2q84+GTwp4j8TW+m6oviOwaSCf8At8yebJNKysDA8q/I/lqqEBAoUOMgE5Po9ABXN2P/ACVPXf8AsC6b/wCj76ukrm7H/kqeu/8AYF03/wBH31AHSUUUUAUtX1ex0LTJdQ1WfyLaLAZtpYkkhVUKoJZiSAAASSQBVXwr4ktfF3hm01uwgubeC637YrtAkqFXZCGAJAOVPeruo6nYaPYve6te29jaR4Dz3Mqxxrk4GWYgDJIFcR8FtY0zUPh3bWthqNpc3FtNcNPDDOrvEHuZSpZQcrkcjPUUAeg0UUUAc3Y/8lT13/sC6b/6PvqKLH/kqeu/9gXTf/R99RQAWP8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31dJQAUUUUAFFFFABXN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99QB0lFFFABRRRQAUUUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUUUAFFFFABXN2P8AyVPXf+wLpv8A6Pvq6Subsf8Akqeu/wDYF03/ANH31AHSUUUUAFFFFABRRRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFFFFABRRRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUUUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFFFFABRRRQAVzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99QB0lFFFABRRRQAUUUUAc3Y/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABRRRQAUUUUAFc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31AHSUUUUAFFFFABRRRQBzdj/yVPXf+wLpv/o++oosf+Sp67/2BdN/9H31FAGbcz65D8U9X/sHTtPvc6Lp/m/bb97bZ+/vcbdsMm7POc4xgdc8aX27xv/0L3h//AMH0/wD8h0WP/JU9d/7Aum/+j76ukoA5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAOb+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ66SigDm/t3jf/oXvD/8A4Pp//kOufs7zxj/wsnWWXQtDNwdJsA8Z1qYIq+debSG+y5JJLZGBjA5OSB6JXN2P/JU9d/7Aum/+j76gA+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DrpKKAOb+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DrpKKAOb+3eN/8AoXvD/wD4Pp//AJDo+3eN/wDoXvD/AP4Pp/8A5DrpKKAPO7O88Y/8LJ1ll0LQzcHSbAPGdamCKvnXm0hvsuSSS2RgYwOTkgdB9u8b/wDQveH/APwfT/8AyHRY/wDJU9d/7Aum/wDo++rpKAOb+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOukooA5v7d43/AOhe8P8A/g+n/wDkOj7d43/6F7w//wCD6f8A+Q66SigDm/t3jf8A6F7w/wD+D6f/AOQ65+zvPGP/AAsnWWXQtDNwdJsA8Z1qYIq+debSG+y5JJLZGBjA5OSB6JXN2P8AyVPXf+wLpv8A6PvqAD7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOukooA5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOukooA5v7d43/6F7w//wCD6f8A+Q6Pt3jf/oXvD/8A4Pp//kOukooA87s7zxj/AMLJ1ll0LQzcHSbAPGdamCKvnXm0hvsuSSS2RgYwOTkgdB9u8b/9C94f/wDB9P8A/IdFj/yVPXf+wLpv/o++rpKAOb+3eN/+he8P/wDg+n/+Q6Pt3jf/AKF7w/8A+D6f/wCQ66SigDm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA5v7d43/6F7w//AOD6f/5Drn7O88Y/8LJ1ll0LQzcHSbAPGdamCKvnXm0hvsuSSS2RgYwOTkgeiVzdj/yVPXf+wLpv/o++oAPt3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ66SigDm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ66SigDm/t3jf/AKF7w/8A+D6f/wCQ6Pt3jf8A6F7w/wD+D6f/AOQ66SigDzuzvPGP/CydZZdC0M3B0mwDxnWpgir515tIb7LkkktkYGMDk5IHQfbvG/8A0L3h/wD8H0//AMh0WP8AyVPXf+wLpv8A6Pvq6SgDm/t3jf8A6F7w/wD+D6f/AOQ6Pt3jf/oXvD//AIPp/wD5DrpKKAOb+3eN/wDoXvD/AP4Pp/8A5Do+3eN/+he8P/8Ag+n/APkOukooA5v7d43/AOhe8P8A/g+n/wDkOufs7zxj/wALJ1ll0LQzcHSbAPGdamCKvnXm0hvsuSSS2RgYwOTkgeiVzdj/AMlT13/sC6b/AOj76gA+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAOb+3eN/+he8P/8Ag+n/APkOj7d43/6F7w//AOD6f/5DrpKKAPO7O88Y/wDCydZZdC0M3B0mwDxnWpgir515tIb7LkkktkYGMDk5IHQfbvG//QveH/8AwfT/APyHRY/8lT13/sC6b/6Pvq6SgDm/t3jf/oXvD/8A4Pp//kOj7d43/wChe8P/APg+n/8AkOukooA5v7d43/6F7w//AOD6f/5Do+3eN/8AoXvD/wD4Pp//AJDrpKKAOb+3eN/+he8P/wDg+n/+Q65+zvPGP/CydZZdC0M3B0mwDxnWpgir515tIb7LkkktkYGMDk5IHolc3Y/8lT13/sC6b/6PvqAD7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA5v7d43/wChe8P/APg+n/8AkOj7d43/AOhe8P8A/g+n/wDkOukooA43w5Lqs3xJ19tcs7OzuP7J04LHZ3bXCFfOvcEs0cZBznjB6DnnAKvWP/JU9d/7Aum/+j76igAsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6Pvq6SgAoormz470c+OYfCkH2ie/kWQvJHF+5hZFVyjOcDftdTtXJGRnGRkA6Siua1fxtDod2w1DRtVTTo7iO3k1Tyoxbo7lQMguJCuWUbghXJ68HHS0AFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQAUVk+JfEUHhjSBf3Nrc3Ye4hto4LUJveSWQIgG9lUfMw5JFT6TqN1qMDveaNe6SytgR3jwMzjHUeVI4x9SD7UAX6KKKAObsf+Sp67/2BdN/9H31dJXN2P/JU9d/7Aum/+j76ukoAKKKo61rNnoGky6jqTusEZVcRxl3dmYKqKqglmZiAAOpNAF6is7SNTu9SSU3miX+klCAq3rwMZM9x5Ur9PfHWtGgArm7H/kqeu/8AYF03/wBH31dJXN2P/JU9d/7Aum/+j76gDpKKKKACiubPjvRz45h8KQfaJ7+RZC8kcX7mFkVXKM5wN+11O1ckZGcZGa+q/ELT9LudQ/4l+o3djpLrHqWpWyRtBZsQGIbLh22qys2xWwG9QQADrKKRWV1DIQysMgg5BFLQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFFFc2fHejnxzD4Ug+0T38iyF5I4v3MLIquUZzgb9rqdq5IyM4yMgHSUVzd1470e18dWPhMfaZ9Suy6s0MWYrdliMoWRzgBmQEhRk4wSACCekoAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigAoqnqmoNpti1xHY3d/JuVEt7RFaRyTj+IqoHcliAB3ql4f8AEtv4ga+hW0urC806cQXdneBPMiYqHXlGZSCrAghjQBs0UUUAc3Y/8lT13/sC6b/6Pvq6Subsf+Sp67/2BdN/9H31dJQAUUVR1rWbPQNJl1HUndYIyq4jjLu7MwVUVVBLMzEAAdSaAL1FZ2kand6kkpvNEv8ASShAVb14GMme48qV+nvjrWjQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQAUVS1W+uNPtBNaaVd6o5cKYLR4VcDB+bMsiLjj1zz0rN8PeLF1/VtT019I1DTLrS/K+0JeGBhmRSygGKRxnaASDjAZfWgDfooooA5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvq6SgAoorM1/XrXw9p6XV1HNO0syW9vb26BpJ5XOFRQSBk+pIAAJJAGaANOisbQfEsGuzXtt9kutPv9PdUurK8CCSPcNyNlGZWVhnBViOCOoIrZoAK5ux/wCSp67/ANgXTf8A0ffV0lc3Y/8AJU9d/wCwLpv/AKPvqAOkooooAKKpavq9joWmS6hqs/kW0WAzbSxJJCqoVQSzEkAAAkkgCqvhXxJa+LvDNprdhBc28F1v2xXaBJUKuyEMASAcqe9AGvRRRQBzdj/yVPXf+wLpv/o++oosf+Sp67/2BdN/9H31FABY/wDJU9d/7Aum/wDo++rpK5ux/wCSp67/ANgXTf8A0ffV0lABXmvizxV4etPi/wCE0u9e0yBrKK/S6WS8jUwM8cW0Pk/KT2B616VRQB5h4x8X6BrnioeEr7X9M0zTtNnhuNXku72OFp2UiRLaMMQSCQpdugHyg5J2+nKyuoZCGVhkEHIIpaKACubsf+Sp67/2BdN/9H31dJXN2P8AyVPXf+wLpv8A6PvqAOkooooAwPGY8OPoKx+MbhbbTnuIyJnuHt1jlVt6MZUKlMMowxIGcDOSBWJ8Pbt7jW/ESaXqVzqvhqOSD+zbue5e5BkKt56pM5LSICE53EAlgDxgd1RQAUUUUAc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffV0lABXD/ABXg8zw1ptxNJPFZWesWlxfS27FWigD4d9w5ULkMWHKgEjGM13FFAHB+BLtJ/FmvxaDqlzqvhqOK2NvczXr3iC5IfzVindmLDaIiRuIVj2JNd5RRQAVzdj/yVPXf+wLpv/o++rpK5ux/5Knrv/YF03/0ffUAdJRRRQB5r4s8VeHrT4v+E0u9e0yBrKK/S6WS8jUwM8cW0Pk/KT2B61j3mq2Wi+FviF4a1CZBreo3t6bHTyf318LpAITEnVwS20lc42tnGK9iooAq6VbPZaPZ2spBeCBI2I6ZVQD/ACq1RRQBzdj/AMlT13/sC6b/AOj76ukrm7H/AJKnrv8A2BdN/wDR99XSUAFea+LPFXh60+L/AITS717TIGsor9LpZLyNTAzxxbQ+T8pPYHrXpVFAHmvjnxRoFh8T/BcV9rmm20lheXTXaTXcaG3D2cgUuCflB3LjOM5HrXpKsrqGQhlYZBByCKWigArm7H/kqeu/9gXTf/R99XSVzdj/AMlT13/sC6b/AOj76gDpKKKKAMnxJqdlpeivLqWrtosMjrENQATEDHoSzqyKD0y4xkgdSK5X4aSRHV/FC6feDWtPku4p010sGa9lePEiFlxGwjCxqDGFUA7cZDE+gUUAFFFFAHN2P/JU9d/7Aum/+j76ukrm7H/kqeu/9gXTf/R99XSUAFcP8V4PM8NabcTSTxWVnrFpcX0tuxVooA+HfcOVC5DFhyoBIxjNdxRQBwfgS7SfxZr8Wg6pc6r4ajitjb3M1694guSH81Yp3Ziw2iIkbiFY9iTXeUUUAFc3Y/8AJU9d/wCwLpv/AKPvq6Subsf+Sp67/wBgXTf/AEffUAdJRRRQBS1rVrXQdDvdW1B9lrZQPPKf9lQScep44FYfw80u5sPCaXuqJt1TWJW1K+B6rJL8wj/4Am1P+AV1NFABRRRQBzdj/wAlT13/ALAum/8Ao++rpK5ux/5Knrv/AGBdN/8AR99XSUAFcx49s7K40W0ur7XbbQX06+iu7a+uyvkpKuQFcMyhlZWZcbgeeDxXT0UAeffD2O91Dxd4m8RXGoW+pWl4lraW95Z2zQQXBhEhZowXcsoMgXfuYEh8HjA9BoooAK5ux/5Knrv/AGBdN/8AR99XSVzdj/yVPXf+wLpv/o++oA6SiiigCrqOp2Gj2L3urXtvY2keA89zKsca5OBlmIAySBXEfBbWNM1D4d21rYajaXNxbTXDTwwzq7xB7mUqWUHK5HIz1Feg0UAFFFFAHN2P/JU9d/7Aum/+j76iix/5Knrv/YF03/0ffUUAFj/yVPXf+wLpv/o++rpK4m58R6H4f+Ker/29rOn6Z5+i6f5X226SHzNs97nbuIzjIzj1FaX/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSVzdj/wAlT13/ALAum/8Ao++o/wCFj+CP+hy8P/8Ag0g/+Krn7Px94PX4k6zdN4s0MW8mk2EaSnUodjMs14WUHdgkB1JHbcPUUAeiUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVABY/wDJU9d/7Aum/wDo++rpK87s/H3g9fiTrN03izQxbyaTYRpKdSh2MyzXhZQd2CQHUkdtw9RXQf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJXN2P/ACVPXf8AsC6b/wCj76j/AIWP4I/6HLw//wCDSD/4qufs/H3g9fiTrN03izQxbyaTYRpKdSh2MyzXhZQd2CQHUkdtw9RQB6JRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAFj/AMlT13/sC6b/AOj76ukrzuz8feD1+JOs3TeLNDFvJpNhGkp1KHYzLNeFlB3YJAdSR23D1FdB/wALH8Ef9Dl4f/8ABpB/8VQB0lFc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VQB0lFc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VQB0lc3Y/8AJU9d/wCwLpv/AKPvqP8AhY/gj/ocvD//AINIP/iq5+z8feD1+JOs3TeLNDFvJpNhGkp1KHYzLNeFlB3YJAdSR23D1FAHolFc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VQB0lFc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VQB0lFc3/wsfwR/0OXh/wD8GkH/AMVR/wALH8Ef9Dl4f/8ABpB/8VQAWP8AyVPXf+wLpv8A6Pvq6SvO7Px94PX4k6zdN4s0MW8mk2EaSnUodjMs14WUHdgkB1JHbcPUV0H/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSVzdj/wAlT13/ALAum/8Ao++o/wCFj+CP+hy8P/8Ag0g/+Krn7Px94PX4k6zdN4s0MW8mk2EaSnUodjMs14WUHdgkB1JHbcPUUAeiUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVAHSUVzf/Cx/BH/Q5eH/APwaQf8AxVH/AAsfwR/0OXh//wAGkH/xVABY/wDJU9d/7Aum/wDo++rpK87s/H3g9fiTrN03izQxbyaTYRpKdSh2MyzXhZQd2CQHUkdtw9RXQf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJXN2P/ACVPXf8AsC6b/wCj76j/AIWP4I/6HLw//wCDSD/4qufs/H3g9fiTrN03izQxbyaTYRpKdSh2MyzXhZQd2CQHUkdtw9RQB6JRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAdJRXN/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FUAFj/AMlT13/sC6b/AOj76iqPhzW9K174k6/daHqdnqVumk6dG0tncLMisJr0lSVJGcEHHuKKAOyooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD/2Q==)

Figure 11 - Region 2

To get the sum of the pixels inside the red rectangle, all we need is to do is subtract the sum of the pixel values in these two regions from the integral value of the pixel inside the blue square in figure 14. One other thing to consider is that these two regions have overlapping area. To account for double subtraction of this region, we need to add this region’s sum value once. Therefore, the pixels to consider are as given in the figure below.

![Table

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADNjkAAJKSAAIAAAADNjkAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MTMgMTc6MDA6NTcAMjAyMTowODoxMyAxNzowMDo1NwAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMTNUMTc6MDA6NTcuNjg5PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAG6AhgDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD2NG8Q6x4i12Kx1yOwttPu47eKL7CspINtDISWJHeQ1a/sbxT/ANDbH/4K0/8Aiqd4b/5GTxd/2FYv/SK2roqAOb/sbxT/ANDbH/4K0/8AiqP7G8U/9DbH/wCCtP8A4qukooA5v+xvFP8A0Nsf/grT/wCKo/sbxT/0Nsf/AIK0/wDiq6SigDifEcPizRPC2q6rF4ohlexsprlY20xAGKIWAPzd8Voro/illB/4SyMZGf8AkFp/8VUvj7/km3iX/sE3X/olq3o/9Un+6KAOd/sbxT/0Nsf/AIK0/wDiqP7G8U/9DbH/AOCtP/iq6SigDm/7G8U/9DbH/wCCtP8A4qj+xvFP/Q2x/wDgrT/4qukooA5v+xvFP/Q2x/8AgrT/AOKrMuIvFkPirT9JHiiEpd2dzcGT+zEypieFQPvd/NP5Cu3rnb//AJKXof8A2CtQ/wDRtpQA3+xvFP8A0Nsf/grT/wCKo/sbxT/0Nsf/AIK0/wDiq6SigDm/7G8U/wDQ2x/+CtP/AIqj+xvFP/Q2x/8AgrT/AOKrpKKAOb/sbxT/ANDbH/4K0/8AiqP7G8U/9DbH/wCCtP8A4qukooA4jQIvFmsafPcSeKIYzFe3VsAumIciGd4gfvdwgP41p/2N4p/6G2P/AMFaf/FU7wR/yA7z/sMal/6WzV0VAHN/2N4p/wChtj/8Faf/ABVH9jeKf+htj/8ABWn/AMVXSUUAc3/Y3in/AKG2P/wVp/8AFUf2N4p/6G2P/wAFaf8AxVdJRQBxHiCLxZo2lx3UfiiGUteWtuVbTEHEtxHET97sHJ/CtP8AsbxT/wBDbH/4K0/+Kp3jn/kW4f8AsK6d/wClsFdFQBzf9jeKf+htj/8ABWn/AMVR/Y3in/obY/8AwVp/8VXSUUAc3/Y3in/obY//AAVp/wDFUf2N4p/6G2P/AMFaf/FV0lFAHN/2N4p/6G2P/wAFaf8AxVZkMXiyXxZe6QfFEIS2sre5En9mJkmR5lIxu7eUPzNdvXO2n/JTtX/7A9j/AOjrugBv9jeKf+htj/8ABWn/AMVR/Y3in/obY/8AwVp/8VXSUUAc3/Y3in/obY//AAVp/wDFUf2N4p/6G2P/AMFaf/FV0lFAHN/2N4p/6G2P/wAFaf8AxVH9jeKf+htj/wDBWn/xVdJRQBxHhqLxZrvhXStWl8UQxPfWcVw0a6YhCl0DED5vetP+xvFP/Q2x/wDgrT/4qnfD3/kmnhr/ALBVt/6KWuioA5v+xvFP/Q2x/wDgrT/4qj+xvFP/AENsf/grT/4qukooA5v+xvFP/Q2x/wDgrT/4qj+xvFP/AENsf/grT/4qukooA4jVovFmnaho1uniiFxqN6bZydMQbAIJZcj5vWID8a0/7G8U/wDQ2x/+CtP/AIqneJ/+Q54S/wCww3/pFdV0VAHN/wBjeKf+htj/APBWn/xVH9jeKf8AobY//BWn/wAVXSUUAc3/AGN4p/6G2P8A8Faf/FUf2N4p/wChtj/8Faf/ABVdJRQBzf8AY3in/obY/wDwVp/8VWZpcXizUNU1q1fxRCg028S3RhpifODbxS5PzespH4V29c74b/5GTxd/2FYv/SK2oAb/AGN4p/6G2P8A8Faf/FUf2N4p/wChtj/8Faf/ABVdJRQBzf8AY3in/obY/wDwVp/8VR/Y3in/AKG2P/wVp/8AFV0lFAHN/wBjeKf+htj/APBWn/xVZviOHxZonhbVdVi8UQyvY2U1ysbaYgDFELAH5u+K7auf8ff8k28S/wDYJuv/AES1AES6P4pZQf8AhLIxkZ/5Baf/ABVL/Y3in/obY/8AwVp/8VXRR/6pP90U6gDm/wCxvFP/AENsf/grT/4qj+xvFP8A0Nsf/grT/wCKrpKKAOb/ALG8U/8AQ2x/+CtP/iqP7G8U/wDQ2x/+CtP/AIqukooA5Wyl13TvGtjpup6xHqNteWFzPgWawsjxPAByCcjErcfSirF//wAlL0P/ALBWof8Ao20ooAPDf/IyeLv+wrF/6RW1dFXO+G/+Rk8Xf9hWL/0itq6KgAoorj9T1HWNV8aXeg6NqJ0xbGxW5aZIUkaR3JCqQ4I28c4wfegDsKKxPButzeIvCNhqd1GsdxNH+9VPu7wcHHtkVt0Ac/4+/wCSbeJf+wTdf+iWrej/ANUn+6KwfH3/ACTbxL/2Cbr/ANEtW9H/AKpP90UAOooooAKK43QNX8Qy/EXV9L12a0+zRWkc9vBaocR5cjlyAWJAGe3pXZUAFc7f/wDJS9D/AOwVqH/o20roq52//wCSl6H/ANgrUP8A0baUAdFRRRQAUVk+JNaGh6O9wiGW5kYQ20K8mWVjhVA+tZnw91TVdV8NzSa/cJcXsN9PA7xxhBhHwBgenSgDqaKKKAOd8Ef8gO8/7DGpf+ls1dFXO+CP+QHef9hjUv8A0tmroqACiivNte8VaxHP4nvLLVYrNPDhQixaJCLhdoYlyw3DIyAVI/GgD0mioLK5F5YQXKjAmjWQD0yM1PQBzvjn/kW4f+wrp3/pbBXRVzvjn/kW4f8AsK6d/wClsFdFQAUUVxnxE1jxDoljaXeiS2kFoLmJLl5FLyvvkVdqgjAGCSW6+g70AdnRXF/ELV/EWjR6ZcaJNaW9m19bw3TSIXlcPKFKKCMAYJ+bk/Su0oAK520/5Kdq/wD2B7H/ANHXddFXO2n/ACU7V/8AsD2P/o67oA6KiiigAori9D1jxHJ8RNY0rWZLRoIrJLm1t7ZThMuyjLkAsSACegGePWsPwx4y1bU/F2nae+pyXN27T/2vpUlosa6eig7GV9oY/NtAyW3Bie2aAPUKKKKAOd+Hv/JNPDX/AGCrb/0UtdFXO/D3/kmnhr/sFW3/AKKWuioAKKpata3t3ZiLTtROnOXBedYlkYKOoUNlQT6kHjP1rz7/AIS/XIvCU889/vhtNYayuNZhtlLLbjrL5eCuQTtJxjgnFAHp1Fcp8PtbvNe0a7uri7OoWi3jpYX7RCNrqAYw5UAAfNuGQBkAHHNdXQBzvif/AJDnhL/sMN/6RXVdFXO+J/8AkOeEv+ww3/pFdV0VABRRXA+PPEF7oN4jaf4lhTUJHhW00ERRO90C+DkEGQ55G5cAY+tAHfUV55qfiG/svGN/HrWs6nomlxNALaVNL32z7gN2+4MLKvzHGSwxXoQOVBBzx19aAFrnfDf/ACMni7/sKxf+kVtXRVzvhv8A5GTxd/2FYv8A0itqAOioopk00dvA80zhI41LMzHAAHU0APorzXTPFniTU9Q1uRMrBJpLX2lWgtx5iDJCEjGWLY3Y9wMZrW8D64+oS/Z9R13ULjU/sySy6fqOnfY3jzwWVTEjMueMjIoA7Suf8ff8k28S/wDYJuv/AES1dBXP+Pv+SbeJf+wTdf8AolqAN6P/AFSf7op1Nj/1Sf7op1ABRXIeN9S1Ww1DRksLjUrWxmklF7cafppvHjATKZURvgFuM4qK98UsvhOyXw9qf9r6hqJaO2umjUEAZLyOgAA2DgjA5wCOtAHaUVgeBtTvNZ8C6PqOpyiW7ubVHmkVQoZiOTgcCt+gDnb/AP5KXof/AGCtQ/8ARtpRRf8A/JS9D/7BWof+jbSigA8N/wDIyeLv+wrF/wCkVtXRVzvhv/kZPF3/AGFYv/SK2roqACuU1fw/rMfiiXXPDc1ks11aC1uI7wuANpJR1Kg8jJ4PX1FdXRQBl+G9FTw94ds9LR/M+zxhWkxje3Un861KKKAOf8ff8k28S/8AYJuv/RLVvR/6pP8AdFYPj7/km3iX/sE3X/olq3o/9Un+6KAHUUUUAcdYaJ4mh+IFzrl0uk/ZLmBbZ0jmk8xUViQwBTGTkcZ/GuxoooAK52//AOSl6H/2CtQ/9G2ldFXO3/8AyUvQ/wDsFah/6NtKAOiooooAzNZ8O6b4gFv/AGpFK5tnMkLQ3MkLI2MZDRsp6GszwT4RXwlY3sHnPK1xeSzgtcSyAKzZUfOTzjqe/qa6aigAooooA53wR/yA7z/sMal/6WzV0Vc74I/5Ad5/2GNS/wDS2auioAK4vxZ4Nl8U3zR3OmaEbZwqG/mh8y7RO6rlcDPTO7vXaUUAMhiSCCOGMYSNQqj2AxT6KKAOd8c/8i3D/wBhXTv/AEtgroq53xz/AMi3D/2FdO/9LYK6KgArlPHuha54j0uPT9GOnpF50czyXcjqwZHDAAKpyDjFdXRQBxni/RPE3iPR7G0tl0mGSOeG5nMk8uA8cgYKuE5Bx1ODXW2huTZxG/WJLnaPMWFiyBu+CQCR+FTUUAFc7af8lO1f/sD2P/o67roq520/5Kdq/wD2B7H/ANHXdAHRUUUUAcTB4f8AEx8d3us3B0uO1vLRbNhDPJ5saKzEOMpjd83TPbrVLSfAWqW9zoEN7/ZUVroU7zxXNqH+0Tkqy4bIAUNuy3JyQK9DooAKKKKAOd+Hv/JNPDX/AGCrb/0UtdFXO/D3/kmnhr/sFW3/AKKWuioAwfGOn63qvh97Lw3dW9rcTOqyyzsy/uv4gpUEhj0Bxx1rCn8I6xPoul20dro1qdHuVmtrNJZXt5QAR8+VBDAnIODzzXd0UAc34R8OXWiT6veX5tY7jVbv7TJb2WfJiIQLxkAknbknA5NdJRRQBzvif/kOeEv+ww3/AKRXVdFXO+J/+Q54S/7DDf8ApFdV0VABXJ+KdF8Q6/Be6UjaUdKvAqiSUP50K4GcLgqxyCQcjr7ZrrKKAON1/wAO+Ida0m58PC408aPcxLA9y5c3Kx4Ab5cbSxx1z3rr4YlhgSJPuooUfQU+igArnfDf/IyeLv8AsKxf+kVtXRVzvhv/AJGTxd/2FYv/AEitqAOiqrqmmWms6Xc6bqUPnWl1GYpo9xXep6jIINWqKAOKt/AP9leK7jWtGuJFY2Agt0u764mCyBs5YM5yuO3brirmm6Bq9x4ui8QeInsUmtbR7S3gsWdlw7KzMzMAc/KAB9a6migArn/H3/JNvEv/AGCbr/0S1dBXP+Pv+SbeJf8AsE3X/olqAN6P/VJ/uinU2P8A1Sf7op1AGVrP9viWBvD40502uJo71nTnjaysoPTDZGOcjnjnn9O+GmmxaUg1NppdSJld7i1uprcBpW3MAI3GVz6+ldrRQBg+CfDf/CJ+ELHSGlM0lvGBI/mu4ZsckbySB7cCt6iigDnb/wD5KXof/YK1D/0baUUX/wDyUvQ/+wVqH/o20ooAPDf/ACMni7/sKxf+kVtXRVxGn6dqt54s8WPp2uPp8Q1KIGJbWOTcfsVtzlhn0GPatX+w/EX/AEN03/gBD/hQB0VFc7/YfiL/AKG6b/wAh/wo/sPxF/0N03/gBD/hQB0VFc7/AGH4i/6G6b/wAh/wo/sPxF/0N03/AIAQ/wCFADvH3/JNvEv/AGCbr/0S1b0f+qT/AHRXB+N9G16P4f8AiF5vFMs0a6Xcl4zYwjePKbIyBkZraj0TxF5a/wDFWzDgf8uEP+FAHSUVzv8AYfiL/obpv/ACH/Cj+w/EX/Q3Tf8AgBD/AIUAdFRXO/2H4i/6G6b/AMAIf8KP7D8Rf9DdN/4AQ/4UAdFXO3//ACUvQ/8AsFah/wCjbSj+w/EX/Q3Tf+AEP+FcT8QTrnh260u+OvS3NwyTxJILeOIxqTGWHyjnJVev92taVN1ZqC6m1Gk61RU11PWKK8cgj+JdzbxzwSXjxSoHRhNHyCMg9af9k+J/968/7/R/410/U1/z8j951/UV/wA/I/eewUV4/wDZPif/AHrz/v8AR/40fZPif/evP+/0f+NH1Rf8/I/eH1Ff8/I/eewUV4/9k+J/968/7/R/41Xv5PiNpljJeX095FbxAF3MsZxzjsfemsHd2U4/eNYC7sqkfvPRvBH/ACA7z/sMal/6WzV0VeZfDu31vVvDtxPbeIZbJBey5jFtHJudsSM2WGeWcnFdX/YfiL/obpv/AAAh/wAK5KkHTm4PocNWm6U3B9DoqK53+w/EX/Q3Tf8AgBD/AIUf2H4i/wChum/8AIf8KzMzoqK53+w/EX/Q3Tf+AEP+FH9h+Iv+hum/8AIf8KADxz/yLcP/AGFdO/8AS2Cuirz/AMZaPr0egRNL4olmX+0rABTYwjk3kIB4HYkH3xW9/YfiL/obpv8AwAh/woA6Kiud/sPxF/0N03/gBD/hR/YfiL/obpv/AAAh/wAKAOiornf7D8Rf9DdN/wCAEP8AhR/YfiL/AKG6b/wAh/woA6KudtP+Snav/wBgex/9HXdH9h+Iv+hum/8AACH/AArBtdH14/EXVYx4olEg0qyZpfsMOWBlusLjGOME59/agD0Ciud/sPxF/wBDdN/4AQ/4Uf2H4i/6G6b/AMAIf8KAOiornf7D8Rf9DdN/4AQ/4Uf2H4i/6G6b/wAAIf8ACgDoqK53+w/EX/Q3Tf8AgBD/AIUf2H4i/wChum/8AIf8KAD4e/8AJNPDX/YKtv8A0UtdFXn/AIF0fXpfh74eeHxRLDG2m25SIWMLBB5a4GSMnFb39h+Iv+hum/8AACH/AAoA6Kiud/sPxF/0N03/AIAQ/wCFH9h+Iv8Aobpv/ACH/CgDoqK53+w/EX/Q3Tf+AEP+FH9h+Iv+hum/8AIf8KADxP8A8hzwl/2GG/8ASK6roq4LxRYavptnaX13r0l81vchoVNrHH5blHXcCoznazD/AIFVO1fxjfWqXFrLcSRSDKsJFGecdzXm18eqNX2Sg5O19D08Pl8q1L2rmoq9tdD0mivPPI8b+tz/AN/E/wAaPI8b+tz/AN/E/wAaz/tJ/wDPmf3Gv9mR/wCf0PvPQ6K888jxv63P/fxP8aPI8b+tz/38T/Gj+0n/AM+Z/cH9mR/5/Q+89DrnfDf/ACMni7/sKxf+kVtXPeR439bn/v4n+NUtEfWZPEs9imoyWN1dSs9xIEWQl1jC5IPB+VFX8KI5knOMJU5K7tqhSytqEpxqRfKr6O56hRXO/wBh+Iv+hum/8AIf8KP7D8Rf9DdN/wCAEP8AhXrHkHRUVzv9h+Iv+hum/wDACH/Cj+w/EX/Q3Tf+AEP+FAHRVz/j7/km3iX/ALBN1/6Jam/2H4i/6G6b/wAAIf8ACsPxvo2vR/D/AMQvN4plmjXS7kvGbGEbx5TZGQMjNAHeR/6pP90U6ubj0TxF5a/8VbMOB/y4Q/4U7+w/EX/Q3Tf+AEP+FAHRUVzv9h+Iv+hum/8AACH/AAo/sPxF/wBDdN/4AQ/4UAdFRXO/2H4i/wChum/8AIf8KP7D8Rf9DdN/4AQ/4UAF/wD8lL0P/sFah/6NtKKzYLHUbP4maR/aWrvqQbSr7YGt0i2fvbTP3Rznjr6UUAaXhv8A5GTxd/2FYv8A0itq6Kud8N/8jJ4u/wCwrF/6RW1dFQAUUUUAFFFFAHP+Pv8Akm3iX/sE3X/olq3o/wDVJ/uisHx9/wAk28S/9gm6/wDRLVvR/wCqT/dFADqKKKACiiigArzD4z/6nR/96b/2SvT68w+M/wDqdH/3pv8A2SuzBf7xH+uh3Zf/ALzH5/kzv/D/APyLOmf9ecX/AKAK0Kz/AA//AMizpn/XnF/6AK0K5Z/EzkqfGwoooqSArm/iD/yIWqf9c1/9DWukrm/iD/yIWqf9c1/9DWtaP8WPqjbD/wAaHqvzMb4P/wDIoXX/AF/P/wCi4672uC+D/wDyKF1/1/P/AOi4672tMV/Hka43/eJ+oUUUVzHIFFFFAHO+Of8AkW4f+wrp3/pbBXRVzvjn/kW4f+wrp3/pbBXRUAFFFFABRRRQAVztp/yU7V/+wPY/+jruuirnbT/kp2r/APYHsf8A0dd0AdFRRRQAUUUUAFFFFAHO/D3/AJJp4a/7BVt/6KWuirnfh7/yTTw1/wBgq2/9FLXRUAFFFFABRRRQBy3xB/5F2P8A6+V/9Bar/hD/AJFOx/3W/wDQjVD4g/8AIux/9fK/+gtV/wAIf8inY/7rf+hGvJh/yMpf4f1R7E/+RZH/ABfozaooor1jxwooooAK880r/kqE3/Xeb+TV6HXnmlf8lQm/67zfyavJzD+JR/xI9jLf4df/AAM9Dooor1jxwooooAK5/wAff8k28S/9gm6/9EtXQVz/AI+/5Jt4l/7BN1/6JagDej/1Sf7op1Nj/wBUn+6KdQAUUUUAFFFFAHO3/wDyUvQ/+wVqH/o20oov/wDkpeh/9grUP/RtpRQAeG/+Rk8Xf9hWL/0itq6Kud8N/wDIyeLv+wrF/wCkVtXRUAFcT8RilrpM975+vi5S2cWyaW8yRpJ1DuY8LjP/AD0O3Ga7asTWtG1TUpX+wa69hBLEYpYfsyy/8CUkgqcH3oAt6BPNc+HdPnuZ4rmaS3RpJoWDK7FRkgjg1oVS0fS7fRNGtdMsgRBaxiNNx5wKu0Ac/wCPv+SbeJf+wTdf+iWrej/1Sf7orB8ff8k28S/9gm6/9EtW9H/qk/3RQA6uR+JiaoPA1/c6RrEultawvNI8CDzJAqnCq5Pyc4yQCccDHWuurF8V6Fc+JNCn0u31H7BFco0c7CASFkIxgZIwfegDmviC2sN8I5b/AEvW7jTJbewE8ssC/vZSEBADk5TnkkDJ9RXb2DtJpts7kszRKST3OBXN6r4Q1HVvBR8Oz68FSSIwTTrZLuePAAGN2ARjrW/pFndWGlxW19eC9ljG3zhCI8jt8oJ7UAXa8w+M/wDqdH/3pv8A2SvT68w+M/8AqdH/AN6b/wBkrswX+8R/rod2X/7zH5/kzv8Aw/8A8izpn/XnF/6AK0Kz/D//ACLOmf8AXnF/6AK0K5Z/EzkqfGzgfEkE+meLtFOk6vqcuqX+oBpbV7pnhNsPvgw52KqjGGCg56kkmsWXUNTm8JXHjVNUvUv4NVVUthcuLcwC4ERiMOdnKk/NjdnBzXVweENUtfFF9rUPiBWkvHHyzWKuYoh0iVtwwv6k/hTG8ABpXtv7VlGjPfC+bT/KXmQNvxv67d4DYx2qSDsAcgGub+IP/Ihap/1zX/0Na6Sub+IP/Ihap/1zX/0Na1o/xY+qNsP/ABoeq/Mxvg//AMihdf8AX8//AKLjrva4L4P/APIoXX/X8/8A6Ljrva0xX8eRrjf94n6lLWIln0e6jea7hQxne9lnztvcJtBbJHHy/N6c4rz7QvFX9ijxPKbi+lsraWJNPs9VmkNz5jL0IlPmBGbGN3o2Oleh6na3F5p7w2V69jOSpSdEDlSCD0PBBxgj0JrFsvBlub68vvEMkWtXV2iRuZ7ZRGEU5UBOR1PWuY5DH+GtzqDX/iS01bVpNRnhvUbLzb1j3QozKg/hQMTgDgV3tc/4f8G6X4b1bVL/AE23gibUZVcrFAqeUAirtGB0+XOPU10FAHO+Of8AkW4f+wrp3/pbBXRVzvjn/kW4f+wrp3/pbBXRUAFcT8RjHbaZJeGfX1uEtn+zJpTzJGjjB3OY8L6f6w7cA+9dtWJrWjarqM7nT9dewglh8qSH7Mso6n5lJIIJBx36CgDgr/WXuJ4ovE/iK505P7Fimsrmxu2hinuCvzuGQ4kIOMKcj2ru/BGrXGu+BdF1S+wbm6s45JSBgMxUZIHYE81Wfwncw6Nb6NpOsNY6bFB5Dxi3DyOvchyflJ57VvWFlBpun29lZp5dvbxrFGg/hUDAFAFiudtP+Snav/2B7H/0dd10Vc7af8lO1f8A7A9j/wCjrugDoqD90460UHkHBx70AeaeGrp/DmoWcXjOLXrbUbmSdY7y61Rp7OY7mYKEEzBTsxjci9Kj0bxBf6t8UtOvX1KRNN1C0uhbaeJvk2I0YR2TpvOWPrg4rpofB91cahY3HiHWpNWjsMmCFrZYwXxt3uR944z6DmnnwDoKeKLDWrTTrK1ksopEWOG0jUMWKkNkDqNvB9zQB01FFFAHO/D3/kmnhr/sFW3/AKKWuirnfh7/AMk08Nf9gq2/9FLXRUAcj8Q9YvNM0zTLXThdedquox2ebQqJtpVnYIWICsQhXcSAM5yMZrAuWudU0dtP8OWniKO60/U4v7SsZtXYXXlFSflmM5G08HAk7Gu28R6AviCzt0W6ks7mzuUura4RQxjkXOCQeCCCQR6Gs628JX1kLm5s9ekTU7yYS3N01srLIAMBfLzwAPegCXwXqVje6bdW9impQS2Vy0FzbapcNPNDIADguzvkEEEYYjBro6x/Dvh5NBhu2a5e7u764NzdXDqF8xyAvCjoAFAx7VsUAct8Qf8AkXY/+vlf/QWq/wCEP+RTsf8Adb/0I1Q+IP8AyLsf/Xyv/oLVf8If8inY/wC63/oRryYf8jKX+H9UexP/AJFkf8X6M2q8h8ea7d6f4p1eGS71QOsFudNnsLxo7axYkhvtKhgBkkNmQMCvA5BFevVyOpeBpru+1iSy1h7S11vab63Nssm5ggQlWJyuVCjHPTPevWPHObu59T1vTfFuq/2zd291oaFbA2dy6Qho4hIWZAdsgZuu8Hg4r0fSbt9Q0WyvJVCvcQJKyjoCyg4/WuWufh2hjvLPTtWmstM1CJIby1ESsZFVQh2v1UlRg9a7GGJIIEhiG1I1CqPQCgB9eeaV/wAlQm/67zfyavQ6880r/kqE3/Xeb+TV5OYfxKP+JHsZb/Dr/wCBnodZPim51Cz8I6tc6JE0uoxWcr2qIu4tIFO3A7nOOO9a1MnWR7eRYJBFIykI5XdtPY47/SvWPHPJLDW/O1O30zwh4gvtWfVNFmaUT3jytFcqgKuC5/dMSTlRgewxXReCbpLDVY9G1a212y1qSyEzLqeotdRzqpAdoz50ighiMj5TgitmHwvdm8l1DUNZkuNR8gwW86QLGsCkgkhMnJJA5z0p2meGJ4PEA1rWNUbUr6O3NtCwgEKxoxBb5QTkkqOfagDoa5/x9/yTbxL/ANgm6/8ARLV0Fc/4+/5Jt4l/7BN1/wCiWoA3o/8AVJ/uinU2P/VJ/uinUAcL4dOsWvxX12w1XWptRjbTbe6jjKCOGAvNMNqICcAKqjJJJxknsDw9/a9v8VNctNT1ufUImsYpooiojigy7ABEBIHGMk5JrRsvCepWvjSfxDLroma4gS2kg+xqoMSM7KAd3By55pLXwnqdv4wn159fEjXEQhkg+xKB5aklQDu689aAMyKCbS/idpOnaTq2p3u61nl1iO6unmjCEDynKk7Y3L9AgUEb+MAV3tcn4c8Ial4fvp5zr4vBdXDT3RlslEs5PQFw3QDgccAV1lAHO3//ACUvQ/8AsFah/wCjbSii/wD+Sl6H/wBgrUP/AEbaUUAHhv8A5GTxd/2FYv8A0itq6KuI0/xNpOi+LPFlvqV0YZW1KJwoid/l+xWwz8oPoa1f+E98N/8AQQb/AMBpf/iaAOiornf+E98N/wDQQb/wGl/+Jo/4T3w3/wBBBv8AwGl/+JoA6Kiud/4T3w3/ANBBv/AaX/4mj/hPfDf/AEEG/wDAaX/4mgB3j7/km3iX/sE3X/olq3o/9Un+6K4Pxv438P3Pw/8AEMEN8zSS6Xcog+zyjJMTAcla2o/HvhsRr/xMG6D/AJdpf/iaAOkornf+E98N/wDQQb/wGl/+Jo/4T3w3/wBBBv8AwGl/+JoA6Kiud/4T3w3/ANBBv/AaX/4mj/hPfDf/AEEG/wDAaX/4mgDoq8w+M/8AqdH/AN6b/wBkrrf+E98N/wDQQb/wGl/+JrgPij4g0zW49MGmXBmMJl35idMZ24+8B6GuzBf7xH+uh3Zf/vMfn+TPUfD/APyLOmf9ecX/AKAK0K8esPi1d2Om21oulQuLeJYgxlI3bQBnp7VY/wCFy3n/AECIP+/x/wAKuWBruTdvxNJ5fiHJtR/FHrNFeTf8LlvP+gRB/wB/j/hR/wALlvP+gRB/3+P+FT9Rr9vxRP8AZ2J/l/FHrNc38Qf+RC1T/rmv/oa1xX/C5bz/AKBEH/f4/wCFZ+u/E+51zQ7nTZNNihW4UAuspJGCD0x7VpSwVeNSLa2ZrRwGIjUjJrRNdUdZ8H/+RQuv+v5//Rcdd7XlPw38WaPoXhy4ttTuWile7aQKInb5SiDqAe4Ndd/wsbwz/wA/0n/gNJ/8TXNi2vby9THGUpuvJpdTqKK5f/hY3hn/AJ/pP/AaT/4mj/hY3hn/AJ/pP/AaT/4mubmRy+xqfys6iiuX/wCFjeGf+f6T/wABpP8A4mj/AIWN4Z/5/pP/AAGk/wDiaOZB7Gp/Kybxz/yLcP8A2FdO/wDS2Cuirzvxf488PXmgxRQXjs41GxkIMEg+VLuJm6j0U1uf8LG8M/8AP9J/4DSf/E0cyD2NT+VnUUVy/wDwsbwz/wA/0n/gNJ/8TR/wsbwz/wA/0n/gNJ/8TRzIPY1P5WdRRXL/APCxvDP/AD/Sf+A0n/xNH/CxvDP/AD/Sf+A0n/xNHMg9jU/lZ1Fc7af8lO1f/sD2P/o67qH/AIWN4Z/5/pP/AAGk/wDiaw7bx54eX4g6ndm8fyZNLs41PkSZLLLck8Y9HWjmQexqfys9Eorl/wDhY3hn/n+k/wDAaT/4mj/hY3hn/n+k/wDAaT/4mjmQexqfys6iiuX/AOFjeGf+f6T/AMBpP/iaP+FjeGf+f6T/AMBpP/iaOZB7Gp/KzqKK5f8A4WN4Z/5/pP8AwGk/+Jo/4WN4Z/5/pP8AwGk/+Jo5kHsan8rJvh7/AMk08Nf9gq2/9FLXRV534I8eeHrHwDoFrcXjrNBp0EbgQSHDCNQeQK3P+FjeGf8An+k/8BpP/iaOZB7Gp/KzqKK5f/hY3hn/AJ/pP/AaT/4mj/hY3hn/AJ/pP/AaT/4mjmQexqfys6iiuX/4WN4Z/wCf6T/wGk/+Jo/4WN4Z/wCf6T/wGk/+Jo5kHsan8rE+IP8AyLsf/Xyv/oLVf8If8inY/wC63/oRrkPGnjjQNQ0aG3tbx2la4UqpgkGflbpxzXOWvjm7srVLe1vriOJPuqLZjjnP92vCq1nQxzqOLacbaI92lhZV8BGlzKLUr6ntlFeM/wDCxNR/6CVx/wCAp/8AiaP+Fiaj/wBBK4/8BT/8TW/9qR/59y+4w/sep/z8j9//AAD2aivGf+Fiaj/0Erj/AMBT/wDE0f8ACxNR/wCglcf+Ap/+Jo/tSP8Az7l9wf2PU/5+R+//AIB7NXnmlf8AJUJv+u838mrnP+Fiaj/0Erj/AMBT/wDE07wz4r08eLlvL66kJDOZpPs8h2sUJ5wvBOR+dctbEvFVaSjCStJPVHVRwbwlGrKc4u8WtGeyUVzv/Ce+G/8AoIN/4DS//E0f8J74b/6CDf8AgNL/APE19CfNHRUVzv8Awnvhv/oIN/4DS/8AxNH/AAnvhv8A6CDf+A0v/wATQB0Vc/4+/wCSbeJf+wTdf+iWpv8Awnvhv/oIN/4DS/8AxNYfjfxv4fufh/4hghvmaSXS7lEH2eUZJiYDkrQB3kf+qT/dFOrm4/HvhsRr/wATBug/5dpf/iad/wAJ74b/AOgg3/gNL/8AE0AdFRXO/wDCe+G/+gg3/gNL/wDE0f8ACe+G/wDoIN/4DS//ABNAHRUVzv8Awnvhv/oIN/4DS/8AxNH/AAnvhv8A6CDf+A0v/wATQAX/APyUvQ/+wVqH/o20orNg8QaZrfxM0gaZcGYw6Vfb8xOmMy2mPvAehooA0vDf/IyeLv8AsKxf+kVtXRVzvhv/AJGTxd/2FYv/AEitq6KgAooooAKKKKAOf8ff8k28S/8AYJuv/RLVvR/6pP8AdFYPj7/km3iX/sE3X/olq3o/9Un+6KAHUUUUAFFFFABXN6nGk3xH0NJkWRP7LvztYZGfMtOf1NdJXO3/APyUvQ/+wVqH/o20oA2vsFn/AM+kH/fsUfYLP/n0g/79irFFO7HzPuV/sFn/AM+kH/fsUfYLP/n0g/79irFFF2HM+5X+wWf/AD6Qf9+xR9gs/wDn0g/79irFFF2HM+551oSqkOoBFCj+1b4YAx0upAP0FadZuif6rUP+wrf/APpVLWlXM9z3YfCgooopFBRRRQBjeKv+QLH/ANf9l/6VRVs1jeKv+QLH/wBf9l/6VRVs0AFFFFABRRRQAVjW/wDyPOo/9g21/wDRtxWzWNb/API86j/2DbX/ANG3FAGzRRRQAUUUUAFFFFAGN4P/AORI0T/rwg/9AFbNY3g//kSNE/68IP8A0AVs0AFFFFABRRRQBja5/wAhTw9/2Em/9Jp62axtc/5Cnh7/ALCTf+k09bNABRRRQAUUUUAFTeB/+PzxL/2E0/8ASS3qGpvA/wDx+eJf+wmn/pJb1cNzlxX8I6yiiitjyQooooAK5/x9/wAk28S/9gm6/wDRLV0Fc/4+/wCSbeJf+wTdf+iWoA3o/wDVJ/uinU2P/VJ/uinUAFFFFABRRRQBzt//AMlL0P8A7BWof+jbSii//wCSl6H/ANgrUP8A0baUUAHhv/kZPF3/AGFYv/SK2roq53w3/wAjJ4u/7CsX/pFbV0VABWfrmu6b4b0mXU9bultLOLG+RlLY9gACSfoK0K8w+KcGsXEeoTSaPNd6TZ6dI0LxXESqJmUguyswY7R0wD1z2oA9MhmS4gjmhbdHIodGx1BGQafWX4amln8L6bJcWz20hto8xOysR8o7qSK1KAOf8ff8k28S/wDYJuv/AES1b0f+qT/dFYPj7/km3iX/ALBN1/6Jat6P/VJ/uigB1Zus+INO0FIjqUkwMxOyOC2kncgDJOyNWbA7nGBkc8itKue8Y+JofDmmxhfLk1C9YwWUDuE8yQjuT0UDknsBQBNN4w0OHTLTUFu3uba8QvA1pbS3DOo6nbGrMAO5I471padqNpq2nQX+nTpcWtwgeKVOjA1yOm2n9g+DLHR9M8S6baXu13a6miEqO7El9g3qBgt6n6VZ+F7R/wDCvbCOKFolhMkW4tuEu12BkBwOG+8OO9AHXVzt/wD8lL0P/sFah/6NtK6Kudv/APkpeh/9grUP/RtpQB0VFFFAGIfGGiLrS6U93Ily83kIWtpRE8mM7FlK+WW9g2c5HUUL4x0NtZj0v7Y63MshhjLW8ixSSAZKLKV2M3B4DE8VyPjS8+06rpdymq2eo2Nrq0YGlW6bZzIrbTl9zbtrZONq9MZq3qup2nirxtZ6Tb3Vsljot4txdytIoaS4UEJEgznI3ZJ+goA76iiigDzvRP8AVah/2Fb/AP8ASqWtKs3RP9VqH/YVv/8A0qlrSrme570PhRW1DULbS7CW9vpPKt4Rl32lsD6AEmq0ev2ElnNdE3MUUON5ns5Yjz0wrKC34A0eILSyv9DuLTVLg21tPtjaVXClSWAGCQRnOKxNO1a5i1XVLKbWEu7OGOMw31wiHy5GyNjFAqt69qCjf0zWLHV0lawlZjC+yRJImjdDjOCrAEcH0q9XJ+FmdfE+uJcTx307+TK95Au2MjaQIwuTgqB6nrXWUAY3ir/kCx/9f9l/6VRVs1jeKv8AkCx/9f8AZf8ApVFWzQAVm6hr1jpc3lXYu923eTFZTSqB/vIhHbpmtKuf8X3Mv9mxaZZvtu9TlFvGR/Cp5dvwUGgCzL4p0WCysrqa/jjiv3WO23KwaVmOAAuM9fUcd6164zxraabp+h6ciJbxSQXVrHGzbQ4jWReM9cV2KOsiB42DKwyGU5BFADqxrf8A5HnUf+wba/8Ao24rZrGt/wDkedR/7Btr/wCjbigDZoopHOEYkZAHQUAZVt4n0i7vltILomVmZULQuqSFfvBXI2tjB6E9KLTxNpN7qC2VtdM0z7vL3QuqS7fvBHICtj2JrgtIkeL+xLt5xd6bJPI1vpSuDLZls/eYDL7fmGDjGepxU2hmWHUfDs73aXVlJNIttp6uDJZFlb5iQMsAMrg4xu70Aem0UUUAY3g//kSNE/68IP8A0AVs1jeD/wDkSNE/68IP/QBWzQBQ/tvTf7cGji7jOoeWZTbqcsqjHJx06jrQdb03+210gXcZv2jMvkLkkKO5xwPxrn7w6fbfE3SfINtC72t202zapaQmHlsdWOO/PFLdmwtviVpvkm2id7ecy7dqlnO373qfrQBtf8JJpf8AaaWBuGWd5TChaBxG0gBJQSFdhb5TxnPBFalcV4muvN1DTJxfW97bQ6pDt0+FNspkztyWyd205bGF6deOe1oAxtc/5Cnh7/sJN/6TT1s1ja5/yFPD3/YSb/0mnrZoAbLKkMTyzOscaKWd3OAoHUk9hWfbeIdLvdHbVLS7WayVmUyorHJU4IAxk8+nXtVu8itZrOSPUEhktmGJFnAKEe4PFcr4QvraLw5qJF5bw41O7w7kMq5nbaSMjj8RQBu2/iPSrmyubpLopFa/6/zoniaP6qwDc9uOe1S6brVhqzTLZSuZISBJFLE8TpkZBKuAcHscYODXn+o+YtzqrXM8d+UvLK4ubyAbYxEHHybcnG0AE/MeK6iylhvPiNdXFi6yxQ6ZHFLJGcruMjMq5HGQMn2z70AdPU3gf/j88S/9hNP/AEkt6hqbwP8A8fniX/sJp/6SW9XDc5cV/COsrL1rxLo/h0Wv9tahDaNeTLBbo5JaVyQAFUcnkjJ6DPNalcD8WV02Pw5DcTi1S+F/YokrhRL5f2yIkAnnbxkjpxWx5J0mreLNI0TUI7G+kuTdSRmVYraxnuG2A4yfLRsDJ703VPGOi6MIft89wrTQmdY4rOaV1jHV2RELIPdgO/oaxfFUGmNfya5a+KZNJ1O1sGVDC8LJJGTuGVkRsjcv8JBrkLi91rxFfW1xHqcHhjWW8Pqbq5n2iO5LF9qKjA42nJ3gkruHytQB7Ba3UF7aRXVnMk9vMgkjljbKupGQQe4xWJ4+/wCSbeJf+wTdf+iWpvgCeG4+HmhyWli2nw/Yo1S1Zy5iAGANx69OvenePv8Akm3iX/sE3X/olqAN6P8A1Sf7op1Nj/1Sf7op1AGVZ+JtG1HWb/SrC/iub7TlDXUMOWMWSQASBjOQeOo9KpQ+O9Bm1G2sfMvobi6k8uAXGl3MKu2M4DPGB0HrWDoTaVafGbVrbTDZwRHRbUJFblFUv59wWAA75OT9aspv8SfEK+uYjut/D8Bt4PQ3Mgyx+oAUfjQBv2/irSbvWW0y0mnnuFcxs8VpK8IYDJUzBfLyOhG7g8deK2K8g8Galf6XpPg+Ky12a8mvbo2t9pMkcREChHMj/KgkUqyjJZiDn3Fev0Ac7f8A/JS9D/7BWof+jbSii/8A+Sl6H/2CtQ/9G2lFAB4b/wCRk8Xf9hWL/wBIrauirnfDf/IyeLv+wrF/6RW1dFQAU2SNJo2jlRZEYYZWGQR6EU6igBFVUUKihVUYAAwAKWiigDn/AB9/yTbxL/2Cbr/0S1b0f+qT/dFYPj7/AJJt4l/7BN1/6Jat6P8A1Sf7ooAdVW90uw1LZ/aNjbXezOzz4VfbnrjI4q1RQBQbQdHe2S2bSrFoEYssRtkKqT1IGMA1djjSGNY4kVEUYVVGAB6AU6igArnb/wD5KXof/YK1D/0baV0Vc7f/APJS9D/7BWof+jbSgDoqKKKAKi6TpyXxvUsLVbsnJnEKiQ/8Cxmom8P6M9z9ofSbFpt2/wA02yFt3rnGc1oUUAFFFFAHneif6rUP+wrf/wDpVLWlWbon+q1D/sK3/wD6VS1pVzPc96HwoZNDFcRNFPGksbcMjqCD+BqJLCzjtWto7SBbdvvRLGAh+o6VYooKIre1t7OPy7SCKBM52xIFGfoKloooAxvFX/IFj/6/7L/0qirZrG8Vf8gWP/r/ALL/ANKoq2aACmNFG8iSPGrPHnYxXJXPXB7U+igCtc6dZXrK15Z29wyjAMsSsQPxFTRRRwRLFDGscajCoi4AHsKfRQAVjW//ACPOo/8AYNtf/RtxWzWNb/8AI86j/wBg21/9G3FAGzRRRQBWi0+yhuGuIbOCOZiS0iRKGOevOM0RafZQXBngtII5m6yJEoY/iBmrNFABRRRQBjeD/wDkSNE/68IP/QBWzWN4P/5EjRP+vCD/ANAFbNAFR9K06W4M8lhavMTkyNCpbPrnFD6Tp0s5nlsLV5ScmRoVLE+ucVbooArrYWaXRuktIFuD1lEYD/n1qxRRQBja5/yFPD3/AGEm/wDSaetmsbXP+Qp4e/7CTf8ApNPWzQAyWKOeJo5o1kjYYZHXIP1FV49K06FJEisLVFkG11WFQGHoeOat0UAQQ2VrbwNBBbQxRPndGkYCtnrkCltrW3s4zHaQRQITkrEgUZ9cCpqKACpvA/8Ax+eJf+wmn/pJb1DU3gf/AI/PEv8A2E0/9JLerhucuK/hHWVUvNJ07UWVtQsLW6ZBhTPCrlR7ZFW6K2PJKL6HpMohEml2TiAYi3W6Hyx1wvHH4U+80rT9R2f2hYW11s+558Kvt+mRxVuigBFAVQqgAAYAHasDx9/yTbxL/wBgm6/9EtXQVz/j7/km3iX/ALBN1/6JagDej/1Sf7op1Nj/ANUn+6KdQBQj0LSYboXUOl2UdwG3CVbdA4PrnGc1bit4YN/kRRx+Y259igbj6nHU1JRQBWh02xt7yS7gsreK5lBEkyRKHfJycsBk8gVZoooA52//AOSl6H/2CtQ/9G2lFF//AMlL0P8A7BWof+jbSigDK0/xJpujeLPFkF+9wsjalE4EVnNKMfYrYdUUgdDx1rV/4TvQf+el9/4LLn/43R4b/wCRk8Xf9hWL/wBIrauioA53/hO9B/56X3/gsuf/AI3R/wAJ3oP/AD0vv/BZc/8AxuuiooA53/hO9B/56X3/AILLn/43R/wneg/89L7/AMFlz/8AG66KigDgfG/jXRLn4f8AiGCKS83y6Xcou7TrhRkxMBkmPA+p4raj8daEI1/e33Qf8wy5/wDjdSePv+SbeJf+wTdf+iWrej/1Sf7ooA5//hO9B/56X3/gsuf/AI3R/wAJ3oP/AD0vv/BZc/8AxuuiooA53/hO9B/56X3/AILLn/43R/wneg/89L7/AMFlz/8AG66KigDnf+E70H/npff+Cy5/+N1g3vjTRW+IWjTiS88uPTb5Gzp1wDlpLUjA2ZP3TyOnGeor0Cudv/8Akpeh/wDYK1D/ANG2lAB/wneg/wDPS+/8Flz/APG6P+E70H/npff+Cy5/+N10VFAHO/8ACd6D/wA9L7/wWXP/AMbo/wCE70H/AJ6X3/gsuf8A43XRUUAc7/wneg/89L7/AMFlz/8AG6P+E70H/npff+Cy5/8AjddFRQB5Jo/ijS0hvsvc/Nqd64xZTHhrmQj+Dg4PTqO9aH/CV6T/AH7r/wAAZ/8A4ip9E/1Wof8AYVv/AP0qlrSrme570PhRjf8ACV6T/fuv/AGf/wCIo/4SvSf791/4Az//ABFbNFBRjf8ACV6T/fuv/AGf/wCIo/4SvSf791/4Az//ABFbNFAHIeJfE2mTaRGsb3Oftto3zWcw4FzGTyU9B+Na3/CV6T/fuv8AwBn/APiKPFX/ACBY/wDr/sv/AEqirZoAxv8AhK9J/v3X/gDP/wDEUf8ACV6T/fuv/AGf/wCIrZooAxv+Er0n+/df+AM//wARR/wlek/37r/wBn/+IrZooAxv+Er0n+/df+AM/wD8RWTB4m0weMr+Uvc7GsLZR/oc2ciScnjZnuOf8K6+sa3/AOR51H/sG2v/AKNuKAD/AISvSf791/4Az/8AxFH/AAlek/37r/wBn/8AiK2aKAMb/hK9J/v3X/gDP/8AEUf8JXpP9+6/8AZ//iK2aKAMb/hK9J/v3X/gDP8A/EUf8JXpP9+6/wDAGf8A+IrZooA5Dwr4m0yDwfo8Uj3O9LKFW22czDIQdwmD+Fa3/CV6T/fuv/AGf/4ijwf/AMiRon/XhB/6AK2aAMb/AISvSf791/4Az/8AxFH/AAlek/37r/wBn/8AiK2aKAMb/hK9J/v3X/gDP/8AEUf8JXpP9+6/8AZ//iK2aKAOQ1nxNpkmpaEyvc4jvyzZs5hx9nmHGU55I4Fa3/CV6T/fuv8AwBn/APiKNc/5Cnh7/sJN/wCk09bNAGN/wlek/wB+6/8AAGf/AOIo/wCEr0n+/df+AM//AMRWzRQBjf8ACV6T/fuv/AGf/wCIo/4SvSf791/4Az//ABFbNFAGN/wlek/37r/wBn/+Ip/hDxho9reeIPOkux5uoo67bCduPssA5whxyDwfr3rWqbwP/wAfniX/ALCaf+klvVw3OXFfwi1/wneg/wDPS+/8Flz/APG6P+E70H/npff+Cy5/+N10VFbHknO/8J3oP/PS+/8ABZc//G6P+E70H/npff8Agsuf/jddFRQBzv8Awneg/wDPS+/8Flz/APG6w/G/jXRLn4f+IYIpLzfLpdyi7tOuFGTEwGSY8D6niu+rn/H3/JNvEv8A2Cbr/wBEtQBHH460IRr+9vug/wCYZc//ABunf8J3oP8Az0vv/BZc/wDxuugj/wBUn+6KdQBzv/Cd6D/z0vv/AAWXP/xuj/hO9B/56X3/AILLn/43XRUUAc7/AMJ3oP8Az0vv/BZc/wDxuj/hO9B/56X3/gsuf/jddFRQBxcGvWGtfEzSBp7TsYtKvt/nWssPWW0xjeoz07UVpX//ACUvQ/8AsFah/wCjbSigA8N/8jJ4u/7CsX/pFbV0Vc74b/5GTxd/2FYv/SK2roqACikJCqSxwAMk1j6Z4u0HWINQn0zU4biDTXKXUy52RkDJ+YjBwO4yKANmisTSPF+ja5fGz0+4n+0eV56x3FpNbmSPON6eYi71z3XI5HqK26AOf8ff8k28S/8AYJuv/RLVvR/6pP8AdFYPj7/km3iX/sE3X/olq3o/9Un+6KAHUUVW1HUbTSdOnv8AUZ1t7W3QvLK3RVHU8UAWaKwn8Z6EukWOpLdSywahn7KsNpNJLNjriJVL8d/l471o6VqtlremxX+lzrcW0oO1wCOQcEEHBBBBBBAIIwaALlc7f/8AJS9D/wCwVqH/AKNtK6Kudv8A/kpeh/8AYK1D/wBG2lAHRUUUUAFFYcPjHSLnVpdOtvt888M5t5Wi0y5eJJBjKmUR7BjI53Y5qZfFOiv4p/4RxNQjfV/INwbVAWKoCASSBgdRwTmgDWooooA870T/AFWof9hW/wD/AEqlrSrN0T/Vah/2Fb//ANKpa0q5nue9D4UFFQXl3HY2rTzLMyLjIggeVuTjhUBY/lWZH4t0d/tIeeeA2yB5VubOaEgE4GA6DOT2GTQUbVFUNM1mx1fzRZSOXhIEkcsLxOmRkZRwCMjocc1foAxvFX/IFj/6/wCy/wDSqKtmsbxV/wAgWP8A6/7L/wBKoq2aACiiszU/EOm6RKIr6aQSFDIUhgkmZUBwXYIpKrnucCgDTorJvfE2k2KxmW4kk8yLzl+zW8k58v8AvkRq2F9zxWlb3EV1bR3FtIssMqh0dDkMp5BFAElY1v8A8jzqP/YNtf8A0bcVs1jW/wDyPOo/9g21/wDRtxQBs0UVR1fWtO0HT2vdXu47W3U43vnk+gA5J46CgC9RWfqWuabo+mf2hqV2lva4BDvnnPTA6k+wGabfa/p+nram4eZjeAmBYLaWZnAAJO1FJHBHWgDSoqK2uEu7ZJ4lkVHGQJYmjYfVWAI/EVLQBjeD/wDkSNE/68IP/QBWzWN4P/5EjRP+vCD/ANAFbNABRWeNd0w67/Yy3kbaj5ZlNuuSVUY5JHA6jg880t5renWGpWlhd3IS6vGKwR7WJc/gMDp1OKAL9FZP/CT6T/aYsPtTecZvIDeS/lGXGfL83bs3cfdznPHWtagDG1z/AJCnh7/sJN/6TT1s1ja5/wAhTw9/2Em/9Jp62aACimTTR28DzXEixRRqWd3OFUDqSewrOtfEWmX2jnVLCaW7tA5Tfb28kjEg4OFVSx57gYoA1KKxovFekzG4Ae6ja2RXlSaxniYBjhcBkBYk8ADJq3pus2WreeLKSQvbuEmimheKSMkBhlHAYZBBBxzQBeqbwP8A8fniX/sJp/6SW9Q1N4H/AOPzxL/2E0/9JLerhucuK/hHWUUVi654u0bw67Lqs86FITcSeRZzTiGIZ+dzGjBF4PLYHB9DWx5JtUVi6p4u0XSFhN1dPJ58RmjFpbyXJMeM+ZiJWIT/AGjxz1qHUPHPh/TbNLue8lltntvtfnWlpNcokPP7xzGjBF4PLYHB9DQB0Fc/4+/5Jt4l/wCwTdf+iWrdiljuIUmgdZIpFDI6HIYEZBB7isLx9/yTbxL/ANgm6/8ARLUAb0f+qT/dFOpsf+qT/dFOoAKKwtO8aaFqmpx6faXcn2iaN5YPOtZYkuETG5ondQsgG4H5CeDnpTrLxhouoasum29xMLlwxjE1pNEkwU4by3dAr4/2SaANuisPT/GWianq0WnWtzMLmeN5IBNaTQpcKmNxid0CyAbgflJ4OelblAHO3/8AyUvQ/wDsFah/6NtKKL//AJKXof8A2CtQ/wDRtpRQAeG/+Rk8Xf8AYVi/9IrauirnfDf/ACMni7/sKxf+kVtXRUANlEZhcThTHtO8P93HfOe1eVadqWjQx/EKC0FreW4K+XZWsijfGLdRhQvRR6gcV6syhlKsAQRggjrVaHS7C3ffBY20TYI3JCoOPTgUAeYeBvOtvHWmJc6xF4g8/R2WGWGQMdORShMbbRg7sj5jg/J0r1moLextLRmNrawwFvvGOMLn64qegDn/AB9/yTbxL/2Cbr/0S1b0f+qT/dFYPj7/AJJt4l/7BN1/6Jat6P8A1Sf7ooAdXG+O7TV764sEtdMN9pdvvublEuEjLyKP3akN1UHLH3UD1rsqCMjB5FAHjXgq++x3nhHUNbjTTrT+zrm3ilnmXYX8zP3ugJHY+ldt8OAH0bU7uEEWt7q93cWxIwGjaU4YD0OMj611EllazQCGW2hkiU5EbRgqPwqZEWNAkahVUYCqMACgBa52/wD+Sl6H/wBgrUP/AEbaV0Vc7f8A/JS9D/7BWof+jbSgDoqKKKAPMNWng0DUzd+D/EMtze3usf6To5eORHYtsl+ULvXG3rnHHvVq+vNGs/jhpQiuLGCR9OulnCuilpWkiwG/2j78mu+SwtI7k3EdrAs5zmVYwGP49aY2l6e85mextmlLbjIYVLZ9c460AWqKKKAPO9E/1Wof9hW//wDSqWtKs3RP9VqH/YVv/wD0qlrSrme570PhRHNMlvbyTSsFSNSzE9gK4m30xtW8NXWsT3MVpcX9yl3FJcHCLGh/dq3sRz+NdyyhlKsAwIwQR1pjQRPD5TxI0eMbCoK4+lBRynhlru+8YatqM7WzxG3ggEloxaN2UuThiBnG4fnXX0yOKOGMJCixoOiqMAfhT6AMbxV/yBY/+v8Asv8A0qirZrG8Vf8AIFj/AOv+y/8ASqKtmgArkvECy6XrlzqlvfWCm5sBBLbXchVsKzFWTGSc7mGMeldbUUlrbyyLJLBG7r0ZkBI/GgDy6K0uYbW0tP7STRLqPSQJZ5mCidWYkIAemPXqM9DXoHhWVZ/CemSR2ptFNsm2AknYMYxk1ozWtvcEG4gilI6b0DY/OpAMDA4FAC1jW/8AyPOo/wDYNtf/AEbcVs1jW/8AyPOo/wDYNtf/AEbcUAbNc14/NmvgnVWuzAJhZTiAy43bjGRhc9yDjiulqOa3guFAuIY5QDkB1DY/OgDlfElxps3w8kmkmtJCLQiF2ZThtuCFPr9KfMukahY6LPNrZsZoID5E0E6LnKqHGWBB6CukNjaGIRm1hManIQxjAP0pDYWbRrG1pAUUkqpjGBn2oAyvBt/e6j4YguNRYyS75ESYptM8auQkmO25QD+NbtIAFUBRgDgAdqWgDG8H/wDIkaJ/14Qf+gCtmsbwf/yJGif9eEH/AKAK2aAOOvrnTbb4m6SIprWJza3fnBWVSZCYcbv9o4788VlalHq0HiXT7y/0stPNqgEbrcIR5YVgqgZ47k13zWNo8ple1haQnJcxgnP1qZkVypZQxU5UkdDQB5zqtndw2cehWN3Y3SzatHMio5NxH+/EjblHAC885/U16RUSWtvHM0scEaSN951QAn8aloAxtc/5Cnh7/sJN/wCk09bNY2uf8hTw9/2Em/8ASaetmgCC8W1azkF+ITbEfvBMBsx754rmPA+oWg0PUmW5iYRajeSMFcHC+c5B+mK6x40ljKSKro3BVhkGo47O1h3eTbQx7hhtsYGR70Ac1oMgTR73X7y4S1l1OXeksq5EafdjBHHHT0603wpIT4o14NcR6g0ggke/hGI2O0gRAAkAqBngn71dU0MbQ+U0aGPGNhUYx9KSKCK3TZBEkS5ztRQB+lAElTeB/wDj88S/9hNP/SS3qGpvA/8Ax+eJf+wmn/pJb1cNzlxX8I6yuM8feJYbaJfDNpdWsOq6tEyh7mRUjtoD8rzNn0BIA7tgetdnVe406yu5A91Z287gYDSRKxA/EVseSefadLpHhfxu/wBrvYE03/hHre3sppJBtlWIsGCnOCcbeB1rMsi8Xwjh0mXxFaaFJJYTPLDdR/O0T7toUlht4yOAxHpXqj6fZyRxxyWkDJH9xWiBCfQY4onsLO6ZWubSCYqMKZIw2B7ZoAzvB8xn8E6LIbF9P3WMOLST70I2DCn6VB4+/wCSbeJf+wTdf+iWroK5/wAff8k28S/9gm6/9EtQBvR/6pP90U4nHWmx/wCqT/dFO60Aee6druneMvH1tqdvqFounaL50VmPOXzbydgUkdVznYq5A9ST6VWu9RjuviNoF8ur22uQF5o4ra1UK1kCuTI+CxbGNvO3r0r0CPStPhlEsNhbRyKch1hUEfjipIbG0t5Wlt7WGKR/vOkYUt9SKAPPZr9bz4m+Gr2PV7XXY3a5jgtrRAjWKtHkzPgtu4ATJ2/f4BzXpNQQWFpbStLbWsEMjDDPHGFJ+pFT0Ac7f/8AJS9D/wCwVqH/AKNtKKL/AP5KXof/AGCtQ/8ARtpRQAeG/wDkZPF3/YVi/wDSK2roq4jT/Een6P4s8WQXq3pdtSicfZ9PnnXH2K2H3o0YA8dM5rV/4TrRf7mrf+CW8/8AjVAHRUVzv/CdaL/c1b/wS3n/AMao/wCE60X+5q3/AIJbz/41QB0VFc7/AMJ1ov8Ac1b/AMEt5/8AGqP+E60X+5q3/glvP/jVADvH3/JNvEv/AGCbr/0S1b0f+qT/AHRXB+N/GekXPw/8QwRrqYeTS7lFL6RdouTEw5ZogAPckAVtR+OdGEa/Jq3Qf8wW8/8AjVAHSUVzv/CdaL/c1b/wS3n/AMao/wCE60X+5q3/AIJbz/41QB0VFc7/AMJ1ov8Ac1b/AMEt5/8AGqP+E60X+5q3/glvP/jVAHRVzt//AMlL0P8A7BWof+jbSj/hOtF/uat/4Jbz/wCNVg6h400SPx1pF/cTXVraw6feQtJdWE8PzvJbFQA6AtwjdM4xzjIym0ldkylGC5pOyPQKK5X/AIWZ4Q/6DUf/AH5k/wDiaP8AhZnhD/oNR/8AfmT/AOJqfaQ7ox+tUP5196Oqorlf+FmeEP8AoNR/9+ZP/iaP+FmeEP8AoNR/9+ZP/iaPaQ7oPrVD+dfejqqK5X/hZnhD/oNR/wDfmT/4mj/hZnhD/oNR/wDfmT/4mj2kO6D61Q/nX3oxdE/1Wof9hW//APSqWtKuX0jxNpscN4c3ciy6hdzI8VhPIrI9xIykMqEcgj6d+av/APCVaZ/d1D/wWXP/AMbrHc+kpyUoJraxs0Vjf8JVpn93UP8AwWXP/wAbo/4SrTP7uof+Cy5/+N0Ghs0Vjf8ACVaZ/d1D/wAFlz/8bo/4SrTP7uof+Cy5/wDjdAB4q/5Asf8A1/2X/pVFWzXIeJfEunTaRGqLfA/bbRvm064UYFzGTyU68dO/Qc1rf8JVpn93UP8AwWXP/wAboA2aKxv+Eq0z+7qH/gsuf/jdH/CVaZ/d1D/wWXP/AMboA2aKxv8AhKtM/u6h/wCCy5/+N0f8JVpn93UP/BZc/wDxugDZrGt/+R51H/sG2v8A6NuKP+Eq0z+7qH/gsuf/AI3WTB4l04eMr+UrfbWsLZQP7OuM5Ek56bMgcjnoefQ0AdfRWN/wlWmf3dQ/8Flz/wDG6P8AhKtM/u6h/wCCy5/+N0AbNFY3/CVaZ/d1D/wWXP8A8bo/4SrTP7uof+Cy5/8AjdAGzRWN/wAJVpn93UP/AAWXP/xuj/hKtM/u6h/4LLn/AON0AHg//kSNE/68IP8A0AVs1yHhXxLp0Hg/R4nW+LJZQqdmnXDDIQdCEIP1Fa3/AAlWmf3dQ/8ABZc//G6ANmisb/hKtM/u6h/4LLn/AON0f8JVpn93UP8AwWXP/wAboA2aKxv+Eq0z+7qH/gsuf/jdH/CVaZ/d1D/wWXP/AMboANc/5Cnh7/sJN/6TT1s1yGteJtMN9osztcwxW98ZJZJ7KaJVXyJl6sgycsOBz+Rq9/wnfhr/AKCif9+3/wDia3hh61Rc0INryTM5VacXaUkjoaK57/hO/DX/AEFE/wC/b/8AxNH/AAnfhr/oKJ/37f8A+Jq/qeJ/59y+5k+3pfzL7zoaK57/AITvw1/0FE/79v8A/E0f8J34a/6Cif8Aft//AImj6nif+fcvuYe3pfzL7zoam8D/APH54l/7Caf+klvXMf8ACd+Gv+gon/ft/wD4mrfg7xhpEE2uy7r2aK51BZIpLbTridWUW0KnlEIByp4PPfoRS+r1qfvTg0vNM58RVpyp2jJM9Iornf8AhOtF/uat/wCCW8/+NUf8J1ov9zVv/BLef/GqDzToqK53/hOtF/uat/4Jbz/41R/wnWi/3NW/8Et5/wDGqAOirn/H3/JNvEv/AGCbr/0S1N/4TrRf7mrf+CW8/wDjVYfjfxnpFz8P/EMEa6mHk0u5RS+kXaLkxMOWaIAD3JAFAHeR/wCqT/dFOrm4/HOjCNfk1boP+YLef/Gqd/wnWi/3NW/8Et5/8aoA6Kiud/4TrRf7mrf+CW8/+NUf8J1ov9zVv/BLef8AxqgDoqK53/hOtF/uat/4Jbz/AONUf8J1ov8Ac1b/AMEt5/8AGqAC/wD+Sl6H/wBgrUP/AEbaUVmwa9Za18TNIFiLsGLSr7d9psprfrLadPMRd3TtnH40UAaXhv8A5GTxd/2FYv8A0itq6Kud8N/8jJ4u/wCwrF/6RW1dFQAUUUUAFFFFAHP+Pv8Akm3iX/sE3X/olq3o/wDVJ/uisHx9/wAk28S/9gm6/wDRLVvR/wCqT/dFADqKKKACiiigAryX46f6nRP96f8AkletV5L8dP8AU6J/vT/ySsMR/CZ52Z/7pP5fmi5pHwh8PX+iWN5NPqAkuLeOVwsqAAsoJx8vTmrn/ClvDX/PxqX/AH+T/wCIrr/DX/IqaT/15Q/+gCtOiNGnZaFU8DhnBNwR57/wpbw1/wA/Gpf9/k/+Io/4Ut4a/wCfjUv+/wAn/wARXoVFV7Gn2K+o4b+RHnv/AApbw1/z8al/3+T/AOIrl/iD8OdH8LeGRqGnTXjzeeseJpFZcEH0Uele1VwPxl/5EMf9fcf8mrKrSpqDaRzYvB4eGHnKMFdIyPAP/Ik2P1k/9GNXR1zngH/kSbH6yf8Aoxq6Oph8CPqcv/3Ol/hj+SCiiirO0KKKKAMbxV/yBY/+v+y/9Koq2axvFX/IFj/6/wCy/wDSqKtmgAooooAKKKKACsa3/wCR51H/ALBtr/6NuK2axrf/AJHnUf8AsG2v/o24oA2aKKKACiiigAooooAxvB//ACJGif8AXhB/6AK2axvB/wDyJGif9eEH/oArZoAKKKKACiiigDi/in/yKcP/AF9p/wCgvWV4Z+H+k6x4btL+6lu1lmViwjkULwxHGVPpWr8U/wDkU4f+vtP/AEF60/An/Ij6d/uv/wChtXvxr1aGWRlTlZ836HmunCpi2pq+hmf8Ks0L/nvff9/V/wDiaP8AhVmhf8977/v6v/xNdpRXn/2ljP8An4zp+q0P5UcX/wAKs0L/AJ733/f1f/iaP+FWaF/z3vv+/q//ABNdpRR/aWM/5+MPqtD+VHm/iT4faRpHh27vrWW7MsKBlDyKR1A5+X3rr/gZ/wAiXe/9hB//AEXHUPjj/kStS/65j/0IVN8DP+RLvf8AsIP/AOi469SNerXy2cqsrvmX6HmYqnCnWSgraHpdFFFeKZhRRRQAVz/j7/km3iX/ALBN1/6Jaugrn/H3/JNvEv8A2Cbr/wBEtQBvR/6pP90U6mx/6pP90U6gAooooAKKKKAOdv8A/kpeh/8AYK1D/wBG2lFF/wD8lL0P/sFah/6NtKKADw3/AMjJ4u/7CsX/AKRW1dFXO+G/+Rk8Xf8AYVi/9IrauioAbLIsMTySHaiKWYnsBXMaR8QdI1jTNW1CJLqC00pgJZJ4tvmKVDBlHUggjGQM108jrFG0jnCqCScZ4rzHRrjS9c1LxvZXn2yO11OVXjkNpKm6MQqCykr1BHTrxQB1+jeL4tV1Yabc6be6ZdSW32qBbrZieLOCylWPQkZBwRkcV0NebeF7G81Hx9Z6j/aV1qNhpenSWy3E9kbbc7smFAIBbATJOO4r0mgDn/H3/JNvEv8A2Cbr/wBEtW9H/qk/3RWD4+/5Jt4l/wCwTdf+iWrej/1Sf7ooAdWfrutWvh/Rp9Svd7RwjhIxl5CeAqjuSeAK0K5TxjoesareWNzp0tk1tYrJKba6VzvmxhH+X+6M4HqQe1AEsXje0udD0u/tLG8mn1UMbWxUIJW2/ezltox6lse9b1hczXdkk11ZTWMrZ3QTMjMnPcozL78GvHdM0m4t9P8ACN54ttZxYQ29xBILNJg0TM2VLhfnGcEce1ehfD1L5PCv+n/aBGbqc2a3RJlW2Mh8oNnnO3HXn1oA6ivJfjp/qdE/3p/5JXrVeS/HT/U6J/vT/wAkrDEfwmedmf8Auk/l+aPR/DX/ACKmk/8AXlD/AOgCtOszw1/yKmk/9eUP/oArTrWOyO2n8C9DldW8aXGi3Ea33hnU1hmultop1mtiHZmwpC+buwevTPtU9z4wWx1i2tL7R9Qtra6ufssN9IqeU0mDgY3bwDg4JXFU7mCbXfiZAksMg0/Q4POy6EJLcScLg9DtUE8dCRWRea7a+IPHsMGpG6tdP0e6/cRNZzf6XcYwH3BcbFycc9eao0PRq4H4y/8AIhj/AK+4/wCTV31cD8Zf+RDH/X3H/Jqyrfw2ceO/3afoZHgH/kSbH6yf+jGro65zwD/yJNj9ZP8A0Y1dHWEPgR7+X/7nS/wx/JGNfeJ7Kx8QWejvHPJcXThN0ceUjJVmG5jxyEbgZPFR6j4qt7C4uo1s7q6jslDXcsAXbAD65YE8c4UGs7xdfwR654fQiZja6gJpilu7hEMMgzkAjqwH41Rupm09/E9s9tcSyaqN9nshZhLvj2YyBgYPrirO06DUvFEemRm5lsLuTT1Me+9QJ5ahyoBwWDEDcMkA9/StyvP/ABBEv9gpp0bahJqVrFEsFkIWaCeRdpXdxgjPXLDGPau+jLGNTIAHwNwB4BoAyPFX/IFj/wCv+y/9Koq2axvFX/IFj/6/7L/0qirZoAa7rHGzyEKqgliewrH0XxRaa7DfS2UF0Fs3CESRbWkygcFV64IYdQK2HcRxs7fdUEnAzxXH+HtWtk17xNOVuNk1wk8WbaQeYiwIpIyvqCMUAasXimATXMWpWd1p0lvbG6IuAp3RDqw2MemOh5p2meJY9Q1CKymsLqyluLc3MHn7CJYwQCRtY4xuXg4PNc7a6g2qRarqohkm1Oe0eO2sZbeRVSMA/KdygEknkZpnhSzWz8TWh0xrq6gawKXb3cLr9nYEFVQt0BJOVGeg56UAegVjW/8AyPOo/wDYNtf/AEbcVs1jW/8AyPOo/wDYNtf/AEbcUAbNZPiLxHZ+GdMa8vlmlGGKxQJudtqlj7AAAnJwK1q53x3cJH4L1S3KyPNdWksUKRxM5ZihwPlBx+NAFrUPEC2T2EcNjcXk1/nyo4iikYXcclmA6e9R614pt/D+hjUdUtLqNiCRaoqyScDJ+6SuABnOcVQu7nQb3S9OfVYLqQRx/upEhmVo2C4I+UBgefpWXfTXcPwmv7bURdSXNzBcR2qNEzyMpzsDYB5wR1oA72NxLEki5AZQwz706qelXcV5pcEsBYrtC/PGyHIHPDAGrlAGN4P/AORI0T/rwg/9AFbNY3g//kSNE/68IP8A0AVs0AYyeJ7KXxT/AGFEk73Ajd2l2YjBTbldx6n516ZqE+LrVboKbW5+yfaPspvcL5Qkzjb13deM4x71n6nqVuPiPpTYnKW9tcwyuLeQqrsYtoztxztPPtWZqOkmW4/sjR765kil1BbiS3a1IWHDB2PmEDjI7Z5NAHRS+L7WKZmNrctYpci1e/AXylkLbcYzuxuIXIGM966CvOmimXwxceFvs1w2oS6iVX9y2zy2m8zzd+NuAnPXOeK9FoA4v4p/8inD/wBfaf8AoL1p+BP+RH07/df/ANDasz4p/wDIpw/9faf+gvWn4E/5EfTv91//AENq9mp/yKof4/0Zwx/3x+htXlybS0eZIJbhlxtihGWYk4AGeO/U8DqazLXxNbTJqH2yCewl07abiKcKSFZcqwKkgg89D1Bq7rGpro+kXF+8E1wIU3CKBCzuewAHvWD4Zu7aOHUNTvp3kvrkia6228gWJRwka5XLBQccdTk968Y7i1D4wtJ/C0+uR2t0IYZTEYWULIxDhehOBye5Faun3lxeI7XOnT2OMbRM8bbvpsZv1rkNAutOl8L6jbapb3EkDXkjyRG3kBKNJ8rdATzg8c1o+Fkdde1VtP8AtQ0UpD5AuS/MuDvKb/m242g57g4oAt+OP+RK1L/rmP8A0IVN8DP+RLvf+wg//ouOofHH/Ilal/1zH/oQqb4Gf8iXe/8AYQf/ANFx17lD/kWT/wAX6I8fG/x16HpdYXiHxLJoKyyLomo6jDBbm4nltVj2xoM5++y7m4J2rk9OORW7XDfEHX2WWHwzEbm0TUIi15qKW0kiwQZwyrtU5kbkD0BJ7CvMOc0rjxtGdQsrTR9KvdXe9shfRNbPEi+UcYJ8x167hxUl/wCLZrXW4dJttA1C9vJLQXbxxSQL5SliuCXkAJyOxNc94hTwl9gtx9i1EXMGneVp01rDcK+zGFQFMYIKjhsdqp3sOmt4as08a22pv4kTSdn2izWYSOSGwqtH8u7d/e4yaAPTYXaSFHkjaJmUFo2IJQ46HBI49jWF4+/5Jt4l/wCwTdf+iWqz4UXVU8H6SviJt2qi0jF2TjJk2jdnHGc9arePv+SbeJf+wTdf+iWoA3o/9Un+6KdTY/8AVJ/uinE4BJ7UAc1beNI31q007UdI1HTDfJK9pNdKgWbyxuYYViyHb82HA4B9Kj07x7Z6hqFlC1he21tqLMtjezKnlXLL1AAYsMgHG4DOOKwNI1q08W+NBqWqC7tYrUS2umWMtnMrHdlZJ3YrgFhwozwvPVqz9P0OS58Q+HdM0jVL290vRbp7giaxMKwKAwVPMYAufmwMdhQB2uheNtN8ReI9T0jTornfpyI7zyRbY5QzOvyE8sAY2GcY9Ca6OvPtI1m0m+M2ryoLryrnTbW2ika0lVGkSSYsu4rjgMOenNeg0Ac7f/8AJS9D/wCwVqH/AKNtKKL/AP5KXof/AGCtQ/8ARtpRQAeG/wDkZPF3/YVi/wDSK2roq53w3/yMni7/ALCsX/pFbV0VABRRRQAUUUUAc/4+/wCSbeJf+wTdf+iWrej/ANUn+6KwfH3/ACTbxL/2Cbr/ANEtW9H/AKpP90UAOooooAKKKKACvJfjp/qdE/3p/wCSV61Xkvx0/wBTon+9P/JKwxH8JnnZn/uk/l+aPR/DX/IqaT/15Q/+gCtOuM0Hx54YtvDmmwT6zbpLFaRI6nOVYIAR0q//AMLC8Kf9Bu2/X/CrjUhZam9PEUVBe+tu6Okorm/+FheFP+g3bfr/AIUf8LC8Kf8AQbtv1/wp+0h3L+sUf5196OkrgfjL/wAiGP8Ar7j/AJNW1/wsLwp/0G7b9f8ACuN+KPizQta8Hi10vUobmf7Sj7EznAByenvWVWcXTdmcuMr0pYeaUlt3QvgH/kSbH6yf+jGro65zwD/yJNj9ZP8A0Y1dHWcPgR9Jl/8AudL/AAx/JBRRRVnaFFFFAGN4q/5Asf8A1/2X/pVFWzWN4q/5Asf/AF/2X/pVFWzQAUUUUAFFFFABWNb/API86j/2DbX/ANG3FbNY1v8A8jzqP/YNtf8A0bcUAbNFFFABRRRQAUUUUAY3g/8A5EjRP+vCD/0AVs1jeD/+RI0T/rwg/wDQBWzQAUUUUAFFFFAHF/FP/kU4f+vtP/QXrT8Cf8iPp3+6/wD6G1ZnxT/5FOH/AK+0/wDQXrP8LeOtF0nwzZ2N48wmhVgwWIkcsT1/GvejRqVssjGnFt83T0Z5zqRhi25O2h6JRXJf8LL8Pf8APS4/78mj/hZfh7/npcf9+TXnf2fi/wDn2/uOn6zR/mR1tFcl/wALL8Pf89Lj/vyaP+Fl+Hv+elx/35NH9n4v/n2/uD6zR/mRe8cf8iVqX/XMf+hCpvgZ/wAiXe/9hB//AEXHXLeJvHei6r4bvLK0kmM0yAIGiIHUHr+FdT8DP+RLvf8AsIP/AOi469WNGpRy2cakWnzLf5HmYqpGdZOLvoel0UUV4xkFFFFABXP+Pv8Akm3iX/sE3X/olq6Cuf8AH3/JNvEv/YJuv/RLUAb0f+qT/dFOpsf+qT/dFOoAKKKKACiiigDnb/8A5KXof/YK1D/0baUUX/8AyUvQ/wDsFah/6NtKKAMrT9L1G+8WeLJLHX7vTYxqUSmKCCBwx+xW3zZdGOe3XHFav/CPa5/0OWpf+Alp/wDGqPDf/IyeLv8AsKxf+kVtXRUAc7/wj2uf9DlqX/gJaf8Axqj/AIR7XP8AoctS/wDAS0/+NV0VFAHO/wDCPa5/0OWpf+Alp/8AGqP+Ee1z/octS/8AAS0/+NV0VFAHA+N9C1mL4f8AiGSXxbqE6JpdyzRPa2wDgRNlSREDg9OCDW1H4f1vy1/4rLUhwP8Al0tP/jVSePv+SbeJf+wTdf8Aolq3o/8AVJ/uigDn/wDhHtc/6HLUv/AS0/8AjVH/AAj2uf8AQ5al/wCAlp/8aroqKAOd/wCEe1z/AKHLUv8AwEtP/jVH/CPa5/0OWpf+Alp/8aroqKAOd/4R7XP+hy1L/wABLT/41XL+IvBs2ueLNI0jXNfvr6B7O7uVZooY2jZHgXA2IMgiQ5znoMY5z6VXO3//ACUvQ/8AsFah/wCjbSlKKkrMipTjUi4TV0cv/wAKR0P/AKCOof8AfSf/ABNH/CkdD/6COof99J/8TXpVFZewp9jk/s/C/wAiPNf+FI6H/wBBHUP++k/+Jo/4Ujof/QR1D/vpP/ia9Koo9hT7B/Z+F/kR5r/wpHQ/+gjqH/fSf/E0f8KR0P8A6COof99J/wDE16VRR7Cn2D+z8L/IjzTwl4NuZtElW28SX9pDb395bRxRwQMAsVzJGDloyckLk89ScYHFbf8Awg1//wBDdqf/AIDWv/xqr3gj/kB3n/YY1L/0tmroq0UYpWSPQhOUIqEXZI4//hBr/wD6G7U//Aa1/wDjVH/CDX//AEN2p/8AgNa//Gq7Cinyov2tT+ZnH/8ACDX/AP0N2p/+A1r/APGqP+EGv/8AobtT/wDAa1/+NV2FFHKg9rU/mZ5n4u8HX1roUUh8U6jLnUbFNr29sB813EueIxyM5HuOcjitz/hBr/8A6G7U/wDwGtf/AI1V7xz/AMi3D/2FdO/9LYK6KjlQe1qfzM4//hBr/wD6G7U//Aa1/wDjVH/CDX//AEN2p/8AgNa//Gq7CijlQe1qfzM4/wD4Qa//AOhu1P8A8BrX/wCNUf8ACDX/AP0N2p/+A1r/APGq7CijlQe1qfzM4/8A4Qa//wChu1P/AMBrX/41WHbeDr5vH+p23/CU6iDHplnJ5ot7bc26W5GD+7xgbc9M8n2x6ZXO2n/JTtX/AOwPY/8Ao67o5UHtan8zKP8Awg1//wBDdqf/AIDWv/xqj/hBr/8A6G7U/wDwGtf/AI1XYUUcqD2tT+ZnH/8ACDX/AP0N2p/+A1r/APGqP+EGv/8AobtT/wDAa1/+NV2FFHKg9rU/mZx//CDX/wD0N2p/+A1r/wDGqP8AhBr/AP6G7U//AAGtf/jVdhRRyoPa1P5meZ+CvB19d+AtBuR4p1GETadA4jS3tiqZjU4GYycD3Jrc/wCEGv8A/obtT/8AAa1/+NVe+Hv/ACTTw1/2Crb/ANFLXRUcqD2tT+ZnH/8ACDX/AP0N2p/+A1r/APGqP+EGv/8AobtT/wDAa1/+NV2FFHKg9rU/mZx//CDX/wD0N2p/+A1r/wDGqP8AhBr/AP6G7U//AAGtf/jVdhRRyoPa1P5meV+L/ANxeSaFpt54n1Ga3v8AUjDJmC3UqBbzSAgiMc5jA57E1F/woDSv+hj1f/vmD/43Xb+J/wDkOeEv+ww3/pFdV0VdFPEVqUeWnJpeTMpe+7y1PJv+FAaV/wBDHq//AHzB/wDG6P8AhQGlf9DHq/8A3zB/8br1mitPruJ/5+P72TyR7Hk3/CgNK/6GPV/++YP/AI3R/wAKA0r/AKGPV/8AvmD/AON16zRR9dxP/Px/ew5I9jyb/hQGlf8AQx6v/wB8wf8Axurvgnwff6PP4g0nS/FOo29tZaiqJ/o9sxfdbQSEktGecvjjHAFemVzvhv8A5GTxd/2FYv8A0itqipia9SPLOba82Cilsg/4R7XP+hy1L/wEtP8A41R/wj2uf9DlqX/gJaf/ABquiornKOd/4R7XP+hy1L/wEtP/AI1R/wAI9rn/AEOWpf8AgJaf/Gq6KigDnf8AhHtc/wChy1L/AMBLT/41WH430LWYvh/4hkl8W6hOiaXcs0T2tsA4ETZUkRA4PTgg131c/wCPv+SbeJf+wTdf+iWoAjj8P635a/8AFZakOB/y6Wn/AMap3/CPa5/0OWpf+Alp/wDGq6CP/VJ/uinUAc7/AMI9rn/Q5al/4CWn/wAao/4R7XP+hy1L/wABLT/41XRUUAc7/wAI9rn/AEOWpf8AgJaf/GqP+Ee1z/octS/8BLT/AONV0VFAHFwadfWHxM0j7frVzqYfSr7aJ4Yk8vEtpnHlouc5756UVpX/APyUvQ/+wVqH/o20ooAPDf8AyMni7/sKxf8ApFbV0Vc74b/5GTxd/wBhWL/0itq6KgAopk6yPbyLBII5WUhHZdwU44OMjP5iuJ0uTV4/HF94dbxDeajajTllkuZI4RLaTFsDaVQL8wycMpxigDuaK4fQm1Q/Ea9so9f1DUdM061CXK3awYNw5DKAUjU/Kg55/iHpXcUAc/4+/wCSbeJf+wTdf+iWrej/ANUn+6KwfH3/ACTbxL/2Cbr/ANEtW9H/AKpP90UAOoorkPHFzq9vf6N/Z02qwae0kv2+TS7ZJpFAjJThkbA3Y6CgDr6K851HWb67s9An0DV9cvNKk84Xt5ZWkUlxkY2h18rCkHIICjpXY+GtQtdU8O2t3YahNqMLqQLidVWRiCQQwVVAYEEEYHSgDVrnb/8A5KXof/YK1D/0baV0Vc7f/wDJS9D/AOwVqH/o20oA6KiiigAorye98XaxF40m00arcw6murJDb6aYIzay2hAO4yFc7sbifnGCMY9djWdZvNO8baXZ2HiKe7ubq/8ALuNNaGNYY4CrEnO3duHGPmOfSgD0CiiigDnfBH/IDvP+wxqX/pbNXRVzvgj/AJAd5/2GNS/9LZq6KgAorivFOo+IdO8ceGlt76CHR72/Fq9ukW6SYmGV2LMfugFFwF5POT2pfHU+q6NaNq9jr00MomijttOWGMxTksAVbKlySCeQRjFAHaUV5xf6v4g1WLxXqOm6pJp39gEx21qkaNHPJHEJG83cpYqSdvylSBXeaRff2notjf7Nn2q3jm2/3dyhsfrQBkeOf+Rbh/7Cunf+lsFdFXO+Of8AkW4f+wrp3/pbBXRUAFFNl8wQv5IUybTsDnAJ7Z9q4LwxqfieeHxjZ6rfR3mo6dcLHbm2hCIha2jk2oDyQGY4LZJ/SgDv6K4Hwdqd3dw/2fqOuaxHr0tgJGttUs4o1jbGGdFWNCwDH+8auaHd6la/Ea+0N9Xn1exi05LiV7lIw9tOZCAmUVRhlycEEjA55oA7KudtP+Snav8A9gex/wDR13XRVztp/wAlO1f/ALA9j/6Ou6AOioorkviXe69pvgbUb/w3eW9lLZ201xLPJHvcKkbMAinjJYDk8AZ4NAHW0VzuqJLP4dh1OfXdQ0xILXzpmtBD8/ygknzI2/THWuKk1/XtN8L+HLjXtav7e1v5JpLm8ggie5RSMwptEe3GCckJ2HSgD1eiub+H+p3+seCbK/1SYTyzGQxzYUNJFvby2YLwGKbSQOhzwOldJQBzvw9/5Jp4a/7BVt/6KWuirnfh7/yTTw1/2Crb/wBFLXRUAFFcR4gn1jQ/EWiyW+vTXL6lqqwnTHhj8o25zvK4XeCi4YsWwSOnOKdLqPiGD4tWNjdXsA0m6tJ3itIY8klduGdiM5yTwOPrQB2tFeTXPjPUrW3bXZdd2zxa6tjJoTLGFEBn8npjzN+0iTdnHtivWaAOd8T/APIc8Jf9hhv/AEiuq6Kud8T/APIc8Jf9hhv/AEiuq6KgAoqtqNvcXenyQWd41lM+ALhEDsgyM4B4zjIBOQCc4PSvPZNU8Srp/jKx0fUbrVpNMeFLG6EMbTiQpmWL5VCMVIB+7/Fg9KAPS6K86l1e+l8Ja1D4f1fW7zXLYQkwXtrEtxAGdclUES5BXdjIPSt3wdqlveSX9p/a2qXl7atH59vqsCQywBlypCrGnytzyc9DQB1Fc74b/wCRk8Xf9hWL/wBIrauirnfDf/IyeLv+wrF/6RW1AHRUUVy3jhb600S+1a38Rz6RFZ2bNGsUMbK0vOC+9WLAnaAowffngA6mivNb3xFq97ew2l9rP/COSrokV/hFjHm3DD5kzIDlVPBA5561SHivWdUs9K1u7utasdIm0cXE8mj2aTKJg7bid0bkDaAaAPV65/x9/wAk28S/9gm6/wDRLVr6bcwXmlWtzZ3X2yCaFHjucg+apAIbgAc9eAKyPH3/ACTbxL/2Cbr/ANEtQBvR/wCqT/dFOpsf+qT/AHRTqACivPrHWry3+Ilhpdv4in1eKSO5OpQzwRxx25QAqYyFBB3cYLNwSe2aZZ+K9VvviNayLcmPw9cW1z5MHlr++8rb+93Yz1yBg44oA9Eorzfwj4tbWbzTdQ1bVdUtm1N2+y2f2REsn+UlYxIULM20E8OMkHjHFekUAc7f/wDJS9D/AOwVqH/o20oov/8Akpeh/wDYK1D/ANG2lFAB4b/5GTxd/wBhWL/0itq6Kud8N/8AIyeLv+wrF/6RW1dFQBDeLcPYzpZSJFctGwieRdyq+OCR3APauY8HeHNb8OxvFf3Wm3XnEy3NzFDIs08p/iYliPbGOB0rraKAMTwr4ffw/ps6XNwt1e3dzJc3NwF2+Y7Nnp7DA/CtuiigDn/H3/JNvEv/AGCbr/0S1b0f+qT/AHRWD4+/5Jt4l/7BN1/6Jat6P/VJ/uigB1ZWsQ67JLC+g3dlCFR1lS7hZwxONrAqQQRg8dDu9hWrRQByOm+Gdb8O6RDaaDqVm0jPJNdNeW7MJJXOSyhSMc9q1vC2gL4a0CPTxObiTzJJpZiu3fJI5djjsMscCtiigArnb/8A5KXof/YK1D/0baV0Vc7f/wDJS9D/AOwVqH/o20oA6KiiigDz+4+Hd/PHd6c1/Z/2Zdam2omQ27G6VmfeVD5x1yAcZAwO1aeq+Gdb126t4NU1KzOm298l2hit2W4OxtyruztHOMkDJHHeutooAKKKKAOd8Ef8gO8/7DGpf+ls1dFXO+CP+QHef9hjUv8A0tmroqAOT8VeHdd1vWtIutPvdOgg0q7F3Ek8Dszv5boQSGAxhyfwqDUvDXiO88WR6wt9pcsVvGBa21zbyMIHx8zjDjJPv0FdnRQBw+peCdWnk1qDTdVt7Oy18Kb4GAtJGxUJI0RzgblHG4HB5rs7W2is7SG2t12RQosaL6KBgD8hUtFAHO+Of+Rbh/7Cunf+lsFdFXO+Of8AkW4f+wrp3/pbBXRUANk3+U/lFRJtO0sMjPbPtXH6J4a8SaZquvXsupabv1iUT5htnBhkWJY1xuYgjCAnPrXZUUAclF4a1yfW21vU9RsTqMFk9rZC3t2WOMvgl2BYluQOMjpS+DfDms+HI3h1C5066WdmmuriKGRZ7mY9XZmYjt0xwMAYrrKKACudtP8Akp2r/wDYHsf/AEdd10Vc7af8lO1f/sD2P/o67oA6KsDxpoupeIvC97o+mXNrbC/t5LeaS4jZ9qupXK4I5571v0UActqPhvVNY8IW+i399bRsJIxcPbxMFlhUjKAEkgkDrUmueG7y613S9X0ae1iudPikhSK7iLx7XxyApBDDGMjsSK6WigDC8IeHP+EY0R7NpkmkmuZbqUxx7I1eRixVF/hUZ4FbtFFAHO/D3/kmnhr/ALBVt/6KWuirnfh7/wAk08Nf9gq2/wDRS10VAHGW/hnxFB4yvNdmv9LuzM3l2/n28m+1t+P3aYfAJIyWxycZ4AqXUPD3iC68c2euQXumpBZxvDHC8EhZkfGckNjPHHGK66igDkdR8H3Gua5FPqw0tbKG6S5AtrUieYxsGRXkJPyggE4xnA7ZrrqKKAOd8T/8hzwl/wBhhv8A0iuq6Kud8T/8hzwl/wBhhv8A0iuq6KgDN8Q2mp33h+7tdBvo9Pv5o9kN1JHvERPU4yOcZx71i6LoGvaJ4fOm2NxpNuYsGF47eRt7bsu0m5yWLcknrk5rrKKAOStfDWtwX2pa02pWf9tXiRRIVt28hI0Odu0tuOctznvVvQfDl3Z+INS17WbuG41G/iig228ZSKKKPOFAJJJJZiST3x2roqKACud8N/8AIyeLv+wrF/6RW1dFXO+G/wDkZPF3/YVi/wDSK2oA6KuS8U+GtZ1zXdPuba9sDp1kPNFheQuyyTg5WRtrDO3sDwDz2FdbRQBzGuaFrGt2cUEj6MGaIpLPJZtI8bHqY9zYHHrnmmzeH9bsNLj0nwzf2Nrp6Wgt1Fzbl5ImwQXXBAPUHBBGRXU0UAZ+gaNb+HvD1ho9kWMFjAkEZc8kKMZPvWf4+/5Jt4l/7BN1/wCiWroK5/x9/wAk28S/9gm6/wDRLUAb0f8Aqk/3RSsCVIBwccH0pI/9Un+6KdQByDeFdX1bWNKufE1/ZXEGlu8sYtbZo5JnZCnzksQFwzEqoAJx6VEPhjocHifTdSsLSK2t7KGWMwKX+YtjBHPGMHj3rtKKAOH0vwJqFr/Y1hfanDNpGh3JubOOOErM7AMsYkYkghVc9AMkCu4oooA52/8A+Sl6H/2CtQ/9G2lFF/8A8lL0P/sFah/6NtKKADw3/wAjJ4u/7CsX/pFbV0VcRp+kXuoeLPFktp4i1LS0XUolMNpHbMrH7FbfMfNhc55xwccDjrWr/wAIzqv/AEO+vf8Afiw/+RqAOiornf8AhGdV/wCh317/AL8WH/yNR/wjOq/9Dvr3/fiw/wDkagDoqK53/hGdV/6HfXv+/Fh/8jUf8Izqv/Q769/34sP/AJGoAd4+/wCSbeJf+wTdf+iWrej/ANUn+6K4Pxt4e1OH4f8AiGWTxjrVwiaXcs0MkNkFkAib5TttwcHpwQfQitqPw1qvlr/xW+vDgf8ALCw/+RqAOkornf8AhGdV/wCh317/AL8WH/yNR/wjOq/9Dvr3/fiw/wDkagDoqK53/hGdV/6HfXv+/Fh/8jUf8Izqv/Q769/34sP/AJGoA6Kudv8A/kpeh/8AYK1D/wBG2lH/AAjOq/8AQ769/wB+LD/5GrBvfD2pj4haNEfGGtM7abfMJjDZbkAktcqP9Hxg5BOQT8owRzkA9Aornf8AhGdV/wCh317/AL8WH/yNR/wjOq/9Dvr3/fiw/wDkagDoqK53/hGdV/6HfXv+/Fh/8jUf8Izqv/Q769/34sP/AJGoA6Kiud/4RnVf+h317/vxYf8AyNR/wjOq/wDQ769/34sP/kagA8Ef8gO8/wCwxqX/AKWzV0Vef+D/AA9qcuj3TR+MNagA1XUFKxw2RBIu5QW+a3JySMntknAAwBvf8Izqv/Q769/34sP/AJGoA6Kiud/4RnVf+h317/vxYf8AyNR/wjOq/wDQ769/34sP/kagDoqK53/hGdV/6HfXv+/Fh/8AI1H/AAjOq/8AQ769/wB+LD/5GoAPHP8AyLcP/YV07/0tgroq8/8AGXh7U4dAiaTxhrU4/tKwXZJDZAAm8hAb5bcHIJyOcZAyCMg73/CM6r/0O+vf9+LD/wCRqAOiornf+EZ1X/od9e/78WH/AMjUf8Izqv8A0O+vf9+LD/5GoA6Kiud/4RnVf+h317/vxYf/ACNR/wAIzqv/AEO+vf8Afiw/+RqAOirnbT/kp2r/APYHsf8A0dd0f8Izqv8A0O+vf9+LD/5GrBtfD2pn4iapEPGGtB10qyYzCGy3MDLdAKf9H24GCRgA/Mck8YAPQKK53/hGdV/6HfXv+/Fh/wDI1H/CM6r/ANDvr3/fiw/+RqAOiornf+EZ1X/od9e/78WH/wAjUf8ACM6r/wBDvr3/AH4sP/kagDoqK53/AIRnVf8Aod9e/wC/Fh/8jUf8Izqv/Q769/34sP8A5GoAPh7/AMk08Nf9gq2/9FLXRV5/4G8PanN8PfD8sfjDWrdH023ZYYobIrGDGvyjdbk4HTkk+5re/wCEZ1X/AKHfXv8AvxYf/I1AHRUVzv8AwjOq/wDQ769/34sP/kaj/hGdV/6HfXv+/Fh/8jUAdFRXO/8ACM6r/wBDvr3/AH4sP/kaj/hGdV/6HfXv+/Fh/wDI1AB4n/5DnhL/ALDDf+kV1XRV5/4i8PanHrHhhX8Ya1KZNVZVZ4bLMR+yXB3Li3AzgEc5GGPGcEb3/CM6r/0O+vf9+LD/AORqAOiornf+EZ1X/od9e/78WH/yNR/wjOq/9Dvr3/fiw/8AkagDoqK53/hGdV/6HfXv+/Fh/wDI1H/CM6r/ANDvr3/fiw/+RqAOirnfDf8AyMni7/sKxf8ApFbUf8Izqv8A0O+vf9+LD/5GrB0Dw9qcmv8AihV8Ya1GY9SjVnWGyzKfsdudzZtyM4IHAAwo4zkkA9Aornf+EZ1X/od9e/78WH/yNR/wjOq/9Dvr3/fiw/8AkagDoqK53/hGdV/6HfXv+/Fh/wDI1H/CM6r/ANDvr3/fiw/+RqAOirn/AB9/yTbxL/2Cbr/0S1N/4RnVf+h317/vxYf/ACNWH428PanD8P8AxDLJ4x1q4RNLuWaGSGyCyARN8p224OD04IPoRQB3kf8Aqk/3RTq5uPw1qvlr/wAVvrw4H/LCw/8Akanf8Izqv/Q769/34sP/AJGoA6Kiud/4RnVf+h317/vxYf8AyNR/wjOq/wDQ769/34sP/kagDoqK53/hGdV/6HfXv+/Fh/8AI1H/AAjOq/8AQ769/wB+LD/5GoAL/wD5KXof/YK1D/0baUVnQaZd6d8TNI+2a5f6r5mlX237Yluvl4ltenlRJ1z3z0GMc5KANHw3/wAjJ4u/7CsX/pFbV0Vc74b/AORk8Xf9hWL/ANIrauioAKKKKACiiigDn/H3/JNvEv8A2Cbr/wBEtW9H/qk/3RWD4+/5Jt4l/wCwTdf+iWrej/1Sf7ooAdRRRQAUUUUAFc7f/wDJS9D/AOwVqH/o20roq52//wCSl6H/ANgrUP8A0baUAdFRRRQAUUUUAFFFFAHO+CP+QHef9hjUv/S2auirnfBH/IDvP+wxqX/pbNXRUAFFFFABRRRQBzvjn/kW4f8AsK6d/wClsFdFXO+Of+Rbh/7Cunf+lsFdFQAUUUUAFFFFABXO2n/JTtX/AOwPY/8Ao67roq520/5Kdq//AGB7H/0dd0AdFRRRQAUUUUAFFFFAHO/D3/kmnhr/ALBVt/6KWuirnfh7/wAk08Nf9gq2/wDRS10VABRRRQAUUUUAc74n/wCQ54S/7DDf+kV1XRVzvif/AJDnhL/sMN/6RXVdFQAUUUUAFFFFABXO+G/+Rk8Xf9hWL/0itq6Kud8N/wDIyeLv+wrF/wCkVtQB0VFFFABRRRQAVz/j7/km3iX/ALBN1/6Jaugrn/H3/JNvEv8A2Cbr/wBEtQBvR/6pP90U6mx/6pP90U6gAooooAKKKKAOdv8A/kpeh/8AYK1D/wBG2lFF/wD8lL0P/sFah/6NtKKADw3/AMjJ4u/7CsX/AKRW1dFXO+G/+Rk8Xf8AYVi/9IrauioAZOnm28ke503KRuT7w46jPevL9J1e28MeLNTlc6lp2k2+lea1rqs7u88it99N7Njjg8gcjivTby3+12M9uJpYPOjaPzYW2umRjcp7EdQawrLwgiauNS1nUrjWblITBEbuOMLGh+8NqKoOcDkjNAHI+AdYe8+I2qG81uO7mvtOguBax3YkjhYvJ8iKDgEKFzj8a9RrFtPCum2PiifXLWFY55rZLcokahVCljkYGQTu5+graoA5/wAff8k28S/9gm6/9EtW9H/qk/3RWD4+/wCSbeJf+wTdf+iWrej/ANUn+6KAHVw/jy+vpPEWgaBZW9xcxXwuJ7iK3uPIaRYgmF8z+EZcHggnGO9dxWLr3hxNaurG8ivrjT76wZjBdW4QsAwwykOCpBGOo7CgDgX1Owv5NKguYtWsdBha4guokuJ5HjukIAV5EJcjByDnHNdV8MdTuNV8FJJcyyz+RdXFtHNMDvkjjlZULZ5zgAH6Vat/CEmn6StjpGt31hukeWeaNIned3+8xLocH6YxWvpGlWuiaXDYWKsIYgcFm3MxJyWJ7kkkk+9AF2udv/8Akpeh/wDYK1D/ANG2ldFXO3//ACUvQ/8AsFah/wCjbSgDoqzPENjcalos1taahNp7NgvPAAX2DllUn7pI4z2rTqnqllPf2DW9rfzWDsf9dCiM2O4w6kfpQB5npmo3t98N/h7YT3lxjWfKjvJxKwkdRGWI35yCcYznNaVparFfeJNCuX1W90zT7mCaCC1uJGmw8YJj37t5UE5+9n3xxWrZfDuGz8LWOif2zfyLpjo+n3RWJZbYoMDGEw3vuBzVy38HvaW87WuuahFqFzcfaJ74CMvKdu3BQrs24xxt4xQBS+GdxNLoOoQzyzZt9TuEjtrmQvNaRltyRSFuSQDnkngjk4rsqyPD/h6DQIrsrcTXd1fTm4urqfG+ZyABkKAAAoAAAAAFa9AHO+CP+QHef9hjUv8A0tmroq53wR/yA7z/ALDGpf8ApbNXRUAcH4yhv7bx74RvU1a6W2n1MW32GM7I8eRMzFscuSVXrwMdKwPiR4qW51FrO01qOwi0i7tjMEuxFJNK0i/LjOSoU5PbkV23iLwhN4g1awvf7evrIafOLi2hhihKpJsZN2WQk5DtwTirGueEdM8Qab9mvok8wvHI1wkSB3ZGB5OO+OaAOKvjJ4lt/Gmrf2lcxTaO7xaY9tcsqQeXCJA+1TtfLHJ3AgjivRNDvJNQ8PadezgCW5tYpXA7MyAn+dYOqeALTUbjUPJ1K9sLLVFVNQsrYoI7gAbTyVLJuUBTtIyBXVRxpDEscShERQqqBgADoKAOf8c/8i3D/wBhXTv/AEtgroq53xz/AMi3D/2FdO/9LYK6KgBsgdonEbbHKkKxGdp9cd6848Lf2hpy+PLS612e4msrpAl7eNwhNrG5OOijcxOBXo8is8TqjmNmUgOoBKn154rkrL4frDNrJv8AXL7UIdb5vYZY4UDt5axhgUQEYVR04oA5L4f31zN4nghU32mtLpW6Rb65eZb6XP8ArogxIAHXA28N04rovhzHeWuqeLrK/wBTutSe21VVWa5bnm3iY4A4UZYnA4rS07wX9j1C2vLvWr7UJrK2a2s2nSIfZwQASNqAMeBy2en1p/h7wjNoGsahfnXb29Ooy+fcRTxQhWk2KgYbEBGFQcA4oA6WudtP+Snav/2B7H/0dd10Vc7af8lO1f8A7A9j/wCjrugDoqwvFlnpMmlPf+ILu4t7GwjeWTyrl4VPA5JQhiRjAGe/Q8Vu1z3inwn/AMJRJp7Pqt3ZLYzeesUKRvHK+PlLq6sG2nkeh5oA4/UbTX5PgMj3urX1jeW9m8krdLiRAT5as/UNt2ZPUnP1rp9UtdKn8HWeo+JL26gsrOzWWUx3TwgkqvzEoQxPYDPJPQnFWNW8LXeteGn0e88Q32JgyzXCQwB5UI+6R5eB9QAap3/gSXUtN0q0ufEeoEaZJ5kZ8mAiUgYTehj2tt7ce/WgC54BXVE8BaSNeMpvvJy/n/6wLuOwP/tBNoPvmuiqrp1rcWdmsV5fy38oJJnmREY+2EAH6VaoA534e/8AJNPDX/YKtv8A0UtdFXO/D3/kmnhr/sFW3/opa6KgDgPEVilh410JdGvb59avNR+03CG6dk+xjIl3R52KgDBVOM528kg1jW+utc6pe69r+n6hNY2+q/Y4riG+aOO2AYIP3SsN43HknNdba+Criy8R3+sWviPUBNfzB5kkhgcBB92IMY9wQdgD3J60k3w/s5ryf/iYXi6dcXa3k2mgp5TTAg7s7d4GQDjdjI6UAYPiQLpvjPRrmzbVbWSXV4/tWoXM7/ZXicMPJC52fNuVR8owQDnPX0quZvPBn9pXcX9p61f3enw3a3aafJ5fl71bcgLBd5VWwQCxHArpqAOd8T/8hzwl/wBhhv8A0iuq6Kud8T/8hzwl/wBhhv8A0iuq6KgCjrNul1o1zFN9qMZTLLaMVlYDkqpHOTjHGDz1FeUSaxe6TY+JbTTpr2wilvrKG2tL6VpLi2SXCPIC5YhWxxycFT0zXrWp2Ul/YvBDeT2UhKss9uQGQgg9wQRxggggiufbwBZ3cWotrF/d6jeagkcb3kmxHiWMkoECKFXDEt05J5oAy7bSBZeOLzwzb3t+NLu9NjuShu3d43EhVsSMSwDAc4P0xVn4f/NqniJtNuLifw+LqOPT2mmaYF1TExR2JYpvwOSeQ2OKsy+A/tFnqS3OvalJfajAttJqA8tJUiX+FQFCjOTk4ycmtTw9oM+g2y2p1We8to4xHDDJbwxrEB6eWi/rQBs1zvhv/kZPF3/YVi/9IrauirnfDf8AyMni7/sKxf8ApFbUAdFXEfEizjfSbi5FtrVzdC0kW2/s+d40gcAkO21hzkjrn7vT17esXWNBvNTnd7TX9Q01JYfKkitxGysOeRvUlW56rjt6UAcXqVlqepLo+uzxT67pqaMpuDY6k9sHmwrGQBWXdkBuPepNMms/H/iOa3FzfJo1rpVvLaRxXUkLlpd+XZlYMSAoAySOtdJL4MEenQabo+s3+lafDara/ZYPLZWQcdXUsCR1IIJqKXwFbQtA+gane6JJFZiyZrTY3mRA5XO9W5UlsMMHk0AT/D7UbzVvAGlXepzefdNEUlmxjzCjFN347c/jUnj7/km3iX/sE3X/AKJatTSdLtNE0e00zTY/KtLSJYYkySQoGBknkn371l+Pv+SbeJf+wTdf+iWoA3o/9Un+6KJZUhheWVgkaKWZj0AHJNEf+qT/AHRSsoZSrAEEYII60AeQ2Hi4an8RNN1ga3F5N/aXgttPS7BVI0CeUWQH/WOS7c84IHapdPku7fQvCXilL+6bUNYvkS9Vp2aOVJQx2iMnau3AxgA8V31x4Q0mfxBYasLaOOWxjljSOOJQr+ZtyTxnI2DH1NULHwDbWV1Zk6nez2WnytNZWUuzy7d2zyCFDNjJwGJxmgDKt7FNO+Kem2Wg3t9OYbWaXWhNdPMm1gPJ3BiQrlwSAoHyhuMYr0CuW8P+DLjw9dySweIr+5Sedp7hJ4YCZ2P95xGHOO3PAGK6mgDnb/8A5KXof/YK1D/0baUUX/8AyUvQ/wDsFah/6NtKKADw3/yMni7/ALCsX/pFbV0VcRp/iOx0fxZ4sgvI9Qd21KJwbXTbi4XH2K2HLRowB46E5/OtX/hOdH/54a1/4Ib3/wCM0AdFRXO/8Jzo/wDzw1r/AMEN7/8AGaP+E50f/nhrX/ghvf8A4zQB0VFc7/wnOj/88Na/8EN7/wDGaP8AhOdH/wCeGtf+CG9/+M0AO8ff8k28S/8AYJuv/RLVvR/6pP8AdFcH438Z6VcfD/xDBHDq4eTS7lFMmi3iKCYmHLNEAo9yQB3raj8caQI1/ca10H/MCvf/AIzQB0lFc7/wnOj/APPDWv8AwQ3v/wAZo/4TnR/+eGtf+CG9/wDjNAHRUVzv/Cc6P/zw1r/wQ3v/AMZo/wCE50f/AJ4a1/4Ib3/4zQB0Vc7f/wDJS9D/AOwVqH/o20o/4TnR/wDnhrX/AIIb3/4zWDe+MtKb4haNOIdW2Jpt8hB0W8DEmS1IwvlZI+U5IGBxnGRkA9Aornf+E50f/nhrX/ghvf8A4zR/wnOj/wDPDWv/AAQ3v/xmgDoqK53/AITnR/8AnhrX/ghvf/jNH/Cc6P8A88Na/wDBDe//ABmgDoqK53/hOdH/AOeGtf8Aghvf/jNH/Cc6P/zw1r/wQ3v/AMZoAPBH/IDvP+wxqX/pbNXRV5/4O8ZaVb6Ndq8OrEtquoOPL0W8cYa7lI5WIgHB5HUHIOCCK3v+E50f/nhrX/ghvf8A4zQB0VFc7/wnOj/88Na/8EN7/wDGaP8AhOdH/wCeGtf+CG9/+M0AdFRXO/8ACc6P/wA8Na/8EN7/APGaP+E50f8A54a1/wCCG9/+M0AHjn/kW4f+wrp3/pbBXRV5/wCMvGWlXGgRJHDqwI1KwfMmi3iDC3kLHlogM4HA6k4AySBW9/wnOj/88Na/8EN7/wDGaAOiornf+E50f/nhrX/ghvf/AIzR/wAJzo//ADw1r/wQ3v8A8ZoA6Kiud/4TnR/+eGtf+CG9/wDjNH/Cc6P/AM8Na/8ABDe//GaAOirnbT/kp2r/APYHsf8A0dd0f8Jzo/8Azw1r/wAEN7/8ZrBtfGWlL8RdVnMOrbH0qyQAaLeFsiW6JyvlZA+YYJGDzjODgA9Aornf+E50f/nhrX/ghvf/AIzR/wAJzo//ADw1r/wQ3v8A8ZoA6Kiud/4TnR/+eGtf+CG9/wDjNH/Cc6P/AM8Na/8ABDe//GaAOiornf8AhOdH/wCeGtf+CG9/+M0f8Jzo/wDzw1r/AMEN7/8AGaAD4e/8k08Nf9gq2/8ARS10Vef+BfGWlW3w98PQSQ6szx6bboxj0W8kUkRqOGWIhh7gkGt7/hOdH/54a1/4Ib3/AOM0AdFRXO/8Jzo//PDWv/BDe/8Axmj/AITnR/8AnhrX/ghvf/jNAHRUVzv/AAnOj/8APDWv/BDe/wDxmj/hOdH/AOeGtf8Aghvf/jNAB4n/AOQ54S/7DDf+kV1XRV5/4i8ZaVLrPhdlh1YCLVWdt+i3ikj7JcDgGLLHJHAycZPQEje/4TnR/wDnhrX/AIIb3/4zQB0VFc7/AMJzo/8Azw1r/wAEN7/8Zo/4TnR/+eGtf+CG9/8AjNAHRUVzv/Cc6P8A88Na/wDBDe//ABmj/hOdH/54a1/4Ib3/AOM0AdFXO+G/+Rk8Xf8AYVi/9Iraj/hOdH/54a1/4Ib3/wCM1g+H/GWlRa/4pdodWIm1KN1C6LeMQPsduvzARZU5B4ODjB6EEgHoFFc7/wAJzo//ADw1r/wQ3v8A8Zo/4TnR/wDnhrX/AIIb3/4zQB0VFc7/AMJzo/8Azw1r/wAEN7/8Zo/4TnR/+eGtf+CG9/8AjNAHRVz/AI+/5Jt4l/7BN1/6Jam/8Jzo/wDzw1r/AMEN7/8AGaw/G/jPSrj4f+IYI4dXDyaXcopk0W8RQTEw5ZogFHuSAO9AHeR/6pP90U6ubj8caQI1/ca10H/MCvf/AIzTv+E50f8A54a1/wCCG9/+M0AdFRXO/wDCc6P/AM8Na/8ABDe//GaP+E50f/nhrX/ghvf/AIzQB0VFc7/wnOj/APPDWv8AwQ3v/wAZo/4TnR/+eGtf+CG9/wDjNABf/wDJS9D/AOwVqH/o20orNg12z1n4maQLJL1DFpV9u+1WE9tnMtp081F3dO2ccZ6iigDS8N/8jJ4u/wCwrF/6RW1dFXO+G/8AkZPF3/YVi/8ASK2roqACiiigAooooA5/x9/yTbxL/wBgm6/9EtW9H/qk/wB0Vg+Pv+SbeJf+wTdf+iWrej/1Sf7ooAdRRRQAUUUUAFc7f/8AJS9D/wCwVqH/AKNtK6Kudv8A/kpeh/8AYK1D/wBG2lAHRUUUUAFFFFABRRRQBzvgj/kB3n/YY1L/ANLZq6Kud8Ef8gO8/wCwxqX/AKWzV0VABRRRQAUUUUAc745/5FuH/sK6d/6WwV0Vc745/wCRbh/7Cunf+lsFdFQAUUUUAFFFFABXO2n/ACU7V/8AsD2P/o67roq520/5Kdq//YHsf/R13QB0VFFFABRRRQAUUUUAc78Pf+SaeGv+wVbf+ilroq534e/8k08Nf9gq2/8ARS10VABRRRQAUUUUAc74n/5DnhL/ALDDf+kV1XRVzvif/kOeEv8AsMN/6RXVdFQAUUUUAFFFFABXO+G/+Rk8Xf8AYVi/9IrauirnfDf/ACMni7/sKxf+kVtQB0VFFFABRRRQAVz/AI+/5Jt4l/7BN1/6Jaugrn/H3/JNvEv/AGCbr/0S1AG9H/qk/wB0U6mx/wCqT/dFOoAKKKKACiiigDnb/wD5KXof/YK1D/0baUUX/wDyUvQ/+wVqH/o20ooAPDf/ACMni7/sKxf+kVtXRVzvhv8A5GTxd/2FYv8A0itq6KgArGtPFmjX2t3+k214Gu9OQSXIKMFQf72MHrzg8Vb1o6gNDvP7ESKTUPJYWyzNtQvjjJ9M14+dO1mzvtd0mHSTFN/wjrK7rdiV5GLks5wo3FiTx70Aer6T4lsdbuGjsI7xkClluHtJEhkAOPlkI2t+BrXrzTwdqgPiLRbPQdcm1ewm0x3vo5JBIto67BGMgfISS42nn5favS6AOf8AH3/JNvEv/YJuv/RLVvR/6pP90Vg+Pv8Akm3iX/sE3X/olq3o/wDVJ/uigB1Zms+IbDQjbJemZ5bpisEFvA00khA3HCKCSABknHFadee/EiRD4g8OQnU10GXdPJHrMkgVYSFAMXzfKS4JOD2TI5FAHS/8JnojaPBqUVxJNDcSGKKOKF2ldwcMojA3bh3GMitWwvU1GyS5iiuIlfOEuIWicYOOVYAivFNGMSS+HJdV1B9K0+F723OpxTeWlxNkHzfMbgb+fbjivTPh/f32o+GDNfzyXKrdTx21zKuGngWQiNz65UA579aAOnrnb/8A5KXof/YK1D/0baV0Vc7f/wDJS9D/AOwVqH/o20oA6Kqeq6tY6Jpst/qtyltaxD55HPHJwB7knjFXKztcudNtNLefWJrWCBDlZLplVVf+EgtwDnp3oArJ4s0uXw5Z65bvPcWV8qtb+Tbu8kgbphAN36UkPjDRZtCk1ZbsrbRSGJ1eNlkWQHHl7CN2/PG3GTXFeDPG2jeHfgXoV9NfW0jQ2cNv5azL/riOEbn5T656VlXtvbroOj30mu28iS699q1e80+4RktmkRguWGQoBZRuPqDQB6xpeqRatbNPBBdwKrbSt3avA31CuASOetXa5DwJqNxe3WuxLfy6npVtdrHYX0rBzKPLUyAOOHCuSMj3HauvoA53wR/yA7z/ALDGpf8ApbNXRVzvgj/kB3n/AGGNS/8AS2auioAx7/xZoumeILHQ7u9VdSv22wW6gsx4JycfdGFbk+lV9Y8Z6boTXH9o22qLFbjMk8emzyRAeu9VIP51zfxA1TRLHxh4R8++sLa6XWVe43zIjhBbThWfJzjLYBPHPvWh4vlXXtb0bwxA4eG6f7bdlTkGCMggfRmxQBqX/jfRtNmC3j3SRZiD3P2SQwxGTbsDybdqZ3L1IxkV0FeafFDULSbRb6zi1y3aS18onQCoEl66srLGP4yG4HyjH616TEzPCjuhjZlBKE8qfSgDn/HP/Itw/wDYV07/ANLYK6Kud8c/8i3D/wBhXTv/AEtgroqAI7m4itLWW5uH2QwoZJGP8KgZJ/KsbT/GOkajcXNuj3FvcW0AuZIbu1kgfyiSA4VwCwyCMite7u4LCzmu7yVYbeCNpJZHOAigZJP4VwHhXxHpPiDxFfeMJ9VsY4vsZgsbQXCGVLUEO0sig5BZgDjsoGec0AdLaeNtGu1vMSXED2dsbqWO5tZInMQBO9VYAsOOoqzoniWz18brG31BIzGJFkubGWFHU9NrOoB69q4nR9Y0LxfqGra/qOrWQtJtPe1gtYrlWlS153yMoJYZz6cCrPhe8S28eW+keGdbl1vQhpRe4LTCdLSRXAiCyDgFlL5XrhQaAPRK520/5Kdq/wD2B7H/ANHXddFXO2n/ACU7V/8AsD2P/o67oA6Ks3V9etNF8lbpLqWSfdsjtbZ53IXGTtQEgDI59xWlXL+OPGNt4U06GITWy6nqLNDYR3MojjL45d2PARep79hyaAJpfHWhpp+mXkE1xdxaqCbQWlrJM0mBk/KoJGMHORxip7zxbpthb2Ulwt4Jb4nyLVbOU3DYGWPlBdwA4ycdx61yUWmeELHw3oMF34rjgksRLJb6jbXqRrJI2TKQ3KnJc/L71QsL2+NhpHibUdf02yv7dbq0ibV28tbu2Lgq+Mg7sKp49aAPS9J1Wy1zSoNR0ycT2twu5HAx7EEHkEHIIPIIq5XG/C2zvLTwW0moKUkvL+7u1UoUwkkzsp2nlcg5weRmuyoA534e/wDJNPDX/YKtv/RS10Vc78Pf+SaeGv8AsFW3/opa6KgDCfxjpEesxabM1zHLNcG1jme1kWF5QCdglI2k/KRjPUY61KPFejHxUvhxLxX1RoWm8hVJ2qOuSOAeehri/F2qW97r2lSWmtw6o9rrMITQUVVlDhtjMcfP8nzPlgF4+lT6pquhWnxm0ZFv9Ogm+y3CTqJkVvNbaAG5+8eMA8mgDrZPFGnJrB0yJbq6uEdUlNraySpCx6B3UEIe/JGBzWxXi1ve3OjRaitlrV0viT/hIWVNIDgidHuAdxixkqYmLb+gA9q9poA53xP/AMhzwl/2GG/9IrquirnfE/8AyHPCX/YYb/0iuq6KgCtqF/BplhLeXW/yowMiNC7Ek4ACjkkkgYFZ1h4t0jULW/mSeS3/ALOIF3HdwvA8OVDAsrgHBB4Perms30GnaTNPc3q2CYCC6ddyxMx2qx7YyR149a8f1cS3Wn+MxY3/APbMcn2KefWLUAqVUkNCAvy5RRu+XP3+eaAPUofFunTadPfCK/jghCkNLYyp5u44Xy8r8+SRjbnqKsaL4j0/XzdJYNMs1m4juILiF4ZYiRuG5GAIBByDjmuL03xdZ6JqesXT6/JqnhqzsY7hryWQShJiSDGrjgkjb8vYmtL4fXFtqdzq2uyahYz6nqzxyS2tpdJN9lhRSsSEqTzjJJ9WI7UAdtXO+G/+Rk8Xf9hWL/0itq6Kud8N/wDIyeLv+wrF/wCkVtQB0VZuv+INN8MaPJqetXHkWsZALBCxJPYKASfXjsCa0q80+J9jrU8GrXx06K70yz0e4FsTdBDFK8bCSUoVOSF+Uc929aAOv1fxjoehW1jNqd8sK37olsu0s0hfG35QM45HPajXPF+k+H7n7PfvcPMIGuHS2tnnMUQ6u4QHavXk+h9K4fxtqOnw/DfRJNXaxsdRZrQrHLOhkEYdckE4JXgE1o+Ib620zXrjxBpPiLRQNSsEje2uZPMaZULbGhVDlydxGBnJxQB39tcw3lrFc2sqzQTIHjkQ5V1IyCD6YrD8ff8AJNvEv/YJuv8A0S1R/DzTbrR/hvoGn6gpS6t7CJZUPVG2/d/Dp+FSePv+SbeJf+wTdf8AolqAN6P/AFSf7op1Nj/1Sf7opJjItvIYFDyhSUVjgFscAmgDLfxRpMfigeHjcFtTMBuPJWNjhB6sBgHocZzyKpp440o6la2M0GqWs15IY4Tc6bPErsBnG5lA6CuH0i01zSviL4aTVdJj+23Ud9NeXK3ofzXbydz42jAUBQF9AB2rqLBl8Q/Ei+1ByGs9Bj+yQ5+75zANI34DAoA1dP8AGej6lq0OmwvcR3FwjyW/2i1kiW4VMbjGzAB8ZB4J45rerzrSvEWk+M/iJb6jFq1gtnpHnQadB9pTzrudxtkk2Z3BQoKqO+SfSvRaAOdv/wDkpeh/9grUP/RtpRRf/wDJS9D/AOwVqH/o20ooAPDf/IyeLv8AsKxf+kVtXRVzvhv/AJGTxd/2FYv/AEitq6KgApNq7t20bsYzjnFLRQAxIY4yTHGiFupVQM0+iigDn/H3/JNvEv8A2Cbr/wBEtW9H/qk/3RWD4+/5Jt4l/wCwTdf+iWrej/1Sf7ooAdTZIo5l2yorjOcMM06igBhgiMQjMSGMdE2jH5U5VCqFUAAdAB0paKACudv/APkpeh/9grUP/RtpXRVzt/8A8lL0P/sFah/6NtKAOiprxpKu2VFdfRhkU6igCIWtuEKCCLaTkrsGDSrbQIjIsMaq33gEGDUlFADURI0CxqqKOgUYAp1FFAHO+CP+QHef9hjUv/S2auirnfBH/IDvP+wxqX/pbNXRUARyW0ErbpYY3b1ZATTgiBgQqgqMA46D0p1FADGgiaQSNEhcdGKjI/Gn0UUAc745/wCRbh/7Cunf+lsFdFXO+Of+Rbh/7Cunf+lsFdFQAhAZSGAIPUHvUa2tuhykESnGMhAKlooAiW0t0OUt4lOMZCAU6OGKEEQxpGD12qBmn0UAFc7af8lO1f8A7A9j/wCjruuirnbT/kp2r/8AYHsf/R13QB0VMkhimx50aSY6blBxT6KAIja25jCGCPYDkLsGAaV7eGRVWSKNlX7oZQcVJRQAUUUUAc78Pf8Akmnhr/sFW3/opa6Kud+Hv/JNPDX/AGCrb/0UtdFQBGIIRL5oiTzP7+0Z/Oka1t3cu8EbMerFATUtFADPJi80S+WnmDo+0Z/On0UUAc74n/5DnhL/ALDDf+kV1XRVzvif/kOeEv8AsMN/6RXVdFQAjKrqVdQynqCMg02OKOJSsUaopOSFXAp9FAEYt4FjKLDGEbqoUYP4URwQwkmKJIyeu1QM1JRQAVzvhv8A5GTxd/2FYv8A0itq6Kud8N/8jJ4u/wCwrF/6RW1AHRUhAZSGAIIwQe9LRQBHJbwygCWJH29Nyg4pPs0GVPkR5T7vyD5fpUtFABXP+Pv+SbeJf+wTdf8Aolq6Cuf8ff8AJNvEv/YJuv8A0S1AG9H/AKpP90U6mx/6pP8AdFOoAQqpYMQCw6HHSgIqklVA3HJwOppaKAIltbdHDpBErDkMEANS0UUAc7f/APJS9D/7BWof+jbSii//AOSl6H/2CtQ/9G2lFAGba63DoHijxKmoWGrsLq/inhktdJubiN0+yQJkPHGy/eRhjOeK0P8AhO9L/wCfDxB/4T19/wDGa6SigDm/+E70v/nw8Qf+E9ff/GaP+E70v/nw8Qf+E9ff/Ga6SigDm/8AhO9L/wCfDxB/4T19/wDGaP8AhO9L/wCfDxB/4T19/wDGa6SigDg/F3iyz1TwTrmn2Om+IJLm7064ghT+wL1dztGyqMmLA5I61rJ460wRqDYeIMgD/mXr7/4zXTUUAc3/AMJ3pf8Az4eIP/Cevv8A4zR/wnel/wDPh4g/8J6+/wDjNdJRQBzf/Cd6X/z4eIP/AAnr7/4zR/wnel/8+HiD/wAJ6+/+M10lFAHN/wDCd6X/AM+HiD/wnr7/AOM1i3fiu0l8caVqCaZ4gNrb2F5DK/8AYF78rySW5UY8rJyI3/L3Fd9RQBzf/Cd6X/z4eIP/AAnr7/4zR/wnel/8+HiD/wAJ6+/+M10lFAHN/wDCd6X/AM+HiD/wnr7/AOM0f8J3pf8Az4eIP/Cevv8A4zXSUUAc3/wnel/8+HiD/wAJ6+/+M0f8J3pf/Ph4g/8ACevv/jNdJRQBwPhbxXaabpVzDeaZ4gjkfUr2dR/YF6cpJdSSIeIu6sDjtnmtr/hO9L/58PEH/hPX3/xmukooA5v/AITvS/8Anw8Qf+E9ff8Axmj/AITvS/8Anw8Qf+E9ff8AxmukooA5v/hO9L/58PEH/hPX3/xmj/hO9L/58PEH/hPX3/xmukooA4HxV4rtNT0WO3stM8QSSrf2UxX+wL0fJHdRSOeYuyqx98Vtf8J3pf8Az4eIP/Cevv8A4zXSUUAc3/wnel/8+HiD/wAJ6+/+M0f8J3pf/Ph4g/8ACevv/jNdJRQBzf8Awnel/wDPh4g/8J6+/wDjNH/Cd6X/AM+HiD/wnr7/AOM10lFAHN/8J3pf/Ph4g/8ACevv/jNYtv4rtI/HWo6i+meIBaz6baQRv/YF7y6S3DMMeVngSJz7+xrvqKAOb/4TvS/+fDxB/wCE9ff/ABmj/hO9L/58PEH/AIT19/8AGa6SigDm/wDhO9L/AOfDxB/4T19/8Zo/4TvS/wDnw8Qf+E9ff/Ga6SigDm/+E70v/nw8Qf8AhPX3/wAZo/4TvS/+fDxB/wCE9ff/ABmukooA4Hwd4rtNK8D6Jp9/pniCK6tbCCGZP7AvW2usYBGRFg8jtW1/wnel/wDPh4g/8J6+/wDjNdJRQBzf/Cd6X/z4eIP/AAnr7/4zR/wnel/8+HiD/wAJ6+/+M10lFAHN/wDCd6X/AM+HiD/wnr7/AOM0f8J3pf8Az4eIP/Cevv8A4zXSUUAcDrviu0vdV8PTW2meIHjstSaec/2BejYhtZ488xc/NIowPWtr/hO9L/58PEH/AIT19/8AGa6SigDm/wDhO9L/AOfDxB/4T19/8Zo/4TvS/wDnw8Qf+E9ff/Ga6SigDm/+E70v/nw8Qf8AhPX3/wAZo/4TvS/+fDxB/wCE9ff/ABmukooA5v8A4TvS/wDnw8Qf+E9ff/GaxdE8V2lnrXiK4uNM8QJFe38c0Df2BenegtYIyeIuPmRhz6V31FAHN/8ACd6X/wA+HiD/AMJ6+/8AjNH/AAnel/8APh4g/wDCevv/AIzXSUUAc3/wnel/8+HiD/wnr7/4zR/wnel/8+HiD/wnr7/4zXSUUAc3/wAJ3pf/AD4eIP8Awnr7/wCM1j+LvFlnqngnXNPsdN8QSXN3p1xBCn9gXq7naNlUZMWByR1rvKKAOZTx1pgjUGw8QZAH/MvX3/xmnf8ACd6X/wA+HiD/AMJ6+/8AjNdJRQBzf/Cd6X/z4eIP/Cevv/jNH/Cd6X/z4eIP/Cevv/jNdJRQBzf/AAnel/8APh4g/wDCevv/AIzR/wAJ3pf/AD4eIP8Awnr7/wCM10lFAHH2urR678QtMuLKy1SOC1028SWW80y4tlDPJbFQDKigkhG4HpRXYUUAf//Z)

Figure 12 - 4 points of consideration

So, instead of performing 14 addition operations, the algorithm now will perform only 4. That is 215-72-80+20 = 83. Note that we add the region with sum 20, because the region with sum value 72 and 80 both contain this region.

Reducing from 14 addition operation to 4 might not seem like much improvement, but what you must consider is larger frames. For example, consider a 24x24 dimension frame. It contains a total of 576 pixels, which would mean 575 addition operations. In this case, it saves time required to perform 571 to 574 addition operations. Additionally, such kind of operation is performed for so many features within a single image. This process drastically reduces the complexity of the task, which reduces the amount of time and resources needed to compute.

1. *Using Adaboost*

Boosting algorithms are one of the most widely used algorithm in data science competitions used to improve the accuracy of models. AdaBoost, short for Adaptive Boosting, is a popular boosting technique which helps you combine multiple “weak classifiers” into a single “strong classifier”. It essentially chooses the best features and trains the classifiers to use them.

A weak classifier is a classifier that performs poorly, but still performs better than random guessing. The accuracy of these classifiers is slightly greater than 50%, which is small. Take for example classifying a person as male or female based on their height. A weak classifier for this would be if take anyone under 170cms to be female and anyone above it as male. This classifier would classify so many people in a wrong category, but its still better than randomly assigning a class. A strong classifier is on the other hand is a model for classification that achieves arbitrarily good performance, a lot better than random guessing.

Weak learners are created by moving a window over the input image, and computing Haar features for each subsection of the image. This difference is compared to a learned threshold that separates non-objects from objects. This is basically what we have seen in the first section.

AdaBoost can be applied to any classification algorithm, so it’s really a technique that builds on top of other classifiers as opposed to being a classifier itself. This algorithm has two main functions.

* It chooses the training set for each new classifier that is trained based on the results of the previous classifier.
* It determines how much weight should be given to each classifier’s proposed answer when combining the results.

1. **System Component**
   1. **Hardware**
      1. **Breadboard**

The breadboard is a way of connecting electronic components to each other without having to solder them together. They are often used to test a circuit design before creating a PCB.

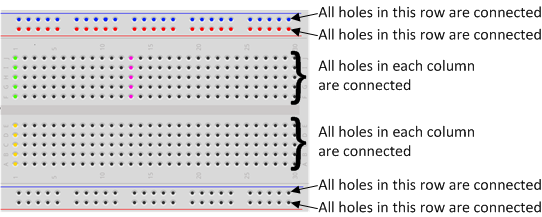
The holes on the breadboard are connected in a pattern. The following figure shows this pattern.

Figure 13 - Breadboard

* + 1. **LED**

An LED is an electronic component which emits light when it receives electricity. Compared to incandescent bulbs, LEDs are more efficient as most of the electricity is converted into light does not heat. Different LEDs can give off different color of light. It merely depends on the chemical composition of the semiconducting material.

LED has one leg shorter than the other. The longer leg known as the anode is always connected to the positive supply of the circuit. The shorter leg known as the cathode is connected to the negative side of the power supply, known as ground. This is because the LED is a kind of diode thus electrical polarity must be taken into consideration.

The conventional current enters the LED, a polarized electrical device through its anode and leaves through the cathode. The current in an LED or other diodes rises exponentially with the applied voltage so a small change in voltage can cause a large change in current. Current through the LED must be regulated by an external circuit such as a constant current source to prevent damage. Since most common power supplies are nearly constant-voltage sources, LED fixtures must include a power converter, or at least a current-limiting resistor.

Unlike a traditional incandescent lamp, an LED will light only when voltage is applied in the forward direction of the diode. No current flows and no light is emitted if voltage is applied in the reverse direction.

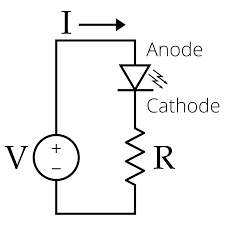
 

Figure - LED Basic Circuit Figure - LEDs

* + 1. **Resistors**

Resistors are needed to connect LEDs to the GPIO pins of the Raspberry Pi. This is because the LEDs would draw more current burning out the Raspberry Pi in the process. Thus, resistors in the circuit ensure the Raspberry Pi will not be damaged.

The measure of resistance is called the Ohm (Ω), and the larger the resistance, the more it limits the current. The value of a resistor is marked with colored bands along the length of the resistor body. It does not matter which way round you connect the resistors. Current flows in both ways through them.

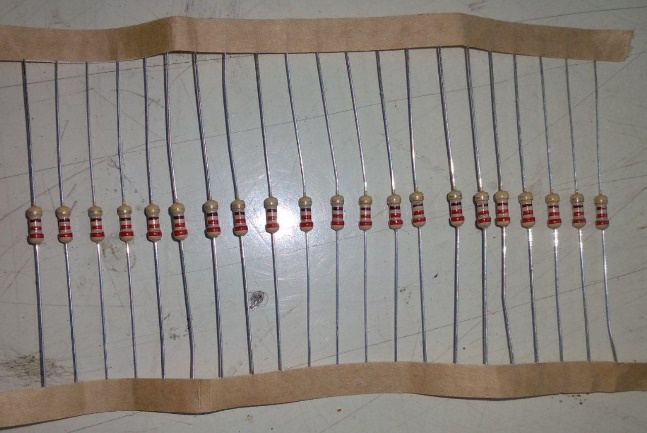


Figure – Resistors

* + 1. **Jumper Cables**

Jumper wires are used on breadboards to make connections. For this project, we used two kinds of jumper cables. Wires pulled out of an Ethernet cable and a standard jumper cable. The standard jumper cables have “Male” and “Female” types. This category comes from the way the tips of these cables are oriented. There are also jumper cables with both “Male” and “Female” type tips. The pins on the raspberry pi are compatible with “Female” tips.

A picture containing colorful, thread, tied

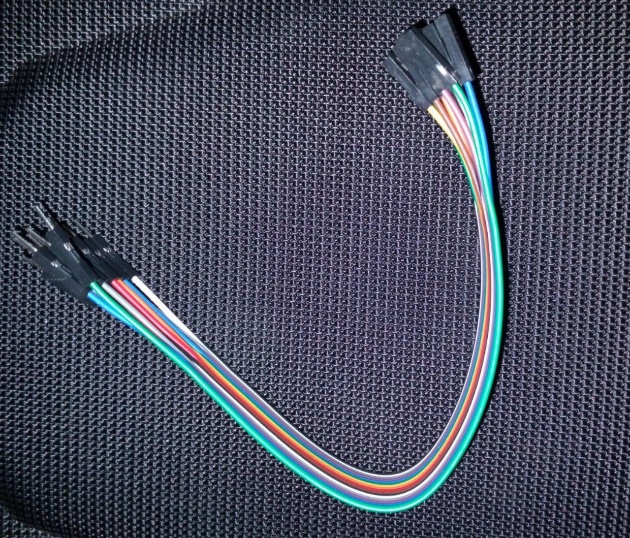
Description automatically generated 

Figure - Ethernet wires Figure - Standard Jumper Cables

* + 1. **GSM Module**

A GSM modem or GSM module is a hardware device that uses GSM mobile telephone technology to provide a data link to a remote network. From the view of the mobile phone network, they are essentially identical to an ordinary mobile phone, including the need for a SIM to identify themselves to the network. GSM modems typically provide TTL-level serial interfaces to their host. They are usually used as part of an embedded system.

Qr code

Description automatically generated

Figure 18 - GSM SIM800L

* + 1. **Camera**
    2. **Raspberry Pi**

This project utilizes the Raspberry Pi 2 Model B. The Raspberry Pi 2 Model B is the second-generation Raspberry Pi. It is based on the BCM2836 system-on-chip (SoC), which includes a quad-core ARM Cortex-A7 processor and a powerful GPU. It weights 42g and has a dimension of 5 x 4 x 3 inches. The raspberry pi 2 model B is illustrated in the figure below.

A picture containing text, electronics, circuit

Description automatically generated

Figure 19 - Raspberry Pi 2 Model B

The specifications of this model are:

* 900 MHz quad-core ARM Cortex-A7 CPU
* 1 GB of RAM
* Video Core IV 3D graphics core
* Ethernet port
* HDMI output
* Audio output
* RCA composite video output
* Four USB ports
* MicroSD card reader
* 40 pins

[2] A powerful feature of the Raspberry Pi is the row of GPIO (general-purpose input/output) pins along the top edge of the board. A 40-pin GPIO header is found on all current Raspberry Pi boards (unpopulated on Pi Zero and Pi Zero W). Prior to the Pi 1 Model B+ (2014), boards comprised a shorter 26-pin header. The picture below illustrates the details of the pins.

We can do programming by either opening the CLI or an IDE under the PI icon on top left. To do this, it is essential to know the pin configuration. The figure below illustrates this.

A screenshot of a computer

Description automatically generated with low confidence

Figure 19 - Raspberry Pi 2 Pin Configuration

*Voltages*

Two 5V pins and two 3V3 pins are present on the board, as well as a number of ground pins (0V), which are unconfigurable. The remaining pins are all general purpose 3V3 pins, meaning outputs are set to 3V3 and inputs are 3V3-tolerant.

*Outputs*

A GPIO pin designated as an output pin can be set to high (3V3) or low (0V).

*Inputs*

A GPIO pin designated as an input pin can be read as high (3V3) or low (0V). This is made easier with the use of internal pull-up or pull-down resistors. Pins GPIO2 and GPIO3 have fixed pull-up resistors, but for other pins this can be configured in software.

*More*

As well as simple input and output devices, the GPIO pins can be used with a variety of alternative functions, some are available on all pins, others on specific pins.

* PWM (pulse-width modulation)
  + Software PWM available on all pins
  + Hardware PWM available on GPIO12, GPIO13, GPIO18, GPIO19
* SPI
  + SPI0: MOSI (GPIO10); MISO (GPIO9); SCLK (GPIO11); CE0 (GPIO8), CE1 (GPIO7)
  + SPI1: MOSI (GPIO20); MISO (GPIO19); SCLK (GPIO21); CE0 (GPIO18); CE1 (GPIO17); CE2 (GPIO16)
* I2C
  + Data: (GPIO2); Clock (GPIO3)
  + EEPROM Data: (GPIO0); EEPROM Clock (GPIO1)
* Serial
  + TX (GPIO14); RX (GPIO15)

***Warning*: while connecting simple components to the GPIO pins is perfectly safe, it's important to be careful how you wire things up. LEDs should have resistors to limit the current passing through them. Do not use 5V for 3.3V components. Do not connect motors directly to the GPIO pins, instead use an H-bridge circuit or a motor controller board.** [2]

* 1. **Software and tools**
     1. **Raspberry pi OS**

Raspberry Pi needs an Operating System to operate. Raspberry pi OS, previously known as Raspbian, is the officially supported operating system. To add this operating system, a microSD card is required, hence the microSD card reader on the list of specifications stated above. Earlier models Raspberry Pi used a full-sized SD card.

Because of a hardware limitation in the Raspberry Pi Zero, 1 and 2, the boot partition on the SD card must be 256GB or smaller otherwise the device will not boot up. Later models of Raspberry Pi 2 with a BCM2837 SoC, Raspberry Pi 3, 4 and 400 do not have this limitation. This does not affect Raspberry Pi OS, which always uses a small boot partition.

An SD card of 8GB or greater capacity is recommended to use for the Raspberry Pi OS. However, the lite version of Raspberry Pi OS requires lesser memory size of 4GB. Other operating systems have different requirements: for example, LibreELEC can run from a smaller card.

* + 1. **Raspberry Pi Imager**

An imager provided by Raspberry Pi official website called Raspberry Pi Imager can be used to easily install the Raspberry Pi OS on the microSD card. This software is available for different platforms including windows, macOS and Linux. After downloading the software compatible for the platform at hand, we can run it and the following window will appear.

![Graphical user interface, application

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADMzAAAJKSAAIAAAADMzAAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MDEgMTQ6NTY6NDEAMjAyMTowODowMSAxNDo1Njo0MQAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMDFUMTQ6NTY6NDEuMjk5PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAFMAfYDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6HJ2gYGSf0qpHqVnNdNbRXkDzrnMSyAsPwpNSjmm026jtG2zvE6xnOMMRxXkumaZqLa1bw29tNHcRyqeUK+Xg8knt/WuetWlCSSV7nsYDAU8TTnKU+XlPYy2BknAqKK6inJEMySFeu1gcVW1iOSbTZVgBJyCVHUrnkVh6NDM2pxuisFQne2MADHT/AOtXHiMbUpYmFFQupdf67bnPTw8J0pTbtY6lpAilnYKB1JpEmWRcxuGHqDVPUlYxoQCVUndjt6GotOVjMzgHZtwT6+leldnLZGnk+tGT60lFF2FkLk+tGT60lFF2FkLk+tGT60lFF2FkLk+tGT60lFF2FkLk+tGT60lFF2FkLk+tGT60lFF2FkLk+tGT60lFF2FkLk+tGT60lFF2FkLk+tG4+tJSjhh9aLsLIr22o2l47rZ3lvcNHw6wyq5T6gHirGTXkemeEvEejQLcw6XuuRpVzHCtoUtpFmebOyWRTlyUwyHscjgnNTTaV4yXw6saLqzyQ6hO1vALgjfEUXyg7+b5igNuwSz7f4gwwKZOnY9VZ9qlmOFAySegFNhuI7iCOa3lWWKRQyOhBVgehB7ivMLWPxHqXim/MH9pEQavJHMzXmbVLf7Ku+HYSMsXYYIHqQRyKr6doXjK08OS2lnFqdoE060ilimvFZnlWQeb5GG+QeVxwVz0GDzRqGnY9ayaMmvPdM0TxFJJZ/brjVRbwWd0yK9xsbzPMBgSQB2LYXONzE4xuJNZuo2uuaNoPhu0g1LUDrWrW5sbuGa8Z5BJJGm6ccnHlFTyOBuz3zRqPTsemXWo2ljs+23lvbeYcJ50qpuPoMkZpUvreSaeJLiNpLbHnKGGY8jcN3pkc/SuR8X+GLzW9d0FbOK2e2tre7imuL23Fwse9Y1UlSQSx2nB9Qc1JougahpNhrell7i5tUsoLaweZwTKFttjEDPBLdfegPkdekoljWSJw6MAVZSCCD0IPenbjXmNl4Z8SBbFJH1O1igOmweVBebEWEQbbn5QccHjPXuvPNQz6d44Gn6VAkGotPaBiJxeEk4ujhZBvAP7nb8zb85IwDzRqGnY9U3GjJrxwXfiO68UXen6RqdxJqo/tQuwvd8IOCLc+V/yyCgqo3AZbnnrW1peg+I530yC8n1mHT/t0jzo9yY5I4vs5GC3mO5Uy46tnPTAo1DTsek7jUaXEbyyRpKjSRECRFYFkzyMjt+Ncr4m0zXbnxDZHSJ7lLK8RIL1459otRHKJPMUZ6su6M455FN0jSZfD3i/Xrix0eQWepTWYjeAp12v5srZOSFLAnue2aNQ07HUxX1tcTywQXUMssBxLHHIrNGfRgDkfjU+T615r8P/AA7rWja5EL/TzCkNrNFd3EscWJJGl3IYXX52DDLPv74716TRdgkhcn1oyfWkopXY7IXJ9aMn1pKKLsLIXJ9aMn1pKKLsLIXJ9aMn1pKKLsLIXJ9aMn1pKKLsLIXJ9aMn1pKKLsLIXJ9aMn1pKKLsLIXJ9aMn1pKKLsLIXJ9aMn1pKKLsLIXJ9aXJpKKLsVkGT60oYg+v1pKSi7HZEmQRkceoopq9aK2i7o5pq0hpDZPyOfwo+f8AuP8AlVgdBRWdjVSdivhv+eb/AJUYf/nm/wCVWKKVg5mV8N/zzf8AKjDf883/ACqxRRYOZlfD/wDPN/yow/8Azzf8qsUUWDmZXw//ADzf8qMP/wA83/KrFFFg5mV8P/zzf8qMP/zzf8qsUUWDmZXw/wDzzf8AKjD/APPN/wAqsUUWDmZXw/8Azzf8qMP/AM83/KrFFFg5mV8P/wA83/KjD/8APN/yqxRRYOZlfD/883/KjD/883/KrFFFg5mV8P8A883/ACow/wDzzf8AKrFFFg5mV8P/AM83/KjD/wDPN/yqxRRYOZlfDf8APN/ypMN/zzf8qs0UWDmZWw3/ADzf8qXDf883/KrFFFg5mV8N/wA83/KjDf8APN/yqxRRYOZlfDf883/KjDf883/KrFFFg5mV8N/zzf8AKjDf883/ACqxRRYOZlfDf8839+KMN/zzf8qsUUWDmZXw3/PN/wAqMN/zzf8AKrFFFg5mV8N/zzf8qMP/AM83/KrFFFg5mV8P/wA83/KjD/8APN/yqxRRYOZlfD/883/KjD/883/KrFFFg5mV8P8A883/ACow/wDzzf8AKrFFFg5mV8P/AM83/KjD/wDPN/yqxRRYOZlfD/8APN/yow//ADzf8qsUUWDmZXw//PN/yow//PN/yqxRRYOZlfD/APPN/wAqMP8A883/ACqxRRYOZlfD/wDPN/yow/8Azzf8qsUUWDmZXw//ADzf8qMN/wA83/KrFFFg5mQfN/zzf8qPm/55v+VT0UWDmZXw/wDzzf8AKjD/APPN/wAqsUUWDmZAu7PKsPqKKmfpRWsdjKbuxR0FFA6CisywooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKK868ffE+58L+IYPD2iaKNS1W4thcq01wIokTdg57kjBOBXET+LvirfSu/9r6Ppi5wsVvaeaMZ/vNk9KxqV6VN2m7GU60IO0me+UV4bZfE/4gaFMJPEOmafr1iM7zpymGdfcAnBAx0967bXfi1oemeE9L1nTI5dWl1jjT7KAhZJSPvZz93b0Oeh4qoVYTV4u5UakJK8Wd5RXgc/jn4qatukhn0fQ4nBKRpB50iDqAS2RnsTip7Tx78T9Llc3I0XXoQCwVkNtIfQArx+Y/GsvrdC9uZGf1ile3Me60Vy/gHxtD470GXUYbKSye3uXtZoXkWTDrjOGXgjmuorpNwooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAR+lFD9KK0jsZy3FHQUUDoKKzNAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA8Q+NOnHRfHfh3xcFxayqdOvHC/cycxknnrkj8OtVri3M6hop5IJAPlkQ5/MHgivZ9f0LT/Emh3Wk6xAs9pcoUdWHT0YHsR1B7GvlybxO3hDxVc+HdLuT4p0qzbZHdQ8SRAfwFsbWI9enpXmY3CyqNVIbnHiMLUrSTpK77HUNrr6Vcpb+IUS3SQ4ivk/1Eh9Gz9xvY8Hsa4Lwt4g0WP4i6o818EsYxL/Z5lfEce5t0m3PTPJ96reMPGGreJU/sKy0prSOTDy+Y4Z2UHjJHCjNcpJ4N1OOLehhdhzsV+anD4T3Hz6N6HRhspxVSEn7N9n/X6Hudrf32uYlsEax08/duJU/ezj1RD91fduT6Vbv7qDRdHuLueRhHBGXZ3bJJ+v1rgfD/AMTNQNh5OpaJNcz237t5YGC5IHdT0P0rpvholl8UfFxj8VXkdqunSLPBoGMG4I/ickfOo7qP5VyxwNSVTlasjg+oV005xtHuep/BHw/Ponw3gnvozHeatM9/MrLgqH+6D/wEA/jXolIqhVCqAFAwABgAUte/semFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFACP0oofpRWkdjOW4o6CigdBRWZoFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHnnxz8QXXh34S6nPYSGK4umS0WRTgqHOGIPrtB/Ovl86rbaPp8NhpaC5vGUYROcMR1bH8q7P4ieJbj4jeOb+K4nf+wdKuGtrS1ViFkZeGkb1JOfwwK4nwjp8UL3twACyzGJD/AHVFS7H0mVYfEQcZRsvaXs+qS3t6kGnw67plzNf3Nr9pEwzKgcb/AMPp6Vch8Xw3UqwWtjcSTscKmR1roq5TRvsy+NNREeOjbMfUbqnc9qpSq4OVOlRqO0nZ3s33utP6YNba/a6pLqiQRMJMeZbxvnKjt7n3q3Jr8cYtdf0iYwalpk6SqM7XXB5U+o7fnXQVzF3o9pceMQsyBkmt2kZAcfMOM/1oTFi8HOnSdOm+ZTdmpdG+q079D7esLoX2nW12owLiFJQPTcoP9asV4P8AATxhewaxd+B9VuXuYYYPtOmySHLKgPzR57gZyPTBr3itD4arTlSm6c90FFFFBmFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAI/Sih+lFaR2M5bijoKKB0FFZmgUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUelFFAHxr4is38B+MNf0jVtyFbh7m1dhgTxuSVK+v/664rSdaudEupPtdtIYrg72UgqQfUZr6F/aX0CMx+HfEojLC2ufslwewRjuUn8QfzrzK9s7fULZoblBIjd+49wah6H1OXRr4uinTnyypbab37/kY0Wvza0zW2jwtEdvz3E3SMewHU1AnhCS1kW5s9QcXSHcGZOCad4YjTTdRv8ATJXHmhwyE/xrj/69dNS22PYw2HjjKSqYnWab8uVp9LdTl5fF8li721/YEXMfDbH+U+/0qlaXWo/2ymt31s8dq3yM2OEQ8D3x71pLZ22seKprkhZIbRVT1Dv/APWrU1p449DvDLjb5RH19KNDn9jiKsZValX3YNuO2vL1Z3nwF0mfXPiVe+JoVYabp1q1rHNjiWV+w+gyfy9a+khXDfBvw5/wjPwp0a1dClxcRfa5weu+T5v0GB+FdzWh8ZWrSrVJVJbt3CiiigxCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAEfpRQ/SitI7GctxR0FFA6CiszQKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAMzxF4f0/xR4fu9G1iHzrS7TY47j0YHsQeQa+ZfGXw68WfDiB5kg/t7RIzhLuEESQr2EijOPr0+lfVtIVBBBGQeCPWjc6MPia2Glz0pWZ8CW9rd+KNXnvInS12beQxJXjAxj6da3ptA1CW1Mba5O2Rggrwf1zX0Z47+B+k+JLn+1PDcyeH9XA+Z4Ih5M/8AvoO/uP1riIfgP44nn8q717R7aDOGnhjdnx6hSAM1LT6HsYTG4NU5PEKTm73s3r9zR4rpl1c+HNRl0r7N9uklYFFgJLFiOABjJ+le3+Bfgrq+uX1nq/j2NbHT4WE0WkKcvKw5HmnsP9nr9K9U8DfDLw/4EswLC3F1qDHdNqNwgaaRvY/wj2FdhTsedVx1aVN0IO1PovLtfqIoCqABgAYAHaloopnAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFACP0oofpRWkdjOW4o6CigdBRWZoFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUGgAor5z8T/GP4gxfFfUvCfha2sbportoLWE2wLsAM8ksBnGaW/+MHxW8EtBdeOPClsLCWQJu8ry8n0DqzAH6igD6LorI8LeJbHxd4Zstc0st9mvI9wV/vIQcMp9wQRWv+FABRRR+FABRRRz6H8qACig9K+d9D8U69N+1ddaNLrF6+mLeXCCzadjEAIiQNvTg0AfRFFHaigAoo/Cj6DNABRR+FHPoaACijn0NH0GaACiivD/AI2fFnxN4C8Wafpvh4WZiubQSsJ4N7Fi5Xg5HpQB7hRXz1c+P/jppFlJqWp+FLZrOBPMlP2YHC9z8jk4r0H4Z/E63+KPhu8EEX9n6tbJsnhD7gpYELIp67c/iCKAPRKK88+Gvgnxf4U1C+m8W+Kn12KeJUhjaSRvLYHJPzeo9K9DoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAR+lFD9KK0jsZy3FHQUUDoKKzNAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACg0UGgD4+13xNbeD/2n9S12+hlngs9SkZ44cbmymOMkDvWz8Uvjpp3xA8JDw5oukXFt9puI2knvJUAUK2RjBOOe56DNNtLeK5/bBniuYUmibVZQySIGU/uz1Br0n9oLwzo6/CW8voNKtIrq0nhaKWGBUZMuFbkDoQaANfwp4a8Q+EfgVBpPhiW0vddMDSQy+aPJDytuJVujBQeOxIryW8+Fmsnw1q2teLPHog8QwiSaO0F+JQ+0ZwzBs5ODgAccVPZeItbtP2Rt2kXEqyQ6g1nPNGxDwQF84B7dQPo1c14ai+FafC24uNbjudQ8XSpMEt183eJMHYVC/Lt6Ek+9AHpHwa+JGv6h8KfE0t80mqX2gQGS1eT5nkUxsVVj1bBU++K888D6YPinNq154q+INxp2s7h9lgkn2iXIznkgbc8YXpXQ/s56nPpHg/xvfWNidRubaKCZLMNgzALJkDg+/aqcE3wc8faXfahrcX/AAhmrKzExW0rMknGQ6rt2k56qADQB6d8L9J8f+HvDGr6f42mS5sVtGewuBeCZ1O05XI524wRnpXjXwj8MeIviTHq2ljxZeabp1uIpbhVZpGlY5C9+gwe/wCFdV+zpqmtT6f4o095prjQ7eyYxNLnbFLggKuemVySPYVzv7PnxA8P+CNQ1pPEt29ol7FD5UgiLrlC2QccjqKANz4Z634i+Hfxtk8Ba1fy31lcTGDDuWUMV3RyruJ25GMj39qwNS0rVtc/af1fTNB1H+zLu6vp4/tYHMSeX85HfO3I4x1rR0LUP+Fk/tTQ63okEjafDcLOXZdpEUSbd59MnGB71Um8R2PhL9qvUtZ1fzFsrfUJxK8aFigaPbnA7AkUAL4q0/xL8BfHGlXtj4guNStLpTIRKzASqrAPG6kkHg8H/Cu0+PvxN1Kzj0nw74XuntDqtst1NcxvsYxucIgbsDySfpXHfHLxrpfxK8Q6Bpfg5pNQMO6MOImXfJIygKueT0qf9obwhd6NeeGtUkga506302HT5WGQA8XYntuBOPoaAMzxPoGp/DCy0zxD4d+IEepXvmqlxDBc7jGxGfu7juTjByP510Hxy8W3eu/D7wPrlpNNZvqEMssqQysg3bVyODyMg4qqIv2fRo6XrjVROY9zWavL5itj7vp175xU3x/stL0/wF4GtvDwb+zFhla13MWOxlVhkn60AdH4b8CeKrTRdT8c+KPEP2qW68Pz+VbRu/7ndF8nOccKO3evN/hj4Y8Y/EvTNS0ux8SPY6dbSRzT+dLIxkcghRwc4ABPXFfSU/8AyQ1/+xf/APaFeU/soj/R/EufW3/k1AGL4+e/+GPx40fUReznTZzBcFXmcoRgRy8Z9i341f8A2gNe1DW/iTofhLw/dzoyogIgkK7pJmGCdp5woB/Gux/aV8Mf2x8Oo9YhTM+jzeYxH/PJ8K367T+Feb/APT7zxt8Wp/E2snzjpdurliOPM2iOMfgoJ/CgD6g0rT00nSLTT4mZ0tYUhDMcltoAyT6nrXzL+0+6xfEbRXf7q2Ck/QSmvqUV8t/tOoH+JGiKy7lNioIPf96aAPQb/wDaP8D2+iSmz+23dysO2OBrQosjbcAFjwB61x/7OmgalBpnifxJPA1vZ3Vk8FucFfMYbmYr7DgZr2ex+Gfgm3EM8PhTSVkCqQ32VTzj3re1KJIfD95FCixxpayKqIoAUbDwAOlAHz1+y9qF5e+ItfW8u7i4VbSMqJZWcA7z6mvpOvmX9lXjxL4hz/z5xf8AoZr6aoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAR+lFD9KK0jsZy3FHQUUDoKKzNAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDBTwR4Zj8RnX00SzXVjIZTeCP95uIwTn1xWpqOmWWr6bNYapbR3VpOu2WGVcq49CKtUUAYuleD/D2iaZdadpWj2lrZXZzcW6R/u5eMcqeDxVDSPhn4M0HUHvtJ8O2NvcspXzAm7aCMEDOcZHHFdTRQBiaD4M8O+F5ppvD2jWmnSTqFla3TbvAOQDWZqnwq8D6zqDX2o+GrGW5dtzyKhTefUhSAa66igDHOj6dofha6sdHsYLK1S2k2w28YRR8h7DvXzp+zh4Y0rxLD4lsfEelw3ttstmVJ4+hy/IPUH6V9R01Y0T7iKv+6AKAMjw74R0DwnbPB4d0q209JDmQwp8z/VjyahbwJ4WfV7rVJNBsXvbxWW4neIFpQwwwbPXNb9FAHM6F8OfCPhrUTf6HoFnaXfOJlQllz/dJzt/Ct6+sLTU7KSz1G2huraUYkhmQMrD3BqxRQBxtp8IvAVlei7t/C2niUHI3oXUH2Ukj9K2dc8IeH/EsVvHr2j2l+ltnyVmjyI89cenQVs0UAVjp1m2lnTTbRmyMPkGDHy+XjG3HpjiqGgeEtA8LLOPDuk2unC4x5v2dNu/HTP5mtiigDxL47/FE6Ja3vgrT9MkuL7UrNVNweUjSQkEBcElsA4+tdF8CfBNx4M+Hif2nAYNR1KX7TPG33o1xhFPuByfc16Q0MbOHaNCw6MVBI/Gn0AFYWt+CfDXiS9iu9e0Szv7iFQkcs8e5lXOcD8a3aKABVCqABgAYApskaTRtHKoZHUqynoQeCKdRQBh6D4M8OeF5ppfD2jWmnSTqFka3TaXAOQDW5RRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAj9KKH6UVpHYzluKOgooGcDg/lS4PofyrM0EopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAEopcH0P5UYPofyoASilwfQ/lRg+h/KgBKKXB9D+VGD6H8qAGv0oofp0orSOxnLc+X/Fl5dr4z1pUvLlVGoTgBZ3AA8xu2ayft17/z+3X/AIEP/jWh4t/5HXW/+whcf+jGrIrme5+sUIx9jHTovyJ/t17/AM/t1/4EP/jR9uvf+f26/wDAh/8AGoKKRtyx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHsT/br3/n9uv/AAIf/Gj7de/8/t1/4EP/AI1BRQHLHsT/AG69/wCf26/8CH/xo+3Xv/P7df8AgQ/+NQUUByx7E/269/5/br/wIf8Axo+3Xv8Az+3X/gQ/+NQUUByx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHsT/br3/n9uv/AAIf/Gj7de/8/t1/4EP/AI1BRQHLHsT/AG69/wCf26/8CH/xo+3Xv/P7df8AgQ/+NQUUByx7E/269/5/br/wIf8Axo+3Xv8Az+3X/gQ/+NQUUByx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHsT/br3/n9uv/AAIf/Gj7de/8/t1/4EP/AI1BRQHLHsT/AG69/wCf26/8CH/xo+3Xv/P7df8AgQ/+NQUUByx7E/269/5/br/wIf8Axo+3Xv8Az+3X/gQ/+NQUUByx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHsT/br3/n9uv/AAIf/Gj7de/8/t1/4EP/AI1BRQHLHsT/AG69/wCf26/8CH/xo+3Xv/P7df8AgQ/+NQUUByx7E/269/5/br/wIf8Axo+3Xv8Az+3X/gQ/+NQUUByx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHsT/br3/n9uv/AAIf/Gj7de/8/t1/4EP/AI1BRQHLHsT/AG69/wCf26/8CH/xo+3Xv/P7df8AgQ/+NQUUByx7E/269/5/br/wIf8Axo+3Xv8Az+3X/gQ/+NQUUByx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHsT/br3/n9uv/AAIf/Gj7de/8/t1/4EP/AI1BRQHLHsT/AG69/wCf26/8CH/xo+3Xv/P7df8AgQ/+NQUUByx7E/269/5/br/wIf8Axo+3Xv8Az+3X/gQ/+NQUUByx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHsT/br3/n9uv/AAIf/Gj7de/8/t1/4EP/AI1BRQHLHsT/AG69/wCf26/8CH/xo+3Xv/P7df8AgQ/+NQUUByx7E/269/5/br/wIf8Axo+3Xv8Az+3X/gQ/+NQUUByx7E/269/5/br/AMCH/wAaPt17/wA/t1/4EP8A41BRQHLHselfBa5uJvGd2s1xNKv9nuQJJWYZ8yPsTRUXwS/5HW7/AOwe/wD6Mjorop/CfnufpLGu3ZHI+Lf+R11v/sIXH/oxqyK1/Fv/ACOut/8AYQuP/RjVkVg9z73D/wAGHovyCiiikbBRRRQAUUUUAa2jaF/atvPc3F9BYWsMkcJmmRn3SyZ2KAvPYknoB61NceC/EFsrltNkdVmMGYnVizeYYuBnON425xjJFVtI12bSI5oRa2t5bzOkrQXaFlEiZ2OMEHIyR6EHBraf4gXsdtZyWcMS6kqt9pvpI8u5Ny0+0YONhJGRjPUdKDhqPFKf7tJq/X0/rv0sZp8G+IB5h/s1ysZQFhLGVJb7u07sNnB6Z6H0qzbeBNYlINykdunnxwn51kY70LKyqp+ZcL1B/kaddePdUu7iKWWG0YRXUV0iOrSKrIGAHzMeDvOfwx0p7/EHVHuhO1pZFlaFkBVzsaJXVTktk/LIwOc0EOWOa2X9fMz18Ia8yWzf2a+LkZjPmpjGzzMsd3yjZ82WxwDT9O8JX93r1xpN3/odxbQGeVChlcrhThETJdiGBwO3NXNO8aTR3RTUYI2sp1RLlIotxdFtzABhmAIKnJ5HPQioL/xSk3iu71W106AwTosSW9yCdqKqqpDKQUb5AcqeM4yaGVzYttxaS03Xf5v1IH8Jau1wUsrf7dESfLngYbZQJBHxuwQdxA2kA5qT/hCtc+ymZbZHb7SlssUcyO7s67gVwSCuB1z79ASL1148vLjTdjKr3U2qf2hOGQCIbQAqKAdxBIDHJHIHJ60wfEHVkvmuo4LNZPOinU+WxKsiMnJJy25WIJbJ57EUE82Na0S/r+uxSXwX4gcSldNYiM8t50eD8ofIO75htYNkZGOayr6xudNvpbO+iMNxCcOhIOOARyOCCCDkdc1u3PjrVLkt5kVvtYSqA29tokhEJGWYn7ozz3rG1TUptX1KS9ulRZZFRSIwQuEQIOvsooN6LxDl+9Stbp3KlFFFB1BRRRQAUUUUAFFFFABRRRQAVs+HvDcniBbx1uo7aO0RWcmJ5W+YkA7EBbaMfM3Raxq1dB8QT+H7gzW9ra3D70kQzo26N1OQVZSCPcZwe4oMa/tPZv2W5aPgnXHFsbW3ju1uIBOjQTqRtLlVGSRyxHA7545yBHF4N8QTLCU01/38fmRK0iKzKeBwWzkngDqTxVq38dajCkSyWenz+XtIMsTcskrSxsQGAyrO2McEHBp1p4/1a01L7d5NnLP5MURaSNsny2LBsgg5JY5HQ+nFCOVyxqvZR/r5/wBflQTwnrsltbXCabIY7kqIjvTJ3AspIzlQQrHJwMAms6+sbnTbx7W+haGZMEqSDwRkEEcEEEEEcGuvHxA+yaXaNp1rt1ZXhNzcSRgLIsUbxqhw2WG18Z+UjHc1yurapPrOpyX10AJJAo2qWIAUYAyxJPA7mg0oTxEpv2kUl+N/8inRRRQdgUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAei/BL/AJHW7/7B7/8AoyOij4Jf8jrd/wDYPf8A9GR0V0U/hPz3P/8AfX6I5Hxb/wAjrrf/AGELj/0Y1ZFa/i3/AJHXW/8AsIXH/oxqyKwe595h/wCDD0X5BRRRSNja8H+Hv+Eq8U22kG5Nssyu7ShdxAVc8D1r07/hQll/0H7z/wAB0ri/hB/yU+x/64T/APoFfSFXFJo+RznH4nD4hQpSsreXmeR/8KEsv+g/ef8AgPHR/wAKEsv+g/ef+A8deuUVXKjxv7Xx3/Pz8F/keR/8KEsv+g/ef+A8dH/ChLL/AKD95/4Dx165Wffar9ku47WG1mu7h42l8uLaNqLgEksQOSQAO5pWRUc1x8nZT/Bf5Hmf/ChLL/oP3n/gPHR/woSy/wCg/ef+A8deif8ACS2n2W/nMcyrYwLPIrKFYqybwACeuOMHHNJJ4kgjuJB9muDbwzpby3IC7EkfGB1yQNygkDgn64LI0/tDMv5n9y8vLzR55/woSy/6D95/4Dx0f8KEsv8AoP3n/gPHXoaeJIGuEBt51tpZngiuiAUd1zkAA5wSpAOOSPcZhi8VRS6el4lhdmGZI3gbCYlDuFHO7AOSCQSCB+NFkH9oZl/P+RwX/ChLL/oP3n/gPHR/woSy/wCg/ef+A8demT6qtnpUt9e28kKx/wDLNcOzc4AG04JJIAqnL4nht2aG5tJ4bsSxRi3YpljJnYd2duPlYZz1Ujk4yWQo5lmMtp/kef8A/ChLL/oP3n/gPHR/woSy/wCg/ef+A8dep2N2by38xrea3YMVaOZcMCDjtwR3BHUVZp8qM3m2OTs6n4L/ACPI/wDhQll/0H7z/wAB46P+FCWX/QfvP/AeOvXKKOVC/tfHf8/PwX+R5BN8BbVYXMWv3O8KSu+3TGffFeML05696+xJP9U30NfHa9/qf51ElY+jyPGV8T7T20r2t+otekeCPhRD4s8MxavcatNa+dI6pFFCrYCsVySe5xXm9fRfwb/5JlYf9dZ//RrURV2dWc4mrhsOp0nZ3X5M53/hQll/0H7z/wAB46P+FCWX/QfvP/AeOvXKR2CKWYgADJJ7VdkfJf2vjv8An5+C/wAjyT/hQll/0H7z/wAB46P+FCWX/QfvP/AeOu+fxTDFYtezWF5HbeQ1xHKyDEiAj3+UkEEBsZH0IqzfeILWxupbd45pZY4UlCxKDvLuUVRz1LDvx70rI2/tDMr/ABP7l/kecf8AChLL/oP3n/gPHR/woSy/6D95/wCA8dehHxHEhaB7ScXwnWAWg2lmZlLAg5xt2hjnPG09+KafE8TNFDFZXMl3I0qm2+RXQx43DJOCfmXGCc5B6ZILIP7QzL+f8v6t5nn/APwoSy/6D95/4Dx0f8KEsv8AoP3n/gPHXo1rrn228eC3sbgiMxiR5Nqbd6B/uk7uARkY60txrqQ6lLaR2lxcGARtO0QB2BzgHbncRxkkDj35oshf2lmN7c/5HnH/AAoSy/6D95/4Dx0f8KEsv+g/ef8AgPHXoLeJFhkvftdjPbx2Khp5GZCBlcjAByc9PqaSXxKkG9LmwuYrlWhCwNsy4lfYpBBx97g88flksh/2hmX8/wCX9dTz/wD4UJZf9B+8/wDAeOj/AIUJZf8AQfvP/AeOvQZPFNpBpst1cQzxtDc/ZZINoLq/BPQ4ICndkHoD34qW711ILqWC2s7m9MESyzG3UNsVjxgE5YkAnA5wPcAlkH9o5j/O/uX+R5z/AMKEsv8AoP3n/gPHR/woSy/6D95/4Dx16Tbax9r1G4tre0lZLebyZJSygBtitwM5Iww7Vp0WRnLNcfF2c/y/yPI/+FCWX/QfvP8AwHjrhPiD4HTwRfWUUV895HdxuwMkYVlKkAjjgjmvpevE/j5/yE9C/wCuU/8ANKTSsejleY4qti406k7p37djyemu21SaWmy/6s1B9m9EM84/3f1o84/3f1qKigw55EvnH+7+tHnH+7+tRUUBzyJfOP8Ad/Wjzj/d/WoqDQHPIl84/wB39aPOP939aq+euVByM5/DFIJwf4GAyAT6Zpk+18y35x/u/rR5x/u/rVXzs7cIx3cDkUqyb2ICnAJGcigPat9Sz5x/u/rR5x/u/rUVFIrnkS+cf7v60ecf7v61FRQHPIl84/3f1pPOP939ajooDnkWhS0g6UtB0BRRRQB6L8Ev+R1u/wDsHv8A+jI6KPgl/wAjrd/9g9//AEZHRXRT+E/Pc/8A99fojkfFv/I663/2ELj/ANGNWRWv4t/5HXW/+whcf+jGrIrB7n3mH/gw9F+QUUUUjY7T4Qf8lPsf+uE//oFfSFfMHw61qx8P+PLLUNVm8i1SOVHk2khSy4BIHOM17f8A8LX8Ef8AQw2//fD/APxNaR2Pic9oVZ4pShFtWWy82dhRXH/8LX8Ef9DDb/8AfD//ABNH/C1/BH/Qw2//AHw//wATTujwvquI/kf3M7Csu+066fUo7/TriKKYQtA6zRllYEgg8EHII/EE/WsP/ha/gj/oYbf/AL4f/wCJo/4Wv4I/6GC3/wC+H/8AiaNC44fExd1B/cy1c+Dob2PVDevDdXF9bpCs8tuC0bLHt3fiTnAxU0vh65d54BeILK4uUuZFMZ8xSu0lVOcYJQHkZGT6jGf/AMLX8Ef9DBb/APfD/wDxNH/C1/BH/QwW/wD3w/8A8TRoa8uM/lf3enl5Ivx+G50a3tjdRiwtblrmFFi/eBiSVUsTjCsxPTnAB75qP4RuJY5/Nns90qxiREtisdwySBy8ibsbiBjj1PXgCP8A4Wv4I/6GC3/74f8A+Jo/4Wv4I/6GC3/74f8A+Jo0GljU78j+759jZk0dp9Bk0/MFoxbdG1rFhY2DBlO09eRz61Xl0K9uJLm5ubi1knuBFG8TW+6Fok3HYQSTyXJz2wOuDnO/4Wv4I/6GC3/74f8A+Jo/4Wv4I/6GC3/74f8A+Jo0IVPFraD+7/geRv6Jpr6VpotpJvNw7MAAQsYJyEXJJ2joMn/CtGuP/wCFr+CP+hgt/wDvh/8A4mj/AIWv4I/6GG3/AO+H/wDiaLozlh8TKTk4O78mdhRXH/8AC1/BH/Qw2/8A3w//AMTR/wALX8Ef9DDb/wDfD/8AxNF0T9VxH8j+5nXSf6pvoa+O17/U/wAzX0lN8WPBQgkK67DIQpIRI3LN7AbetfNqdPTJzUyPqeH6NSn7Tni1tuvUWvov4Of8kysP+us//o1q+dDXs/wy+IHhnQfA9vp2saolndQyy7kkRuQzlgQQCCMGlHc7M+pzqYZKCb1W3oz16mSxrNE0bjKupUj1Brkv+Fr+CP8AoYbf/vh//iaP+Fr+CP8AoYLf/vh//iavQ+L+q4j+R/cy5N4d1C60OTSLjUYja/ZWtk2wYLjgBn56hRjAwCST7U658Jwm/mutOaGxZoogixwDAkjkLhiBjI5wR6d6o/8AC1/BH/QwW/8A3w//AMTR/wALX8Ef9DBb/wDfD/8AxNGhvy4xbQf/AID/AMDyL7+HrmS7OpNdRLqInSVSIz5QVUZNmM5OVduc9SOOMUybw1cTWrrNNaXL3Esk06T22ULtgKy4O5SoUAc8+x5qn/wtfwR/0MFv/wB8P/8AE0f8LX8Ef9DBb/8AfD//ABNGgcuM/kf3f8Au6f4alsNR+0vJbXr4hBuLmEmYbIwhIbPU4J/E1Jq+gXOp3wlFzDGFdGil8j99b7TlgjgjhsdD6nqOKzv+Fr+CP+hgt/8Avh//AImj/ha/gj/oYLf/AL4f/wCJo0DlxnNzcjv6f8A17zw+t8urJNMVTUFQDavMZVcA+/IBqtdeG7jU5Gl1S5hdy1uNkURCbI5PMPU5yx/Ljr3o/wDC1/BH/QwW/wD3w/8A8TR/wtfwR/0MFv8A98P/APE0aCjDGR2g/u9PLyRbTwgoaOFruRLKB53iihyjZl6hmz82AXH0YelRHwlcx2UlvBfRnz7ZLeV5I23DZkJICrA7gpwR0JAPHeH/AIWv4I/6GC3/AO+H/wDiaP8Aha/gj/oYLf8A74f/AOJpaFf7b/K/u+fbuaNj4eax1q4vQLOYzziXzZIT5yDy1QgNn/Zz+JrfFcf/AMLX8Ef9DBb/APfD/wDxNH/C1/BH/Qw2/wD3w/8A8TT0Mp0MVN3lB/czsK8T+Pn/ACE9C/65T/zSu8/4Wv4I/wChht/++H/+Jryv4u+KtH8UalpZ0K8F2ltFIJJFRgoLFcDkDPQ0pPQ9LKMPWhjYSlBpa9H2Z59TZf8AVmnU2QFkIHWsz7x7FeineW/92jy3/u0HNyvsNop3lv8A3aPLf+7QHK+w2g807y3/ALtHlv8A3aA5X2KzW+7zMNjccjjp60pgHmbxjO4EfgMYqx5b/wB2jy3/ALtMn2a7ECxFRGM/cJP1oSIpIW+Xkk5xzzU/lv8A3aPLf+7QHs/IbRTvLf8Au0eW/wDdpFcr7DaKd5b/AN2jy3/u0ByvsNop3lv/AHaPLf8Au0ByvsWB0paQUtB1BRRRQB6L8Ev+R1u/+we//oyOij4Jf8jrd/8AYPf/ANGR0V0U/hPz3P8A/fX6I5Hxb/yOut/9hC4/9GNWRWv4t/5HXW/+whcf+jGrIrB7n3mH/gw9F+QUUUUjYTFGKWigLCYoxS0UBZCYoxS0UBZCYoxS0UBZCYoxS0UBZCYoxS0UBZCYoxS0UBZCYoxS0UBZCYopaKACkxS0UAJijFLRQFkJijFLRQFkJijFLRQFkJijFLRQFkJijFLRQFkJijFLRQFkJijFLRQFkJijFLRQFgooooASilooASilooASilooASilooASilooASilooASilooASilooAKKKKACiiigD0X4Jf8jrd/9g9//RkdFHwS/wCR1u/+we//AKMjorop/Cfnuf8A++v0RyPi3/kddb/7CFx/6Masitfxb/yOut/9hC4/9GNWRWD3PvMP/Bh6L8gooopGwUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHovwS/wCR1u/+we//AKMjoo+CX/I63f8A2D3/APRkdFdFP4T89z//AH1+iOR8W/8AI663/wBhC4/9GNWRWv4t/wCR11v/ALCFx/6MasisHufeYf8Agw9F+QUUUUjYKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD0X4Jf8jrd/wDYPf8A9GR0UfBL/kdbv/sHv/6Mjorop/Cfnuf/AO+v0RyPi3/kddb/AOwhcf8AoxqyK1/Fv/I663/2ELj/ANGNWRWD3PvMP/Bh6L8gooopGwUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHovwS/5HW7/7B7/+jI6KPgl/yOt3/wBg9/8A0ZHRXRT+E/Pc/wD99fojkfFv/I663/2ELj/0Y1ZFa/i3/kddb/7CFx/6MasisHufeYf+DD0X5BRRRSNgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPRfgl/yOt3/wBg9/8A0ZHRR8Ev+R1u/wDsHv8A+jI6K6Kfwn57n/8Avr9Ecx44s5bPx1rKTqVL3kkq5HVXYsD+RrBr6a8SeCtF8VbW1OBhMg2rPC21wPTPQj6iuZ/4Ul4c/wCf3VP+/sf/AMbrOUHc+jwObUqlCN07rR/1c8Lor3T/AIUl4c/5/dU/7+x//G6P+FJeHP8An91T/v7H/wDG6nlZ2/2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbo/4Ul4c/5/dU/wC/sf8A8bo5WH9pUez/AA/zPC6K90/4Ul4c/wCf3VP+/sf/AMbo/wCFJeHP+f3VP+/sf/xujlYf2lR7P8P8zwuivdP+FJeHP+f3VP8Av7H/APG6P+FJeHP+f3VP+/sf/wAbo5WH9pUez/D/ADPC6K90/wCFJeHP+f3VP+/sf/xuj/hSXhz/AJ/dU/7+x/8AxujlYf2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbo/4Ul4c/5/dU/wC/sf8A8bo5WH9pUez/AA/zPC6K90/4Ul4c/wCf3VP+/sf/AMbo/wCFJeHP+f3VP+/sf/xujlYf2lR7P8P8zwuivdP+FJeHP+f3VP8Av7H/APG6P+FJeHP+f3VP+/sf/wAbo5WH9pUez/D/ADPC6K90/wCFJeHP+f3VP+/sf/xuj/hSXhz/AJ/dU/7+x/8AxujlYf2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbo/4Ul4c/5/dU/wC/sf8A8bo5WH9pUez/AA/zPC6K90/4Ul4c/wCf3VP+/sf/AMbo/wCFJeHP+f3VP+/sf/xujlYf2lR7P8P8zwuivdP+FJeHP+f3VP8Av7H/APG6P+FJeHP+f3VP+/sf/wAbo5WH9pUez/D/ADPC6K90/wCFJeHP+f3VP+/sf/xuj/hSXhz/AJ/dU/7+x/8AxujlYf2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbo/4Ul4c/5/dU/wC/sf8A8bo5WH9pUez/AA/zPC6K90/4Ul4c/wCf3VP+/sf/AMbo/wCFJeHP+f3VP+/sf/xujlYf2lR7P8P8zwuivdP+FJeHP+f3VP8Av7H/APG6P+FJeHP+f3VP+/sf/wAbo5WH9pUez/D/ADPC6K90/wCFJeHP+f3VP+/sf/xuj/hSXhz/AJ/dU/7+x/8AxujlYf2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbo/4Ul4c/5/dU/wC/sf8A8bo5WH9pUez/AA/zPC6K90/4Ul4c/wCf3VP+/sf/AMbo/wCFJeHP+f3VP+/sf/xujlYf2lR7P8P8zwuivdP+FJeHP+f3VP8Av7H/APG6P+FJeHP+f3VP+/sf/wAbo5WH9pUez/D/ADPC6K90/wCFJeHP+f3VP+/sf/xuj/hSXhz/AJ/dU/7+x/8AxujlYf2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbo/4Ul4c/5/dU/wC/sf8A8bo5WH9pUez/AA/zPC6K90/4Ul4c/wCf3VP+/sf/AMbo/wCFJeHP+f3VP+/sf/xujlYf2lR7P8P8zwuivdP+FJeHP+f3VP8Av7H/APG6P+FJeHP+f3VP+/sf/wAbo5WH9pUez/D/ADPC6K90/wCFJeHP+f3VP+/sf/xuj/hSXhz/AJ/dU/7+x/8AxujlYf2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbo/4Ul4c/5/dU/wC/sf8A8bo5WH9pUez/AA/zPC6K90/4Ul4c/wCf3VP+/sf/AMbo/wCFJeHP+f3VP+/sf/xujlYf2lR7P8P8zwuivdP+FJeHP+f3VP8Av7H/APG6P+FJeHP+f3VP+/sf/wAbo5WH9pUez/D/ADPC6K90/wCFJeHP+f3VP+/sf/xuj/hSXhz/AJ/dU/7+x/8AxujlYf2lR7P8P8zwuivdP+FJeHP+f3VP+/sf/wAbpyfBTw2rgm71NwP4TNHg/klHKw/tKiuj/D/M5b4IWcreJr+8CnyY7MxFscbmdSB+SGivXdG0PT/D+nrZ6VbrBCDk45LH1J6k0V0RVlY+BzLFrF4mVWKstvuP/9k=)

Figure 20 - Raspberry Pi OS Imager

It is possible to select from the different OS variations available on the “CHOOSE OS” dropdown. It is also possible to download the file directly from the website and select it here from our local machine. After connecting the microSD card on our personal computer, we can select it on the “CHOOSE STORAGE” dropdown and press the “WRITE” button, which will be active after selecting the appropriate OS and storage device. Once complete, we can plug the microSD card on the microSD card reader located at the back of the Raspberry Pi board.

We can use two different ways to control the Raspberry Pi. One is by using the different ports provided by the Raspberry Pi board to connect IO devices. That is, connecting a conventional keyboard and mouse to the USB ports and a desktop monitor, TV, or any display with HDMI input to the HDMI output of the Raspberry Pi. This way we can use the Raspberry Pi as a personal computer.

Another option is to perform a Raspberry Pi headless setup and use a personal computer to control the Raspberry Pi. To do this, we need two tools:

* An SSH Client
* VNC Server
  + 1. **SSH Client**

An SSH client is a program that allows establishing a secure and authenticated SSH connections to SSH Servers. The server in this case is the raspberry pi. PuTTY is an SSH and telnet client, developed originally by Simon Tatham for the Windows platform. PuTTY is open-source software that is available with source code and is developed and supported by a group of volunteers. The image below shows this software.

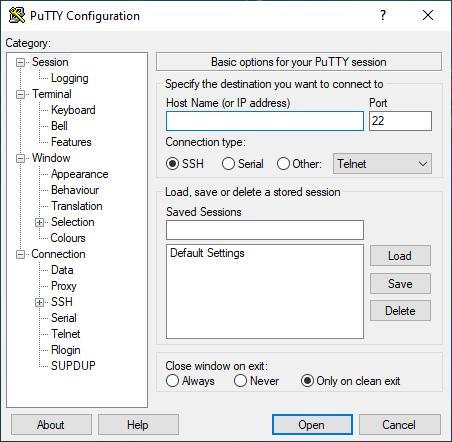


Figure 21 - Putty

After installing the OS on the microSD, we must first open the boot partition of the microSD and add an extensionless file called “**ssh**”. The Raspberry Pi OS will automatically enable SSH on first boot-up. This will allow us to access the raspberry pi’s CLI using putty. To do this, we must follow the following steps.

* First use an ethernet cable to connect the Pi to a personal computer.
* On Putty enter raspberrypi or raspberrypi.local **as the host name of the connection we want to create.**
* **The above step will open a window prompting us to login. By default, the username is Pi and the password is raspberry, which can later be changed.**

**This will give us access to the Raspberry pi CLI. It is possible to stop here and use just the CLI or continue, to access the Pi’s desktop.**

* + 1. **VNC Viewer**

VNC is a graphical desktop-sharing system that uses the Remote Frame Buffer protocol to remotely control another computer. It transmits the keyboard and mouse input from one computer to another. To use this tool, we first must enable VNC setting in the raspberry pi.

* **On the raspberry pi CLI, enter the command “*sudo raspi-config”*. This opens a configuration window.**
* **To enable VNC, navigate to Interfacing Options > VNC select it and select Yes.**

**After enabling VNC setting. Run the VNC viewer and select “New connection” from the “File” menu. The window given on figure 22 will open.**

* **Enter** raspberrypi**.local or** raspberrypi **in the "VNC Server" field.**
* **Double click the connection icon.**
* **Enter Pi’s username and password in the dialog box pops up. Use either the default or the one you entered if it was changed previously.**

**The Raspberry pi desktop will then appear. It is given on figure 23.**

*Note* that we can also use Wi-Fi and direct USB connection to do this. Even though some of steps are shared, both connections have their own setup.

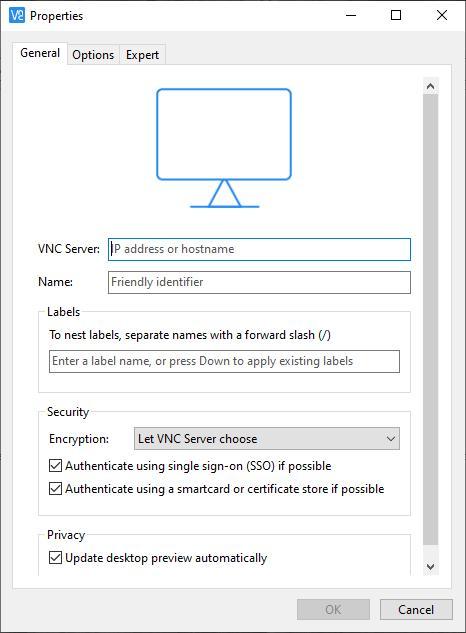
****

Figure 22 - VNC Viewer new connection

**![A screenshot of a video game

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADNjQAAJKSAAIAAAADNjQAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDc6MjggMTE6MzY6MjQAMjAyMTowNzoyOCAxMTozNjoyNAAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDctMjhUMTE6MzY6MjQuNjQzPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAMABVYDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD1DxR451vR9bv7fT7OzktbIxB5JQxbLqGHAYcdR0/nVS28b+Mru1S4t9J0945F3IcEFxkjABkyTlW4HPFUPEX+kfErWNNJAGoQJAuTgeZ5SNH/AOPqo/GnRMZJyLaO5vo9HvIkggsUDuDGgG9v9gsp6DqTzX1UKFBUYe4r2Tu/NLz3bPnJVqzqy992u19z/wAj0Lwtq82u+GbTUblEjlmDbljztGHK8Z+la9cx8PDj4f6fj0l/9GvXn+qeM9f0/wCHOiXx8RyLq+o2EmoCa5a2t4X2on7hV+zuZGJYERrtY/P86jAHzmJjGFepGOybX4v/ACPewzlOjCT3aX5Hs9RXF1b2cPm3c8cEe5U3yuFG5iFUZPckgAdyQK8z1jxjqFnqHiJI9eEl1DpE93Z2dk9tLHZ7LdW3TxlPOR95yMsyEEA4OAcvWfEN1f8AhrUxH4lj1m0hbS53vfs8fl2Vy14m+LEeMgBQ2xiXXuxyKx6pehqtVf8Arp/mey0V5JqXjHWbfQZ30jxFDf6b/bEdqniK4kghjSIwb2zMkLxACXEe/wAoj5tp+b5hK/iTxE+m6ncx+JLeb+zfDBv0fTjDcQ3E+blQ5kMQ3AeWhIUKNy9AMqV0v/W1ylG7t/W9vzPVqCQqkscAckntXBS6lr2mXVto0uq3F5c63FE1jePbxAwMDm44VAuFjIZdwJPIJNZujeLNSu/FUdt/wki3l1/bV5aSaKsEIMVpG0oWZsDzBjao352nhcFuSPQhO8eb+tm/0PSIb21ubFL23uYZbR08xZ0kDRsmM7gw4Ix3qSGaK4gjmt5ElikUOkiMGV1IyCCOoI71wj6leax8F9LvtSl86W+isvt0m0KGjkljExIGABsLZx2qDWPEOpWE/i66m1i4gtdPubeytIoxBFHbmWKA+a8rxPtUM5JYhgFLfKx2gNqza7f8D/NFWZ6LRXkdn411T+ydCuNV8SxASXlxbvHYXFqbm/K3ASMossSiZNv3jGsbHIKg5xV3R/Fmo3nipLb/AISRbu5OtXlpLoqwQjyrSNpQsrYHmDbtUb87TwuC3Jl6L+v66i6N/wBdf8j0q2uYL21jubOeO4glUPHLE4ZXU9CCOCKlrxXwb4m1Sy8HWUfh7V1124t/D008ulpAhFjLGi+SuEHmAtkjaxJfkrtAxV/RvEuv6paaZbxeMLG6+3arHA91pt1b3k0MbW0zsjf6NGqHdGpAKEjnJI4q7e9Zf1rYbVvx/BXPW6K84tvEWsabZ3PiTVdVuLvTLbV7u0ubNbeLEUCSyRxsu1A5YMIwctjBPGRk5uueJ9c0m9mtNU8WDS7uPRYr6C3+zQFrm7eSbEC7l+YYVU2L87bQQwO4mf6/C4Wd2u3+dvzPT11TT3vjZpfWzXSuUMAmUuGChiNuc52sDj0IPerVed32q6hfNqQvWxPp+vaYlpGFA8kutuZFBHJz5soJJPDEdOK7a+l1aO6tV0yys7i3Z8XMlxePC8S5HKKInDnGeCV6Dnnh20/rsn+oiz9pg+1/ZfOj+0bPM8neN+zON23rjPGaht9W067uza2uoWs1wIzIYY5lZ9gYoW2g5wGBXPqCOtcv4+u5vD8tj4ks0kkliSXTyiKW3GcDysj/AK7JEvtvNYX/AAjs+neMtui/PqWh6BYtb7j/AMfGJLgSRsT/AM9Bnns21u1Jef8AW/5K1/UbWj/rql/nY9Dm1nTLbT57+41G0is7dmSa5knVY4mVtrBmJwCG4IPQ8UQa1pdzpS6pb6lZy6e33buOdWiPO3hwcdeOvWvLfDmr6cG0vxFqzGDQv7T1Z1nu0KR2tw91+6eXcP3Z2+aoZsYLY6sK9EuI9K8X+FL+DTLqG4s9Riki+1WrBlcldu5XHDYPcE8j2o2jf+v6/wCB3DTmt5mjdanYWMix3t7bW7vjas0qoWywUYBPdmVfqwHerVeXWmvaldaFe+KEL2159r0/ScvGDjZcIlwAGGOZJZVz32gjoDVaDxV4rvfEWuQRa1psF1bPdpBoz3cf2gCIkxMtuYA/zqqksZWUq5IA42vT8/0f5NCs7X+Xz/4c9aorzvTPF+satrdtHavmz1iVbzTyYgCtnHuEgORzuKRHJ5H2gegrm9K8a+KL3QLq5m8R6at9K9or2cVxFNc6fI93HG6m3MCNGAHZSJGkOQMN3Ik27f1/V9PVB/X9fme0UVHbxPBaxRSzyXDxoFaaUKGkIGCx2gLk9TgAegFSUgCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKo6rYXOo2qxWerXmlOrhjNZpCzsMEbT5sbrjnPAzwOeuQC9RXP23hzVILqKWXxprlykbhmhlhsQkgByVbbbBsHocEH0IroKACiiigArjfFPxR8PeFNZi0m6mjur50d5YYr60hNuF2EeZ580YUsJAVHUgMcYFdlXE2OuweH/FHiqPUrHWP9K1OOeCS20a7uY5E+xWyZDxRsv3kYYznIoA0vCnjaz8WzXMdnZ3Fv5EMU4kknt5o5kkeVAUeCWRThoJARkEEV0lef/DTStSi1DXNbvrb7LaahNKlnHKskc7IL+9m3yRSIpj3C5XA5JAycZwPQKACiiigArHsPFGmXuj3OozSmwSxLLfRXhEb2bKMssgyQMDByCQQQQSCCdivOdQ8Nan4u1aPxXDbLYPaFDY6beIUGoKjbla7XGV5yYgQTETuIJJQAHdaVqI1bS4b5La5tUmBZI7qPZJtyQGK5yu4AMAcEAjIByBcqnpV+dT0uG7e0ubJ5AQ9vdR7JImBIKkdDyDgjIIwQSCDVygAooooA5LW/AWi69q0uo3d1cxzTBd4ilQLwAB1U9gKof8ACqvD3/P/AH3/AH+j/wDiK6aiuyOPxUIqMZuyOWWCw8pOUoK7JtH0+z0PSYNOs5S0MIO0yOCxySTnp3Jq75sf/PRf++qzKptqAdttpE1wR1Kfw/WuSUpTk5S3Z0xiopRWyNPV7G11rRL7S7qYpBe28lvI0bAMFdSpIJyM4PoatQmKGFIlkUqihRlhnAFYYh1RuRLbqPQocijyNU7TW3/fBpDN7zY/+ei/99UebH/z0X/vqufN1c2xxdwFlHWVBhRVqGaOeMSRMGU9CKBkw0yA+IDq097LPIkRiggkZPLtwcbygCgkttGSxbGMDAJyukabZ6LbTwWszOs91NdMZHBIeWRpGAwBxljj29ajopAXruK0vrOa0vBHNBOhjkjY8MpGCKdD5NvbxwxyZSNQil5C7YAxyxJJPuTk1n0UAafmx/8APRf++qoaRptnottPBazM6z3U10xkcEh5ZGkYDAHGWOPb1qOgnHWgPI0/Nj/56L/31R5sf/PRf++q4++8Xaba7lt3+1yocNHEeR+f+eKzo/HhlkKJoV8SATwV7fjWkac5K6RDnGLs2djqumQaw1stzeypbQyiWS2jZNlwVIKh8qWwGAOFK56HI4pY9Ns4/EU+srM32ie1jtWUuNgRGdgQMZzmQ559K5K08dQTv/pOn3NpGOWklK4UevBroLHUbTUoPOsZ1mjzjctKUZQeqsNSUlozTubOxvLu0ubnDyWbmSD96QqsVK52g4JwSBkHGTjFWfNj/wCei/8AfVZlFQUafmx/89F/76o82P8A56L/AN9VmUUAafmx/wDPRf8AvqjzY/8Anov/AH1WZRQBp+bH/wA9F/76o82P/nov/fVZlFAGn5sf/PRf++qPNj/56L/31WZRQFjT82P/AJ6L/wB9UebH/wA9F/76rMooCxp+bH/z0X/vqjzY/wDnov8A31WZRQFjT82P/nov/fVHmx/89F/76rMooCxp+bH/AM9F/wC+qPNj/wCei/8AfVZlFAWNPzY/+ei/99UebH/z0X/vqsyigLGn5sf/AD0X/vqjzY/+ei/99VmUUBY0/Nj/AOei/wDfVHmx/wDPRf8AvqsyigLGn5sf/PRf++qPNj/56L/31WZRQBp+bH/z0X/vqjzY/wDnov8A31WZRQBp+bH/AM9F/wC+qPNj/wCei/8AfVZlFAGn5sf/AD0X/vqjzY/+ei/99VmUUAafmx/89F/76o82P/nov/fVZlFAGn5sf/PRf++qPNj/AOei/wDfVZlFAGn5sf8Az0X/AL6o82P/AJ6L/wB9VmUUAafmx/8APRf++qPNj/56L/31WZRQBp+bH/z0X/vqjzY/+ei/99VmUUAafmx/89F/76o82P8A56L/AN9VmUUAafmx/wDPRf8AvqjzY/8Anov/AH1WZRQBp+bH/wA9F/76o82P/nov/fVZlFAGn5sf/PRf++qQXEJmWETRmVlLKm4biBgE49BuH5j1rNqpeaZb300U0xnSWJWVHguZIWAbBIyjDIO1evpQB0NFcz/Ylv8A8/Wp/wDg0uf/AI5R/Ylv/wA/Wp/+DS5/+OUxHTUVzP8AYlv/AM/Wp/8Ag0uf/jlH9iW//P1qf/g0uf8A45QB01Fcz/Ylv/z9an/4NLn/AOOUf2Jb/wDP1qf/AINLn/45QB01Fcz/AGJb/wDP1qf/AINLn/45R/Ylv/z9an/4NLn/AOOUAdNRXM/2Jb/8/Wp/+DS5/wDjlH9iW/8Az9an/wCDS5/+OUAdNRXM/wBiW/8Az9an/wCDS5/+OUf2Jb/8/Wp/+DS5/wDjlAHTUVzP9iW//P1qf/g0uf8A45R/Ylv/AM/Wp/8Ag0uf/jlAHSK6uzBWVihwwB+6cA4P4EH8adXM/wBiW/8Az9an/wCDS5/+OUf2Jb/8/Wp/+DS5/wDjlAHTUVzP9iW//P1qf/g0uf8A45R/Ylv/AM/Wp/8Ag0uf/jlAHTUVzP8AYlv/AM/Wp/8Ag0uf/jlH9iW//P1qf/g0uf8A45QB01Nd1jXMjKoJAyxxyTgD8ScVzf8AYlv/AM/Wp/8Ag0uf/jlH9iW//P1qf/g0uf8A45QB01Fcz/Ylv/z9an/4NLn/AOOUf2Jb/wDP1qf/AINLn/45QB01Fcz/AGJb/wDP1qf/AINLn/45R/Ylv/z9an/4NLn/AOOUAdNRXM/2Jb/8/Wp/+DS5/wDjlH9iW/8Az9an/wCDS5/+OUAdNRXM/wBiW/8Az9an/wCDS5/+OUf2Jb/8/Wp/+DS5/wDjlAHTUVzP9iW//P1qf/g0uf8A45R/Ylv/AM/Wp/8Ag0uf/jlAHRyyxwQvNPIsUUalnd2wqgckknoKPNj/AOei/wDfVczL4fs54Xhnm1GWKRSro+p3BVgeCCDJyK06QzT82P8A56L/AN9UebH/AM9F/wC+qzKKANPzY/8Anov/AH1R5sf/AD0X/vqsyigDT82P/nov/fVHmx/89F/76rMooA0/Nj/56L/31R5sf/PRf++qzKKANPzY/wDnov8A31R5sf8Az0X/AL6rMooA0/Nj/wCei/8AfVHmx/8APRf++qzKKANPzY/+ei/99UebH/z0X/vqsyigDT82P/nov/fVHmx/89F/76rMooA0/Nj/AOei/wDfVHmx/wDPRf8AvqsyigDT82P/AJ6L/wB9UebH/wA9F/76rMooA0/Nj/56L/31R5sf/PRf++qzKKANPzY/+ei/99UedH/z0X/voVmVk+KLyTT/AA1d3UBxJGFwfqwH9aunF1JqC3ehM5KEXJ7I3JPEGjQuUm1axjYdVa5QH+dM/wCEl0L/AKDWn/8AgUn+NfJviTxfdRai0UTFiOrMSSeB71jf8Jjf+o/X/GvSnh8HTk4Tm7rsjz41sVUjzRgrPzPsv/hJdC/6DWn/APgUn+NH/CS6F/0GtP8A/ApP8a+NP+Exv/Ufr/jR/wAJjf8AqP1/xqfZ4H+eX3Fe0xn8q+8+y/8AhJdC/wCg1p//AIFJ/jR/wkuhf9BrT/8AwKT/ABr40/4TG/8AUfr/AI0f8Jjf+o/X/Gj2eB/nl9we0xn8q+8+y/8AhJdC/wCg1p//AIFJ/jT4tf0eeQJDq1jI56KlyhJ/WvjH/hMb/wBR+v8AjW34Y8X3UuprHIxVjyrKSMcH3qoYfCVJckJu72uiZV8VTjzzgrLzPsDzo/8Anov/AH0KPNj/AOei/wDfVc14cupL3w7Z3Mxy8keWP4mtKvNnFwk4voehGSlFSXU0/Nj/AOei/wDfVHmx/wDPRf8AvqsyioKNPzY/+ei/99UebH/z0X/vqsyigDT82P8A56L/AN9UebH/AM9F/wC+qzKKANPzY/8Anov/AH1R5sf/AD0X/vqsyigLGn5sf/PRf++qPNj/AOei/wDfVZlFAWNPzY/+ei/99UebH/z0X/vqsyigLGn5sf8Az0X/AL6o82P/AJ6L/wB9VmUUBY0/Nj/56L/31R5sf/PRf++qzKKAsafmx/8APRf++qPNj/56L/31WZRQFjT82P8A56L/AN9UebH/AM9F/wC+qzKKAsafmx/89F/76o82P/nov/fVZlFAWNPzY/8Anov/AH1R5sf/AD0X/vqsyigDT82P/nov/fVHmx/89F/76rMooA0/Nj/56L/31R5sf/PRf++qzKKANPzY/wDnov8A31R5sf8Az0X/AL6rMooA0/Nj/wCei/8AfVHmx/8APRf++qzKKANQSIejqfxo8xP76/nWfF0f/d/qKydX8U6Rod9aWmp3awy3TYUHog5+Zv7q5GMnv7AkMR03mJ/fX86KoUUARUdOtFVNQcmNIE5M7iNvZTwTSGR4fVJmRSVtUYq5H8ZHUeo+tcLqPxD1Jr64sNA0oRJb4BujMpzn/ZZc9iK9MgiEECRL0VQPrxXknjfTz4R8SXOtyA/2XfBBJtGfJKgLn8WbvWGJlUjSbpbmc3JL3S7aeP8AxFp8qtqdit/b5/eSLJHF5a92wAScDnFWdS+J0984i8J2X2qLH7y8MgQRtzldjqCeCDn8K8v8W+KbLRtLeXSLhZpJ1KfZ4yGDZ4zxk8VzPgLxe7Tvpeqs1jDK5l8xhjeTtXYc4wCMnPtXBDEYp0XO39ehC9q4OVj2YeP/ABNpqvNe2S6lEoyUV44sfjg11em6qdQs49XsIzGs2d8BbOcHb1OMYwT0ry954NfY6BoEitJKP3kqHIjHXOeR2r1qytI7Kyjt4l2qgxj+ddODqVqkHKr8iqbk17xsW1wl1brNEcqwyKlrGsX+y6k0X8EwL5PY9MVs12moUUUUAR3E8drbyTzttjjUu7YzgAZNee6vrd14hneKFjDp4YqFU8yjP3s8EZGOO1anjO8muruDSLcMUIE0roM5AJBQ+mQaoabaSR3EZ8lxHFjjaelejhKEWvaTOHEVpJ8kSO6iitY4rWJRiMZ3dznmn6b/AMfL/wDXJv5VFLDM0rHypOp/hNWdNglFw+YnH7tv4T6V6rsoWPP1c7lKJ/LmRyAwUg4Pekv45dNvlvtMmMMzqHHGVye208UrwzKufJk/75NOkinuNLUeTJujcsflPSpqqEviKpuS2Ov8NeI4tftGyvlXUOBNCTnbknBzgA5Azx0rarya3lutF1OHU4oZSIztkTYfn3DaPyzXrCOsiB0YMp6EHrXhV6Xsp2Wx61Gp7SNxaw4rfzvMdtx/eMPvkd63KzLL/VSf9dW/nXjY9tQVjuobshWKe1kD24LDupbr+Jq19vuf+fH/AMiinO+xCx7CqaXlxIgZYUwenzVwU8TVhGyZtKnGTvYtfb7n/nx/8iik/tC4H/Ll/wCRRUEd6d+ydRGexzxU3nR/89E/76FafXK/cXsoEkGoPLdLDJb+WWBIO8HpV2spJY/7UhbeuArZOa0ftEP/AD2j/wC+hXp4aq6lPmnuYVIqMrIkopqSxucI6sfY5p1dRkeMeKDJe+NNWjmmm2QSqsYSQrgFAe1Zn2FP+e1z/wB/3/xqDxiLw/ELXfs9/JCvnp8qoD/AvrWTjUv+grL/AN+1r3aGPwtOmoyhqvJHFOjUlJtM3fsKf89rn/v+/wDjR9hT/ntc/wDf9/8AGsLGpf8AQVl/79rRjUv+grL/AN+1rb+0sJ/z7/BE/V6vc3fsKf8APa5/7/v/AI1DcQxQJkzXGew89/8AGsSWTUY1/wCQtLn08taoyfb5G3PqUhP+4tJ5lhbaU/wQewqdWazIzMT9ouR/23b/ABrqfhteXEHji2s1nkaCeKRnV3LZKrx1+tefeXe/9BGT/vha6v4XLcL8TLDzrp5h5E3BUD+H2rkr4uhUpuMY6/I1hTmpXbPoCiiivIOoKKKKACiiigQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFYPjb/kTb/8A3U/9DWt6sHxt/wAibf8A+6n/AKGtdOE/3mn/AIl+Zhiv4E/R/kfJ2uRCbxA0ZO3cQM/gKh1jRn0ryyzblcZBx9ff2p/iFtmuOw6gg/oK3dSX+1PCMNwvLxKN3thSa73RhWlWX2lqjhVWdKNJ/ZejOLpQMkCkq/o1mb3VIosZXJz+RP8ASvLpwc5qK6npTkoRcn0Lmo6AbCwimaTMkh4Tb7465qxYeELq7gEsrCMMMgHB/rWzfSre+LILZuViBP8AI1keK9UuDqj26OVjj4x9Ca9urh8LRcqkldJ2S7vqePTr4mqowi7Nq9/Irap4YutOiMo/eRjqRjj9aZ4X/wCQ3F+P8jWz4S1GW782zuG3oFGM1n6PEIfFXlr0BP8A6CayVGkqlKtR0Unt2Zo6tR06tKrulufV3hD/AJFHT/8Arl/U1s1jeEP+RR0//rl/U1s15uJ/jz9X+Z6OH/gw9F+QUUUyYstvIY/vhSV+uK51qzZuyuU9X1m10e0aa5bnHyrg/McHA4Bx0rh0+IN6NTLuoNru4i4zjPrjNVk0XV/EWtMb5XQBvmZlxgZGccc9ay4NKWbxP/ZZchftDQ78c8EjP6V9bhcDhKcJKo1KVrvyXkfFY3McdUnGVJOEW7Lzfmesabqltqtqs9q+4HqMEY/MVU8T6pNpGhvdW/8ArAwUZ7ZrhoNL1rw9rQW0R23E/Mq5BGD1OOOtdX4+/wCRVk/66p/OvLlg6VPFU1F80JP+rnrxx1argqrnFxnBP7/Im8Iazca1pMk12QZI5dhIAGeAe31rfrkPhx/yArn/AK+T/wCgrXX1x4+EaeKnGKskzvy2pOpg6c5u7aCiiiuI9AKKKRmVFy5Cj1JoAWjIPQ1z+p+IQmYrPk939Kq+HJXk1dzI2SYyT+YruWCn7J1JaWPMlmNL28aMNb9TqqiluoYZESV9rPnaMHmor26aK0ke2CyOgOQD0rInVNb08you25j6r+OP6VlRoc3vT0WxvXxPJ7sNZb279zoaKzdEvzeWeJDmROG9+taVY1KbpzcJdDoo1Y1aanHZhRRRUGgUVFdXUFlbtPdSrFGgyWYgD9a56w+IGg6lrg0qznkkuSu4EJlSN23rn1NC1dkD0V2dNRTZJUhjMkrqiL1ZjgCuKn+LHh+G6MS2+qTqDgzQWLPH/wB9jilfWwW0udvRVTTNUtNYsUu7CZZYnGQQRx9aXUtStdJsnur6VY4kGSSeT7D1NOXu7iWuxaoriYfit4fluvJeDU4Fzjz57Jki/wC+zx/kV1897b29m11LMiwqMlywx+dD0V3sHWxPRXFJ8VvD73otxDqQUsF+0GzYQ9eu/pj3rsba5iu7aOe3kWSKRQyspyCCMiiztcL62JKKKKAJIuj/AO7/AFFZMvhfSLi71K5u7RbiTUlVJzJz8iqoCr/dHyhuOc4OeBi5e/8AIOuP90f+hCsKmI6Cws49O022soCzR20SxIXOWIUADOO/FFZ2kf8AH43/AFzP8xRQBqVUAz4gQHkC3Jx77qt1UX/kYV/69j/6FSGaVfO/x68ZrJrsGiR3mbSAEzwxP/rdyoy7hnBwRkV79qUs0OmzyWq7plXKD1NfFOu3ivcG5v3M0rzyhnkO5jhsYyfShnoZfRU6jqNpKGuvrYgSG5W4+2vaRLCqnEYQ7h+HTtUkkj63AGtLdUMb9bhcdB7Z9avz6jbtbMIXEjMpCqO9UtJums4nj1CP7OXcspPfp6fjUH20qdKE1R57wldt6b9NdkavhbxHJ4Z8RWs6v9jdG/fqDtSUYOM8jIzzX1XbTpc20c0Tq6uuQynINfH8l7Z3WtRRLtkPqR7GvoT4NXl1d+A4PtLvJGrOI5HbJb94+eT6YxVI+WzijBS9rCSavbTyO4uzta3I4PnoM/jW9WDejP2b/r4T+db1M8IKKKKAPNp72b/hJNX2ysPLuigwegwOKvWd7cmC6JnkJEXHzdOay7iMp4k1kn+K7JH5Crtl/wAe93/1y/rX0FGMfYRPGqN+1ZH9uuv+fiT/AL6q1YX9x577p5D+7Y43e1ZjMFXJp2nSGS8f08p+PwraaiovQyg25IifU7x2/wCPmUD/AHjVqyv7o2d4TcSEiMY+Y8c1lVdsf+PO+/65D+dRJKxUW7kEt/dNEwe4kIx0LGu78Fztc+DdOmclmeMkk9/mNeePzG30NegeBozF4I0xD1WI/wDoRrz8cklE7cG22zfrMsv9VJ/11b+dadZll/qpP+urfzr5rMPgR69Hdklx/qG+lRWSKbKLIH3afcnEDfSksf8Ajxi/3a8bozqHvbxSffjVvqKZ9jt/+eKf981PQTii7EQfZLcf8sU/75pv2S3/AOeKf981MTmiquxkVhGsepSqihR5Y4A9606zrP8A5Ckv/XIfzrRr38J/BRx1fjPA/Fv/ACUDXf8Arun/AKAtUbWD7VdxQebHF5jhfMlOFXPcnsKveLf+Sga7/wBd0/8AQFrM6dK6jI09T8P3+ljfNH5kB+7PECY2+hIFY8swjHv6Vs2Piy80oCJ9t1D3inG8D6A9Kn1jStP1Pw5N4g0mOS2WFlEsMjbslm2jGOnQn8aYrnJM5dssc02iigQV0/wz/wCSl2H/AFwm/wDQa5iun+Gf/JS7D/rhN/6DQB75RRRSKCiiigAooooEFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWD42/5E2//AN1P/Q1rerB8bf8AIm3/APup/wChrXThP95p/wCJfmYYr+BP0f5HyV4k/wCQzL+H8hW14WmF1pF5YvzujfHt8oH9axfEn/IZl/D+QqTwrefZtaVGPySDb+bCu2FR08bLzbRxzp8+EivJGZdwG3upYz/A5H6103gy02yXF24+WIDn1zuFUPFFiYdUyo4lO4fiSa17YtpfhEdnlJyfo3/162w1D2ONbl8K1QsRVVbDKMd3uZulXwl8UfbJ3CqxxyenQVS8Suj69cGNlcbzypyOpqhbQy3UixREh8joa6yLw/p1nbJLrNztdxkkk/57GojTrYinKKa5eZu7B1KVCUZNPmtbQzvB88UGoytNIsY2jljinaWyv4t3IQwPQj/dq/8AZfDCg7L7B9if8Ky9CEY8SqIG3Jzg+vymtIxlS9jSbTtLo7mMpRqe1qJNXj1Vj6x8If8AIo6f/wBcv6mtmsbwh/yKOn/9cv6mtmvKxP8AHn6v8z1MP/Bh6L8gooornNgryux/5KQf+v8Ak/8AQjXqleV2P/JSD/1/yf8AoRr3Mp+Gt/hPnc6+Oh/i/wAj1Sua8ff8irJ/11T+ddLXNePv+RVk/wCuqfzrz8D/AL1T9UenmX+51f8ACyr8OP8AkBXP/Xyf/QVrr65D4cf8gK5/6+T/AOgrXX1pmX+91PUjKf8AcafoFFFFeeemZXiG5ltbBGgdkZpNpKnHY1y8moXkqFZLmVlPUFjXR+KFLabHgZxKCfyNcpX0WXwg6KbWp8nmtSaxDim7WQVr+Ghu1RhnGYmGfxFZFa/ho41Rj6RN/MV1Yr+BL0OHBf7zD1LsLNY+ImtncslwcjceOW/+tRZj7D4ie3XhZOSPXgmmK41DxIH6C3PJ+jH/ABp0cq3fidJo/uxZDf8AfJFeZH3lK/VHryvBxt0n+D3F00fZfEk9ov3cZ46fdz/WuhByCffFc9YDzvElzcDsP/Za6BP9WPfmuHFXc032PVwaUYSS/mf3C0UUVyHcQXlja6hbNb31vHcQt96ORdyn8K8+vNF0zR/ilpcelWFvZobWPKwxhQf3p9PoK9Irhde/5Ktpf/XrH/6ONEdKkfX9GEtacvT9Ub3jKxu9S8I39ppxIuZUATGeu4HtzXJaL428Fab4Z/s+6uLPT5kDK9hO8cchJYn7me+c/iK6H4iapc6R4Jvrqzfy5VQYf+78wqLTfAXh0aMqTafBdSSLua4njV5Cck/eIz3/AEFSr2n20Xz/AKYO3u99f0/yM/4f2d5aaDqt1Y232eO5cy2FvOpUINmACB0G4dq073QL7xPYad/b/kxtb3CzTQwbhHIAuCpDA5GSaofD+eS31LWtGWV5rWwuRFCXYsVXaDgk/Wu1ubiK0tpJ7hwkUa7mY9hWkmlaXSyt8kTG93Hrd/ic542ttJt/BN1HqEEP2WNVAQqvHzL0zx6VyPiH7fa/C7SrTUHdJJLlFnYkg4M/Q59Qa17aKfx7rQu7lSmiWrFY4ieJ25U59RkAjIrq9e0K11/R5LC6GEJDKV4KsOQfzqLNJtrdp28lf87/AJFJrmSXS6v62/KxDc6Fpf8Awis2nLawi0+zsoUINoG0jPp3rF+GNw0mg31vu3R2moTW8XP3UTaFA9sVlTeFfGFrpU1reeJbRtIiibcFhcT7AOf3meuM8+tXPhJa/ZPDd+iszp/aU2x3OSw+XBJ96uOspu/RfmQ1aMV5/od5RRRUlEN7/wAg64/3R/6EKwq3b3/kHXH+6P8A0IVhUxF/SP8Aj8b/AK5n+Yoo0j/j8b/rmf5iigDUqnfK0ckNzGOUceYfROpq5SOiyRsjjKsMEeopDElvEEKsnzbwCK+WfiP4bh0z4hXxkixbXSoYeTjIQFu/qa+jJUfT7grJlrdjlH/uex9AKzPEfhfS/FVisOpQrIUz5UnUpkjOPrgUPU6sHiFhq8aso3S6Hyja29tpOsGMnCyjKZycVb1eS3mgS2ZwXmYIuOxIIrrPFXwe1LQ7z7XGsusWY4ACF5B/wFRWVpfw61LxDeRwWOj3GnsrAtPdQPFtGccEjGeQfwNTbU+qpZjS+qzUOVRvs3rbrp+Wpk/2Oslgun2aZuJRhMdS3U/yr6r0HS4dG0O2srZdqRr09ycn9TXL+DPhlp3hgRXN05vtQQZE8gGUOO2PxrsZZmZxDbDzJW9Oi/X04qkrHzuZYyGLqJ048sUrJD7ZPtWqDHMUQ+b2bqK2qr2VotnbhAdznl2PVjVig80KKKKAOL8VrPpOrQ6jbnZbTAQyfKGzIx4PqOB9Kis9VuG8yMyKTIuF+QdfyrsNQsYtSsZbW4GUkUrn+7kEZ/WvN721vPDWpqt0jNbRtmKYAlQvIG49BwK9LC1o8vs5fI4cRTlzc8SSXWb3zCPMUYOPuL/hVnTNVu3uXDSKR5TH7i+n0rOvoljuMxtvRwGDDkHIz1qXSv8Aj6f/AK5P/KvQcYuN7HEnJStcP7Xvf+eq/wDftf8ACrkOq3cenyyvIp8wbF+Reo/CsYAsQAMk9AKs6hN5MUNjbK08uBJsjG5gSO4FKagtxxcnsI99qOpXMOm20o864OV/dr0X5j29K9Rt4I7a3SGFdqIMAelc54S8MtpUbXl/hr2bGQDkRgZAx9QRmunrxsRUVSd47HqUabhHXcKyo4ryDeq2wcFywPmAdTWrRXDVoxqq0jpjNx2Mi4W+MLYsx/39FS2P/HjF/u1oS/6l/wDdNZdnPEtlEGkQEL0LCvJxdCFJLk6nTTm57lsnFMJzUZuIj/y1T/voUefD/wA9U/76FcNmbElFR+fD/wA9U/76FHnw/wDPVP8AvoU7MBbP/kKS/wDXIfzrRrNsWV9TlKMGHlDkHPetKvfwn8FHHV+M8D8W/wDJQNd/67p/6AtZcSPdXkNpb4MszhFyQBk8dTxV3xrNs+IGuqvUzr/6Atc+Tk5NdZjc7H7HoHhrD6k39q3w5NsN0QQ/76kg9/yqjcaprHjPUI7CIx4IPlQkogAAyctgZ+73rnKKBHV/8K18S/8APva/+BsX/wAVQfht4kVSTb2uB/0+xf8AxVcpRQA+WNoZnikwGRirYOeRXSfDP/kpdh/1wm/9BrmK6j4Zf8lKsP8ArhN/6DQB73RRRSKCiiigAooooEFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWD42/wCRNv8A/dT/ANDWt6sHxt/yJt//ALqf+hrXThP95p/4l+Zhiv4E/R/kfJXiT/kMy/h/IVnQP5U0EgOCsyn64NaPiT/kMy/h/IVlqQflPrmniZOOJk13/UnDq9CK8ju9TtTq9tZXMQxtRQR1z8v/ANes3xhclIYrSL5fLXJHrnaak0PxPHY2ZglGcDA/SsDWL7+0NQe5HRsDH0GK9XFYmM6XNHc8/CUJRxTjLZFrwwyHWIzIMHPTNTeL1nGsuXz5Zzs+mTisaGc2sonjPI5rqLfxLYX9qkeq24cqAMkf/X9zXLh5U6tB0ZS5XubVFOnV9tGN1schWz4X/wCQ3F+P8jWwbrwx/wA+a/l/9es3QTE3iRTANsfOB/wE0U8OqNem1NS1Ww6ld1aM04tadT6x8If8ijp//XL+prZrG8If8ijp/wD1y/qa2a4sT/Hn6v8AM7MP/Bh6L8gooornNgryux/5KQf+v+T/ANCNeqV51aaLfJ8QDcNbuIRdvL5m07dpY98V7OVzjGNbmf2TwM4pznOhyq9pHR+MdU1HS7KKTTOCxO99oO3kY4IPqa5bVvFi6z4We1uBtuhIp9dwyeeAAK9JliSaMxyruVuoNef+JPBLwFrnSlLR94gMkfQCtctq4V8sKqtJO6ff1Ms2o4xc1SjK8WrOPbzRS8PeJ49C8O3ESLvupJyUHTA2gZ6EdR0rpvB2talq7TnUPmjAyjbQO/TgCuf8OeC5ryRbjUkaKFTnYwILdDggjp1r0S2torS3WGBAiKMACrzOrhU5Rpq85bvt6EZRRxslCdSXLCK0Xf1JaKKK+ePqAIB6jNRTWsM8ZjlQFT1HSpaKabTuhOKkrNHJ6noElsTJb/PH3HTH60nhkf8AE2bcP+WRz+YrretQx2lvBK0qRKrH7zDvXorHylSdOpq+55DyuMa8atJ2S6f5FW9tTbQyNZwb3mzk78Yzz3rLiUaLp0zyDzLh8EJnHf159a6UENgoePSqV5pkV3dxzM2SmePwxWEK6t8zeWHuypoNqY0kmc5MnbHTqK185CjH3Rj60kaLFHtWl7VnUqKVzqpU+VBRRRWBuFYV/wCGvt3iq11r7Vs+zxLH5Pl53YctnOeOuOlbtFGzT7A9U13Kupabbatp0tlfR+ZBMMOuSMjOeo57VwyfDrxJZxG00nxw1npvP+inSo5Dg8kb2bd1JP416HRSsr3C+ljn9E8JW/h/QLiw02YxzzoQ9yVLEuRgNtJPTjjPas3xB4K1XXPCkekL4lNtMr5kuhZK28bduNm4Ac89a7KinL3t/wCrCj7ux55beCPH9pbpBb/E0JHGoVVHh+34A/4FXVafpWrQ6CbPVtc/tG9KkG9+yJFzk4OxTjgED8K2aKHqmn1BKzTXQ8/m+H3iS/H2XWPG5vNMJw9mNKjjLL0K71bcMgkZ967XS9MttH0yCxsk2QwoqKMk9AB3+lW6Kd3awra3CiiikMhvf+Qdcf7o/wDQhWFW7e/8g64/3R/6EKwqYi/pH/H43/XM/wAxRRpH/H43/XM/zFFAGpRXiH/C0fE3/PeD/vwKcPih4l/57wf9+BWPtYm3spHtckSTRlJUV1PUMMg1lyaXPAc2MoIPVZiTj6YrykfE/wAS/wDPeD/vwKX/AIWd4k/57wf9+BR7aI/YyPTmluU4axuGPqq8GkE8/bT7kf8AABXmY+JviT/nvB/34FL/AMLN8Sf894P+/Io9tEPYyPUEtL25+8VgiPUHIcVo2tlDaLiMZY/ekbBZvqa8f/4WZ4k/57wf9+RS/wDCy/Ef/PeD/vyKXtoh7GR7PRXjP/CyvEf/AD3g/wC/Io/4WV4j/wCe8H/fkUe2iP2Ej2aivGv+FleI/wDnvB/35FL/AMLJ8Rf894P+/Ipe3gHsJnslQ3Vpb3sJhvII54z1SRAwP4GvIv8AhZPiL/ntB/35FKPiR4i/57Qf9+RR7eAewmdlqPgQPh9LvJUYE4ink/dr9AB/nis+38HeJbaZnS60ogqV5EncfSue/wCFj+If+e0P/fkUf8LH8Q/89of+/IrWOOcVZNmbwXM7tI6Oz8C6qZk/tG9t1jBBJtGZW/AkfWup0vw5p+lN5kcZmnz/AMfE4VpPpuxnFeaD4jeIf+e0P/fkUv8AwsXxD/z2h/78ipnjef4myo4Nx+FI9foryH/hYviD/ntD/wB+RS/8LE8Qf89of+/IrL6xA0+rTPXaK8i/4WH4g/57Q/8AfkUv/Cw9f/57Q/8AfkUfWYB9WmeuEZGD0qH7Fa/8+0X/AHwK8q/4WFr/APz2h/78il/4WDr/APz2h/78ik8RTe6H9WqHqn2K1/59ov8AvgUfYrX/AJ9ov++BXln/AAsHX/8AntD/AN+RR/wsHXv+e0P/AH6FT7el2H9Xqdz1P7Fa/wDPtF/3wKPsNr/z7Rf98CvLx4/14j/Ww/8AfoUf8J/r3/PWH/v0KX1qn2H9Vqdz1KOCKFiYoUQnqVUCpOfSvKv+E+17/nrD/wB+hR/wn2vf89Yf+/QprFwWyF9Un3Oj174ZaJ4g1WXULme+t55Tl/s0iIGOAOcqfSsz/hS3h/8A6COs/wDgQn/xFU/+E61z/nrD/wB+hQPHWuf89Yf+/Qp/XIdivqci9/wpXw9/0EdZ/wDAhP8A4ik/4Ur4e/6COs/+BCf/ABFVP+E61z/nrD/36FH/AAnWuf8APWH/AL9Cj67DsL6nIt/8KW8P/wDQR1n/AMCE/wDiKP8AhS3h/wD6COs/+BCf/EVU/wCE51z/AJ6w/wDfoUq+OdcP/LWH/v0Kn67HsL6nPuWv+FK+H/8AoI6z/wCBCf8AxFbXhv4d6R4YvvtllLdTz4IV7p1cqCMHBCjHWud/4TjXP+esX/foUf8ACca1/FLF/wB+hR9dj2BYOfc9Mx7ijHuK8y/4TjWf+esX/fsUf8JxrP8Az1i/79ij67DsV9Tn3PTce4orzL/hONZ/56xf9+xSjxvrX/PWL/v0KPrsOofU59D0yivNP+E31r/nrF/36FH/AAm+tf8APWL/AL9Cj67S8w+p1fI9LorzX/hNta/56xf9+hR/wmutf89Yv+/Qo+u0vMPqVXyPSqK82/4TXWf+esX/AH7FH/Ca6z/z0i/79ij67S8w+pVfI9Jorzb/AITXWv8AnrF/36FH/Ca6z/z1i/79ij67S8w+pVfI9Jorzb/hNdZ/56xf9+hS/wDCaaz/AM9Yv+/Qo+u0vMPqVXyPSKK83/4TTWv+esX/AH7FH/Caaz/z1i/79Cj67S8w+p1fI9Iorzb/AITXWf8AnrF/36FIfG+sj/lrF/36FH12l5i+p1PI9KorzI+ONa/56xf9+hSf8Jzrf/PWL/v0Kf1yn5h9TqeR6dRXmB8da3/z1i/79Ck/4TrXP+esP/foU/rdMX1SoeoUV5cfHeuf89Yf+/QpP+E81z/nrD/36FH1umH1SoepUV5Z/wAJ7rn/AD1h/wC/QpP+E913/nrD/wB+hR9api+q1D1SivKv+E+13/nrD/36FH/Cfa7/AM9Yf+/Qp/WqYfVah6rRXlP/AAn+vf8APWH/AL9CkPj/AF7/AJ7Q/wDfoUfWoB9Vmer0V5P/AMLA17/ntD/36FIfiDr3/PaH/v0Kf1mAvq0z1mivJT8Qdf8A+e0P/fkUf8LC1/8A57Q/9+RR9ZgH1aZ61RXkn/Cw9f8A+e0P/fkUh+IfiD/ntD/35FP6xAX1eZ65RXkf/Cw/EH/PaH/vyKb/AMLE8Qf89of+/Io+sQD6vM9eoryH/hYviD/ntD/35FJ/wsXxB/z2h/78ij6xAPq8z1+ivIP+Fi+IP+e0P/fkUn/CxvEP/PaH/vyKft4C9hM9gorx/wD4WN4h/wCe0P8A35FJ/wALH8Q/89of+/Io9vAPYTPYaK8d/wCFkeIf+e0P/fkUf8LI8Q/89oP+/Io9tEPYSPYqK8c/4WR4i/57Qf8AfkUf8LJ8Rf8APaD/AL8in7aIexkex0V43/wsnxF/z2g/78ij/hZPiL/ntB/35FHtoi9jI9korxv/AIWT4i/57Qf9+RSf8LK8Rf8APaD/AL8ij20Q9jI9lorxr/hZXiL/AJ7wf9+RSf8ACyvEf/PeD/vyKPbRD2Mj2al/DNeMf8LL8R/894P+/Io/4WX4j7TQn/tiKftYi9lI9nwf7powf7prxn/hZfiX/nrD/wB+hR/wsvxL/wA9Yf8Av0KftEL2bPZsH+6aQ5H8Jrxr/hZfiX/nrD/36FNPxL8S/wDPWH/v0KPaIPZs9n5/umlGf7prxb/hZfiX/nrD/wB+hTh8S/EuP9bD/wB+hR7RB7Nns+D/AHTSHP8AdNeNf8LL8S/89Yf+/Qo/4WT4k/56w/8AfoUe0QezZ7Lk/wB00An+6a8a/wCFkeJP+esP/foUD4jeJf8AnrD/AN+hR7RB7Nns2PZqMV44PiN4l7yw/wDfoU9fiH4gP/LWL/v0KTqoapM9gxRg15GPiB4gP/LWL/v0Kevj7xAf+WsX/foUvaofsmesc0mfavLB47189ZYf+/QqRfHGvH/lrD/36FL28UHsZM9PyfpTgPcV5mnjXXD96WL/AL9Cp08Y6yf+WsX/AH6FZvEItYeR6KeOppMiuCXxZq7DmWL/AL9CpF8Uasf+WsX/AH6FR9egtGP6vI7nPuKP+BLXFr4m1Lb80sWf+uQp3/CTaj/z1i/79Cj6/DsL6vI7L/gS0f8AAlrjP+Em1H/nrF/37FH/AAkuo/8APWP/AL9ij6/T7F/U5nZ5H94UZH94Vx//AAkV/wD89ov+/dKPEV//AM9ov+/dH1+n2D6nM6/I/vCjI/vCuS/4SC+/56xf9+xR/wAJBff89Yv+/Yqf7Qh2H9Tmdbkf3hRx2YVyX/CQX3/PWL/v2KRvEN+BxLH/AN+xQ8wgCwc7nXfitY/iq3a68N3UCgsHC529fvA1j/8ACR6h/wA9Y/8Av2KRvEF7NG0chR1b0QCtqOZUYSUrO6Mq2BnKLj3Pm/X9EunvnleNgxx29hWV/Yt8oG21eTPOVXOK+h73R7K6O6aNc/SqZ8P6a2NsR4GODivQeYYKr8aav1OCOBxUNIPbueB/2NqH/PlN/wB8Ug0bUFbiynPttr3z/hHNP/55t/31S/8ACOad/wA8m/76o+tYC1uaRX1PHc3N7t/U8B/sbUP+fKf/AL4pP7F1D/nyn/74r3//AIRzTv8Ank3/AH1R/wAI5p3/ADyb/vqs5YzL4O6bZccFjmraHgP9iah/z5T/APfNbnhjQbwapBIYzzuzwfQ17F/wjmnf88m/76qe00i2tCXhQZQjHHrWn9pYGHvRvdEf2djpe7K1jv8AwvE8HhmyidGG2PHT3Na3H94Vxi67fQReTBtCxnHQcUv/AAkepf8APWL/AL9ivNlmVGcnKOvqd6wVWlFRmvuOy47MKT8Vrjh4j1EH/Wxf9+xTv+El1H/nrF/37FT9fp9hfV5HX/VhRkf3hXIr4j1AnmWL/v2Kd/wkN/8A89Yv+/YqXj4dh/VZs6zI/vCjI/vCuRbxDfj/AJbRf9+xSf8ACRX/APz2i/79ij6/DsP6nPudfkdmFJn3WuQPiW/X/ltF/wB+6T/hJr7/AJ6xf9+6tY+nbYPqc+52Ix/eFLx/eFcb/wAJPff89Yv+/dH/AAk99/z1i/790/r9PsH1Ofc7DPutGT6rXGHxRf5/10X/AH7FJ/wlGof89Yv+/Yqfr0OwfVJnbcf3hR8v95T9a4f/AISjUP8AntF/37FL/wAJRqH/AD2i/wC/Yo+vQ7B9Ul3O3+XOQVHsKTC/3lrif+Ep1D/nrF/37FH/AAlOof8APWL/AL9in9ep9hewkdsAv98fnRx/eFcT/wAJTqH/AD1i/wC/YpG8U6iB/rYv+/Yo+vU+wewkdxx/eFHHqDXC/wDCVaj/AM9ov+/YpG8V6mPuyxf9+hS+vQ7B7CR3XHrRketcH/wluq/89Yv+/Qpp8XasD/rYv+/Qo+vQfQToSO+yKMj1rgf+Eu1b/nrF/wB+hTD4v1bP+ti/79Cn9cj2F7CR6DketL+Neef8Jfq3/PWL/v0KT/hMtXH/AC1i/wC/QprGR7B7CR6Jj3pSB6151/wmWr/89Yv+/Qpp8aav/wA9Yv8Av0Kf1yHYPYSPRfxFL+IrzZvGurgH97F/36FR/wDCb6v/AM9ov+/QqliYyE6LR6Z+Io/EV5n/AMJvrHaaL/v0KY3jnWR/y1i/79Cn7eIvZM9Jvf8AkHXH+6P/AEIVhVk+HPEuoazPe2966NGttvAVAOfMQf1Na1bQkpK6MpR5XYv6R/x+N/1zP8xRRpH/AB+N/wBcz/MUVZJ86gU4UYpRXnnoi4pRRSgUhi0oopRSGKBSiilqRgBS0UtIoKWgUopDAU6kpwFIApwFAFPC1LZVhuKcBTttLilcqw0ClxTsUtTcdhmKcBS4pQKAExSgU7FGKVyrCAUuKXFKBU3HYbzmnClxzTgKV4haQgpwWlAp4FF4jtIYKdilAp2OKz5olWkMApwWlAp4FHNELSECil246U4CnEcVPNErlkNApcY6U4ClIo5ojUZDOaUUuKUCjmiPlkNxS4p2KXFJyXQfK+o3FGKdtpdtTcdhoFLS4pcUrhYbRS4oxRcLCUlOxRincLDaXNGKMUXFYTdSFqXFIRTFYaTTTTyKQrTuKwzFNxUhFJiquKxHSVJikxTuKxGRTSKkxSEVVxWI8UmKkxSEU7k2I8UhFSEU0incViMikIqTFNIqrisMpDTyKQincViPFIafikIqrk2GYpCKeRSEU7isMNJinkU3FMVhppKdikIpiG0hp2KTFO4hhpMU8ikxTENxSYp2KTFMQlNNPxSYpiG4pKdijFMQ2kp2KSmAlJTsUYoENxSGnUYpiGYoxT8UYoswuhmKULnrTsU4CizC6I9g9KNvpUuKULRZhdEYSnBKlCU4JUyuVGxEIx6VIqVIEqZY6nUrQjWMelSCMDtUyx1KI6zk2hqxCq8ipkT2p4jqRUqOZj0EVamRQKULgUdKl3ZpGxMgAqwhx0qmrYqZHrJpmqaLinNTIaoedtqVLismlfUq6L2T604Zqos+asJJmlaIXRJgmnCNz0pVYYFSrKBWWgWZFsf1pQjZ61LvFG8UaBaQgU07bxSF8U0y1VohaQpFNJx1phlqKWX5ePWmkgtIlLim+YO9VTL70wyE1ev8yD3i7v8ASmMx3daq+binrcDvRZ9WGn2icE04bifaoxcJSi4G7ilyx7hamT7TTDuoNwKcJVKjOKXw7a+orQ6Mb81LsJBHZsZp3mp7U3zhT9rJ6WQuSK6sQR4ct3JyTTyT603zhTDLS33Kuh5Zh1NNMnvUTS/KaiMlO0QuiyJTnrQZz61U3k0hJpqMSXd7Fh7g8c037SfWoBz1pcCjliK0h7zkmm+eaaVBpNop2iO0h/m5o8ymcDijK0WiFpEnmUnmUzK0ZWq5YmfvEm8+tG/3qvvpQ9HLEXvFjdRuqHfRvxU2iVzImyfWkYnHNRebSNJkUWiHMh5amls1EXppl21XLEOZEpJFNJz1qFpqb59NKKYOSJ6Y2N1R+fTTJk5qrxJ5kS8U0nmmb6TdTTiHMh+6o8mlzSU7xDmQh5phSpKQvT32JbTIiCKY3NSM2RUbUWZOh0XgkY1C/wD+vM/+jY66quV8E/8AIQv/APrzP/o2Ouqr1cL/AAzz8R8Zf0j/AI/G/wCuZ/mKKNI/4/G/65n+YorqMD54FLQKUCvOPSFFLQKdUjCloApwFIoQCnCgU7FIYgpcUoFYGuyyG/W33ER+UH4OOckVvh6EsRUVOPUwxNeOHpOpJbG/inYrlra2RoslpCc/3zU32SP+9J/32a9xcP1Wr86Pn3xHRTtyM6QCnAVzP2SP+9J/32aPsqf3pP8Avs0f6u1v50H+slH+R/edSBThXKfZU/vSf9/DR9lT+9J/38NL/Vyr/OvuH/rLR/59v7zraK5L7Kn96T/v4aPsqf3pP+/hpf6uVf519w/9ZqP/AD7f3nXYpcVxdxbqsJIeQH/roat+G55V1T7OGYxshY7jnkVx4vJquFpuo5J2O3B53SxVVU1Fq51WKUCnBaULXgXPobDcU7FOC04CpuOwwLTgtOAp22lcqwwLTgtOxTgKm47DQtOApwWnBam5VhgWnbacFpwFTcdhgWnbaeFpQtTcqwwLS4p4WnAUrjsR4p22n7aXFK47Ee2l21Jil20rjsR7aXbUm2jbS5gsR7aXFSbaNtFx2I9tG2pNtG2lcLEeKMVJto207hYixRtqXbSbaLisR7aTbUu2kxT5gsRbaNtS7aTFPmFYiK03FTFaTFO4rEO2kK1MVpCtO4rEJWk21KVpMVVxWIitNK1NikK07k2ISKQipSKQiquKxDikK1KRSFaq4rEWKaRUpWkIp3JsREU0ipStJiquKxFimkVLikIp3JsREUmKlxSYqrisRYpMVLimladxWI8UmKkIpMVVxWIsUmKkIpMU7isR4oxT8UYp3JsR4pMVJikxTuKxGRSYqTFG2ncLEWKMVJtpMU7isR4oxUm2jFFxWIsUYqTbRtp3FYi20oWpNtLtouFiPFGKfijFO4rDMUoFOxTgKLhYZinAYp2KQ0XCwlPWmU9aTY0h4qUNUQpA1TcqxaD+9TB6pBqeHqZDRcD08SVTD04PUjLnmHHX9aTefU/nVcPS7qlgWBJjqaeJveqhbNKM0gLhm55NKJveqZpwzUuOponoXlnx3qzHc+9ZOSKeHNLlQ7myLn/aP504XH+0fzrGE5FOFwfWs+QfMbX2oD+I0fblA61hfaSTSeYx70uQOY2jfD+9+tM+2Z/iP51kBye9O3Ec1fKg5mahus/xH86YbjP8R/Os8OTTwaOVBzFvzvejzc96q5pVOM0uVBzFnf70bqg3UbqfKhXLG/3NKJcVW3UeZjrRyhoXBMaXzjVUSil80Umhplrzj6mmecfU1B5opvmipsO5Z88+p/Ok88/3j+dVjJkU2qSEWmmyvWmeYfU/nUGcUm6iwFgOc9T+dO3n1P51WDc0u6lYCff70u8+p/Oq+6jdRYLlgS4HJpDN71XJJpjE07ENstCYHrS+aKqDpS0Bdk5fnrSbz6n86g3UbqYD959T+dKHOep/Oos0ZoAsebR5mago6UhE++kLe9Q7qA1AEu73prnOKbmgnNMBKMUtFACYHpRS0UgCl4pKbmmhMfxTM0ZpKoQuaaaWkNAmMNNanGmtQI6LwT/yEL//AK8z/wCjY66quV8E/wDIQv8A/rzP/o2Ouqr1sL/DOCv8Zf0j/j8b/rmf5iijSP8Aj8b/AK5n+YorqMD56xTgKAKUCvMPUFxSgUAU4CkMAKUClAp2Km5QgFOAoAp2KVx2EAqte6bFe4L8OOjCrgFKBRGcoPmi7MUoRmuWSujhk+0I0ircMAHI+6OxqdIr11DLcnB9hTXGJ5R/00b+dXbU/uRX6NhF7SnFtvbuz80xkvZ1ZJJaPsit9nvv+fk/kKPs99/z8n8hV5WyW9jilrs9jHu/vZxe2l2X3IofZ77/AJ+T+Qo+z33/AD8n8hV4nDKPWlo9jHu/vYe2l2X3IofZ77/n5P5CmvFeopZrk4HsK0GbGPc4qO5P7k1LpRS3f3sca0m9l9yMuU3LKAbljyB90etd1p+jwaexeP5pD/Ea4tF3SKP9oV6MBXxef1JRnGCbs13PuOH6cZU5VGldPsNAp2KUCnAV8tc+qsNApwWlxTgKVyrDQKcFpwWnBam47DQtOC08LTgtRzFWI9tOC08LTgtLmKsMC04LTwtOC1PMOxGFp22pAtKFqeYqxHtpwWpAtLtqeYdiPbS7aftpdtLmHYj20u2pNtKFpcwWI9tLtqTbS7aXMOxHto21IFpdtHMOxFto21Lto20uYViLbSbal20bafMFiLbRtqXbSbaOYLEW2jbUu2k20+YLEW2jbUu2kIp8wrEW2k21LtpNtO4rERWmlamxSFadxWIStJtqUrSbaq4rEJWkK1MVpu2quKxDtpCtTbaaVqrk2IdtIVqUik21SZNiErSFamIppWquKxCVpCtS7aQrVXFYi203bUpFIRTuTYiK00rUxFNxVXFYi20m2pdtJtp3FYiK0m2pcUhWquTYh20m2pttIVp3FYh20hWpttJtp3FYiK0m2rKxqepp/loO4o5g5SnsJ7UeWfSrmFHek+WjmDlKnlNSFD6VaLD0pMj0/SnzMXKirsPpRtqz+FMK5quYnlINtG2p9lGz2ouKxBto21Ps9qNntRzBYg20ban2+1G32o5h2INtOC1Lt9qULRzBYi200p81WNtG0UcwWIBHTglWAgpwT2obBIgEZoCGrQT2oEftU3KsVwhpdhqyEpdopksrBDmn7am2il20CIAtLipSvFN4pMBoXNLtoLAdDSb6VmA9flpd1QNIM8kUnmj+8Pzp2C5MW5o3VXMg/vD86TzV/vD86fKFyz1o4qv5w9RR5w9aXKFywGp4aqgkH94fnTxKv94fnRyhcs7qA3NV/NX+8PzoEqk8MPzqbDuWt1G8VB5g9RSF8jg0WC5PvFKJQtVdxoJJosK5b+0Ck80NVTmlBIosFy4slLvqoHNPDcUWC5Pupd1QbqeG4FJoaZJmlqPNP3D1FKxVx1O21HuHqKdv96loaY7bRtpu/wB6XfSGKBtpc0wtRmqSAfmjNR7sdTRu96LAPJzRSA0ZqWSBFJinjGKOKAEA4oxT+KOPWgQlFGaM0AIaZ9KcSKb16UAJhqOe9GG9aMEdTQAU5Rmm0oOKAHbaB8tJupC1AD80xvvUZpM0AFNPWnZptNCYUUUZpiA9KbSk8U3I9aBMD0ptOJGKbQI6TwV/x/3/AP15/wDtWOuprlvBX/H/AH//AF5/+1Y66mvWwv8ADOCv8Zf0j/j8b/rmf5iijSP+Pxv+uZ/mKK6jA+fgKcFpwQmnhK8m561hgWnBakCVIsdS5FJEQSnBanWLNSCA1Dmi+UrBKeI6tLDil8r2qOcrlK4ipwiq0sRp4hPpUOZXKedXS7buUf7Z/nVi0P7s03Vk8vVpl/GizPytX6blsr0Kb8kfl+ZxtiKi82Tp95/rTqan3m+tOr1FseS9xrf6xPxp1Nb/AFifjTqEDGyfw/7wqK7P7qpX6r9ahvD8i/Wplsy4fEiC0XfeRp6mvRQtcDoyebr1rH/e3f8AoNejiGvzviGf+1JeX6s/R+HYf7K35/oiALTglWBDThFXzfOfScpXCU8JU3l0oSp5irEQSnhaftpQKVx2GhacFpwWnBai5Vhm2lC1IBS4qbjsMC04LTgKcBSuOw3bS7adtp22puVYYFpQtPC07bU8w7EYWl21IFpdtLmCxHtpdtSbaXbU8w7EYWl21JtpQtHMFiLbS7al20u2lzDsQ7aNtTbaNtHMFiHbSbam20baOYLEO2k21NtpNtPmFYi20m2pttJtp8wWIdtG2pStJtp3FYiK0hWpdtJtp3CxEVppWpttJiquKxCVpNtTFabtppisQlaQrUpWkK1SkTYgK0hWpitIVq0xWIStNK1MVpCtUmTYg20hWpitN21VxWIStIVqYrTStUmTYh20m2pttNK1VxWIttNK1PtpuyncmxDtpNtT7aTbVXFYg20m2p9tJsp3FYg20bam20badxWINtJsqfbRtp8wrEOyjbUu2gLRcLEWyl8upQtKBT5hWIfLo8up9tGKXMFiDy6PLqfbS4p8wWIPLo8up8UuMUcwrFcRU7yanzQTjrRdjsQeTQYD2qbcKVXAoGV/s5o+zmrO+jzAKBMrfZzTGhINXPNFNLoetAikcrTfNYVbYIaYUj9f0qoksrfaGFM86T1qdoVPSmeSPWtCSLz5PWk+0vUphpvkn0poTGG5kxxTftUv979alMBI6U37NTERNcy4+9TDcSnuasfZs0otRTuQ0VPMkbqxFG5/+eh/M1d8hF680eUnpRcViiXcHqTTl3mrZjjHtSjaOlFwsVdrU4RMas5Wk3+lFwsRCFgKXymqTzDR5hpFDPLpfLp2DRg0AGxaUKoPFG00u3FSUFKpwaSigB+aM03Bo5oAdmjNMooEx+aXdUdIc0CJd9L5lQ80oIoGibzKPMqKlxQMkEnNO8yoQOadipYEnmUolqLFKMUgJ/NpPMpikU7igBd26nimD2pwIoAkFLTQwpd4qGtTRPQdmjNRlxmjeKVh3JM0ZqPePWjeKLEXJM0E8VHvFG8UWC47NG6o91BbA60WC5LvpC/FQ+YPWkL+9FguTb6N9Qbvejd71ViSffTS/NRbvekJosJku+jfUOTRuosIm30b6h3e9Jv96aQE++m76i3+9Jk0wJi/FMzTMmjBoAfuxSeZSYNGKAOm8EPu1C//AOvM/wDo2Ousrk/A4xqN/wD9eZ/9Gx11lephv4ZwV/jL+kf8fjf9cz/MUUaR/wAfjf8AXM/zFFdJgeFrHTxHVlbcmp0tvavAc0e8olNYie1Tx257iri2/tUywn0rKVU0VMqpb1MkFWVgfstSLbyHsaxdQ0UCr9npwtxV5bSQ9jUy6e56g1m6qXUtQM4RAUu30Fa6aXnqKkXSh6Vm60SuRnjniVfL8STr0+RTVezP3vwrW8d232fxjOPWGP8AlWPZn5zX6tk0ubCUn5H5VnMeXF1V5lkcSGn03/lsPpTq9xHhMa3+sT8adTW/1ifjTqEDGt/rBVe8P3RVj/lt/wABqteH5hUT+FmlP4kXfCcXmeLrHvgSf+gGvT/I9q888Cx7vFNu390P/wCgNXqTKtflnEdT/b2uyR+o8Ow/2FPu2Z/k4pDHirbKKiYV4Ck2fQWIClJtqQj0pMVVwsR7aMU/FKBRcLDAKcBTgtOC1Nx2GhacFpwFOC1PMVYYFpwWnhacFqeYdhgWnBaeFpwWpch2IwtOC1IFpQtRzDsR7adtqQLS7anmHYj2Uu2pAtLtpcwWI9tLsqXbRtpcw7Ee2jbUu2jbS5gsRbaNtTbaNtHMFiHbRtqXbRto5gsQ7aTbU22jbT5gsQbaTbU+2k20+YViArSban2Um2q5hWINtIVqcrSbarmCxBtpNtTbaTbT5hWIStN21PtpCtUpBYgK00rU5WkK1SkTYgK00rU+2mlarmFYgK0hWpylIUqlImxXK0hWpytNK1fMKxBtpCtTlKbtqlIViDbSbanKU0rVXJsQ7aTbU22l2inzCsV9tJtqxtFG2nzC5SttpNtWClNKe9VzCsQ7aTFTbBSeWPWnzE2IcUYqUxj1pPLX1qrisRUYqTYtGxe1O4rEYWl21Jigii4WGYopSKTaaAE4oo2mmkN6VRIuaN1N2tSbGpgLupN2aNhpCu2mIKXOKTNITTAdmkJpm6gnNAmOzTSeaSmnrQIdmkJ5pKTBqoiYuabmjBpuDVk2Y7NGabg0YNNNCaFJ4pM0EHFNwad0SKWxSbzRijFJsdhGYmm5NPxRgUrhYb160Yp4FLtouFiPFGKfijFFwsMxRipMUbaq6IsJQOtFFF0A6iijOKRQYoxil3D0pCwoAKQ0ZpCaACikzRmgTFopM0tAgpO9LSY5oGhwpaQHFOxQMB1p1NxS7hSAWik3CjcKVmA5eDS5qMtijeKLMCXdijfUJfNG6izFdE24npSZNRbz2o3miw7k2/FG+od1G6jlC5Nvo31Duo3UcpOpNvoL1DuoDc0coakm80FiRim7hQWGOKLCuGDRg03eaN5osFx2DSjIpu+jdmnoVdDs0ZplFGgNj800nmkpCKNBDs0lJg04ChgJT6binUgAdadTR1p+KAEopcUYoA6TwR/yEL//AK8z/wCjY66yuU8EDGoX/wD15n/0bHXV16eG/hnBX+Mv6R/x+N/1zP8AMUUaR/x+N/1zP8xRXSYHnS6ao7VKtio7VcMi0bxXw7qTZ9dyogW0T0qZbRfQUb8Uvn4qXKTKsiRbZfSplhUdhVb7SKUXQqHzD0LYRR2p3AqoLoU03I7VPKx6F7zAKXzlFZT3RFRNeZqlTbFzI8++IuG8VO47xp/KubtD+9rf8ctv1oN6qP5Vz9qf34r9ayH/AHGl/XU/K8+X+21f66Fz/lsP92nUYGc96K+kPmxrf6xPxp1GASD6UUAN/wCW3/AaqXZ/ffhV3AznvVG6OZvwrKp8JrT+I3vAxxrhYfwD+atXoTTkmvPvAq7tQvG/uBP1DV3VflWe2lmE36fkj9WyJcuXw+f5sm840m81GKcBXiWR7Q/dS9aQCnAVJQmKUClAp4FS2Ow0LTgtOApwFS2Ow0LTgtOAp+2ocirDAtOC08LTgtQ5DGhacFpwWnhalyHYYFp22nhacFqHIdiMLShakC07bU3GRhaXbUm2lxSuBGFpdtPxS4oER7aXbT8UuKAuR7aNtSYoxQFyPbSbalxRtoC5Fso21Lto20Bch2UmypttG2ncNCDbSFanK00rTuBAVpCtT7aTbT5gsQFaQrU+2m7KpSFYhK00rU+yk2VXMFiArTStWClJ5dVzCsVttIUqz5dIUquYVisUpClWCtJtquYViuUpmyrRWmlKpSFYrFKQpVnZSFKrmJsVSlIUqyVpClVzCsVSlIVqyUpClXzE2Ku3FJirBSk8uq5hWK+KaRVkx00pVKRNiuRTSKsFKbsquYViAik21Pso21VybEG2kxVnbTClPmCxCRSYqYrTdtO4rEdBNSbaNtO4rEOTSEmpsUmBTuKxCc005qwRTSKq5Nivg0mD3qYimnpTuTYjxSEVJSGmBHijFOoJxQhMbimkc0/NB5qhDMUYp1FNANxTcVJTM1QDcUYp2aM0Esbto2U7dS7/AGoJGbKNlPDe1LmgCPZRsqTNGaAGhKXZTg2KN/tQAzaO9G0UMctSUABFJinZozQSR4oxT6SmA2g9KXFGKoBlFO20baAG0YzTtnvTljz3oAjxRipvL96PL96AIcUVN5fvTTHz1oAjoqTy/ejy/egCOm7jU3l+9J5XvQBFuNHNS+V70uz3pNgQ80c1OI/el8r3pXAr8mjBqx5eO9JtouKxBg0YNT7aNtFwsRqOOaXFSbaMUXGR4oxT8UUXAZijFPoouAzFGKfRii4DKKfs96NuKLkcozFGKfigCi4cozFKBT8UAYqblWG4oxT6UDNFwsR4oxUmKUL70XCxFinAcU/Z70u2i4WGYoxT8UYouFhgHNOpcUYouFhKKXbS7aLhY6PwT/yEL/8A68z/AOjY66quW8FDF/f/APXn/wC1Y66mvVwv8M8/EfGX9I/4/G/65n+Yoo0j/j8b/rmf5iiukwPNzce9AuT61li5PrTvtHvXyXsj6jnNT7XSfa6zfOzR51L2SHzl9rmk+0+9UPN96USU/ZoOYvi496eJ/es8S04S+9L2Y+YvF93eo2Garib0pwmpcrQ7ozNa8OwayyNLLJCyfxR4yfzrKXwLbo2V1C6z/wAB/wAK6nzM0ZrtpY7FUI8lObSOKrgMLWlz1IJs5r/hDYv+ghdf+O/4Uf8ACGw/9BC6/wDHf8K6Umm1v/a2O/5+sw/snA/8+kc6PBkP/QQuv/Hf8KX/AIQuH/oI3X/jv+FdEDThS/tbHf8AP1j/ALJwP/PpHN/8IXD/ANBG6/8AHf8ACmN4CtnbJ1C6z/wH/CupFOFS82xz/wCXrKWU4FbUkZOh+HoND87yZZJWm27mkx2zjp9a2MUYpwFedVqzqzc5u7Z6FOlClBQgrJABTgKAKeBWDZsAFOApQKcBUNlWACnAUoFOAqGyrAFpwFKBTwtZtjsNC08LShaeFqHIqw0LTwtKFp4WobAaFp4WlC07FTcYgWlAp2KUCkK4gFKBTgKXFBNxmKXbT9tLtpCuM20u2n4pdtMVyPbRtqTbS7aBcxHto21LtpdtAuYh20u2pdtLsoFzEO2jbUwjpwizTFzlbbRtq15FO+z0+Vh7RFLZTdlXTDimmL2osxqoipspPLPpV4QZ7UvkCizD2qKHl+1HlVe8kUeSKdg9qUPL9qPL9qv+UtJsX0osP2hQ8r2o8r2q8VWmlRTH7QpGKmmE1dKimkCgfMUTCfSkMVXSFqMgU+ZlJ3Kfl+1NMdWyBTGxVKQWKxSkK1O2KjJFWpCsRFaaVqUsKYTVpiGFaYRTyaaTVokYVppFOzSFqtEjCKTFOzSZq0IYVpCKeWppNUhDDTacaaapEhmkJpCKaaokCaaTSmmmqQhN1JuopDVkhupCaSkNUSLuppNBpDTEJmkNFJVEsKQ0tIaYhtIadTTTEJRRRTEFNJ5p1IVzTTAbmkp+wUzFPmQgooxRii6EwooxRincVhKM0uKTbTCwZozRt9aXaPeiwWEzRmjb6UbaQgpaMYoxRcAooxRii4gooxRii4hcijIpu2jbVgOyKCabtpdtABQDijFGKAFzRmkxSgUgDNLSYpaLoAooopXQBRTgopoBougCinBM07y6iTHYjHWnU7ZigKTU3CzG9aXFP2YpNpo5ikNxRinhfWnbBRzARYoxUhWlEeaXMTYi25o2VNspwjzRzBZlfZRsqx5RzSiHPrRzIfKytsoCc1aFuacLY+9HMg5WVdlGzNXBbH3p32XHrS50PkZR8qgxelXhak9jTxaexo50HKzN8o0qwk1pfZD6U5bTGeKn2iK5WZnkGnCA4rT+y+1Ktrx0pe0QcrMzyDSiA4rU+ye1H2YjtR7RD5GZnkGjyDWn9mPpS/Zfaj2iDkZl+QaPINan2X2pPs59KPaIORmZ5Bo8g1pfZ/ajyPaj2iDkZmiAjrS+VWgbfI6Un2Ye9HtELlZpeD023t8f+nT/ANqx10lYnheER3N6R/z64/8AIiVt17WDd6Vzy8UrVC/pH/H43/XM/wAxRRpH/H43/XM/zFFdhzHi2+nB6gFOFfPWPoLkwkpwc1CDThU2KuShjTg1RCnA1NhkuaUE0wGnA1JQ8GnA1GKcKko2YLDSpIVaXWlicjlPsznH41buNE020lMdxrio/p9lc/yrnh1rY8RD/iaN+H8hW14cnNyre3Xz8zG0udLmfXt5eRRuFiinZIJvPQHhwpXP4GmA5raaDT7PT7W5lgErvGMxkkBvfP4VDbnT1je6ngVtzkJb7jgd+vWs5UrOzaNI1Lq9mZgpwrYMVlqNlNJa2wtZIcfKrFg2Tjqaj0u0he3luZ4/OEZA8sZ5z9Kj2T5rX8/kV7RWu0ZwrQNrENHS4APmGQqTntip3fT7qCQLaizlRSy7WLbsduf88VZtVgGgK1z8yrK2F/vdKcaa95XW2/zFKo9HZ7mGBTwK2ESy1G2kFvarbSpjG1id35/SsoCuapHktre5vCXNfS1gAp4FAFPC1ztmqQAU4ClAp4WobKsIBTwKUCnhazbKEAp4FKFp4Ws3IdhoFPApQtPAqGxiBacBSgU4CkK4gFOApQKcBSJbG4pwFOC04Cgi4zFOAp22nBaCeYYBS7akC0uymTzEe2lC1KFpQlOxPMRhKXZUoSnBKdieYh2UuypgtOC0+UnnIRHTxFUyrTsAVaiQ5siEQqRYRTwRSmQAVolFGbk2AjUU7YvpUJnAprT5p88ULlkyRlWoyq1GZqYZazc0aKLJSQtMLiozLTDIahyNFAe0lMMlMLUwtU3NVEkMlMMlRlqaTSuWokhkphkphppouaKKHmSmlzTTTTQVZDi9NL0hppqkMC1NLUhppNWkIQmmE0pNMNaIQE0wmg001aJAmmmg001oiQOKaaDTTVoQpIppNIaSqJFJppNIaQiqRIZppNGKQirQhCaaTTiKbiqJEJpDTsUmKYhppKdikxVCGUYp+KTFO4hhFJinlaTbTuTYZikxUmDSFaaYmhmKQin7TQVquYmxHimkVNso8vNHMFiDFGKm8qjy8dqOYLEOKMVNs9qNntRzCaIcUmyp9ntR5VHMKxBso2VP5VGz2qlILEGyjZVgR5PSl8mnzBYrbKNlWhEB1FHlr/do5rBYqFM0nl1d8selGwelHOFimExS7KsmMelJ5Y9KOYmxX2UbKsFB6Umz2ouFiDZRsqfZ7UbPajmCxBso2VP5VL5VHMFivso2VZ8mjyaOcLFbZRsqz5NBho5wsVtlGyrHk0oh9aOcLFbZSiLNWfKHpSiPHShzCxV8mjyauhKCoB6VPOFil5NKIavBB6Um0bulHOHLcqiGnCGrQUelKEHpRzj5CuIaf5IqwEGOlKFz2qJTKUCqYRigRVc2AjpSiL2qeYfIVRDml8irixD0p4iHpUuYchQFvml+zVoiIDoKXyx6Uc4chnC1zTha1oCL2pfKo5w5CiLTPanizq6ENOCH1pc4chUFpTxaCrYFLzWLqO5ryorC2HpTxbD0qbIpQ3NL2jDlRELYelO+zDHSptwpd9HMy+VEIth6VItso6inb6USe9LnYcqE+zr6Uht17Cn+ZSGT3qeZhyoZ9nFOWFQOlHm+9IZeetNSbJcUkO8pfSmmNQelJ5vvTTJz1p3ZI7YvpSbVpvmUwvz1ouwJdq03atM3+9N8yi7AkKrg0zyxTTLxTfOPrVxuSyRkG2mbR6U0ykjrTfMPrVCNrQABJeY/59//AGolaNZfh5iZr3J/5dv/AGolalfQYD+CeRi/4pf0j/j8b/rmf5iijSP+Pxv+uZ/mKK7jkPERTsUAU4Cvnrn0FgApwFAFOAqblJCgU4CgCnAVLZSQAU4CgCngVDZVgApwFAFOAqblWFUVseIR/wATRvw/kKyQKs3V3LezmWbbuP8AdGKfMuTl81+ouV86l5P9C/qQ/wCJbY/9ch/M1LZw29npYvJYBcOzlQrLlRwDzWdLdSzwxRybdsS7VwO1WbLU57OMoixyJnO2VNw/Kq9pHnbJ9nLkSRr2t0bnTbojTre2XC4eKMrnn1rLsWu7eJ57bJjUgOozg/WnNrFy28ARqrYyirhfyqKzvZrNiYtpB6q4yp/CpnWjKad9lb8WEaUkmrbmlE0WqW0/m2iQvFGziSJMZI9SfrUbDGgIP+mrfyFRz6tcXEZTZDED18pNufyqH7TIbVbc42Biw45zWc6sNbdv1LjSlp6lvRR++k+n9DVELU1tcSWzEx4yfUU0LXNUmnGKXT/M6Ixam33EC08LSqKeBXM2a2ACnhaAKeFrNsqwAU8CgCnhazbGIBTwKUCnAVAwApwFAFPAoIbEApwFKBTgKCGxAKcBSgU4CghsQCnAU4CnBaCGxoFOC0oWnhaohsaBTgKcFpQtOxLY0CnAU4LTglUkQ5DaWnhKUJVJMnmRGBSgVKEo2YquVk8xH0pCTUhUUm2lZjuiPmmkE1NtppFJoaZFtppWpSKaRU2LTIiKYRUpWmlaktMiIppFSlaaVqS0yI00ipStNK0i0yIim4qUrSFaC0yIim4qUrTSKZSZHimkVJikIoKTIyKYRUpFNK00UREUwipitIVq0xEBFNIqYrTStWmKxCVphFTlaQpVqQrFcrTStWClIY6tSJsVytNK1Z8uk8v2q+YVisVpuyrXle1J5PtVc4uUq7KTZVvyvajyqamLlKeyk2Vc8qk8mq5xcpTKUmyrflUhi9qfOTylTZSeXVvyqQx1XOLlKnl0eXVnZSeXVcwuUr+XR5dWPLo8unzC5St5dHl1Y2UmynzBykHl0eWKn8ul8s+lHMLlK/limslWvKo8n2qudC5Snso2HtV0Qe1KIPaj2iDlKOxqNnrV7yPaj7PntRzoOVlHZRsq99m9qT7P7Uc6E4MpbKNhq4bf2pPs59KfMieRlTYaNlXPs5o+zn0pqaDlZUCc8UuxqtfZz6UeQ3pR7RBysq7SOtJirf2du4pDbn0pc6Fysq4oxVj7OfSl+zN6U+ZBysqkUmKuC1PpTvsp9KOdC5GUguaNlXha+1L9l9qPaIORlDZRsrQ+y+1L9mHpR7RByMztho2NWj9nHpR5A9KPaIOQobGo2NV/yPal+z+1TzoOQz9jUBCa0Ban0pRan0o50HIzP8s0ohY1ofZj6U4Wx9KOdD5GZ3kNR5DVp/Zj6Uv2Y+lL2iDkZmiBqXyOea0Rbn0p32b2pc6DkZniGlFvzWiLY+lKLb2pe0Q1Cxni3pwt60Bb+1OEHtS9oi+UoC34oFvWgIDSiD2qXUTCxREGKeIhV0W59KcLb2pc6HYpeUBSiOrv2f2pRb+1TzoLFTyxR5Yq39nNHkUcyCxTKHtSbGq75FL5PtRzILFLYaeENWvJ9qXyqOYLFTbRirfk+1Hk+1TdC5WVPLo8urnle1Hle1F0HKypto21b8r2pPK9qrmQ7Mq7aQrVryqQxUuZBZlXFIRVoxU0x0XQrMrYpCOasFKaUFNNIVmQYppHNTlaYVq+ZCsR4qIthjUxBFMIFO6EM30zmpMCjFPQRHzTcVLto20aCIiMUmal2Zo8v2p3A1PDZzPe/wDXt/7USteszw+m2W8OP+Xb/wBqJWnXv4D+CePi/wCKX9I/4/G/65n+Yoo0j/j8b/rmf5iiu85DxUCnYoFOAr5y59FYAKeBQBTgKhsuwAU8CgCnBalspIAKcBSgU4CobKsAFOApQtOAqGykgApwFKBTgKi5VgAp4FAFOAqWyrABTwKAKkArNstIQCngUoWnhazbKACngUoWngVm2VYQCngUoAp4rJsYgFSAUgp4FZtlABTwKAKcBUgAFPAoApwFIhsAKcBQBTwKDNsAKcBSgU4LTIbEAp4FKFp4SnYzbGhacBUixmpFiNWoszckRBacFqdYakFvWipsydRFcLTglWhb1KkA71rGi2ZuqimENOEZrQWAelPEA9K3jh2YusjOERp3lGtERLS+UK0WGZHtjO8s0GI1o+UKaYqPq4e2M/yjSGI1oeVTTHjtUugNVSh5Rpvl1dKgUw4rJ00jRVGVPLppT2q0ajNZuKLUmVylMKVYamGsmkaKRXKUwpU5phqGkaKTIStNK1MaYag0TIitNK1Kc00ikWmRFaaVqXaaNhoLUiAimlaseXQYjQPmK2KTbU5jNJ5ZoK5iuVpNlWfKo8qmPnKvl0vletWSgHemnAoHz3K5iFIYhUxNITTuVch8oUeUKlop3YEfkik8sU8mkp3YxhjFJ5dSbaXYT0FO7DQhMQppiFWhAx7GnC2Y9qfMybop+TS+SKvi2b0pwtT6U+Zk80TMMNN8itYW3tS/Z/anzMXPEyPs5NJ9lNbH2f2o8jHanzsXNEx/sho+xn0rX8n2o8k+lP2kgvEyPsdIbStfyT6Un2cntT9pILxMj7LSG0PatgWx9KcLf2p+0kK8TFFqacLQ1seQPSnCD2o9pIV4mN9jNPFkfStkQAdaURgU+eQuaJjiyPpTxY1rbB6UuwUuaQudGT9gJpRp5rWCilxT5pC5zKGn07+zxWiRTcilzMfMUP7PFH9nir+5aNwp8zC7KH9nrQNPWtDcDSjFF2LmKH2BRSiwX0rQGKDindi5ih9gX0pp08elaGaTdRdhzMof2etH2Bav7h60bhRdhzMoGyFMNlWiSKQ4oux3M77FR9i9qvkgU0yAU+ZjKf2Kj7CKt+cveg3C+tF2BW+wLSjT1qc3SjvR9qWi7ERfYFpfsKipPtS+tH2pfWjUNSP7GtOFmtPF0nrQLtPWjULsb9kWj7ItON4vak+1j1p6i1D7ItH2VfSkN2PWk+1D1o1GL9mWj7OKabpaT7UKNQuP8kUnkio/tIpDcD1oswuiXyRS+SKh+0+9L9oFFmF0TCEUvlCoPtI9aPtQHeizC5Z8sUbBVb7WPWl+1j1oswuWdgo2Cq32setJ9q96LMVyztFG0VW+0j1pfPosx3LG1aTatQCajzaVgJtoowKh8yjeaAJcCjAqMOaXdQBJgUnFNzS0DFNJikyaTdSEBWkK0FqQtQAhWmFacWppNMQ0rTCtPNIaq4WIiKYVqY02ncmxAUppjqxgGkK0+YVivsFGyrIT1pdi+tPmCxV8ulEVWcIO9G5B3o5mFiIQ08Qin+cg70huEHelqGhoaQm03Z/6Yf8AtRKs1W0iYSNdgf8APvn/AMiJVmvpct/3f5nh43+MX9I/4/G/65n+Yoo0j/j8b/rmf5iivROM8YFPFNFPFfNM+kQ4U4CmgU8VDLQ4CngU0U8VDKQ4CngUwU8VDKQ4CnAUgpwqGUKBTgKAKeBUNlpCgU8CkApwFQ2VYUCpAKQCngVm2VYUCnikAp4FZtlCingUgWpAKybKACnAUoFPArNsYAU8CgCnAVIABTgKUCnhaRDYgFPApQtPVaRm2IFqQJmlVakC1SRk5CLHUix0qqakWMmrSMZSEVBUioKcsdSrCTW0YMxlMaoAp4+lSLDTvJIrZQZi5IjBqRTSbMGpo481pCLbIk0AyaVQQasrAKkEArtjQmzndREAzT8GphCKeIq6o0JmTmiryDUi4xUph9qcseKuNCaYnNEP4UmcdqteUKPLXvW/1WZHOimXPZf0pjbz0FXWRBSAKO1YPDu9nIrnXYzmic9qYYG9DWmdvpTSAe1c8sLHuaKqzL8lqY0JFapVB1qFvL71hLDJdTSNVmYYqYYqvSGPsagZ0FccoJdTojNsqmI0nk+tTmRfSmmT2rFxiaqUiBoajMdWCxPaozuPas2kaKTIDHSbKn2Me1OFrK3QVPK3siudLdlQrik4q6LCU9aX+znNHsp9h+1h3KBIpC1Xjp5HWm/YM0vZz7D9rDuUGk9qYXPYVp/2bmnrpdNUZvoP29NGOWak+c963BpS96cNLjq/q9TsH1qmYGxzR9nc9Aa6EafGtPFrEKf1eXUX1tdDnPsknoaUWcnpXR+RFTTFGO1P2D7i+tt9DBFjIe1PGmSGtobB0FBcelCox6sTxM+hkDSj/Ef8/lUi6Wg6n/P5Vols0hPtT9nFE+3qPqUxp0Q65/SnizhHb+VTF8UwyUWihc831E+zxDt+lHlxjtQXzTSxo0D3hxVPSkwnoKZljTGzU3KSJfkpMp7VFgmomJFHMUo3LJaP2ppeP0FUmdqjMxHWlzGqpF/zI6PMj9qzvP8Aek8/3ouyvZGl50fpTTOg9KzfP96Qzj1p6j9kjQNwvYU03I9KzzOvrTTcLTs2P2cUaH2kUhugKzjcr2pvnA96fKx8sTS+1Ck+0elZplHrQJqrlYWiaBuiKabs1TWZT1p28N0o5QsiyLw1It0TVEjmlWQDvRyhZGgLjPWgvuqn5qAdaja9CGhRbFaKLrGoWlZe9Unvye1QPcs/erjTfUTkjQ+2MtH9oGsveT3o3Vr7NEcxqjUD3pTfVk76PMNHs0HOan25vWkN4fWszfR5ho9mg5zSF4e5p32w+tZXmGjzD60/ZoXOaZvW7Gmm9f1/Ws7eaNxp+zQudl5rxj/FUZum9aqbqM0+RC5mW/tDetIZz61VzRup8qFzMseefWjzz61X3Um6nyoXMyz559aTzz61XzRmjlQczLHnn1o88+tVs0Zp8qFdljzz60vnn1qtk0ZNHKguyz9ob1o+0H1qtk0maOVBzMs+eaTzzVfJpM0cqC7LPnmk881XzRmnyoV2WftB9aPtBqtmjNHKguyx559aPPNV8mjJo5UF2T+d70vnH1qvRzRyoLssib3pfPPrVWlpcqC7LQn96cJ/eqdFLlQ7svC496cLketUMmlGankQ+ZmiLkU4XI9azeaUMaXIiuZmmLhfWnC4X1rLDGl3mp5EPmNUXC+tOE49ayd5o8xvWl7MfOa3nCjzBWV5j+tHmt60vZhzmoXHrSbx61m+c3rR5zUezYcxo7h60m4Vnec1HmtR7NhzGiWFNLAVR81qXzTRyBzFkyL3pPMSqpcmkyTT5RcxaMyjpTDP6VBzRg0+VCuyUztTDKx70mKTAp6C1De3qaaWb1p+BScVVxWYzmlx706lwKLhymnoAxLef9e3/tRK0qz9B/1l5/17/wDtRK0K+hy/+B8zxcZpVL+kf8fjf9cz/MUUaR/x+N/1zP8AMUV6ByHjQp4pAKcBXzDPpkhRTxSCngVDZQopwFIKeBUNlpCgU8CkAp4FQ2UkKBTwKQDNSKtZtlJAop4FCrUqpWbkWkNAp6inrEalWE+lZOaLUSMLT1WplhPpUqwVk6iK5SAIaeqGrKxVKsQrJzHoiqIzUgiNWljFSKgqHJic0ioIzThGauiIGneTS1I9qUwhp4jNWhCKkWEUGbqlVYzTxEauLEKmWJTVKDZjKsUVgqZYcVa8kdjThD7irVMydW5AsQ71Msa1IIwO9IQK0UbGTlcAiDvShkWoyKTbT5rbIVr7lhZEqVZ0HaqYFOANaRqSRDgi39oHani4BqoBTwK0VSRDhEn3g09ZMVAoqRRWkZMhpFhJyKmFx7VVC08LXVCpNdTFxiWBOakFxVYLTwtdMKtRdTJxiTefR5xpgSlC1rz1H1JtEes5oMuetN20bKrnqWtcVkIXphdqfso8uspKbKViAuaYZG9asGL2qNoj6VzyhM0TRXJY0nlM3SpwmGqULis1S5tynO2xU+yt3pht8dautuNM8smlKjHohqo+pS8gZ5pwhSrXk5o8j0qPYtdCvaeZCsMfpUohT0pChHSlAYd6tRS3RLbfUd5CelHlgUgDHq1O24HJrTToiNe4BRTsLUeQKN/pRzJBZisEphKCgjNM8nPU1Em+iKSXUXzF7U7cMU3yQP4qTyh/eqLz6le6O3ijeKYY6b5WaXNLsOyFeRaiLgGnGEU0wD1rKXMy48pGZQKY09SmBfWm+VGOrD86xamapxITNntQH9qkPkr/ABL+dMMsA/jX8xU2fVlqz2QBj6UhY0hngH8Y/MUxriD+/wDqKV/Mai+w4n3puM1E11AO9RtfxDpmo5kaqEnsi1wKQuoFUmv1I6GoHvfRaXN2LVGT3L7XCionuQOlZ7XTHop/KozNIf4aV2zZUUty890ahe796qMZG61EY2NNLuzRQS6Fl7r3qs8+aTySaDBjtWiUUPXoMMpppkJqXyf9mlEB9KvmiKzICxNJk1aFuacLejnQuVlLmkwaveR7Un2cntT9ohcjKWDSYNXjbex/Km+RjtT9ohcjKm004BhVnyvajyz6U+cOUhy3cUFz2qbyz6U0xH0pcyHysgLE0wk5q19nY9qDav6VSmieVlTLUhyauiyc0psXqvaRFyMoYNJV/wCwt3phtcdaftIi5GU8UVZMIFIIR3qudC5GV6Ks/Zx2pwtM0e0QcjKdGKu/Yz6Un2RqXtIh7NlTFFXPsh70n2Wn7RC9mypSVb+y+x/Kl+ye1HtEHs2U6KufZfag2pHaj2kQ9mynRVr7MTQbU+lP2iFyMq0VbFmx7Uv2M96PaRD2bKdFW/sgo+zAUe0QezZUxRirotl7mjyEpe0Q/ZspYo21e+zA0otUHvR7VB7NlDYacsDN0FaCWqZycVOFRelS63YapdzLW0kY9Kl+wkDnk1obx2pDJio9rJleyiUDYNimGzYVomWkMqnrR7SQeziZhtio5qIoRWm5RqiKoe1aKo+pLproZ9GatmBD7UfZk9av2iI9mynRmrf2ZfWl+zLR7RB7NlPNGat/ZhQbYdqPaRD2bKvNHNWhBjrTXhwOBRzoORkHNLml2nvSBeadxcoZNKCamEfHNOwq1HMiuRkHNJUxdfSmbl7ijmDlEx70v1NG9R0FMLj0p3YWH5FG4VFvHpSbs0WET7hRvFV80ozRYCfcKN4qDJpMGiwE/mUnmCocGjBp2Qak3mUvmVCFNKFpaBqS+ZmjfTMYozSGSZozTM0oOaAsOzRmmg0tIdh2aCTSZpCcUgsa+gHMt5/17f8AtRK0qzPD7ZmvP+vb/wBqJWnX0mXfwPmeHjf4xf0j/j8b/rmf5iijSP8Aj8b/AK5n+Yor0DiPHQKeBQBTwK+VbPqLABTwKQCngVDZaQoFPUUgp4qGykhwFPApBTwKzbLSHKKkUUirUyRmspSNEgValQUqxVKIjXPKaNEhVAqVcUwIaeErBtFolUipARUAp4NZg0S7h6Uoeo6UUibInVqcGqJTT91Bk0Tq+KkEhqsDTw1FzNxLAJNSDdVYSEU8S00zJxZYDGnhj61V8yl3Gq5iHEteYR/FSib3qrk04c1XMyeRFsTD1pxlWqqqakWNj0q1JkOKRLvBo3UqW7HtVhLMmtYwnLZGUpRRAKcKtCz9ad9lArZUZmbqRKyrUioasrEoqVVUVvGj3MpVCBIWPSpltzUq4FPVq7IUYLcwlNkYt8U8QgdakAJp6xsa64UE9kZObGrBmpBDTwuKdXoww8EtUYubIxEKXyhT6K2VGC6E8zGeWKURr6U6iq9nHsF2JsHpSbB6U6inyx7BdjDGKYYx2FTUVnKjFj5mVjD7UeUfSrNFY/VID52VTFSbKt0YFS8Iu4+dlPb7UbfarZApjYrKWGS6jUyqU9qbs9qs7gO1NLD0rmlSj3LUmQbD6UhTNTE5qJw5zg4/CsZRS8y02N8kU4RgdqjCSKch/wAMU8Fu5zWceXsU79w2CkKUpfFNMlEuUFcaUpMAUGbHaoZJs9OK55SgtjRJskZgvWoXnVR1qJvmOSTUbgsuFFc0qr6G0YLqD3yjgVC983bFNNuxNJ9m9v1rlc6jOlRpoie8kPRvyNQmaRurt+dWfsmegqRbIDrWfLORrz04meSzHqfzpPKOeSfzrS+yqO1L9nX0o9nIftl0M4RL3NIY4xWl9mXvS/ZovSn7Nh7ZGUUSmGJT2rY+zRDtTDBEKPZtFKujJ8kUeR6L+laeIlppljFK3mV7ZvZGf5JH8P6UnlGrrXEdRfaEB6UtClOT6Fcwn0pvkn0qy10p7Uw3AxRctSn2IfLx2/Sk8o+n6U8zim/aQKLl+8AhPpThbsaYb0AH2Gar/wBsqCQRjB49/wBKpRb2E3Ivra+tO+yqOprPTVvM+719KY2pMarll2J5ZvqaflxjrSExjsKyGv2NRm+eqVOQ+XuzYZkPYUwtH6CsY3bnvTTcMe9UqTHZI2S8foKYZE9qx/tDetJ9oPrT9iwuka3mJ6ikMqj0rJM59aDMfWq9kx8yNYTqO4pwuF9RWN5x9aTzyO9P2IuZG59oUdxSG6X1rE+0H1pDOfWj2IuZG0bpT3qN5lbvWP559aTz29apUQ50a25D1NKGj9qx/PakM7+tV7J9xc6NvzYh6Uv2mMelYfmt60nmt60exD2hvfak9RSG6T1FYXmN60eY3rR7BB7Q3lnRzjIqUGINh3ArnRMyng0GZz1J/Ok6D7h7Q6J5rdf41qq95GGODxWOZGPU0m5jVKgluxc5rm9QU0361lfMaNrVXsoi52aX29ewFJ/aArO2E07yzT9nAOaRf/tCkN/nvVHyzThGaXJAOaRb+2UhuiarbDRtajliF2WPtBpRcGoNrUojPrRaIak/2lhR9qaoxF70vle9T7o9ST7U/ajz5D3pvl+9LsHrS0HqOEz9zTvOY96j2D1pNtFkGpIZSf4v1pu8+tM20Yp6CJN2OppPMX+9URX1NN20WQakxlUd6b59RhM0pTHWnZC1Hefij7UB61E2KYRVcqFdln7SppwuV9ap8CkyKORC5mXvPU96cJUI61n5o3YpezQ+Yvfuj1Io3RL0qjuppY0+QXMXmmXsajaUetUy5ppc+lUqZLkWjIKaZKrGQimGU1agTzFvefWk3e9UjK3rSeY1PkJ5y9ketLuQd6o72o3H1o5A5y/vQUvmpWfvNLvNL2Yc5eMi0eatUt5o3mjkHzlzzRR5wqnvpQ9HIhcxb82k841V8yjfRyj5i15xNO31UD0u/wB6OUOYsl/em+YR3qHd70mR60coXJ/NanCY1X3L60m4etLlC7LXn0nnZqtvHrSbxRyoOY6Pw0+64vf+vX/2olbFYPhVt11fD/p1/wDakdb1fQYBWoni4zWqX9I/4/G/65n+Yoo0j/j8b/rmf5iiu44zyEU8Uojp4jr5JtH1aTGgVIBTljqQR1m5ItRYwCngVIsdSrFWbmi1EiVanRKcsVTJHWMqhoohHHVlEFMVcVKtck5NmyRKoFOApi0+sGUxcUYNHNLg0EjcUuKcFzThGaLiuMFKKkEVOENK5PMhgpwqURY7VIsQouZuaIRmngGpxFThDQZuaIFUmpRCTUyxAVIFqkjJ1OxAIT3qaONe9P8ALJpfKfsD+VWkZOd+o8RR09VjWoxBKezflT1tZT2NapPojJ26skynanCQDoKEs5O9TrZZ+8a3jCo+hi5Q7kYnPanLOfc/hVlLKPuc1OltGvQCuqNCq92YSqQ7FRZXPY/lUgWR+1XFiUdqlUAV2U8LJ/EzGVVdEVY7Vz14qdbT+8anU07cK9SlhKKWupzyqSYxbZB2p4jUdBS7h60bh612xp0o7JGbbYuMUUZorYkKKKKACiiigAooooAKKKKACiikP1pPQBaKaSB3pN6jvUOokOw+iojKBSGas5Yimuo+VkhppqIzUw3HvXNPEwZagyQimkVGbgeo/OmNcqO4/OuKdan3NFGRKRTaha7X1qFr4DvXNKvTXU0VOTLdIRmqJ1BR1NRvqI7GsZYqmaKjMvsvvUZX/arOfUSehqBr5j/F+tcs8VT6I2jh5msQO5FMwmeWFY7XrHvURu29awlio9jaOGl3NwmIdx+dNMsY/iFYLXLnuaYbhvU1DxXZGiwr7m41xEvVqjN5F61hGYnvTTKazdeTNlhV3N37bGOhppv4/WsIyH1pC+AC2eaXtpFLCxNptQjFRtqQ7CsfzPm5zimmU9sUvaTZosLE1zqINMa/rIMpz0FJ9pbpgY9KLyZf1eKNRtQPaoWvie9UPN3nGAPpTCxos+poqUF0LrXZPU1G11mqhJpuapRRXKkWWuKYZ6hClulDBYxl2/AGqUUMl+0HaT2FVmupN2QcD0pRPGQVYcGoHwD8p4rWMVfVEtllbjzODwaX+HMjbRVLdih5Cxyxyav2fYnmJZ593yx8L/Oq1BakJraKsiHqKGKtkdamZsjdnrVbNKjgN83Sm0JMlLU0tUioGGQeKPJpXRVmREmkyae7RxthiSfamSPGg+U7qpE2EJpMmnRFZeBwal8g03JLcFG5Bk0mTVn7PSi3pc6DkZU5o5q59mpwth3o9og9myjg0YNX/s6+oo8hfUUe1QezZQ2ml2mr/kL6il8hTS9qg9mzP2NShG9K0PIA9KAgXpij2o/Zmf5belKImq+QCe1OQqvZT9aPaMPZooCBvSl8g1eaUHoqioy2fSl7SQciK4g9aUQCpvypD7UczDlQ0QLS+StHPrSYb1ou+4WQ7yVpfKSm8+tBz60ajsh4RB3pQqCoeaOaLeYE+EFHyVBhvWl2tSsBN8tJlRUWD60u1jRYB+4Um/0qJyI1zIwUepNIrqwyrgj1BqraXFcnDUbhUIYetLuHrSsBIZAOgppn9qbkeoowp9KdkAv2j2pfOppVaaVp2QtSTzc0b6j28UmD60WQakpek31ESRTDJinyk3LBkNMLmq5uMU03IqlBkuSLBekMgqsbgGmmdavkZPMiZnNMLGojKCetNLj1q1EhyJt59aYZD61EZQP4v1pplX1qlElyJTK3rTTK3rURlT1qMyjtVKJDkWPMPrTfNPrVcyU0vVKJPMWDJ703zKg30m6q5RcxY8z3o8z3qvupN1HKLmLXm0edVXdSbqOUOZlsy0nne9Vd1Jup8iFzMt+cfWk84+tVdxpNxo5A5mWjO1J57etVtxpNxo5ULmZa+0MKUXLVU3GjcafIg5mWzctSfamqrvNG+jkQczLX2k0faTVXdRvNHIhc7Lf2ik+0VU3mjfRyIOdlvz6Tz6q7qTdRyIOZnX+C5N+oX4/6c/8A2rHXUVyHgQ51K/8A+vI/+jY66+vWwqtTPNxDvUL+kf8AH43/AFzP8xRRpH/H43/XM/zFFdRznlgQ+lPEZrTFqopwt1Havg3iEfbexZmiM1IENaawoKeIk9KyeIRfsjNVG9KmVG9KvBVHanYFZuvfoUqdioqN6U4I9WuKXis3VZXKV1Q1KEqT5acMVDk2Gw0LTwDSging1FyWxoU08ITShqXfilchtjljqVYxUIlp3m47UjNqTLKotPVFqp9oPpSi5I6inczcJF0RrTxGtUhdH0o+0t6VV0R7ORfCL61IqLWV57nvSiaT1quZdiXRl3NgItOCqKyPPk/vUvnP3aqVRdjN0H3NkOi+lOF1EvdfyrE8xj3o3GrVdrYn6uurOgS6jPQiplmQ1ziuR3qdbhx0NaxxTW5lLC9jf8xaPNXuawxcOf4qf5rn+Ktvrb7GX1bzNxZk9acJl9awxI3rS+a3rWixr7EPDeZvCYetL5w/vVhCVvWniQ+taLGvsQ8ObQmx/FThNnvWMHPrUiyEd61jjJEOga/me9OEg9ayhM3rUglPrXRHGWM3RNMTCnCYVmrJUolrqhjpGTpF8SA0vmCqQlp6ye9dMcY2Q6Zb3UtVhIfWl8w+tdCxUSORliiq28+tJvNH1qPYORlrIpN6+tU3l2KWY4A5JrOh1iKW7MXTsD6/pXLVzOnSkoy0bNYUJTTa6G2ZQKiaXNVjJTC5rKpjJSHGmWDJ71GZsVAzGoixrhliGaqmWGnqJrkjpULGo2Nckq0jaNNErXLetRNOx71GaY1c0qku5tGCHGZvU0wyt6mmmmGsXJmyihTIfU1GXPrQ1MNZOTNEkDNTC1BphrNs1SAmmFqDTSDU3NEgJphNKQabg0FoQmmk0u00m0mgtWGk00mpvIbHv6VJFEgHzjJ+tMOZJFUnHWmO24+3arkqQIucc/U1BvhDZA/nVFRlfWxXJppNSySoScL+tQswPQYqkaoQmmE0E00mtUIN2DmnbwevFRk0wmq5biLSyoGxgY7k04xqeQeDVEmmlj60/Z9hXLVxMEwsRHuRVNnJ6nNBNMNbRikQ2KWpu6kJppNapEilqaTSE00mrSJHE0hNNJpuaqxI4mmlqQmmk1ViSxBMQ+M8GppZ/KAz3qhkihnLdTmk6abuUp2Q5pCxyaYWppNJmtUjIkjcrICDjmtETcDBzxWRmlV2XoamVPmKjPlNcSn1pwl96itHE0ALde9TKEZsVyysnZnStVcUS+9L5vvSvGiLuJwKgMse0461Ks9hvQkL570mT/eqBbuLODxSf2lAJgmPl9ef8K05JdERzR7lnDnoaeqSetNFzFkbDnIqK7vzbkBF3Z75qEpN2SKvFK7LWxz1NNKHu1VIdTEp2uNh+uasnnoaHGUXqNOMloO2e9Hl+9NJx3pN4HelqGhJ5QPel8qo/OAFMN2B3otJhdE3le9Hl1Ab1PX9Kja+jHO79KpQmyeaKLflUvl+tYj64yTEKuVB9f8A61SnXEKjjBxzz/8AWrT2FUj21PuaR2rUUs6RRl36CqQ1ANzjP41R1GZpVVugHatIUW3ZkTqpK6Lk2rooBiGfUVENXLSDgBax91AbFdioQSOR1p3OpN3GoGT1pY7tJB1Fcv5x24pBMw6GsvqqNPrDOsD/AMXanR3CSD5DnFcqt9MsZQP8p9qjFy6NlWINL6q31H9ZXY0tTvvPcKuVC+/WoLe/aBSpyQaoM5JyaQtXUqUVHlOZ1G5cx0NvcrcR5XII6ildyP4qwYLpoGypq8lx5y5FYyo2fkbRq3XmWmuGH8R/OmG6cfxH86gJzSUKKJcmT/bJB/EaPtsnrUOKTFPliLmkWPtsvrR9skPeq+KKOWPYOaRP9qk/vGmm4fuahpM0+VC5mS+c1IZWqMmk3U+VCuyTzDSeYaj3Um6nYVyXzDTS7GmZpCadhXHkmkzTc0madhDs0lNzRmiwh2aM0wmimA7NJmkzRmgQuaM03NFFgFzRmkpKYhc0UlFAC5opMjtRQIKM0lNZ1U/MaYD80maQMD05ozQAuaM0lJQIdmjNNzRQA7NJmkzRQAuaKSjNAHU+A/8AkJ3/AP15H/0bHXY1x3gL/kJ3/wD15H/0bHXY16eG/hnn1/jL+kf8fjf9cz/MUUaR/wAfjf8AXM/zFFdJgcCLhu9SicEc1nrcJ61IJ46/PnS8j7tTLolX1p4kFZ/2he1KLgdjUexY+dGhvHrShs9DWabgetH2kjoafsGHtEamPelwPWsxbo/3qd9qPrU+wkHtEaPA70hlVe9Z5uGPek8wnvQqL6i9oi/9pxThdVnhqcDTdGJPMaIuc08TZrPVqeHPrUOkh3ReEwzT/OHaqAang1DpodkXRNThIDVMNTw1Q4hyoteZTg2aqhqeGNTykuJZFLj3quHNODE0rEOLJvxpQah3U4GgTRNkUoNRA04GgixKDTw1Qg08GghomDU8NUANPBqkyGiYPTw1QA08GrTMmidWp4aoQaeDWiZm0TBqeDUINPDVopGbRMDUgaoA1SBhW0ZGTRMrVIrVAGp4et4yMmiwDTgagElOD1vGojNxLANOzVffSh62VREcpPuFGRUO4Uu+q9oTymT4hvTDGsCnBYZP05rmDOVbIPNaPia5V9RVUOdsYB+uTWE0lfD5nUlVxUtdFsfTYKilRWm53+mXQvbBJT1Oc/mR/Srm1awPC86vp5QHlOv4k1tl6+swtXnoRlLex4WIp8laUV3HMi0zy19aazZ71GX96uU49jNRZIY0ppjWozJ700v6msHOPY0UWOaNBULKtKzA96iY+9YSkjWKYMFFMO2mlqYTXO5GyiKcU04pC2KjLVm5GiQ87aYSvpTcmmNUNmiiOLLTSy0wmmNU3NFEkLLTC4HSm0mKVy0kBegMKaRTelBdkSblqKaTjjijIqKXpTW5UYq4wuT1phNBNMJrVI3Ammk0E00mtEgAmmE0E00mtEiQJppNBNMJrRIkUmmE0E00mtESBamk0E0wmrSJFJppNBNNJq0iQJpCaQmmk1aJFJppNITSE1SRIE0maQmkzVokUmmk0maTNMQppCaQmkJqiRSaaTSE00mqsIkWZlBCnFNEzK24HmmU007Im7J3vJnGGcmoS59aaTSE1SilsJyb3FLUm6m5pCaqxJLHKVPBqxcXjSIFHQVRBoZqXIm7jUmlYd5hByDVhNSlRQueBVEmk3VTgnuSpNbGuurnbyoq1a3SzJk4B9K53NTRzmNSFJBrOVCLWhrGtJPU6CQqRknFUJbhVfC/NUAnaS3wZDnHPNUmZkk4NTClbcqpV7GzAxk+8oA+tUtRulD+VGOnU0tteYXDnH1rOuJN8pb1q6dP39SKk1yaCb80b6hLUhauqxyXLK3DpjaxGKe97JIgVzkCqe6jdRyLcfMyYyZppeo91Jup8pNyQtSbqjLUm6qsK5LvpN9RbqN1FhXJd9JuqPdSbqdhXJd1SwXBhbK/lVXdShqTjdWGnZnSIytGCcZownfFZ1pMvlku+fYmia52/dOfpXH7N3sdnOrXNPcgGCR+dRsYyeMVlG8AGWzTkvo265FP2LRPtUzTDKKcWTHas8XMZ6GpA4P8X60nApTLB2DpimHaegqFnUdxTDcEdKaiyXJEzYFRGQelRvOzVFvJrRRM3LsT7smlHvVfefWk3n1quUnmLeQBTGIqDcfWjOKXKHMS5pcjvUXmUnmGnYLokJpN1R7zSb6dibkuaTdUfmUb6LCuSbqN1R7qTNOwXJN1G6mZozRYVx+6oZbjYcDk0rvsQmqTNuYmrjG5MpWJZLlm6cCmec+MbqjorXlRnzMmhmMbc9DV1XDDg1m1NBIIzz0NTKN9RxkWJ5CicdapvKz/AHjUs8u7gYI9agxRGNkEmT20m1tp71bzWcp28ipoZJHk68UpQ6jjLoW6TNFFZ2LFzRSUEhRk9KVhC0ZxUH2kbsY4qKS4ZsgcCr5GLmRPLN5eMYNRfaz/AHagJJ60lWoIhyZ3Pw/ffqN+f+nI/wDo2Ou0rh/hy+dRv19LI/8Ao2Ku4rtoK0DkrO8i/pH/AB+N/wBcz/MUUaR/x+N/1zP8xRW5ieSq/pTg57VAp/Cnd+tfI8p9bcm3HvTgxqMNxSg1Nh3JQxpwNRjNPFSykPBp4NRing1DKHg08GoxTxUMokBp4qMU8Gs2UiQGng1GKcKzZSJQacDUYp4rNlEgNPBqMU4VmyiUGnA1HThWbGSA04Go6cKklkgNOBqMGnZpE2JAacDUYpwpENEgNOBqMe1OFIhokBp4NRA04GghomBpwaogacDVXM2iYNTwahFPFWmZtEwanhqhBp4NWmZtEoNPDVGvPSpFU1rFsydh4anB6aEJp4iY1qrmbsODU4NTRCxqVbc1rFSZm3EQNS5NSC396d5IrZQmZuUSHcfWnBql8lahuytvZyyZAIQkZPfFNxlFXYJqTsjitek/4mknGOT+PJrJeWlvJzLcyux5ZyT+dU3kr46fv1HLufXU1yQUTsfCEuYbgbTnK85+tdEXrh/CN1t1YREgJIDnJ9Aa7/y1r6LA3lQSXQ+fxyUa7b6lfOaYR71b8te1J5QrrdKRxqaKm31pDirLIKiKisXFotSuQMQKjYip2A71Gyr61jK5rFohbFMqRto700stYs1RGRTStPLjtTWfNZs0VyMnFROTVgFe9KRGRU2uWpWKWaTdVlljFMJjFSaKXkRAn0oJpxmQUwzJmkUrvoNJJ7Uwike6APC5H1pq3AZvmGKdmaqMuw/FRvtxhuKfI6iMlTzVJmyeaqKuXFNiseeOlRk0FqYTXQkaik0wmgmmk1okSGaaTQTTCa0SJFJphNBNMJrRIkUmmk0hNNJq0iRSaaTSE00mrSJFJppNITTc1aRLFJppNITTSauxIuaQmkJpuapIkXNITSE03NVYkUmkzSZppNVYkcTTSaQmmk1dhDs00mm5pM07E3HZppNITTc1ViRSaQtTSaaTVWEOLU3dTSaQmqsTcdupCabmkJp2EKTSZpM0maokdViKIFSWOKgjwTzUnSpZSJQFzjOBRtXdnFRZo3EdKmxVyclR0FV5ocqSoo8xvWkLt61STQm0ymcjrSZq2eetV5kCnIrZO5i1YjJozTSaTNXYgduo3UzNGaLCuO3UhNNzRmnYQ4tSZptGadhDt1JupmaKdhD91KDTacilulIZIjHGAakGcdaQDFLmoLIpCajIIqxxSEZp3JaCE881O0pVPlNQDilPIqWrspOxG00hPWpI2fHJpAoFLmqdhEm/1pN9MzRmpsO4/dRvpmaKLCuSeZR5lR0UWC5J5lG80yiiwXHbjRupuaM07CuOzRmkoosA7NGaSigB2aXNNqORyOAe1CVwuMuHO7HaoKViSeaTFbKNkYt3YtFL0op2EFJTsVQ1cZtlUHaWPDenIppXYmy7RTbdGWBA53Njk1MVx14pDIwMnircMZjzmmQ7R8xZcdzmpwwboc1nJ9DSKFooorMoWq9wSenSpyCVqoc96uK1Jk9CPFGKjubuC0TdO+0fTNQwapaXDqsUhLN0G01tZmV0WsUUks0cC5lYKKftyOOaVgOu+HH/ACGNQ/68T/6OirvK4T4cjGsah/14n/0dFXd11UvhOap8Rf0j/j8b/rmf5iijSP8Aj8b/AK5n+YorUzPHAaeDUYNOBr5Vn1KJAeakBqIGnrUMtEoJFODVGGpwaoaKJQaeKiBp9ZstEoNOBqMU8VDKJBTwajBp4NZstEgNPFRA08GoZRKDTgajBpwNZtFIlBpwqMGng1ky0SA08GoxTxWbKHg04GmA04GoJY+nCo91OD1JLRKBTgKiDU8NUmbTJQop4UVDk0oJpENMnCinqgqAMaeGPrTuZtMkY7TgUgY0m4d6UMoNMmxIrmnlyaYJE9qXeuaq5FvIcGqZHUdRUIdfSl356VSdiGrlr7R/dWlS5cHpmq6MO9TrKo7CtFJ9zKUV2LcUzMfu/nVlJDnDACs4XOOlKbqumNbl6nPKk30NTzF9aUOPWsn7UaPtT9jWyxaI9gzX3j1o3gd6yPtT+tOF23c0/rSF9XZriQVzXi/U4UsxacF2O7jtV43bAE5PHvXB6/qKXt+XjLYHqf5Vy4vFXpOMep14LDfvVJ9ChJLUDyZpjye9QNJ714sYHvNlu1uRBdRyEnCsCcV6nZatFeWUc8X3WGeeorx0yV2XhTUoWt/shdvNHOGP8q7sPUlSbS6nBi6SqRT7Ham95pftorNOab81dX1iZ5vsYmi94pqI3OelUjupDn3rOVaTLVGKLDz571A0p9ajIPvTCDWTk2bRgkSGX3phlphU0eWTWd2apIXzPemmWkMZppiNIpKIGQ+tJ5h9aDEaaYjQWrAZPeoy+acYzTTHT0KVhhamk0OCppuQV5q0aoaTSZxSE00mrSNBWbNMJpCaaTWiQgJppNBNMJrVIQE00mgmmE1okSxSaaTSE0wmtEiBSaaTSE00mrSJFJppNITTSa0SJFJppNITTSatIkUmmk0hNITVJEgTTSaCaaTVpEi5ppNITSE1SRIuaaTSZppNWkSKTSE0hNNJqkIUmm5pCaQ1SRNxc0hNNzSE1ViRSabmkJpM0yRc0cmkwakQY60wSIyCOtNJqZl3VGYvSmmDRHmjaTT1TDDdVkBAOBQ5WEo3Kew+ho2EnFXAV9KTCZzilzD5CuImHNShCRUmRjtS5XFLmZXKiHZSbalO2mmi4rEZWkIxTziopZFUEZ5q1qQ0kQtNhj6VCzls5NNJ5pCa3UbGDbDNNooqiAzRRS44pgJTaU0UxCUUUUxCEUAUtAOKAHomTzU4UAcUyM5Wn5rNloKKKKQwoopKYhaKKKACkpaSgAopaSgQtFFFMBKWiigAooooEFLRRQAUCiloAWiiigAYfLVVmzxVqRgkbM3QCuduPEVtExARicdsVpCNzObsapIUZYgD1JpQ8ZXIdceua5S78QyTqyxptVlxg/8A66z31K6eNUEjKB/cYj+tbqmzHnRvahr/AJEkkSBWxjDKc9qLDxHGwVLldvbI/rXLEliSxJPvR06GtORWI5nc9ES6t3UMJ48Ef3xWXq9/ZSBbczc5+8hBx0NckJpQuBK4HoGNMJJOScn3qVT1G5Hdw6zp8cI3Tg7RnqMn9axda8Sm6Hl2O5ExyxGCetc7SqATzTVNXuDm7WLA1G5EZQSttPUetauneI7i1hKyASbehbr3rCOB0FKGwKtxT3I5mtjrYvGa5H2iHAzzsGf60+88YwCP/Qo2ZiP4xjH5GuOLZpM1n7GFy/ayOiTxdeLgsiEZ55NJeeKpZU2wJ5eerdxXPZpCcnmrVOPYnnky1eahNeMpkkZsDjNRW9xLazCSMkMORUY65oZiTzVWRFy5eapPfzI0x4XoorXh8WeXEUaEDA+XA/8Ar1zVFLlTHzNHrHwc1O5v/F2rCaQlP7MZgvYfv4f8a9erxX4Gn/irNV/7BTf+j4a9qqkrEPcv6R/x+N/1zP8AMUUaR/x+N/1zP8xRTEeMinA0wGnA18uz6hEgNPBqIGng1DKRIDTwaiBp4qGWiQVIDUQNPBqGUiUU8GogaXNZtGhYBFWY0XGTVFWqdZzWU4t7FxaLLxqfu8GoyhU0gnpROaySki/dY4Bh2qRHweajM2aQGla+4XtsWvNVu1LkHpVcGnA+lZ8tirk6tTw1QLmnCocUUmWNwpd1Q04VnyoZKGpwaogacM1LQEganBjUeacrY71NiWiQMaeCaiD0oepsQ0Shqdn1NQ7zShqLEuJMPrTxUAanBqRLiTilqENS76COVk4pQ9QhqUPTJ5SwGzTg1Vw1Lvp3IcSwHpQ4qvupd1O4uUshxSbjUG6l3U+YnlJ9xp4kHcfrVbdRvAGSQPrTUhOJBrerLp9r8n+sf7oPfpn+dcHPOZJGdup64FXdZ1Ka7uSkpG2P7oBz1x/hWO71zzbnI7qUFTj5j2eoHemNJUTPVRgW5EhkrU0DV10zUFdk3KxCsfQEjmsIyYpokwa2UDNtNWZ7TBfQzQpIv3XUMD9akWaE9W/Q1x/hfVDe2IhMYXyVCg564AFbpNHO0zkdFGqZIcdf0qJp4PX9KzsmjJqfaMSoruXzPB/e/Q0B426H9Kz6Tip5mX7JdzQJTsf0pKoiUr0OKd57etLmD2bLJphaofOammUmlcagyUvTC9RmQ0yRzsOKRooDmnAOKZJPgcdar5pCa0UTdU0KzEmmk0maaTWiRoBNNJpCaaTWiQATTSaCaaa0SJAmmE0E005rVIkQmmk0rA0w5rREsCaYTSmmmrRIhNNJpT9aYa0RIE00mg5ppq0QwJpuaDSYqkSBNNp5GFplUhMQmm5oY00mrRLAmkNITSE1SRLDNJSUhNWSBNNNBNNJqkSGaQmg0hNUSFNNFFMQmCTUiKO9MH3qdnFAIeeBxSBsCmbqN1Fh3F3Y6Ub80wtTC+OlVYnmJCaTzKhLmoy1VykuRa82m+fVUk0mTVciJ52W/OpPN96qZoyafIhc7LXmGk3mq4al30couYldztOKrEk8mnl89abVpWIk7jaSnGkqiRuKMUuKKYgApSaKSgBpoxS0VQgxmkNFFAgpyKCeabxTlYLQBMAB0ozUfmCjzBU2KuiSjNReYKXzKOUVySiovN9qDL6UcocyJaKi800vnU+VhzIkpahM3pQJvWjlYuZE1FMEq0eaKLMLofS4pglFHmLRZhdD6KbvWl3j1osF0LS0gI9aUEetFgExS4oyPWjI9aLAFLijcPWgEUWC4oFLWdqerx2MR24eT+6TisC58T3E9qUQeUx7jn+lUqcmS5pF/VPEFsYZYkBLcAcnn9K5BiWYk9TTzy2TyaQ+1dUYqOxzSk5DAM0FQKdjNBFWQNCZoKgdaXFB6dKYDeKMDtRinDigCMijFSNzSUxDMUYp+KTFADaMU7bRigBmKKdilxTEMxRin45pCOaAGYoxTsUYoA9J+Bv/ACNuq/8AYKb/ANHw17VXi3wOGPFuq/8AYKb/ANHw17TQSy/pH/H43/XM/wAxRRpH/H43/XM/zFFAjxYZpwpA1PGK+XZ9QhwFOApufSnK9Syhwpwpm6nA1JRIDT6iBpwNQ0UmTDGKcMdzUINOBqGirk4xTwQfaoAacGqGi0yanCq0twkEZkkOAKy38QjcQkZxng0uRvYHJLc6Bcd6eCK5xvEJMWEjw/qasR+IIsYaNs+ual0pDVSJu5FPVqxoNbhcHzPl9KuQalbzdHAOelZSgy1NGiGpwaqwmUkAEZqQNWTiaXJw1ODVAGp4NZuI7kwalDVEGpwNQ4juSZp2aiBpwqbDJAacDUYNOBqbAPBpwNR0tSTYlBpc1GDTgaRNh4NOBqMGlzSJsSBqcDUeaXNImxJupc1GDSg0E2JN1LuqPNLmgViTdS5qPNLmmTYkDVjeI79rezWOGRQznDAHkCtGe4S2haWVsKozXDarerdXjvGzFO245oKhHW5WeQ96ru9Iz+9Qs9OMTVsVpKhaSmu1RM1bxiZtjzJimeZUTMabuNbqJm2a+k6tPp92jRu2zPzKD1r02KXzIUf+8oNeOByCMGu+8KamstkIri6DS9kJJI61jWhbUqOp0++k3moPtMRQv5g2jvSLcwv92QE1zWL5ScuaaWNMLqoyTgUwTxscK4JosUkSEmjcRTSaQmixVh3mH1pu8+tNJpCadhpDi7etJ5hxTCaQmq5UXyoXdSFqbmmk1aiMcSKQkUwmmk1ooiuOJFIW9qaTTSatIVxS3pTC1ITTCa0USbji3tTS9NJppNWok3FLZpmaCaaTWiRFxS1Rk0pNMJrRIliE0m4ikJppNWkSKXNNLGkNNzVpEsduppY0hNNJq7E3FLU3dSE0mapIlsUtTSaQmkzVWJuLmmk0maQmrsSLmmk0ZpuaqxIZpKCaaTVWEKaSkozTJA0ZozmkJpgLupjNS5pDTRLGEmjcaUkCmZqiQLGkJpc5FNJqkIQmmmlpDVEDSaKXFFUIbmjNLSUxCUUpFJigQhNJmlIpMVQhM0bqXbSYpiEzRmjFGKBCZozRijFMQZozRijFMQmaM0uKMUAJmkzTttG2mIbuo3U7bSbaYCZNJmnbaXZQLUZmjJqXyqTyqLoLMjzRUvkmjyTTuhWZFRUvkmjyTRdBZkdLmpPJNL5NF0KzI80Uly6WsDSydBWE/iI+YdkfydgetUlfYT03N+lzXOw+InG7zVHtgVEmvypKzMNwJ4HpT5WTzHUA+tRSXtvCwEkyKT2LCuRfVrt2YiVgD23Gq0s0kz7pGJP1p8gcx24vrYj/AI+Iv++xUMmr2cXWdG/3WB/rXF73H8R/Ok69afIhczOou/EcMXFuPMb1PI/Q1mzeI7uRjsAQEYwM/wCNZFLVKKRPMx800lxJvmYs3vVV7pFuBETyasgVh3Qb+1cDpVEs2scUmKcBxRTAbikIp+KSgBuKMUuKKYhuKMUtFACYpMU6jFACdqTFOpKYhKSnYoNADaXtRRQIQUuBQBQaAEpMUtFMD0j4H/8AI2ar/wBgpv8A0fDXtFeMfBD/AJGzVf8AsFN/6Phr2egll/SP+Pxv+uZ/mKKNI/4/G/65n+YooEeJg08GoxTxXzR9MPBpwNRin5qWUPFOBqMU8GoZSHg08VGDTwallIeKeKjBqOe7it13Stj271FirlnOKjmuY4YiztgYrGvdYWRAsGcd8isx5nkADNkDoPSqVNvcl1Etia4uTNI20nYTkDNRimCnitLGVx608UxTTwahlIkFPUkdDTBTwazZaJ0mkU7gxzVuPU7lWBD/AKCqAp4rKSRabNga3KYwMYbPJ9R+VS/24eMR5993/wBasUU8Vk4RNFJmz/bjEcRc/wC9/wDWq5Hq0JhDOcN3GD/hXOinis3BFqTOojv4Wi3huAMng1PHPHIAVbO7pXJipopnjIKNgispUy1M6sGnA1zX2+ctneff3qeDU5IicjOTk1k6bLU0dBmlzWQms8/MnFWo9ShkHXH1rNxY7pl4GnA1AJ4z/Gv509XVvusD9DUASg0uaYDSg0ibEmaXNR5pwNImw/NLmmZoBoFYkzSg1Wkuo4iA7c0G7i2bt4/OkLlZazS5rLbVB/AuaqX2uPbwl1UZ7UD5GVvEupxyr9kjzuR8t17ZFcyz1Jd3b3dw0sh+Zjn6VUZq0URbIHeoWeh2qJmraMSGwZqid/SkZqiZq6IxM2xxeoy1IWpm6tUiLkgarNtcSQzB422kd6o7hmnq9DjcFI7uG5E0eY3LD8qduI7mue0fUVjxA4Az/F61vZ4rjlDldjsjLmVxzSuRgsfzpm9hyGP50hNNJoUQLkWq3MWAWyvpgVaTXh/HD/49/wDWrGJphNPkTFc3Dr6Z5h/8e/8ArUv9uw7eVwfTJ/wrBNRk1SpxDmZ0H9vQeWDj5vTn/Co01+N5Api2gn727/61YBppq1SiLnZ2iyB1BU5BFBNclaX8lpKGByvcVtQ61bysFJKk+o4qXTaKU0zRJppNNEiv91g30NBNCRQE0wmgmmk1aRLAmmE0E00mtEiWBNNJoJphNaJEik00mkJppNWkSKTTCaCaaTVpEsCabmgmmk1aJAmmk0ZppNWiWBNITSE0hNUiQppNBNITVpEgTTc0E02qJFzTSaM0mapEhmmk0E0hNUSBNITSUmaoQpNJu4pCcdagku4Ih88qf99CqSJuT5xSeYPUfnWNqGtpGm22O5j39K583c/mMwcgscmrVO5m5pHdBs0priTq94cfvjx7CtzTtZWeNY52CuByScZpum0CqJmqTzTTSGRNu4uuPXPFJvXbu3Lt9c0WAdTTUDX1ugBMq4PoRSfbrcx7/NXH+8Kqwrk9FRRXEUy5jkU/jUuKBCUUtJTEBFG2lzRmmIXbxRjFG+mkk0D0FOO9IcdqSjNOxIhFNIpaTFUSIaSnUUxDaKXFGKBCYoxTqMUwG4oxTsUYoENxQRS4paYCYpcUuKMH0oAbigdacB607Z6UAOA4pcUBSKje4ijba0qBvQsBUlEmKMVVn1O1t1y8yn2Ug1kzeKANwiizzwT6U1FslySN93WNcucCncEZB4rjdQ1yS/h8t4lA9c1H/bV55PlJIVT0FX7Nk86Oqu9UtbMHzHy3pg1l3viVPJAtB856+35iubZy7Zbk03rVqmjNzZPPeTXBPmuTznFVzS0YrQgSjFKBRimISjFOxS4oAaBSEU/NBFADMUuKcBS4piGgVz10zf2px17V0Z4Fctct/prNnuaBHTgcc0YoTDICDTsUwGUmPSn4pKAGmkp2KMUwG0lOIoxQIbQKUijFACHmkp1JigBKTFLijFMQlGKXpRQAlJT6aRQITFFLiigD0j4Ij/irNU/7Bbf+j4a9mrxn4Ij/AIqvVP8AsFt/6Phr2amSy/pH/H43/XM/zFFGkf8AH43/AFzP8xRQI+f11uAjlXB+g/xqa11SKdiHOz0zxXNU5SR0rwHBH0HOzrPtturYMq/nQdQgDhd4Oe4IxXLbiTyT+dKGPqankRXtGdT/AGnbAH94Dj0Iph1eAMMHjv0/xrmgaduqfZofOzpP7btxn5X4+n+NVrrWy4224Kj1PX9DWKDmngUuRIfO2ag1ucxFSFz6gH/Gqck8k7Zldm+pqEU4CiyWwXbHAU8UwCnAUmMeKeKYBTwKzZSHCnimgU4VDKRIKeKjWnioZaJAaeKjFPBxWbLRIDTwajFPFZsokFPFMFPFQyh4p4pgNOFQyh4pwpgNOBqGUSA04Gow1ODVmxkoc+pqWO4kjOVdh+NVwaeDUMo0F1OUEZwQPrz+tXY9TiYDcCDWIDTgahxRRryagTIPLK7auwyGSME8EiudDVNHdSRn5WPpyahxA6HNVrq8W3GOrGsxtRmZcZAqu0jSNliSfelyisSPK0rlmOSaAaiBpwNFih5cIhZjgDvWJqOoC5+RBhR61NrM5SNEBxuzn9KxGeqjEzlLoSM9RM9MZ6iZ/StVEybHs1RM2KYXqNnraKM2xWNRsRTWeoWet4ozbJGIppPpURemFzWySIbJc0oPvVffQHquUm5o20ojmRm5AOa621vIrqPMbfhnkVwqye9aFhetb3ClTxkAj15rGpSurm1OpZnYk0002N/MjVv7wBpSa5LHWNNNNONMNUIDTDTjTTVoRG1NNPNMNUiWMNMJxTzTDWqIZJFfTwsCkjDHbJxV4a/N5eGRM+uD/jWS1NzT5UxczRo/2zcDndn6k/405denD/OiFfYH/GsrPpTSapQQuZnSDW7YqCQwJ69P8aU6xa7sbu3XI/xrmCaaTVezQe0Z2EVxFOMxOrfQ08muOjuJITmNiv0NacWvbYwJIyW9QaPZvoNVF1Nsmmk1nwazBKP3h8s+9XVkWRdyHIos0O6YpNNJpTTTVoQhNNNKTTGYKMscCqRIE0hpvmLtyDxVW41GGHIzlgOlWkQ2WiaaTWVJrXTYmPXNRS6yxQeWuD3zWiiyHJGyTTTWUNbXb80Zzj1p8WsxOQHBX3zVcrJ5kaOabmq738CRl94IrLvdbyu226+tUotickjazTGkVRlmAHvXLSapcuPv44xxVZriZusjn/gRrRQM3NHXtcRLjdIoz6moP7StST++Tj/aFco00rfedj+NRkmq5CHUOkn123jU7Msc44x/jVKXxE5/1UY/4EP/AK9YxptaKKIc2W5tVu5Sf3jKD2UkVSd3c5dix9zS/SkxVpWM22xlIadSYqiRvak5HIp5FNIqhEv2y4MflmV9vpuNO/tG4FuYQ+FPuarmmmiyC7FMjEYJOKTccYzxRijFUSS291JbuGjb8K0h4hmDHKLjHof8ax+lBNFkx3aNceIZxNllXZ6YP+NaEev2r7QwdSepOMD9a5eilyoOZnYrqlox4lX65FNGq2hk2eYPrkYrkdxHSkBNHIg5ztZLuGNc7g3OMA05riJYw7OFGM8muK86Q/xt+dKZpWXBkYj0LGjkDnO0SeKRQUkUg+hp5OOtcOs0qfdkYfRqkN9cHGZW4/2jRyhznZ0Vyaa1dooAYHHqKQavdB2YPy1HKxcyOqaaNZBGzqHPRc0+uO/tCczrKzAsuccVpw+Imz++jz9OKfKw5kbtLiqEOsW8oBHHGT7VDLr0CTFVG4AdQaVmO6NXFN3KM5IrFl8Rjyz5cZDdiTWYdTuGkZ9/JOapRZLkjriQBknim+ZHn765+tckdQuGzmQ8jB5qIXcqnh2J9zT5Rcx2IniPIkXjrzTt6gZ3D864nz5R0dvzpTczH/lq/wD30afKLmOwkvbeEZklQf8AAqgk12ziGAS/+6Qf61ybMz/edj9TTcYo5ULmZ00/iCBP9UCx/D/GoYvFBAxLCM5/hX/69c9SVXKg5mbk3ie4YkRRoB2JBz/OseW5lnlLyOSx75qOimkkS22BJbknJ96SloxVEjcUU7FGKAExS4xSgUu2mIbRinbcUYoAQigCnYpQKAG4pMU+jFMQzFLjNOxRQA3FLilApaYiGU7YXb0Ga5eRt0rHaOp7V0moMUs329SCP0rm8HJ5oEzpLJ99ojeuf51OeRVPSm3WgBP3en5mrxFAxuKTpT8UhFMQw0lPC0FfSgBmKKXFGKAGkUYpxFJimITFIRTsUlADcUUtFADaMU6jFMBuMUU6koENopSKTFAj0j4Jf8jXqn/YLb/0fDXsteNfBL/ka9U/7Bbf+j4a9lpkvcv6R/x+N/1zP8xRRpH/AB+N/wBcz/MUUCPl8c08UwU4V4Z7o6nCminCpGLSikxTgKRQoqQU0U4CoGOFOFIop4FTcocKUUmKcKhlocKeKYBUgFQUKKeKaKcKhlIcKeKaKeKhlIetOApop4rNloctPFNFOFQykPzT6YKeBUMocKcKaKcKzZQ4U4U0U4VIxwpwpopallDxTqYDTgahjHg04UwU4GoKHg0tNBpaQx1ANNpRSsA8UtNFLmlYDE1xsXCj/Pashnq9rc4a82jIK9c/SslnreEdDmnLUkL1Ez00vUTPW8YGTY8tUbPUZfFMZ62UDNyHFs1GzUhamM9bKJDYFqjLZoJz3phNaqJDY7dSbsU3NJmqsIkD1PFJ8wqpn6VJG2GGfWocRpnoFk2bOHP9xf5VP2qnYuGsocHPyL/KrQNebJanpRegGkNONNNIYw00080w1aJGmmGnkU01aJIyKYakaozVoljCKjapTUZFaIkYaaacRSGrRAw0004001SENNNNONNNWiRpNSw3UsDZjbB+lRGmmqEasOuSr/rl3j64/pUy66h+/Hg/X/61YdITRyIOdm1JrqD7kefx/wDrVnXWoNcY3cCqhNNJq1FIlyZMbltm3ccVEZAe9MNMNWkRckLimlxUZpKpEjmcdqiLmnGmEVYmISaYacaCKokZimkVIRTcVRIzFIRTyMUlUhEZpuM1IVpMVRJGRmkxUhFN20xDCKTFPIpMUyRlIRUmKQiqEREUmKlK00rTER4op+KQimIaRSYp2KMUxDMUuKfigimBGRSU/FJimIbSU/FJigQ2kp+KQimIbRS4oxTASg0oFBFAhMmjrS4oApgJijFOxRigBuKMUtKBQA3FGKdS0CG4o206imAzFJin4oxQIaBRjFPAoxTAjxRtqTGKTFAhu2ginYoxTAaBS0u00u2gQ3FKBTsUYoASilxS4pgMxS07FGOaAG49KMU/GKMZoENxQRTwKMUAZWsNi2Cg85/oawQuDnFaesSE3BA7DH6ms4k0yGa2iuDvU8dOPzrWxXP6dK63K4zzXR4pjQ2kIzTsUUAM20mKfigigBgoxTselJimIaRSU/FGKAI6KfikIoAYRSYp+KMUxDMUoFOxSYoAQ02n4pMUAMxRTiKMUCPRfgl/yNWqf9gtv/R8NeyV458FBjxVqn/YLb/0fDXsdUQ9y/pH/H43/XM/zFFGkf8AH43/AFzP8xRQI+YAKcBSgU4CvCue8IBzTsUoWnAVNyrABTgKUClxU3HYQCnAUoWnBalsoUCnCgCnCoZQCngUgFKBUlIcKcKQCnAVBQop4pAKcBUsoUCngUgpwqGUh4pwpop4rNlDhTxTRThUMocKeKaKdWbLHCnCminCpGOpwpopwqWMcKWminCoGOFOFNFKKkoeKUU0U4VIxacKbSikMdS00U4UhjhRmk7UGlYDkdUJW+cM2ffNZ5bmrerzCTUJCOnAqgzZNd0I6HDJ6is2aYW5pM00nNdEYmTY1jzUZNPJFNLCtVElkZNMJp5YU0Ed6tIhjDTCakbb+NRHFWkSITQT7UhpM1VhDs05Sc9KblTQpG4enek0FzutJL/2fFvAB2jGB2wK0AeKo2OBYwbenlr/ACq2K8ya1PSjsS5pDSA0VkWJTTTjTTVIQ00w08001aERmmkU800iqRJGRTCKkIppFWiWRGmmpCKYRWiZJGaaRTyKaRVkDCKaRTzTSKoQwikIp5FNNWiRhppp+KaRiqJIzSU8imEVQhpppp+KaRV3JGGkIp/WkxTJIzTSKlIphFWIYRSU8im4pkiGkp2KCKoCPFIRUmKQimSR4pCKkxSEVQiIikxUuKTFO5JEVo21JtpMU7isRkUhX0qXFJiquIixSYqXFG2ncRDtoxUm2k207isREUm2pStJtp3EMxSYqTFIRTERkUmKk20YpgMxxSYqTFIRTEREUYqTHNG2mKxFigipcUhFAiPFG2n4oxTAj20uKdil20CI8UoBp22lC0wGbaULTz7UnSgQzaaULTqXFADMUYqTqKQCmAzFGKcRRtoAbilxTsUYpiG0YzTsUYoCwzbRin4pdtAhm2lxTgKMUwGAUYqXGBSEUCGbaULTsUAUwGlaAtPxSbaAExRilApcUCG0mM04Lmq1/P5EJ2Nhj04pgYGpD/TZcMfvHv7mqJB7N+tWJZWeQl2G4nn5ajJxn5h+VMzJrBS1ynzY+hrqDXKxS+W4KuM/St+wvkulCswMmMkYoGi3SY9KeRTcUDG0Yp2PWkNAhKTFOoxTAbikxT6TFADcUlSFaaRQIbikp2KMetMBmKMU/FJigBmKMU7FJimIbikp+KSgD0T4K/8AI1ap/wBgtv8A0fDXsVePfBX/AJGnVP8AsFt/6Phr2GmjN7l/SP8Aj8b/AK5n+Yoo0j/j8b/rmf5iimI+ZgKcFpwWnAV4Fz6BIQCnAU4ClC1LZQgFKBTgKcBUjEApQKcBSgVJQgFKBTgKcBUXKsIBSgU4CnYqRjQKeBQBTgKllIUUoFKBTgKhlABT1pAKcBUsoUCngU0U8VmUOApwpBThUMoUU4UgpwqShRThSAU6oYxacKQCnCpGKKWkpwqShRS0gpaQDhSimignAqRjxS0lKKmwxwpRSClFIY6qmo3QtLN5M844+tWJJUiQtIwUAdSa5fWtR+1P5cf+rU/maunByZE5cqMiRy7sx7nNRseKDTTXoxicDY0mm5pTTDWqiTcCTnmmk0Uhq0ibjSaaaU001aRLY003NOIpuKtIkaaSnH2phNUkSFOBpnNKKdhXO08P3In08L/Ehxj8q1hXE6HqH2K9Ac/u34b2rtkZXUMhBB9K86tBxkehRnzRHg0tNFOrlZuJSUtIaEA00004001Yhhppp5ppFUhEZFNNPNIaskjIppFSGmEVSJIyKYRUpphFWiSMimkVIRTSKtEkZFJinkU0iqRIzFNIqQim4q0IjxTSKlIpuKq5JERSEVKRTStUSR4pCKkI9KQrVCI8U3BqUik21QiIimlalIpMVVybEW2k21LikxTFYjxSFal20mKYiLbSYqUik21VxEWKTbUuKTFMRFtpCKl20m2ncViPFJipNtG2mKxHjFIRUu2k207isRYzSbal20mDTuKxHikK1JikxVXERbaNtSbaCtO4rEWKTFS7aQincViPbSFakxRtp3FYjxRtqTFBWi4rEW2kxUu2k20xWI9tJipNtG2mBHto21IBS7adxEWOeaXGaftpcYoAj20m2pcUm2gRHtxRipQKXbTAixRipMYpNuaBDMUmKkxSYoAZil208CjFMBm2gin4oxQIZtpcU/FG2mA3FIBT8UbaYhpFJin4pdtAEeKXFP20YxQIZijbTx9KMUwGgAHJoOKUrmkIoAbWHq10JZfKUZC9TTtV1h7S4MMIU4HJ/AViG+c8lRmqREn0I7qLbLkdDUWzjNTSXJkTDKtQFuKZBJBD5kn+yK3NHkjjuCjDlhw2axI5zHHgAVJHfNHIrhRlTmgDtDSGs7S9U+35RgAyjP1rRxSLExSYp+KQj0oAbjFBHpSmkPNMQmPU0GlC5oK0AMJNJzTyMU0igBKQ80uKMUxDcYpcmlpKAEz60daXFGKBDTSU/GaMYFMD0L4Lf8jRqn/YLb/0fDXsFeQfBj/kaNU/7Bjf+j4a9fqkZy3L+kf8fjf9cz/MUUaR/wAfjf8AXM/zFFMk+bgtOC0oFPC186fRDQKXFPC0oWkVYaFpwWnYpQM1JQgFOApwWl21IxoWnAU8LS4qRiAUuKcBSgVLKEC0oWnAU4LUMoaBTwKULTgtSMaBTgKdtpQKkoQChmEaM78BRk07FZniCbydJbDYLMB/OklzOwN8quW7HUIb7f5J+4xH19/1q4K4vwzN5ep7c4Drj6nIrtRRVgoSsKlPnjdiiniminCsGbDhTqaKfUMYCnUClFSUKKWkpRSAWlFAFLSGAqrqMzw2u5BzuHP4irdYviG52rHEp+9kn8MU4xu7Ck7RubSEsgJ4p4qnpk/2iwjbvjmroFQ1Z2KTuriimzSpBC0jnAAp/CjJ4rm9T1RrnMcfEff3ojFyYpS5UVby/knkb52CE8LurNlfnrUrnAqrIc12042OOUribjTCxpCaaTXSomLYM1NLGkNNzWiRNxSxppakNMNWkTccXppajFMNXYm47fTS1NprVSRNxxemlqYaQnFVYm5Jvo31FRmnYLkwetrStbltflcmRD2JzjrWEGFPjfBrOcFJWZcJOLuj0aG6jndRGwORmrFcj4evEjvtsp+8MKa66vKqQ5XY9KnLmVwpjkKpJ6VJiqmpy+RYO/0H61mkaN2RLGwkjVl5BHFBFVdIm87T0z1XirhFO1mStURkU0ipCKaRVICMimkVIaQiqERYppFSEUhq0SREU0ipSKaVqkSRFaYRU5WmEVaEQkUmKlIppFUSR7aaRUuKQrVIkhIpCKlK00iqEREU0ipitNIqkSR4pMVIVpuKoRGRSYqTFIRTuKxHikxUmKTbVXFYjxSFakIoxTuKxHikxUpFN207isR7aTFSEUm2quTYj2+tJtqQikxVXFYj20FakxRtzTuKxFtoxUuKNtO4rEWKTFSbaNtO4rEeKQipMUmOaYEe2k21IRSYpk2IsUhWpdtIVqrisRFaNtS7aQrTuIi20bal20m2mIj20YqTbQFouFiLFIRUuKTbTuKxFijbUu2jFMViLbSbalxigCi4rEWOaXFSbKXbxTAi2mk21NikwKdxWIsGl5p+KNtAWGFc0AVJtzRtoERYo21IVqq14i3YgxyeM++aYE22jbUu3ijbTERbaXbxUm2l20ARYoxxUmyjbTAj20uBTwvpRtoER49KULUmzilA9KYiPbSlcCn7aXbQBFtoK1LtxTSKYiIiqt/dCztGkPLdh61cK5rE8SSiO0RO7GgT2OYnlM0zO5yTTBjvSfxU7gVZiISvSk2incZpM80wFwopvHpQThvag8UCLenXX2W7Rui5+b6V2KMHRWXoRmuD6MK7PSZPO0+Ns88iky4lrFGKfijFIoYRSYp9JimAwDFBp2KMUCG7c03FPPtSYoAZikxTyKaRTENxRtp2KMUANxRinYpdvFAhmKSnYoxTA9B+DP8AyM+qf9gxv/R8NevV5F8GR/xU+qf9gxv/AEfDXrtWtjKW5f0j/j8b/rmf5iijSP8Aj8b/AK5n+YopknzsFzTttSBaeqV84fRkW2nbal2U0rUspDdtKFpwFOxUMpDQKdtpQKdipbKGgU7FKBTgKQxoWnAUoFOxUsoQCnikApwFSMcBSgUgFOAqblBilxSgUuKhjG4rnfFlwFhjt/73zflXSVxHiO5M+qMmRiPgYrSirzMqztAg0WUQ6rATnBcD9a9AXkAjvXmlvIYZ0kXqrAivSLRxLaROCDuQE4+lViVqmThno0SgU4CgCngVxnWIKdQFpcVLKFFLQBTgKgYgpwoxS0hiiloAp2KQEcjrDG0jnCr1rjL68N5dtIenYfhXTazcRQ2DxyN8zjAGa5EKCetdFKOlznrS1sb/AIcu8SNbt/FyK19TvPsdtlWw56VzGlyJb3yO7YXIyc+9a/iGeGSGIJy5wwYY6c1Eo++VGXuGdPqdzcIUkfK+lU2kpgOKYxrWK7GTdweTjpVZ5PanvVdzzXTBMxkxTJ7U1pPamE4pjE1ukZXHmQelNMntUZzSGrSJuPMntTS9RnNIc1SRNx5kpC+aj5zSHNWhXJC4phYUzNIaom44sKTctMNNzTFckLLRuFRZop2FcmDLTw4HTrVf8aUH1pNDuX7eUq6sOoOa6iy8RBLcJOpZh3rj42NXIn9a5atNPc6Kc3HY7yw1CO/B8vgr1FZXiK7yy26Hp979CKj8OBUlklklCIoGcnFZd3KZrl3Jzk9a4uRKWh1ubcDU8P3O2VoGPDciuhIrirOQxXkT52gOMn2zXaI6yRK6kEMAQRU1FZ3KpSurCEU0inmmmoRoMxSGnEUhFUIZimkVIabVCGYppFPNIaskjIppFSEU3FNCIyKaVqXFNIqySPGKQ1IRSEU0IiNNxUpWm4qiSPFIV5qXbSFaq4rEJWkK1NtpCtVcViHbSbam20m2ncViHbSbamK03FVcRHtpNtS7aTbTuIj20m2pdtJtp3ERFaTZUuKCtO4rEBWk21PtppWquKxCFo21LtpNtO4rEeMUoFP20FadxWIytJsqTFG2ncViMrTdtS4o4qriIcUm2piKTbTuIi20hWpcUhFO4rEW3FJipcUYp3JsRYoxUm2jbTuFiMLSYxUm2jbTuKxFto21LtoIouIi20YqTFJtp3Aj203bUu2jbTuKxHijGaftpdtMViPbSbal20hFAiPbS7aeBS7aYEe2jbUmKXbTEQ4rAmP/ABOgR080fzroJ2EULu3AArkzcE3fm/7e6miZHVgcUuOKbayLNbI6/wB0Z/KpttAyPFGKfto20AM20bak200uivtLKD6ZpiECUbaGlVSc1WuWmLhoWCqBk5JpiJWljGQTTVkVcgEe1ZNxOyv833hyCvQ1BJds1wSr7VHqcUE3Ld5qFwlwAoCqGA69afBqBE224kA3cjkcVSuZPOjDuME8qR0rNYNJOA3zHsVpktnXJKH57U/IJwCCfTNczLdXKIE3SIe2SRViwvJWf5iNx6ls0Dub3I6Vx/iK482/2g/Ko/WulN20cE3mDDJGWDD7pxXD3MhmuJHJzuYn9aqJMiEetGKXtRjirMhtHag8UGmAo6UfhSClBoAQjOK6fw1Lugkj/u4P55rmSeK2fDk4S9MZ/wCWnT8AaT2CO51BFNxzT8cUmKk1G4pCKkApCKYDMYpKeaTtQIYRRT8UmKAGGjGadikxTEN20YzTsUmKAEIo6U6kxQIaRTcVIRTcUwPQPg2P+Km1P/sGN/6Phr1yvJfg5/yM2p/9gxv/AEfDXrVXHYxluX9I/wCPxv8Armf5iijSP+Pxv+uZ/mKKok8DCU8LTY5UYHawP40/pXzdz6WwuzNMdNtSIeelExyKTeg0iEClxSgE8igDFZNliinCkApwFRcqwAUoxSilxSuOwAU4LSCnhvWlcYBaXFKGpQam4wAp2KQHFKWxSKDFKBSBjRn1qLjKOr3wsLFpCCSemD7j/GuBeRpZC7nLHqa0de1D7dfEKcxx9PyGf5VmCu+lDljqcFafNLQcK7HwvqBmiNs4JZOhzXHCrmnXJtL2OYDO09M47UqkeaNhU5csrnpAFOAqOJxJGrocg1KDXl3PUFFOAzTc07JqW0MXFOApASaUZqboYuKXFICadU3GGaqvqCJem3xlvL3j35xirXQGuSu7sw620zJnY/Td706cedsmpLlRV1O8ku71zJxtYgD0qspp9zMtxcvIE2hj0zSLiu5KyOJ6skU8U5pGbG5icDAyegpvG2k4qGigL0xnOKDUTVcUSxrvUDPT3NQNzXVFGMmBY00vSH2phHvWqRncUtSb6QjNNxV2JuOL0wvzSEUmKqwhS1NLU08UGqsSKWpu/FBFNp2EKWzTN1KaYQaqwhc0bqbzSfjTESbqUGox1p+RjrSsBMjVZikqiv1qeM+9ZyiaRZpxzsqkKzAHrg9akHIqlEeOtWY3rklE6FIkzit/Q78GJoJW5XkZ/AVz5NWrS4iginLNiRkITjvWM43jY0hK0rnWwyrPHvTpkin1j+HbjzIXjLElTnGPU1skVyNcsrHZF8yuNIpKUikIp3CwhpppTTSKrmFYYaYalIppFMQyjilxSEVSZNhDikxmlxSYq7isJikxS0ZqkxWGkUm2nZozVXRNiPbRtqSjFVcCIrSbamxSbfwpkkO2k21OVpu2mIhK0myp9tL5DHp/OqQivtpNtWGiZev86ZtpiIttJtqXbRtp3CxDtoK1LtoxTuIh20hWpttIVqrisQ7aQrU22k207isQ7aTbU22k207isRbaTbU22k2U7isQ7aTZU22jbTuTYgK0mKsFfamlMVQrEJFJipStIVp3FYi20hWpdtJtqrisR7aNtSbcUYouKxHik24qbbxmmEU7hYbimlak20baLisREUYp5GBmjbTuKxHijbUmPWjbTuKxFijFSEUAVQrEeKNtSYFJRcQ0LRtxT80U7hYZil206o5pRBC0j/dWi4WMbXrkqqwIev3qwdp9KmuJ3uJS796izmtEYvVm3oNzkmBzjutbuyuLglaCVXQ4INdnbSCe3WRehFJlRHbaQrT8UyWRYU3OcD1ouUU9RuJLSMOi7l7+1c5Jdy/a1nJI3ds8elbOsRm4hDRyjB7cVlfYJliMhO8D0xxTM5XubduVazBc75MZOKq3N40BUTKBGw4+tY1vNLbzeWc7B7dK14Z4L2MRtHllOOp596Yr3M28kXd+7Oe4FZ4dpJMscetbmo2zWoUwjaOw61gMMNnNNES3NQWr/YDNK+EUfL78VVs5USb5iMepHSm/apHtSjtlQcBcVFbxo8jBjtHrQI0r26inCRW43sf46sWGnuPmkUjIOKzYlEk48sZx0rfsJcf6yTPquMbfxoKWrIbuGWHR7gykE7GAHoMVxR9T6132tyK2kTFTkbT/ACNcCfariRPcQgYBpKcRxSEVZmNoxS0uMigY2jtS7SelIOlAheq1c0mTytRicds/yNUwOtWbABrtMf54pgju8YFFPIpKzNhtJin4pMUAN20mKfikNMQykIp5FJigBmKMU8UYpiGdqTFPxSUAMpcUuM0pHFMQzFJin4pMUAd98HRjxLqf/YMb/wBHw16zXlHwfGPEmp/9g1v/AEfDXq9aR2MZ7l/SP+Pxv+uZ/mKKNI/4/G/65n+YoqiD5PhvJom3KxrSi16VFAYA47msVnCDmopZgRhTXg8tz2+dxOxtNb80qCqgnjrWr5kcy/KwJ9Aa88gu2i5B6Vs6Xq20lnc8dievWspwaWhtCqnudWAR0o2knJqi2rJDb+bOjKp6GqMPiMO7AqGy+FAHOPzrHlkzfnijd20/AxwOaqwX8UsYZvkHTLetSSXkUS53A+lZ6l3RLkDjIz9adkeormrjUZZJy6MUHYAkU631KaJss28Z6MSafIyfaI6XFG2qFnq8Nxw5Ct+laSlXGV5rJ6Gqaew0CnYpwFRXFzHapmT8BU7lbEmKUCs7+2IyCduKltb37QTjg+hpWYlJMu4rO1vUFsLBiHKyPwm3qKvTTrBaSzuMiNCxA9hXA6vqT6ndlySqDhVzxWtGnzu/QzrVOSNluUSxdizHkmlFIBTgK72eeKKctApwGKhlHb+Gr5bqxETuTJH1z7kmtzAHU4rzexvJbK4EkLsvqASM1s3OvXVxyrbAR/CSP6159Wi+a6O+nWXLZnT3GoW1swWRxk+hFQf27ZjPzHj6f41yLzyScyMWPqxzTM1PsV1G676HYya/ZoPlLE/Qf41nz+J33/uIl2+9c9k04U1RiiXWkzpLPxJwftS49MVcXxDbOwAyB6muRpRxUOjFjVaSNzUNZeXIgcqD6ViuxZiWOSTk0bqZnJrWEVFaESk5PUeoqQCoxS+Yq4ycU2JEvSkNJu44pu71paDuDEVE7CnMwNQsa1jqQ2RuahY09yagY10oxbFJppNIWzSE1oiGwJpM+tIW9qQmrRNxTimE0ZphbBqhXHZpKbnNGDTFcXgUmaQmmk8VRNxTikpm7FG6mK44gU3FIT7Um7nmmA8cUtR7s9KM0WESj61IhqAHNSKalopMuRNzVuNqoRtzVqNq55I2iy3nNIfSmKwPFOY/nWDNjS0nUTYyFSMo3WuuxkcVwANdvp/mpp6G5OW7/ma5a0UtUdNGT2JytNIqK+vo7Py93V3AI9Ae9WExJGrryGGRXPZnRdXsR7aaVqYrTStMRFtpCtS7aQrVCISKaVqYrTStUhEWKTFSlabtqhEZFJtqTbRiqJI9tN21LtpNtMCPbRin4oxTEMxik5qTFG2qEMoxmn7aQYzxzVXEN20YNSCl25qkySEgmm7asGM+lN8v2qhEO2jmp/L9qPL9qYivto21P5ftR5ftTAg20m2rHlH0oER9KYivspNtWfJPpR5XtTEVSlJsq00eBk8Cs5tRiiuJI5ATtPBFMT0JilNwPUfnWbqWqrtCWxIyMkg9Kymvpy2fNcfRjVIhyR0+3PSjZXM/2ndAYEh/76P+NI+qXTLjzWH0Y/40yedHSO0cf33VfqcVTk1GBW2plz/s81z73E0n+skdvqxNMVmRsqxH41RLmdIb2FRl9y/UYqWKWKdSY2Bx15rl3md/vszfU5p0dxJCv7p2XPXBxTFzHTuyRjLMB+NIWjC53rj61zL3U0n35HPpljTTPKVAMjY9NxoFzHTRyRSHCOrfQ1JsrnLS8Ns2UAJ961La5uJpAd8WG/h5pjTuXilGz2qcIdoz1o2UXKsV9lGyrHl1nPfJHv3H5kkK7e5ApksS+lW3tyT1PQfjUyESIGXoax7qV7x8vwo6Cn2V81tmOU5Tt7VRN1c1io79aTbWbJqf75Sv3dvP1rUt3SeJWRgTgZFADClIVqx5dIY6YrFfbSYqcx0mymBDijFS7M0uymKxEFrG126McYhQj5uoB57Vs3L/AGe2klxnYua4+e4NxMzycnNUiJaIqke1J+FTYUigqvpVGRD+FdH4fuvMiaBzgr0z+NYO1cVPazfZ5g8ZYEe9Ma0Z2OKrXQUxMHUsOhAGatWz/aLdJQMbqc6xr9/aM+tSanDah8kpVXbAOQGGMU+zvrixwzgsr+o/z61d1eS2a9KmNcj+IAVSlu1iZo3WOQcbcDOKpGD0Y/U5QI1mjYZk5ODWfb3E0LmVCeeDimyESYBkwAOhPH4UzBQhVf5WHPNUS9y/NqVzLtEgJC8jPaswqSN2OKtHfs7lWGNzVG7KmRGdwPXNNCZAaO1JinBeKZJYt7iaDHlg/hVuznBYyzhiD0GOKoRu2Mc/hWwdPlj0pDHtZnOdvfrSGiS+Z/7ImI2mNgcbTnHB4rkcV1VxFJb6FIs2AzZJTuDtrmDwauOwpkZHTNBFKR3zSt2qyBmPSlxTgKkWMFeeDSAhGQeKQDripCuDTBgk0xMFxzU1p8lwrDrz/Ko1A5qS3I85eKAPQcUlPIpMVmdA3FIRTsUhFMQzGaXFOpMUCGkUmKfikNMBuKAKXFGKBCYpCuadRigBmPWjFOpMUAGBikOKXFIRTEd78IP+Rk1P/sGt/wCj4a9Wryr4QjHiTU/+wa3/AKOhr1WtY7GE9y/pH/H43/XM/wAxRRpH/H43/XM/zFFUQfHbuXajHNNzk5704GvHPVHUoYjkHFNzR1pDLDXkrwiJnJUetRq2OhwfamCnCpsh6lg3k3lCPedoOacLyU4HmNj61WFOFTZFXZa84465qT7Uwj59MCqlLmocUPmZZtrnypNxyfxrct/EhSIIExjuTmubpR1qJQUty4zlHY6oavIZVd349hVa+1Y3LYPKjpWOrll56UmcVn7NI19o2i8brA459qWHVJoJNyVn7qM5quRE8zNO51y5mt5Ecja6FTgetYeeankbCfWoOK0hFJaESk29RRT1pop4qmShRTqQGnCoZSHrVtD8oqsuKsJ0rGa0NIj6UUgp2OKysaAKcKQe9Lj0pNAKKbLMIlz1NR3CFk+U4xVFmO7nmqjC4pSsaEc4lXjg1G8zByBVMPil3ZOarkRHMy0l0yH5uaa8pfqag7UqmjlQXZdhkyMZ5qQmqYkC8rQ07EVDhdlc1kTTSFQMVGJiV96gZietM3YrSMbIhyJXf1qFjzSs2ajJ9a2iiGxc03dim7qTNaJENj8kmkJpN1JnNUibi5pp5NGabWlhXHbsUhemGkNMVx5am7uxpvNIDVCFIpOO1Gc0UwFyKQgGjOKbuoEOAApeDUfNHNAEuRShsVF2waValjuWVerEb1SU1OjVlJGkWaEbU8knmqsb1ZUgrWEkbpjlbBrqpNV+02sJiO0kEsuOnPFcqFFPSRo+UOPWsZQ5jWM+U2dWlkkMBfn5Bj8zXR6eGbT4Sw/gH8hXDCXdy3Jq9aanJAvlb/3Z6jFYyp6WNY1Enc7NtoGTxTMqTgHmuQl1Jmj2qf8A61VlvJEkLqeSKhUmW6yO2d0T7xxVc3tv5gXf174NcbLdSyn52z+FMWRgRg9KpUyXWO84PSmkCsPS9Ugt4ibht7N7Yx1q02uWwyvXuGpcjL542NHAqOZ0gjMkhwo6moLfWLMwkv1H15rE1LXHmYrbr5a/XOfzFUou4nNJFyXxBbKh2DLdv84qi3iKRiBswM81jNktk9abWyijndSR19hqcd2hAGCB+daG0GuBVijZU810Gja0POWK7+56+nBpOHYuNS+jN3bikwK1oLK3nUtGQyjuDWRf6jZ2V/8AZ1Acjg8nGc+tQrPY0bsrsgurqO1jJY/MBwPWsK58SZUiFcGqOuXRe+baQVPOBzj2rGLZat4wW5yzqu9ka8uv3JJ2tjNEGtTgcvzWP1o+735rXlRlzyOkh1x14PPvW7aXi3Bb2xXArMRxVuDUXt/9XUuBcavc9DV1I+Y4NOBi7uPyrjLXxRcRSKX+cKck8DP6Vtaf41ieXZdx4DPwc/dX8qnlaNPaRZtfu+zfpThCrDIORVGXxhp6zbIgXHrgis668aNk+VCFBBH3v/rUJMbmjoRAMUfZwe9cMfEN8XB83gHgYH+FWY/Fd4kOxvmJPXj/AAquVk+0R1twn2eEvt347A4zWBea+YZHjWHHoc00+MJGsHQriXjafx+lc5cX8s5JkOSetUosmU+xek1WVs7Swyd33u9Rrqd0rhvMJFZvmGlEvrVcpnzGxda3LckFsrgcAHFZjSMzFiSSaYHU04c0WC9xpJPWkIp546U2mIZil20vUU057UxAV9KaRSn3ozTEJiilxS4piG4pMYFOoOaYBHjpjk9K1bK1upNuEwp4DZFZSHY4OM4PStC1ka7k8oEIo+br07UgR21vbIluiyLubAyc1IbeDqUIx71naPcPYt9ndkcEZB3AYrcaVpLdmQAgqeQajmN0rmXEbWVpFAPygkc9QK52+0CU/aLsSbYyzOBjsTn1qjLfT295KUfbnKngdKGupJ4QryZH0ArRJmTaKJlZcgGkVWlbHepZAignOareeVbK8VZBZW3wfm9KniZoHBVyP5Vnm5kzkmo2lduc1V0RqdjaX9s+FugY/wDazn+VaVvbQXW/yTuVTjPrXnouJAuM/pVi01W6s2JgfbnrwD/Sk12LUu53VxYJDGXY49B600aduRWz1Ga5Rdfu7p4o7mTcgkDdAP6V2VrqtvN5cSEFto4z7VDbRasyudO/2v0pP7NP979Ku3N6lqwDryfeh72KOMO7KAfejmY7IyNTsRHpdwzuMBD2rz9x8xx616Hrl/DLo86noyEKc9TXAGOtItsxnuQgGkIPenshpChFaGYwg05B8wzShDSqjbuBTEehaZZhtNhKsMYPb3rB8UXX2dRbMCpzuDA9eoptr4nurSxW2UAhQQDkf4VkXd3NeztJK24H6cVCvcttW0Mo+Y0gY5K57mnXEyzlflww6471JKQgJKhs9DnpVToowPxrRGLHzWwiiDM/zn+HFVx9aezZppqiS9aX8gZY2jV0/u4GT+NQXpBmbCbPQVCKVmYja3SgBiDP51KUOQDTIyVbIqYMS/NMQsUREg2rknpzXoEFkxs0eaLDqDnketcJbu4uD8m0DofWu+KJeeFVYziOSRGOSBzgmpehpA4nXNUEk9xblMFSVBz2rnjiprhGjmePg7WxnPWoec4NaoxbuxDyKXbnqelITjrQTnpVCHBaUmmb8dqN/wDnFACHnrSKpPIpd1GaBCZwOetTWsqxXCu4yo6j8KgL4pNwzTA9BttYsLp9sUoL4J24Pb8KtRsk0YdDkGvO7S7ltp/MgO1sEdOx6133h6VrrS1PdcKfyqHoaRdyfYKXy1Per3kORSfZ27ClcopeWvrR5S+tXPs7d1pPIPpTAqeWvrSGIetW/I/2aDb/AOx+tFxFPyhQYxVr7Of7n60eQ3939aAKnlCjy/SrXknulHkn+7TEVfI70nk+9WjFz92jy/VaAKhhIpPKNXPL/wBmk8v2NAHZ/CC3eTxNqKRjczac2B/22ir1n+zbv/nl/wCPD/GvNfgyu3xfe/8AYPf/ANGx17RW0djnnuZmm2k9vcM0qbVKEZyD3FFadFUQfEFLSUoryD1BRSikpwFIYtLSYpwqWUKBTqQUuKkYuaUUlKKQxaUUg5pfpUjHq56VIDxUIqQHikxocTSE4GTSZqGWQ5x2oSuNuwO5ZvakDU0GlFWSOBpy00U4VLGPBqQGo1p4FSykSA1Mj1AMVIKzZSLSmnVDGx6VKKyaNB1KDTHbYmTzVX7QUZucjtS5bhzWHXFx1RRx3qr1NDybzyBn2pua1SsjJu7FzSim5oFMB+aVTTScUopDJKQsKTdTc0WENLc0m6g8mmmrSJHfjTSRmmlu1MLc1aRNx+OaaTSbzSHrWiJFzRuxTTmk/GrsSKWpu45owaaQc1QDi+aaT70oXPtTWHpTEGcUuaYaM0xD/pSZpA1LuoEBPrSZ9KTNFABnFFITSZoAeTQKbyetOFFgHqamU1AKkU1DRaZbjNWY24qijYxVpJBtrFo1iyzv9qdu45qJWBFPLZrJo1uGacrUzNOUioaGmPzRmlGKMCosUNzRzTuBRmkAzmjcaXNNJANMQ7eRSbs00sKTcKdguOPNNIpc5pCaYhuKcoG4ZbFNzUbPjpVWFc6G08RPpFu8UDmUt/eOR+hrBu7yS6uZJnOC7biB61AWJpmfWnGCTuKU29BSc5ppUUAZBppY9K1sZ3DFIRS5pM0yRMYFJmlJpM5piCijgUYoAcrlTwcUrS7+vWo+aaCRTsFy0jZoY/NUSPinM/elaxVyXccU000S/LTgcj3oHcTFHNO4peMUAMCmpEyB1po68mncDvQA/PFJUbSAcVD5x3deKFETaLBpM1B9o+bk8UhuPSq5WLmROeTRgCqwuGoNwafKxcyLR9qOcVUWcjrT/tNHKxcyLANOGCeelVhOKes4Ip2Y7olK4pU3BwUOG9qQOGPFOGc8fnSA19Kv7e2Z01KFnVx98Llh+deh2sNstmqxvGYiDghhivLgSQPMGamTU7mFAi3U2zsokPFRKnc0jU5Te8XLpVtp4jtBA9yXGWQgtjB64/CuPeUMi7QFIUA066uTPLlsn3bmoDzWkY2ViJSu7jeTRinDA60hkQr8pzVECbaTaaPMA4PWmmZR3piFIPpSM2zk9Kja8A4P51WmvQy4qlFkuSLxZBHvEiZ9N3NFtrLWNws0LfOvqaxGnbJwaiMhJ5NaKC6mbqPoblx4ovbiYyPIxJ6jPWq8+u3k4X96QBxgHrWUKcvAquSKIc5Pqa/9rXE8CRzSEqpyoz7VSe+lWXtj2qqZCPrSH5uTTUUDky1HfHzfn59q0Uu0ePJxkCsHoc09Zju4OPrQ0Ck0biSLIMg4qQYHesy3lJxyD9KvI2fWoehqncldQV6iqznygccg0+Rtoqo0jdDzSEwY+vNQkU8v7U3rVIkbilKE9AT9BT1XOcnGKA+08UxEbY42596GxmnMMnI4zTMUxCjj/GniQqcgDI6VH6CmynYQc8ZxVWEWftXnMFDnjqM1c1O+f+ybWOGeQ+WpDqT0ye1YVu226JFT3ExZdtOWrEtEVWkyeaQMBk4oOD1FKQMfhVEjd4NGaAqjtT/lximAwkHrSbgKXaDS7RQIbkU8Ou3nOaacelJkUAOJBpCEJoJB7ULtPGKAEU7TkYrpfBl7KmpPbhyYyhO0njOQK5oAVpaBcNa6tHJHtzuA5HGMih7DjuemPLJHEX+XgetUrHVZJ9I+1yCMHcwxn0bFYGra5dQLLuZcMMgAH/GsW11WYaU8QchQcgZPdqyUXY1clc9E0y8kvdNinZUBcZP51aznnEf51wGm63cxWCQxtwgx3q3H4gu0IyQ2PXP+NJrUakrHaYzwDEP+BUBAerJ+dcY/iK7f+4OewP8AjTF127Dgl+nbn/GizC6O4CKP41/Ol8uPvIn/AH1WHpmspeKEkIWT0rTY+gzS1GWikWPvr+dN8uL+8n51X3nb939KbJOkS5kwo96BlryI/wDnpH/31S/Zoz/y0i/76rLi1OKW5aIDp3qG/wBahsiFUB2zyKeotBdXv0sXEMRR5D6HIHSnWWp2s0SefIkTEcl2AH865rUNQF9cmXZs9KzLi7Z1CKcBelPUhux778ILi2l8XXyW8iuVsHyVYEf62OvYq+c/2dpmfx9qKsSf+JVIeT/02hr6Mrop/Cc1R3kFFFFaEHxBQM0lOAryT1AHWn9aZThUjHUoPNNzmlpDHinZ9aYDTs1IxetLTaKQx4NKKZTl96Qx9KKQNSSP8vFKwXFZwOlRE5amHNLV2sK9x2KcBTRTgaQxwGacBTQacDUsoeop6mmA04GpZQ8VIDTSMJnvSKahoonRjUwIqsDUgqGrlIfL80ZANZrNzzV5z8pFZ8mQ3PWnBESDNGcU3nFKBV2IHA0uaZ0pc0WHceDmnggCogadnipaGOJptNJppamkK47PNNJo3UhersTcaxHamfWlc+lMzWiRIp68VICAOahZuaN3rVWJJsg9KjI5pFbninkiqQhvSkL8Up5prLVWEGfekzTScdqTdQIcR6U00p5FJmqASjdRjNBHpQIKDxQTim5pgLnmlphozQIkzjpSA0maBRYB4NSA1CKmixk5GaTRSJEarEZNVlqdD71lJGkWWlapB71WBqQPzWEkbJk3PbmlGaYGpwOe1ZlEitT6hXilL1LWpVyXGe9NbiofM29OlMeQmjlDmJiwphbNQFjQGquUm5MTSZqItSbs0+UVyffilMhHWoQ1BNKwXHMw7Uwk0UhqhDWzUecHmnEmkxlhVIkljX5OR196rsSGxUpz2NMl4wfWtOghvajNMBopWJFPXijOOabn1oPApgLnNGeKZk0ZzTsIkzQ3tTQaXdQAUuaBg03ODTAeCRUqnpUGacDzRYC2NpHTn1zTCMU1H4pGekVcV2wKhMhBpS1RnmmhNil896YTzQabiqRIfSikPSkNUIdupN1NpOtAh2aM0gFBpiFzSq5FNxRnFAFqGULy3FWVvETkjNZMkhC8VTe4Zsg9qahcTnY35NWGzgc/59qrC+ypPesbzCRyaPMwKr2aJ9ozX+1gnJpr3wB46VlCY9KaXz1p8iF7Rl2W8LdDgVGLtkxiqZb1pPM5q+VEczL7XRY59qZJcNs+bqaqCQUrOCKOVBzMDMzHBNMLkmjIHNJjIyaokN/qKXcCKQDdwKPKOOaAF34o3ZzgUmwUoQgZNACbqcGpOnSk3UwJMZo2d6ZuFODcUATRSbCK0I5eM1lJw2as/aMDFRJXKi7FuV889qiIFQpcZHNSBg1K1ir3DpQB3oNA4oATFIRTiaaeaYhWkyoHemZxR/Oopc9O1NIRIJ0J6duOaZMyOmO/aoiaTBrQkaPkOQ36UM4OOcmlZcnOaTYMdaBDO/PSjqT6U8r6U3ZTAT2oxxkU7bS4oEMUZNSBBikU4NDOCaAGsh/hqMgjtUu7mmEEmmAzBpwXA5pSKZigQ4AY5NKGKOCnY5FNx607bjoeaYDppprgfvGyBSxOFjZT0NQc7uaKANOzmRcqD1q0X9KwuQwPetGCfMYDeuKhrqNPoWS7UeaTUTP83tS5DDIpDLEE8kMqyRnDKciuk0/xCXUC8PI74/wFcqlTL060mUnY7t9V09EDPPg46bG/wrn9W1VbmYrbvmNfunBHp61hswWo2lC9KXKNyLwv5bcMVbBZSpOPWqElyzSEsc1FLLu71GDnrVWIbJnuTj0qAt70hxTcDPFOxJ69+zgc/ELUf+wRJ/6Ohr6Tr5q/Zw/5KJqX/YIk/wDR0NfStbx2MpbhRRRVEnw8DTwaYBTq8o9MdRkdqSn7flpFAKKQUtSMXNOHNNp68CkMcKCOaMik3VIDhxRuyeabmkzRYCQsDUZbmmlqTFUkK47NLmkFKKBjwaUGm0tSUPzThTBTxUsaHgilHWmCpF5qLFEzDKU1eKQE0dKTKJM1Ir8VCDS7sVNh3HOapylQ3fOamncheKpsctVKJnJjy4K4FJv4qPODRuq7E3JM0mabmnAilYLjxS7qZmlLc0rDuOJzTCcDigtmmE00hXF30mQaYTRmrSJBzTc0mfekLCrsTcDnrSZozSYHrTsK4ucGn5pgFBNUkIfml3etQ5IozVCJTzTGGKQNQTmmAZPagcUzcKaZeaBEhNGai8yjfk0ASZpCRUbsaYHIpiuT7hR9KgMmacjetAEtLTaUGgB2aniHy1Aoy1Tl9tBSF5DYqVWqHzM80okrOSKTLJmWNRmp0IIBNZLymRsHtUzXDKu1KycS1I0g6knnpSJdIWKjqDispZHDZJP50of5s5xUezK9oa/mGmlyRVL7QzDC0qyOWAap5Suct5pM03dSZqSh2c0nSkzSZzTELSZpc0h4pgITTg1MznrQTTsIfvpN1NzSGiwD+KXrUW6gGnYVyTGFqNulODetIelUBD3pTTmXaKYTTJE96XtQAfwpwwPegQmBigLSn2pCCBQAbaMCkzij6UxClfSm9KcM0jYzyaaAM0VC8wXpTDdVfKLmRbV8cUF171T88mmmX5qfILmLbSAVCbgfhUDSHpTGYU1FEuTLYmUjOaQzJVIH0p4BNPlQuZlsSKehpRzzVIkhuOKkS4I4NHKPmLOKDjoetV2nPamGVj1o5Q5i1mjFUxKQOuaekx70crFzFjpTWOFqFpwe9R+fg88inysHJDZpstxxUWcmlmKscios4rRIyY8hfSmk56U0knvSbTnmmICaTcaUrilCetMQnUUhU7uKdwOlGcc0ANZSKADinZzSZ9KAFCingCmr0560u00AKAA3ApS3NIF96AefWgB6qpHzUhPHt6Unam4pDEbHbI5pgAB4NONJgUxCdelOC/LRkU4MMc0wE6UZPYU7g04ADpQA1QamV9oqPNGRQBOHzTwKrqcVOrjAzUMpMUjnikp/BFBAA5pFDNvtUErAqMc1YdwMYNUu+O1aIhiY5oZ8DHahqjJOeelUSOLUgOTxTM+lCk5pkkp96UAYqIv60bqQxzHFIHG3rSEh6YRj3piHb/Skzk0zk0vApiHgZHSkbdninBhjilzQMYY2+p60bT71JuxSbvagCMqaQq+M1Luz2oJyKLgV+QeamXGOgpjY9Kd2pgKQrMKn4TYFHcGq3NP8wgqT06UCLjn5CTQrNsGOlRk7lGORT1O1BmptoMduYc04SsFpm7nmkbH4UguPMnc1GZCRzTSc00807AKTSim9adnAoAQikOaUmlFAHrX7N/8AyULUv+wTJ/6Ohr6Vr5s/Zx/5KJqP/YIk/wDR0NfSdbR2MpbhRRRVEnxAc9DQB6inBs96U8ivLPSEBA7U/IqKnj7lIoOKXim0uaQx6/WnVGDTs8VNgHdaQimUoPHvRYY48VGxOaGam8mmkJsWnKCe1IKcDimAfhThnNANLk1IxaeBx0poJqQHIqShAOafikGRTs1JQdKevSmDk0/NSNDxmlpuaXPtSKFpGbGaN+KY7549aSQNkcu4Lyciq5bFSSvu6npUPU1okZMAaXNNpQTimIcOaXNMBxSilYB+aCc0wmk5PSiwx+cU0nmmk880hOKaQhSaYT60ucikPSrSJEJppOaTNGeKqxIZpw5qOnKcU7CHE0fWjJpKpCFxmk2mjpRmmApAHWl3DFMPIqFhg8GgQrvUYY0h96QmmIcWpA1FJjNAC5zR+FAxRkdqAEoBIp1IR6UwH7zQH+bNM5pM+tIC3FIO9OJz3qmr4NSb9x9qQ7lkU7OKgDgU7eNtSyrjt+SaC2TzUfbNLuqbASZ2nINKWyaZQOKVhkgBHNPVyOtRA08AEdealootxS7hSmYBsdapgkdKcGxUcpXMWw6k4p+Kpg4OasKxYZqLFJjyaTNJg0hBosMXNJSZpc46VSAQk0maXdS4BoENooZSKbyKYDs0oamA0opiHuQVpmMD8KXIozTAYTSZobg02gQ4NShu1R0op2ELznik3etLjnikYdzQAoaoJ/lOc9alBpJE3If61UdxMpFqaWFOZTmmYNaoyFDelG6kxSEUwHbqM7qaATUgwtAhFTBzTt+DRvzTcgmmA/cDSYHamkmlAoACvFN+6Oac3SoWyeKBCu/HFRPI1Id2elMcnNUkSBkIpDJkUn1pDjNUIXJNKMmjae1GD3oAcAMe9OJHfmmdqcDx1oAMmkPNG7mkJ9KAAjFGQKXORzTD14FAhxYUD5qARgZoLCmAtOzjvUW45o5J5pASEn1peMe9RjnpS7T3oAeDTgdwqLJC+9OVmzQA5hyAKQRk9KGJ69aXcSOKAGleabt55qUUbBnmgCMZFLk96k2jFIEzSGJuzSj6UuMDPQ0m73yaAHgVIseeTVbzKcJveiwFwcJ+FQ+YWJyPamrN2ocjqKEh3GSHtmovu8GlfJ61CT6VaIbHyMMYqPd60GmkHtVEi59KUGmZoDY7UAOfNA4pNwIpM80wFpfrSbqQmgQ7tTDkml3UBsGgBVyOtPzmm5BFJ070AOLYpN3FJkGg89KAFJPelXBHNMJ9aVQAOKAFJ/Gk5K04YpCRQAZ9TimEmnFhjikBDGmA7cQMCnJKQcVGTQMUxF3jbxSrjFQo25aeD6VIxWJzgUm00oOTz1p2ccUgG4I60hoaTHUik30wAjFKKb5maUMKAPYf2cwB8QNQx1/sh/8A0dDX0jXzX+zg+74iakP+oRJ/6Ohr6UrWOxnLcKKKKok+Hwp7U8A0wNinhs9K8s9IXyyVJzilwRHxz64pQcjBp6DaMdc0DIaKlG0DAprIMjbUjG9KCcU4r6U0ox6U7AJmkJxSE4NMOTQkK44HJ5pymmoKWmA8GlzTRzTh70ihQacKbinAe9SMepFOBFMFOqGMcDTgajpRUsaJVNPBzUQNKDSKRJzTs1FuNBekO45jUTOBSs1Qs3NUkS2MZs0wGlbrTauxmOz6UZpAMUGlYYoPrSg0gFGRQApNKpxTCaUHinYAbmm80pbIpufWqQgzimkk0NxQeRTJG4pDxS570vWqEMpwoAp2w0xDc0bqCpBpMGmIXfRuptH8OaYClgOtQyNzwaRsk8c0NEwXLcUCG0360EGpUg3HmmIj+lLkipJkVcYPaomxQAZo702pFA70AJmgNxStTOaAHhuaMZphNAOKAF2HPFOAIo3Z6UoJpDFU881IOaAoxkUhPakA78aaDzSbqAeKViiUMKfxxUANGTSsMmxz1pd2KiVzmlJqbATCTikLVGGpSaViiUOcYqaKUg9eKqA1IrVLiO5elk/dgr+lJE4cfN1qFXB4NSrgfdqLFXHlcemKaxoNMJ5oGOyKQNzTc80DOaYEm6jIbrUeeaXOaBCsvpTacDmmnrTAKUE02lANMBW/OmEYp5U00jHWgQw0maf8tNPHSmIA2KXJIqPJp6c9aYChe5qOWTHGKmPC1Unb5qpITGMSelRkUuSTSVZmN2+9AA70uDSdaYh27FNzml25XmgYUUAIVJ6UgDDihpfSmeaadmK48uRTTKe1MZ/xpvWqsImSTPWpQVJ+aqwHvS7jilYEyWcgr8uB9KqsDUu/NJ1prQGQGlVfWpCuOgpv1qiRC3pScmlxk0ucUANxxxQCTxS5yeBSHcOvFAChKcU6Yoj5HNSZA4oAiYE+lGeelPyMcUh+XtQAxiP7tMIJ6CpN3PSnYLc4oEQ7Wpyqe9ScjnHFND57UwHIMNz0qTyg7dcVHzSiQ5xSAc0Y7GgoMccYo3E00kjrQMUKcZNLtpA7dD0pc4GTQIRlwetBalzk0hUGgBc8UBhSbAO9NP3uKBji2T61Gxwaf0o69u9AEPWjFSlR2pAtAhAeKbuO7qafsHrSFB61Qheo5qJwVPI4p33aHAI60CICaMmnMB2puRVCFIHrSGkwcZo+tMAPtSGlwTTTmgQA0u6mmkoAfnNIx9KQUDmmA4H0/Wjd2o4pDigBemKM/hTcil6UAIW4pN/FLinxqO9Ahqk1MFyvINJtFIT6GgYNHhc0wDBpWakU5agAwc0gBp9IKYiaIYSnr94UkYJTgU4Z3dKQxW+9QTQ5+ekOB1pAQyoWbINN3EVOBnJqB/vVQg5bpThkd6aCewpCTSA9j/ZrOfiLqX/YIk/9Hw19M18x/s0nPxG1L/sDyf8Ao+GvpytI7Gb3CiiiqEfDYNOAz0qt54DD0p4n44rzuVnocyLQ4HJpd1Qq+5RmnZxU2GS5yaXcO9RB6UsCKVhk2FNKCqjiqu8jvTTKaoVydmUHim5U8moSc09FLe1FhEgINLgUzaw6UqkmkUmPFOBpgpwFSVceKcKYBThUjuOJpAaQ0opDHZozSZpTzUsYu71pwNMpeakdxc0hNBqNjTSC4pOKbnmmlqAcmtEiLi+9NY5NO2++KNi+tArkfakzg05xim0gFz6UZpBS/WgdxetBIximnij60xAevFI3TikzzQcGmIB70h+7xQT2pM/LVWEJjNABFA55pSc0xC9+KM7aToKZvoAmL5HNJtzUZYdqcr4HNAhMc04/u+vcVFv+akdgwqgHrIFBx1pskxkAzUWRSE5oEKDg5p4kqLNHvTESHBPNIUGMik4o344FAxpBxkUKcHFO3HHSmqQTl/woEK3bFNKkDFSB0HSlyGoAh4FL16U4p6U3OKYCZxTlemsO9JjHNAiyHwvFMzk0xX9aeSMcUrDDNLxUeeaXNKwySlzxTAeKXNKwx4NOpgalBz0pWGLmnYoHA3EGnJIrHlQKlhcbmnA0/MZ+tJt5+XNTcfMhVYk1MjbTg1CAw9RSh6VrlJlrcMcUnWolb1qUEEccVBdxKUGk70HpTAM0o60zvSg80AO70vWmE+lKppiHBaU+lKOaQimITJxTDk0/HpSAGgBhUik5qQAg0uR6UwIGHPFLHT2UHkUxeM5piHHnvUbpk9alXpTWPNMCHy8d/wBKZ904BzVkL60eWOuKYrFcRs3JpGhPrVrvxTGA707iaKflEc9qjeMnOyrLYPeo/MRRVJshoqEN3ppHrU7srDjrURAx1q0TYZ3p2cUlLu9aYg3Zoz6038KQH2oAUH0pe1IPYUpBpiEyRSEZ707YxHFMKkE0ALnaKTdmlC5oA2v0zQAKSDU7FWQYHNAIxwMVHJuHTNADhgGkO09aj+bvTGJBosBNlR0oL1DtJGcGnKhIoEODYbirAuiItoFVdu3k04YPQ0WGtCQPsHTOaizk5oJwPWkBJ7U7CFGcUAknmgvikDEtwKAFBOeKcX9qTdz2phJNAiUNmkYnGKj596f/AA9aAAH1pwOKZn6UZwKBkwbjiioenOcUu8Z4osBOHAXBpvFRZz3pc8UWC48gYqMqR0pwOKdkYoC5ATjjvTc81Ky5OcVGy80yRc5ppNH1ppFMQHmnDZt5603FNNMCUsMcUxV3E5/nUdGfUUADdeKTbThjHPWkzTATBxzSDrS5pOtAhdwpPpSYyaXacfSmAlLupCMd6TFAC5zS9elJilUelABkg+lSLmm7d3U5p6kqMUAO2NjgU3Y1P8x9uAx+lMbPegBpRqEXHNGcUqnHX1pgBY54oGN3NLkZoUgHNAiWGUA47VOHU81RcjbxxQkm0YzSYF1lDHdmoWQk+1Al4pDN2oC4BiBjPegRktmmJ1NSh8DFPoAjphagbOas7getRuMnikB65+zQMfEbUv8AsDyf+j4a+nK+ZP2alx8SNS/7A8n/AKPhr6brSOxnLcKKKKoR8FA5PNTwqWaoAvOaniPziuJnWi0oIHNLULS7Ww3SkM+DWdmaXRNRu+aqrOc9aRJCG9afKLmLLHmmc0qsepFKCG9qAuC1KrYphG0ZzTTMcYpMdyyrE0pCjnpUCSgjng0S5ZRg8UguWUIYcc0/HtVKOQxjinec7jGetKw+YtKy5wGp2DUMFuynLc1aAYdqllIYFNLgD3p3PpSbT6UihueaXNOCH0pQh9KmwxuaM0/aR2pMHPSlYdxpNRsakIPpTCD6U0iWyM0btvSlP0pD9KuxI0uTQHwaaRQAadgHsQy0ynBSRTSpHWlYAHvQTSGkpDHZ4pC2Kb0oJ4pgBNJmkzSjpzTEHOaXimlsVEZOaYrkzHH0pvmCoTJTc07CuTF80zdxTN2elBNMQ/dQH96ZSHNMQ/dTS1NPFIaLALmjOKTvS9uaADrzS5puewo3UxDs0ZPakB4pQDmgAJPamGpVBK5NIcUAR80qtg04YzQ6+gpgPDUpwV4FQZxxTlcjqKAHdPekGDxTtwp8cW89cAUtgIjgUCp3tweUfP4UxoSq9c0uZAMxR3oQF2IFSeSfX8KG0gGZpyqzdBTxCB9408yhAFWpb7DuIiDq/FSJGuN3IWomkJOaaZS3Gal3YXLDsGGEHAFRZC9QajMpTpUTzE9KFEm5Kr/MeT+dSB8KSG/Wqe44pw3Y5qnEC4krP1NTfIf4hWcXwvBpUbuTU8oJ2NA4HIORSLN8wAqr55XA60ocFs/1qeV9Sudl3cTTsnHNQRPuNT9amxtF3Q6kzRSGgoUn1pAfSlPIpBTEPDYWk3E0jZpmcUASBsUok9aizRmmIl3A96PrUOacDxQBITjpTcfNSA00sc0wJOgpCQabn1pOpoEPyKWm4AFN34oEOOe1RnJ60E009KYEUsZC5FUmJzzV95Mdaquqls1pEiRDyaXaT0qX5RjtShgelO5JD5Z70FPSpC1IDmmITZxTWXFP5pCeKYDVFONM3Y4pSc0CDdjgUA+tMJoJxTAk4FJu9qiL84FLmgCYEUFs9eah30bqAJnZSnTFRHafSmlscUY3LkUwHlgFx0pwYKvFQYbuOKcMEUWEPJDdaVIC/CkCmKnIyauQRd6T0GiH7I4HPNNKbc8VoE4FUbkhQFXv1pJtjaRATj0pof5vT6U+FDK23sOtXNqxjgCquJIo7gW9KcoJXOOM1JcMjdBzUJA2fI2D6UCJHK47A4qIn0pSEMfX5qZ9KaExQp7VJiosnHFOH3femAhz1PSkDDHNNLHOMfrTR70CJBJT99QN04oDYNMRYD5pS1QgrSjkcmgCTeaCQTTCvvSbT60AP470h56U3JHNKCfSgQ1t2aYQamzjrQSMcigZX5o61KcVGwx0piCm5paSgAPPSl245pMjFLy30oAVWAB9aOD1J/OpVVQgz0zmmlQ/RcfjQMcsad6PJAPHP1qHnPBpyk9M0CJzGrKOMH6VAYyrY7VIFYClY71pjIQGBGKeRjrToxzyePpQfmY/WgRHgnpmlJxwxpclW44pSAy5bpQA0lcdqbml2Z6U4RqeCcUxDM08Y74p4hX1oNt3HT60ANYKR0qMr6VK6bI8ge2c1DuweRn8aAHBj6UZpR0+X8qjy2elAiRfmYjOKQsVbrmiIgHcTg9OlEnLcUAHmU4SZqIDJ4p4FAHsf7NRz8RtS/7A8n/o+GvpqvmT9mkf8XG1I/8AUHk/9Hw19N1cdiHuFFFFUI+Btxp6uR3qLNLwelcp0khlzQD60zA60p6UhjxkmrEagY5yaqrmrMGCwJzj2pMaLO1dnJwKaqhOc5FP8kNEcH6VBhguCazGSSNxwaiPrSbmozzzxRYABxTvM5pAAeKa3FFhkjHuKEJ6im9Fz1zSB9tAF+OdjgZwKT7S32jrxmqokOKEb5snrUWHc2hjgk1ICtUbSQycv0FWRLFuwME1Bpcn+UdKN69qaEBpdgzxikMUMO9NMg7UEe1NK+1AXGs26o2OO9PKYppT6VSIbIixz1prDNTeX60GM1QrlfApcVN5Pc04Re9A7kHPSpEXrxT/ACqeEwpoW4XMxutJzTpFKnkEH3qPmgdxetBGKTPpQWoEGKCfypQcnig4xzTAhkIqPipGKmo2OaokMUZ4puaQnNMBSaAeaSgCgQ8mkB96ACaeir/EKAGbSaceBg1Iyrt4qNhmgBpGaCeMUAZ6UYxTEN2nsKTv71Jkj0pRGHbJOBQBGMgU7d8pxT2VAMLmm4GOKAGhzt68Um73p2z5aEjUjLGnogECsegJH0p25tuDUyuFXGOKG8tjnBqOYRAxyKjORVlooyhKkg1AUI9D9KpNMBVyTVhSM4BqFVXbz1pxcKMD86mWoE37tR97mmh0J5qqzUwPzS5QLe35js4qMuQaYJSOhpu7LU7dxk6sWPtRwCSefSoS+BxTkZdvNFhEolDVEzANSKygmmSEFuKaQx2+mb+abuxQefrTsInjIbrUjSYqmGZfpSmSjlAnBHOeaC/PAqFX54qUFWHvSaESmMOuc801EIYc1HvK1JHIc5HNLUZZQFMHGauLkiqauyqCRVuJ1fAzz3FZM1ix4pSRSMyp1P5Uq7X+6ak0uIRnmm96lKUeXQBCaSpfJajyX7D9KYERpQpNSeS/939Kdsb+6fypiIsYpKkMbehpvlN6GgBmcdKOacYj6GgqSOAaYDc0hpdrdwaNpoEN3GkJzTgvrSxp843dKaAYPekY1I4xIwHrTCBjkUxFKRmJ9aYFZzxVpgMYVQB600hR92quRYrMjDrSBsVOQD15ppQdTVXFYZSbhTWOOnSk6r0piFL+lBbNNCGl2ZFACb8dOtIZCaXZRtxTERnNGSak2k9KChpgRdDT95pdpNKEJPtQIYxzSbSetT+WPfNIEwc4oGMWElueKnSBjgdKQzg7Q6kbT2FSi9ReQM46UtQENoR/FVV4zG2TV1bxH6jimyPGwPce9K9g0I4mjYgjg1MlwGYhe3es9xtYlc4p0cxQEAVVguXpZgqk5qj80snXrSNIXPNTQcA8fjRsG4/yvLUbT71Xldi3tVvOaa6Bh0pBYpEGk2k9KuFFAwaiOACFFVcVityKDnHNSDHO+mkEngHFMQg4704tt96Rl3dTimlWHTkUxADuNKV9DSZwPenDke9AiP5qTFTnFBAbigCHBFKKVlINGOMgUALn3pTnj0pvGO1G8jigQ/NN3H1poY7qCc9qAHeYRSGQnrSAUc0wGk5o3UE0h460ALmgNzmmE0vamAuO5p6kY5qMmkzQBMcGmkkdDUYJp2aAH5GzHekCg0q7cc0cY4oAlHAxSMD/AAnFRgn1pwGe9ADgcd6QYNLs+WiMfISeuaAEPrSyfc4NDMCR6UkvQYpiIwWTleKkgJaXLVGFY96eoZTmgC78vTFHRcVWSZlb1+tTsdxOKAILk/IFH1qtk0+4Pzjmowc0AKM0NkDNOx6GkYHbg0xCx/dzS7ctRGPlpQQGpAKBgcU4LxmmlqXf8vFBJ7D+zX/yUTUv+wRJ/wCj4a+ma+Y/2aWz8R9S/wCwPJ/6Phr6cq47CYUUUVQj4E20BSDSg5NSDha5jpAJx15p6pkYPamq1LnB4pAPMeVwKdH+7603dheKaZPlqR3LYlJXrimHO4mqyOT1OKkWTPFLlHckOKXZuPHSm5xTTNjgUWC5Lt2UjbcdKi3N3p4OaVh3HDGOaXardqbnk5pUbA5osO4mNpwadkDpTHcGmo/zc0rCuWRcMq7RwDUkBLSDaCT3qtnmrNvN5cg4qGijbA+UZFHy1Ua4ZulOF1hcEVBoTSOiKSai+1Rk4qGaYSIeKjDoByMmnYRbLpTGcdjVfzE78UeZHVWIJ94pPNBaoxJFULsu/KmiwFvdil3VDujA60b0PGaLAT+ZilEyk4qsQv8Ae/SnxBATzmhLUCvO5l5qHaaskR7eKi3A+xoGRbMUu3PWn+YgyGNA2lQQaAGbcDioJCegNXQikdaQxLTEZ3NJtOKsysFbAqDcTwelUIbtGOaUN6AUHGaARTAXaDShcU3cBQW9aBD846Um4Cmbs0gNAEm7im5zTXfceBikpgO6UuabnIpO9AiQEd6N1QliKVTuOBQA8tTkQsM9BTGiccY/WpUJjTmk32Af5ecYNIyjooOaQyA4bPNNMgBzmo1AUtxtpGYAYFRNJ82RTMk1VgJg+7g0DKv14qNDg08kHigQ8yKfrUZ3dTSKmGy1I8h59KLdgGHJpNpXmlDEU1mJqgFx78UoPGaZg7eaCaAF5NAJHFNzTkJ3c0xjl5PNIx5pCcnNKW4FIBGB60sZ4JpcjbTFbmmAM1MOSadJjrSKwxzQIcuaeretRKMt7U5gOq/iKAJSwYdKcjFelVlbn2qRWpNCLhdjGM9KBMVbcDzUKTZ+U9KU4PSosO5J5rM3zN1q3DPtXFUQwFSxS5ceoPFS4jTNUcqDntTh9arrdjG1uGxVpCrjI4rOxsncTcR3pwlIp2BnFLsFMYCUntS7z6UmwClAFADd7ego3sT0H5UrADvSDB6GgA/L8qME+n5U4Yo60CGhM+n5UvlKetLmhjhc0XAb5KelL5aelKGBpePxpp6iIniUKSRVN4yW+Wr4WkK88Ci+oFF7ZlXORiqzKVGTV26Y9CcCqLHkiqQhhpp5pc+1JxViGlRQq/yp2QaQEDpTEDDAAplObmmnNMQuKQkL1pMmkIz1pgLvz0ppkNHTpQaBCb6UMaTOaOg6UxC+Zj60hmJ5puR3pOO1AAzE896bgjk08DJ6Uu0d6YCxOozxjPrUrsmMDioQFx8wphI7dKVgJXUgZ7VGV9RTd5qXBK5piFtow82DzV9LFh90VRhYrMDV46iUTA5NS730KQPauiksMCqkkwU4XmkknmuT87fKKZFKACFTLf3s00gFSOWXlFJp/wBjkI3NxT4dQkUFX5H0AxTzcDGQaNREAtwGG6nOAq4AxSm4G3jnmkM0bIMrn8aNQKr461Hu7VISCfamMq9aokbj1pM4PFLimk4piH5JbNOUgnnrUYalB5pgSsu7kUwthcEUm+jfSAaRmm1KGHpQcUxDBS49aQ9aXvQAoxRxSUw5/WgB7Lk0xvQ0hakHNACrjdzQfalAGDk4/Cm0wFHJ5oOD0oHJwelSSQ7cbTmgCLbShW64p204zRvZaAG7qM0w5Oc0o6c0CHinhvSogcU4YPfFMCYPxikOD3qJevWpfL3H5RikFxO/FK/zYzxS+V70oXbTAIRyT6UrMDIAR3p0WAxHXNRtxcDHrQBOI13A05SMmkBpvrTEVLgZlOKSJOfmpZSfOaljJbikA9Yi3SonBViKuKflIqjIcuaAHLgr1p6rlqSJcoeaUqVPHpQBJKny5UdKgIO2pFfIwaQDI4FBJ67+zMf+Lkann/oDyf8Ao+Gvp+vmL9mgY+JGp/8AYHk/9Hw19DS+KdIt7vUra7u1t5NNVXnEnHyMqkMv94fMF45zgY5GdI7CZr0VXsLyPUdNtr2AMsdzEsqBxhgGAIzjvzRTEfCKriipaKy9n5mnOQk4FNLVZpKPZ+Yc5X3nFGc1YpaPZhzlfNOVwOldTdXVwt5MFnkAEjAAOeOai+13P/PxL/32aPZ+Yc5zoY0gPOTXR/a7n/n4l/77NH2u5/5+Jf8Avs0ez8w9oc9vNKrc10H2u5/5+Jf++zR9ruf+fiX/AL7NHsx+0Of3+ppjSV0f2u5/5+Jf++zR9ruf+fiX/vs0vZeYe0OdVuOeaeCK3/tdz/z8S/8AfZo+13P/AD8S/wDfZo9l5h7TyMIHmrMT+XyRmtT7Xc/8/Ev/AH2aPtdz/wA/Ev8A32al0b9R+18iKCbzRyMVOFpv2u5/5+Jf++zR9ruf+fiX/vs1H1bzK9t5AQPaoyB6VJ9ruf8An4l/77NH2u5/5+Jf++zR9X8xe28iLavpQUU/w1L9ruf+fiX/AL7NH2u5/wCfiX/vs0/q/mL2vkQeWuelAjUds1P9ruf+fiX/AL7NH2u5/wCfiX/vs0/YeYe18iDy19KBEvcVP9ruf+fiX/vs0fa7n/n4l/77NHsPMPa+RF5aelKiBScVJ9ruf+fiX/vs0fa7n/n4l/77NCoW6h7XyKTFEfDGoJ2Gcoa1Ptdz/wA/Ev8A32aPtdz/AM/Ev/fZo9h5j9r5GHyx96nDZUc1q/a7n/n4l/77NH2u5/5+Jf8Avs0/Y+Ye18jNWQAZzTHuPlIFav2u5/5+Jf8Avs0fa7n/AJ+Jf++zR7HzD2vkYOSTRure+13P/PxL/wB9mj7Xc/8APxL/AN9mn7LzF7XyOfJoDD1roPtdz/z8S/8AfZo+13P/AD8S/wDfZp+y8w9p5HP5pN2a6H7Xc/8APxL/AN9mj7Xc/wDPxL/32aPZeYe08jnelBOK6L7Xc/8APxL/AN9mj7Xc/wDPxL/32aPZeYe08jnaM5rovtdz/wA/Ev8A32aPtdz/AM/Ev/fZo9l5h7TyOd6UoNdD9ruf+fiX/vs0fa7n/n4l/wC+zR7LzF7TyOcpycGumtbq4a8hDTyEGRQQXPPNc3R7LzD2nkS5IAY1DIxJp1FT7HzD2nkRljTc+tS0Cn7LzD2nkRDFOV8dKfRR7LzD2gzdSjI5p1FHsfMPaBJJuUZ4qAkseKnooVK3UPaFfGB1oFWKKfsvMPaFZm9KMZqzRR7LzD2hAqAg5PSkJw1WKKPZeYe08iIsMYpnFWaSj2XmHtCHK7eKYOWqzS0ey8w9oVHXnrmmmrlFP2fmHtCoD6UuSrBh1q1WpoP/AB/v/wBcj/MUez8w9oYGctUgxj8K7uil7LzD2hwecGnhjuruaKPZeYvaHENJnpT4Wwc+9dpWDqv/AB7n/rsf5ml7HzD2hmuTu3CpY5nXHOKrUUvYX6j9oalvclpBk/WtMYIBFczRUfVvMtVrdDpiM1FLkDIrnaBR9W8w9v5GzJOdpA61XEhB61nUU/q/mP2/kblvJ5jYqwxC9a5uil9W8xe38joxKAcVHNOMYrAoo+reYe38jajnx1qVZvMkwKwKKaw+t7h7byOjAUMSTTyRjgj865mlFH1fzD23kaVzjJxVbtVagU/YW6i9t5E+00hQ1FQKfsfMPbeRLsIpdvpUVKKXsvMXtvIdtJ7UoTA4NMop+z8xe18hxK5pj47Glop+z8w9r5EYGaCB61JRR7PzD2vkRjGOtJgdzUv0oo9mL2nkR7Ae9N27fepqDT9n5j9p5EPUU3Bqeij2YvaeRGDxUZTirFFHs/MPaeRAEHFPGBxUlAo9n5h7TyICfSgH1NT0U/Zh7TyIWbKlQadHN5K4TipKKXsw9oVyxOffrSZOParNFPkF7QqA08YxU9LRyBzlfAppTjirVFHIPnKwT5eaa0RI4q3RT5A5yhtb0oHvV+ko5Bc5S4pM+lXqKOQOYpA4pd4NW6WnyBzFIFSaXgnrVulo5A5ii7gEAUw81o0UcgcxQwBSE+laFFHIHMZ460rHLdMVfoo5Q5igFB4qcWvy5DZ+lWKKOUOYprGd5qFmy59uK0qKOUOYzOaTPPNalIKOUXMZuKkjAJwwNX6Q0cocxBFGpPzD86mIHRefpRRRyj5g27earEnJqzRRyhzEEZIYmmMT5matVrT+F9btrLTrqfTbhY9TYpZDbl5zx91Pvc7lwcc54zRyhzGEkvPNOEgwa1NW0TUdC1RtN1W2NveKqMYiwYgMoZehI6Ecdqv3HgrX7e8srX7Gk0t87RwG2uYp1Zl++pZGKqVzk7iMDk4FPlFzHJSnMrYp8Jwea1r+wm028a2uXt3kUAk21zHOnPo8bMp/Or8vhLXINS0ywm0947rVUjezjZ1Hmhzhec4U57HBHfFHKHMYAaqb/erqrTwrrV94oPh21sHfVhI8RttyghlBLfMTtwADznFZUsTwTPFKNrxsVYZ6EHBo5QuZ0Zxj61JIOhq1S0coXKX0p6t8tWaKOUVz1b9mo5+I+pf9geT/ANHw19Cav4X0jXL60u9TtFmltWypPRxz8rf3lyc4Pf2JB+JaWmlYR94UV8N6r/x+J/17Qf8AolKKYFPFJRRQB6NJ8C/GlrZx3Oo29nZLJcQW4EtyGIaWVIlJ2buNzjPtnrXXWP7MOqSY/tLxHZ2/r9nt2l/mVr1LxdaeK10S3NzrWjSJ/amngCPSJUIb7ZDtOTcngNgkY5AIyM5G59j8Y/8AQd0P/wAEk3/yVQB8O0tJS0Ab13/x/T/9dG/nUNTXf/H9P/10b+dRKpZgqglicAAdaANyDQrC3sLe61/VHsTdJ5kEFvbefKUzgOwLKFU4OOSSBnGMZqaxo50toJIriO8s7pDJb3MYIDgHBBB5VgeCD+oIJ6PX9AfUJLEjUNOt9SgsoLe9sbm7SFrdo0CL8zkKSUVSVB3KxIIzWPrs9rb6Tp2i2dyl4bN5pp7iLOwySbAVQnqoEa89CS2OOSAYVaw8KeITH5g0HUymN277HJjHrnFZNdJAyJ8Ow0sYkRdZUshJG4eUcjI5o6f13sHU5uiu1n8O6bZXjtLB5lvf6lBFp4LsMQNiRm4PPyvGvOep71DcafpV++u2dnpgsG01t0Nz50jMwEwjKybjt53ZGACNvejXb+un+YHIVIsErwvMkTtFGQHcKSqk9MntnBrsNf0rw5pkepactxZC6sxsgeM3RuJJVIDCQMvlYPzfdxjjk85oaBPb2/hLXJbq1W7VZbbbE7sqE5f720hsdehHOOaV0BzVFd5L4c0e1e/1KUWsNsqWpt7a8knaJGmj3kExAuQMEDke57GpJa+HYbXV9Qs7aHUY4BbeUnmTLEjuGDrztdlBHGcHgc9ct6BvqcdRXb3Gj+HdNtY7TULmxWWSxWZps3RuFlePeoUKvlbclRg5OM8g9MzwVcRwahf+bZw3OdOuSPNLjGImJHysOD0P6Y60d/IO3nb8Tm6K6eRNM0qx0ua50aG+fUla4fdNKoiTzGQRx7WHICnlt3UenNG606w0zxrLp19NIdPt70xSyL9/yw2CeB1x6CjrYOlzGoruY/D1jNeTXl1a6baafb2TXMLwXE8lvdfvAiliC0gwW+YDDcDhc5qqdO0i51KOfTE064hhtGlvlMtxHawENtDZfErAgr8oJO48ZHFAf1/X3nIUV3M2i6Lb30l19liubY6N9uWGGWYReYJAnyl8SbTjo3PJwehrLvF0zS9LsJ5NHguZdTje4bdNKFt13sipHh+o2kkvu6j8R6f16/5MFr/Xp/mc9LBLAVE8Txl1DqHUjcp5BGex9ajrvri30/U57TTprBWnbQVmW7Mrh43SEuoAB27flwQQTyeRXA0PRtf1u1+gLZP+tgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAmtP8Aj+g/66L/ADrANb9p/wAf0H/XRf51g0AFdh4e+HV5rGi/2zqeo2Wh6UW2Jd38m0SN6KOrfhXHV6P8XvP8zw15Gf7G/seL7Ftz5e7nzfbdu698baAMnxB8OrzR9FGs6ZqVlrmlBtj3dhJuEbejDqv41x9ei/CHz/M8S+fu/sb+x5ftu7/V7sjys9t27p7bvevOqAEooooAK6nUPAl5b6lcw2Oq6HeWsczpDc/23ZR+cgYhX2mbK5GDg9M1y1eq+J9Q8b3Pi7WJ9G8axrp0t9O9qI/FtvGoiMjFML542jbjjAxQBxVz4at7G8tba71myEkunz3crW88dwkMqCYpBvjcqWfy078eaODjnn69f0vxbr+heKNJuYtRsNU1iPwxeJeTXN0L9R5ctzchS8cnLFI0A+Y4DDjtXkNACUCiigAr2e2+CNtNaQysdQzIgY4uIQOR9K8Zr6zm16HSNMsRKjuZIVwF9lFeNmSxM506WGb5pX0XWx1UJ0acJVK1rK255jL+z9M8ha31xIYz0jlh3svsSCAfyrm/GvwouPBnh8apLqsV2vnLF5aQlTyDznJ9K9o/4Ti1/wCfeX9P8a5b4w36aj8L47iMEK95GQD1HDVnH+1MNOmsVFqLaWtgjVwddS9jK7Sv1Pn6lpKWvdOUSuw8IeFItTj+36lu+zhsRxA48zHc+1cfXsXgq60pNNsf7VWd7UQjK25AOffPbrXoYClCpUbmr2V7HlZpXnSpJQduZ2v2J08PaTMogj0q3fdwFWIEn+tcN4y8IDRWa6sldIQ+yWF+sTf4Z49q+oNKl8O6VCJLR7O0VlBXdIokcdeSTn8K8L8Vtc6jY6rJ5E0rXDM4VUJJJbNd1SdHEwmuXlstO551OniMJOEudy5nqtWrHklaeg/8f7/9cj/MVmMrI5V1KspwQRgg1p6D/wAf7/8AXM/zFeCfTHQV3OjaYbnQZbiFlBtYI5GjxywJAJ/AkfnXDV6T4GuY4r+0t7j/AFF9b/ZJfo64B/A4Ne7k7cZVJR3S/U8bNUpKEXs3+gzSNFuNYM4tsAwop5/iZmCqv1JP6GrOqeG/sFlJcQX9tfLDIIrlYc/umPrkcjgjIrW003Wi6bYW1rErX17qYYI5wGWJtqg+xcn8qpXzw6bY6rZpqNvczXUi+akcb/KVfJ2seOtfRe2qSqe69L6eavZ3/Gx4fsoRp6rW3/BX6Hll2oS9mVRgLIwAH1rnNV/1B/67H+ZrpL3/AJCFx/11b+dc3qv/AB7n/rsf5mvhK2lSXqz7Gl/Dj6IyqQ0UtZmgUlFFAC0UmKWgBKKKKACiiigBaSiloASgUUUAFKKKB1oAMUCg9KKQBSiigUCFoFFFIBTRRRQAUUUUAFFFFAAKKDRQAUhpaQ0wCg0UUAFFFdf8LvDGn+LvHdrpmsT+Xa7HmaJX2tPtGfLB9+pxztDYx1AtXYT0JfCXwq8ReMdLbUbEW1pZbikc97IyLMQcHYApJweM4xnIzkEDI8SeDdc8KXskGr2TqiHi5jBaJwSQCG98Hg4PsK+s7azs9I0mK3t4FtLCwi2Rxgk7EHueSffqauXtxB/ZToGWWKWP/eVwR09CDXW8P7q7nIsR7zvsfEVORGlkVI1LOxwqqMkn0rR8SR2kPijU49N2/ZEupBDsOVC7jgA+npXRfDVbOK81rULsusthpck9u0SBnR9yKXUHjcFY4PbOe1crVnY61qrnJnTr0XP2c2c/nFdwi8o7seuMZxSGxux5u62mHk8y/uz+7/3vT8a7S40rVJNSs73Q9avBBqGmG5lur6YpLbQrKVbew5C70GCOuR61NqPxJ2Rz2djbi6ja0jtzdyko0zrE0bO6/wAWdxwG6YFIZw7adepB572dwsOM+YYm249c4qtXonxCuAlrp0a67cKx0q1B04K+xht65zt/SvO6AJDbzCVYjDIJGxtTacnPTApjIyMVcFWU4IYYIrv/ABfCLj4kaHAXdFlt7FC0bbWAIAOCOh5q3Y+FdE/tjRbLU7S81GTWrmTNxHOR5KrIV29Pmb5ckn1oA81aN1VWZGCvyrEcN9KSvT7HT9E1Gx8H6LqdpPM961zbpMk2zyAbiQKwH8RyeQewrE8QnTk+GPhnydMWO6kkulNyJDklXQHIxznP4dqBnF4p0UUk0gSGNpHPRUXJNdRZaTpreC7O6NjNeanf38tpEFmKqoVYyCB3OX/WumbwhpkM+nS20bWUx1FrOdba+aRgPLZsFsDawK4IGRTA8vIIPPBor0C08P8Ah+4g0yyltrk32oaW921155xHIAxGF6EHbzXn/SgBtLSV0Xh630azs5db16SK6WCTy7bSlf57mTAOZMcrEMjJ6t90dyADnjSV2GoX2neNNNuL66+x6Vr9rGXYIqwwX8ajoAOFlUcADhwP733uQoAvaVa6fdXDjVdRNhCibgyW5mdzkfKqggZ+pA4qxqVlocVmJtH1m4upN4Vre7sfIfHPzAq7qR+IPNb3g3+3f+ET1z/hEPt39rfbLPP9m7/tHkbLjfjZ823d5Wcf7Oa6uP7b/wAIV/xcL7P/AGt5WqeX/wAJDv8AtvlfZV8nyvM/6b9M/NnOzjdQB5BRRVqwt0mkeSfPkwrvcL1bnAUe5J/n6UARQWtxdMVtoJJiOojQsf0qKuug0qS6tZJbuW1trOB/KeW6meO2jkxny0WMF5HA6lQcd+xPI0AJS19CfCq80NfC+nW/ijxBJpcCaWklrEdblsVZmvb0SMAkiBjhYwTzjArzfwR428V3fxA8PW914n1ieCbVLZJIpL+VldTKoKkFsEEHGDQBwdX9M0PUtaF2dMtJLhbK2e6uGXAWKJBlmJPHQdOp6DJpmrxWEOuX0WjTSXGnJcSLaTSDDSRBjsY8Dkrg9B9BXptv/av2eL+zfsn/AAjX/CPy+Z/Z/kY+0/2O+/z/AC/n37/Mx5vOd2KAPL4dOup4o5lhkWGWRoo5mUhGkABKBsY3YK8f7Q9ard+a9Dm8o+B7nyfs/l/2ZY+Z9n2+X/aHn/u8bePM+y7t/fduzzmuEv8Ab/aVz5f3fOfH0yaANp/CdvbJCNS8T6RYzywRXH2eZLtnRJI1kTJSBlyVZTwTjPrTf+Ec0v8A6HTQ/wDvzff/ACNXQapu8+/IknXZoemsBFrUNkM/2aq5MTgtP8rsu1MHDMv8dFxp+qT+f/xMs+b5n+s8a2L53faPvfMN3+v+bpuzN0835ADFs/B9pqV/b2On+LdEuLu6lWGCFY7xTI7HCqC1uAMkgZJA9TXMGvTdEeSTxZ4akknupHk8SwBzN4kt70Ni6kIzCgD5Bdz5pO1i7MB+8FeZGgDQ0vw/rOuCU6LpF9qIhx5n2S2eXZnpnaDjOD+VQ3Ol6hZRQSXljc26XBYQtLCyiQqcMFJHODwcdDXceB9O/tT4deI7f+xtT1j/AE2zb7Npj7ZekvzZ8uTgf7v41s/urzwt4V8Kaqv2Zrq1kezeclTbXiXMoVWz0D8o2Rwdp7UAebWvhzXL3UJ7Cy0bULi8t/8AXW8Nq7yRdvmUDI/GqE8E1rcSW9zE8M0TFJI5FKsjDggg8gj0r2Xxfp0us32pWOl2N3qSx+IZ31ay01sXDqVUQuflc7B84ztIBz0JrzHxlZw6f411a0trua8igunRZ55RI8mDyWYdTnrQBiV0V5cwN8N9ItknjNxHqN07xBxvVSkIBI6gHBwfY1ztFAHea5qMFzNf29rr0FvHdaXpsBiEQlS5ZY4tymQZ8vYQSf8AdIro9K1DTdIt9PtrmTRLO/8AJvobe0hvI7uyDyRKFmlcs+0uw2EO5GB0UE58hooA7nVLHRtT8f6LZzXWl2kbW0H9rz2jxpbCQAtJsKYjztAHyfKWziurt/EXh3X9Y07UxrUiz6b4hjulGpRR2oS2lcBkTEr7ghRSTxgEnFeNUUAezaR4o0OHxFp3iL+0LdNWv7yDTrvdIFEMUUg33BY8YeNYlzn/AJ6V5HqbrJq128bBladyGByCNx5qrS0AJWz4f0ez1RdTn1O9ns7XTrQXMjW9ss7vmaOIKFLoOsoOd3QVjV0Phz/kA+Lf+wRH/wCl1rQAGz8Hf9B3XP8AwSQ//JVF/omj/wDCNXGraJqt9dfZruG2kiu9PS3/ANakrBgVmfOPJIIIHUVz1dDZ/wDJNdZ/7C+n/wDom8oA5+kopaALmq/8fif9e0H/AKJSijVebyP/AK9oP/RKUUAUqWkooA9Gk+OnjS6s47bUbizvUjuILkGW2CktFKkqj5NvG5Bn2z0rrrH9p7VI/wDkJeG7Of1+z3DRfzDV4XS0AJRRRQBv3f8Ax/T/APXRv51c0fWDopnntrdWvyoW3uWb/j267mVf7/TDfw8kDOCILq1uGvJisEhBkYghDzzUX2S5/wCfeX/vg0ARMxZizElickk9aSpvslz/AM+8v/fBo+yXP/PvL/3waAIatR30xsV06WZlsjOJmVUBIbG3cOhPHbIFR/ZLn/n3l/74NH2S5/595f8Avg0Abd54ggl1PRhA1zJYaSI1jMoAkfDbmbbkgE9AMnhRzUGteJ7/AFaS7iaVRazz+aVEEaPJgnb5jKMuQD/ETWX9kuf+feX/AL4NH2S5/wCfeX/vg0b/ANdw2L134j1O+szb3c0UgZFR5Tbx+a6rjAaXbvYDA6nsKpR3txDZT2kcmILhlaVNo+Yrnbz1GMnpSfZLn/n3l/74NH2S5/595f8Avg0AX4/E2qxzvKLlXMkCW7pLBG8bogAQMjKVOMDBIzUFxrN9cpcpLKuy6MZlRIkRTsGEAAACgA9BgVX+yXP/AD7y/wDfBo+yXP8Az7y/98GgC8PEepjT1smmieJIjCjSW8byIhzlVkKl1HJ4B7mqmn6jdaXeC5spAkoVk+ZFdWVgQQVYEEEEjBFM+yXP/PvL/wB8Gj7Jc/8APvL/AN8GgDQtvE2qWkQjhmh2LIZY1ktYnELE5Jj3KfL5x93HQelUIL24t79b2OTNwr+YHcB8t6kNkH8etJ9kuf8An3l/74NH2S5/595f++DQBfHibVVvY7qO4SN442iWOOCNItjZ3L5YUIQcnII570L4l1NLs3CSW6lofIMS2kQiKZ3bTFt2Hnnp15qh9kuf+feX/vg0fZLn/n3l/wC+DQBeufEeq3bs1xdbi1t9lOI0AEW7dsAA4GemOg4HHFNtfEGo2eniyiljaBSxRZreOUxFupQspKE/7JHrVP7Jc/8APvL/AN8Gj7Jc/wDPvL/3waALSa5qMd0lylxiWO3+yq2xeIthTbjH90kZ61n1N9kuf+feX/vg0fZLn/n3l/74NAENFTfZLn/n3l/74NH2S5/595f++DQBDRU32S5/595f++DR9kuf+feX/vg0AQ0VN9kuf+feX/vg0fZLn/n3l/74NAENFTfZLn/n3l/74NH2S5/595f++DQBDRU32S5/595f++DR9kuf+feX/vg0AQ0VN9kuf+feX/vg0fZLn/n3l/74NAENFTfZLn/n3l/74NH2S5/595f++DQBDRU32S5/595f++DR9kuf+feX/vg0AQ0VN9kuf+feX/vg0fZLn/n3l/74NAENFTfZLn/n3l/74NH2S5/595f++DQAWn/H9B/10X+dYH0rpLW1uFvIS0EgAkUklDxzXN0ALXYeH/iLeaRov9janp1lrmlBt6Wl/HuEbeqnqp+lcfSUAdj4h+It5q+jf2LpmnWWh6UW3vaWEe0SN6serH61x9JS0AJRS0n1oAK6m/8AiV4xv9Subz/hJNVtvtEzy+RbX8yRR7mJ2ou7hRnAHYYrlqKAOhuPG2s3t7a3moT/AG26ttOn04T3LvI8kcwmDFmLZLATsAegCrwcHPP0lFABS0lTWttNe3kNrbJvmmkWONcgbmJwBk+5o3DYir068+LNvqdvbR3OmTW/2dAgMcgk38Ad9uOnvXM/8K38V/8AQK/8mYv/AIqj/hW/iz/oFf8AkzF/8VWkcPUjWhXUHzRvbR9VZmFSrRqU5UpSVnvqump1l38Y7W+szbPoJtg2Myxzh2GDnptHp61i+KPiLHr3hNNCh094kjmWQXDyjLYzxtxx19azf+FbeK/+gV/5Mxf/ABVH/CtvFf8A0Cv/ACYi/wDiqxhgOSkqKg7KXMt97W/LpsW8RTdR1eZXat02vc5eiujuvAHiays5rq50zZDBG0kjefGdqgZJwGyeBXOVpKEo/ErFRnGfwu4lb2g+IDpq/Z7jc1uxyCOqH/Crf/CtvFn/AECv/JiL/wCKo/4Vv4s/6BX/AJMRf/FV0UlXoz54Rd/Q5a/1evBwqSVvU9K8NyJq9laTK7PbyPteXB+VQSD16YCn8BXVQ6XbyX8UdxZG3eRAzxN5hWNfMZWORyDgDk/L1PpXj2neGfiDpNuYbC2aKInOwzQMAfxY4q3/AGb8TP8Anl/49bf41M6dacnJxevky6c6NOCgpLRW3Ry3jVVXxhfBAAMoePXYuaq6D/x/Pj/nkf5itm4+H3jG6uHnuNNaSWQ7mdrmLJP/AH1VDwhpl3qmrywWEXmyLAXI3BeNyjPJHqKzdOaaTT1NVUg02pLQ1q67TZcWVs8Tcoi4I7ECsz/hDte/58P/ACMn/wAVR/whuu/8+P8A5Gj/APiq9LAV6uDm5ezbv6r9Dz8ZSpYqKXtEren+Z2OqeJb7VNWg1F/LgntwPL8pcBSDuzj1JJNM1LW4tQjlaTS7OCaRtzzxBgc5yTjdgZ+lcl/wh2vf8+P/AJGj/wDiqT/hDdd/58f/ACNH/wDFV6KzJxty4dq3m/8AI4XgIu966d/Jf5mTdsHvJmQ5DSMQfxrnNV/1B/67H+Zruf8AhDte/wCfD/yNH/8AFVyniLRr/TrIyXkHlp9pZM71PzfNxwfY189UhUbcpRa+R7lOdOyjGSfzObo+lFFYmwtFFJQAUtJS0AJRS0n1oAKKKKAFopKKAClpKKAFoFFAoAO1FFJSAdQOtJS0CFo70lLSAWiiigAo+lFFABRRRQAUUUUAFJ3paSgAo+lFFMAqW2uZ7O5juLSaSCeJg0csTlWQjuCOQaiooA7LR/if4isLwtqd9c6tbNGUa3uLhvYhgTnBBA5IPGfXNZ+s+ONd1aecLqF1a2cmVW0juGCKmMbfcY69j6VztFae1nycl9DL2UOfntqFWdP1G80q8W7064e3nUEB0ODgjBH0xVaj61mamxF4u16HUZ7+PVLhbqeIQyyZGWQYwvpjgce1UtR1S91e6FxqVw1xMFCBmAHAJ44+pqpRQBYvb+61CRHvZ3neONYkLnO1F6D6Cq9FFAG2/jPxDLbxwyatcPHGFCA4O0L93BxnjArZ8MeO/wDhHrZXeTUri4SV5hD56i3Zz0JG3d1wTgjOK4uigC+ut6ilzazxXciPZuXtirf6klix2+nzEmmf2vqH9jnS/tUn2HzTL5BPyhzjJ9ug/KqdFAywuoXaW0MCXEixQSmaJAeEc4BYe/yj8q0rvxh4gvmia61a4kMMnmxkt918Ebvrgnn3rEpaYF1NY1COWGRLuVXt4jDEwblEORtHtyapUUUAJRSUUALRRSUAX9KutPtbhzqunNfwum0KlwYXQ5+8rAEZ7cgjmrGpXuhy2Yh0bR7i1k3hmuLu+898c/KAqIoH4E8Vk0lAC1Ytb2S0XEaIw81JTuB5KZwPpzzVeigDqdB+IWr+HZraSxgspPs9pNaqtxCXVhK5d3IJ+/0GRgbVAIPOeWo+lFAGxY+L/Eml2UdnpniHVbO2jzsgt72SNEySThQwAyST+NWP+E/8Y/8AQ2a5/wCDKb/4qufooAKv6XrepaKLsaXdyW63tu9rcKuCJYnBDKQeOh69R1GDWfS0AWYdRuoYo4VmdoYpGljhZiUWQgAuF6bsBef9kelVutFFAG9H401dIYonTS5/JiSJHudHtJpNiKFUF3iLHCgAZJ4AFO/4TXVP+fXQ/wDwQWP/AMZrnqWgDoovHWswTJNbR6RBNGwaOWHQ7JHjYchlYRAqQeQQcg1zhpaQ+9ACUUUUALRSUUAPilkgmSaCRo5Y2DI6HDKRyCD2Nel3F3qmt2vhzw74h1e+u4ZAdZ1OW7uGl8qHaSoBYnGIlJx6yV5jV5Na1FPtH+lys1zbi1lZzuYxDbhAx5A+VRxjgY6cUAdzaeK9TW21XXdXvZIdI1H7VFa6Uv3b2RkCAFRwUiBT5m6bVC5OcbmuWN7rfh2Xw5bFpLmyOlxvayDFvZbkK7rdu+8uC+Qvf7/3h5lZeKvEOmWH2HTtd1O0tOf9Ht7yRI+evyggc0sPivX4beCBNYvWgtkZIIZJmdIQyFDsVshTtYgEAEZ4oA7nT/EdzaeJLjVrTVJrHwppUsNqFiODepEp8uAAff34diGO0b2J7ZvxyXE2lrplrGf7In8KtfC0Vd0P2oykq4U8F/N2oOM4wvSvM9L8S65okLw6LrWoafFI250tLp4lY9MkKRk4pP8AhItb+y/Zv7Yv/I8/7R5X2p9vm5z5mM43Z53dc0Adfr/iXULOTR7DUNRGqa7p93LLcz3Ma3C2rNtUW6mQEHbtJOBtDH5emawfiBz8R/EOev8AaM3/AKGaoal4m17WY449Y1rUb+ONt8a3V3JKEb1AYnB96oXFxNd3MlxdTSTzSsXklkYszsepJPJPvQBFV3TNX1LRbprjRtRu9PnZDG0trO0TFSQdpKkHGQDj2FUqKAOytfiRqaWgfU4Y9V1a2z/Z+rXrNJPaZ+9yc78dV3Z2HkVhan4n1/WrZbfWNc1LUIEcSLFdXckqhgCNwDEjOCRn3NZVFABR9KKKALuq/wDH5H/17Qf+iUoo1X/j8T/r2g/9EpRQB//Z)**

Figure 23 - Raspberry Pi Desktop

1. **Design**
   1. **System Design**
      1. **Block Diagram**

The hardware components required to build this system are given in section 3.1 with a brief description. At high-level, the system can be described by the following basic entities.

* Microcontroller
  + - Object Detection Algorithm
    - Scheduling Algorithm
* USB Camera
* GSM Module
* Traffic Light
* API

Let us see how these components are connected to each other to form the smart traffic control system. The block diagram below illustrates the high-level interfacing of these components.

![Diagram

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD6RXhpZgAATU0AKgAAAAgABAE7AAIAAAAQAAAISodpAAQAAAABAAAIWpydAAEAAAAgAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAE1pa2l5YXMgVGVzZmF5ZQAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADNzMAAJKSAAIAAAADNzMAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMjE6MDg6MjkgMDc6NTE6MDgAMjAyMTowODoyOSAwNzo1MTowOAAAAE0AaQBrAGkAeQBhAHMAIABUAGUAcwBmAGEAeQBlAAAA/+ELImh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDgtMjlUMDc6NTE6MDguNzI4PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPk1pa2l5YXMgVGVzZmF5ZTwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAF1An0DASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6RooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKM0AFFGaM0AFFGaM0AFFGaM0AFFGaM0AFFGaM0AFFGaM0AFFGaM0AFFGaM0AFFGaKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoorC1bUrma6Gm6U6pLgNcTkZECn0Hdj2H4n3qMXJ2QpSUVctX+uW9pN9mhV7q7xn7PCMsAehY9FHuSKos+s3nM13FYof4LZN7j/gbcf+O1JaWkNlD5cAPJ3O7HLO3dmPc1PXSoxjsYtt7lE6Ur/66/1CT/t7dP8A0Aik/sa2/wCe+of+DG4/+Lq/RVXYuVFD+xrb/nvqH/gxuP8A4uj+xrb/AJ76h/4Mbj/4ur9FO77hyrsUP7Gtv+e+of8AgxuP/i6P7Gtv+e+of+DG4/8Ai6v0UXfcOVdih/Y1t/z31D/wY3H/AMXR/Y1t/wA99Q/8GNx/8XV+ii77hyrsUP7Gtv8AnvqH/gxuP/i6P7Gtv+e+of8AgxuP/i6v0UXfcOVdih/Y1t/z31D/AMGNx/8AF0f2Nbf899Q/8GNx/wDF1foou+4cq7FD+xrb/nvqH/gxuP8A4uj+xrb/AJ76h/4Mbj/4ur9FF33DlXYof2Nbf899Q/8ABjcf/F0f2Nbf899Q/wDBjcf/ABdX6KLvuHKuxQ/sa2/576h/4Mbj/wCLo/sa2/576h/4Mbj/AOLq/RRd9w5V2KH9jWw6XGoA/wDYRnP/ALPThp9xFza6rexsOgdxKv4hgT+tXaKV31CyKy6pqdj/AMf1ul7D3ltFIdfcxknP4En2rXsr+21G3E1nMssZOMqeh7g+h9qo1Qu7SeKY32kMsV5xvRuEuAOze/o3Ue44qJU4y20ZSk0dLRVPS9Sj1OzWaMFGB2yRt96Nh1U+4q5XM007M1TuroKKKKQwooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAz9Z1H+zdOeVV3ynCxRj+NycKPzNZ2nWf2KzEbtvmYl5pP77nqf8PQYFN1Z/tfiOytv4IFe5b3IG1R/48T+FW666cbQ9TCTvIWikoqhC0UlFAC0UlFAC0UlFAC0UlFAC0UlFAC0UlFAC0UlFAC0UlFAC0UlFAC0UlFAC0UlFAFCZ/wCy9Yi1BOIbgrBdDsDnCP8An8pPoR6V0yncoIrBvrUXunz2zHHmxlc+hI4P4Vd8P3pv9Ftp34doxvHo2Of1rKstFIum7OxpUUUVzmoUUUUAFFFFABRRRQAUUUUAFQ3N3b2ULTXc8cES9XkcKB+JqDVdSj0uwe4dS5GFSNersThVHuSQKxLaweWYX2rlbi8PKjrHb/7KD/2bqf0q4xvqxpGh/wAJTph/1Ruph/ehsppAfxVSKT/hKLD/AJ5ah/4Lbj/4inbqN1ackR2Q3/hKLD/nlqH/AILbj/4ij/hKLD/nlqH/AILbj/4inbqN1HJELIb/AMJRYf8APLUP/Bbcf/EUf8JRYf8APLUP/Bbcf/EU7dRuo5IhZDf+EosP+eWof+C24/8AiKP+EosP+eWof+C24/8AiKduo3UckQshv/CUaf3j1Ae5064H/slWrLW9O1CQx2t1G0oGTEx2uB6lTgj8qr7qr3llbX8YS5jDFeUcHDIfVWHIPuKXJELI36KwdH1C4hvG0vUpPNkCl7e4IAMyDrn/AGlyM+uQfYb1ZSTTsSFFFFIAoqpqGpW2mW/m3T4ydqKo3M7dlUDkn2FZf9s6xL81vpMCIegubwo/4hUYD86lySNI0pzV0jforA/tTXv+gZp3/gfJ/wDGaP7U17/oGad/4Hyf/GaXOi/q9T+mv8zforA/tTXv+gZp3/gfJ/8AGaP7U17/AKBmnf8AgfJ/8Zo50H1ep/TX+Zv0Vgf2pr3/AEDNO/8AA+T/AOM0f2pr3/QM07/wPk/+M0c6D6vU/pr/ADN+isD+1Ne/6Bmnf+B8n/xmj+1Ne/6Bmnf+B8n/AMZo50H1ep/TX+Zv0Vgf2pr3/QM07/wPk/8AjNH9qa9/0DNO/wDA+T/4zRzoPq9T+mv8zforA/tTXv8AoGad/wCB8n/xmj+1dcHLaXYkeiX7k/rEP50c6D6vU/pr/M36KzdO1uG+ma3ljktbtBloJsAkf3lI4ZfcfjitKqTT2MpRcXZhRRRTJCiiigAooooAKKKKACg9KKD0oA5cHzPFt7n/AJZ2sIH/AAJpP/iav1nR/wDI2al/17W//oUtDa/oysVbVrEEHBBuU4/Wu26UVcxjGUm+VXNGis3/AISHRf8AoL2H/gSn+NH/AAkOi/8AQXsP/AlP8aXNHuV7Kp/K/uNKis3/AISHRf8AoL2H/gSn+NH/AAkOi/8AQXsP/AlP8aOaPcPZVP5X9xpUVm/8JDov/QXsP/AlP8aP+Eh0X/oL2H/gSn+NHNHuHsqn8r+40qKzf+Eh0X/oL2H/AIEp/jR/wkOi/wDQXsP/AAJT/Gjmj3D2VT+V/caVFZv/AAkOi/8AQXsP/AlP8aP+Eh0X/oL2H/gSn+NHNHuHsqn8r+40qKzf+Eh0X/oL2H/gSn+NH/CQ6L/0F7D/AMCU/wAaOaPcPZVP5X9xpUVm/wDCQ6L/ANBew/8AAlP8aP8AhIdF/wCgvYf+BKf40c0e4eyqfyv7jSorN/4SHRf+gvYf+BKf40f8JDov/QXsP/AlP8aOaPcPZVP5X9xpUVm/8JDov/QXsP8AwJT/ABo/4SHRf+gvYf8AgSn+NHNHuHsqn8r+40qKzf8AhIdF/wCgvYf+BKf40f8ACQ6L/wBBew/8CU/xo5o9w9lU/lf3GlRWb/wkOi/9Bew/8CU/xo/4SHRf+gvYf+BKf40c0e4eyqfyv7jSorN/4SHRf+gvYf8AgSn+NH/CQ6L/ANBew/8AAlP8aOaPcPZVP5X9xpVD4SONOlj7R3M6D6LKw/pUFtq+m3kwhtNQtZ5SMhIp1Zj+ANS+Ev8Aj0uv+v25/wDRz1NRp09O/wDmJRlGdmuh0NFFFcpqFFFFABRRRQAUUUUAFFFFAHNa0/n+JNOtm+5Gstxj1KgKP/Rn8qtbqoamceM7X/ryn/8AQ4qtbq6Y/Ci+hLuo3VnatYDVtKnsWuruzEwA8+zmMUqcg/Kw5HSvKbfwpcS/Fm88ON4w8WfYYdJS8UjWZN/mGQqefTHbFD0A9n3Ubq4nVfGGkfD5dL0TUZNVv57iB/szkfaJrhkKjYTnczsXAHHrkirEvj63isbGQaHrr3t6rummrZf6RGqNtLOCQqjOMEtzkYzRoB126jdXL6V44s9a0nULuwsNRa605/LudMeAJdI+M7dpbaSQcg7sH1rynwVrIi8Iax4qbwzrFzr7reSNq6qjKcuQFBMucIAMjGBtOM8ZLiPft1G6vBvD66DafCEapqGneI9GmnW0+16pZyqk9+7yZ3I5c7l3HncAcHivVfE/jTTfCzWkF1Fd3t9esVtbCxh82ebHUhcgYHckgUJjOk3Ubqw/DniWDxJZzTRWV/YSwS+VNbahbmGVGwD05BBBHIJFa+6mBS1hvJ+xXa8PBdxgH2c+WR/4/wDoK6uNt0YNcfrx/wCJYn/X1bf+j0rrrf8A1C/Ss6nQTJKCcAmimv8A6s/SsSTl1l+3eJL24lOVsiLeFeykqHZvqQyj6D3NX99ZGnNjUtZ/6/h/6JirQ31z31Z6yj7sfRfkT76N9cv4t8Z2nhSC1R7ee/1C/k8mysLYZkuH74zwFGclj0qro/ifxNc6vb2mveDJtLguN2LuLUI7lIyFLYcKAVzjGeRkimTpex2W+jfUG+jfSuVyk++jfUG+jfRcOUn30b6g30b6Lhyk++jfUG+jfRcOUn30b6g30b6LhylPXWMOnnUIztmsM3CMPQD5l+hXI/8A1V1UEnmwq3qK5DxA3/FM6n/15y/+gGup07/jyj+lXDdnPio2jH5/oWqKKK1OEKKKKACiiigAooooAKD0opNylioI3AAkZ5AP/wCo0AcrH/yNmpf9e1v/AOhS1ynw48JaJr3hye61ay+0TJdtGrea64UIhxhSB1Jrq0/5GzUv+va3/wDQpazfhB/yKN1/1/P/AOi46quk3C/b/I6sLOUKFVxdndfqav8Awrbwn/0Cv/JmX/4qj/hW3hP/AKBX/kzL/wDFVP4y1fUdI06x/sdrVLq81GCzEl1C0qIJG2ltquhJH+8KxL/xhrHh6TUtP19rN7q3tY721vrOzfy5Y2lWN1aBpcqysR0lIIYHjBWsvZw7E/Wq/wDO/vZqf8K28J/9Ar/yZl/+Ko/4Vt4T/wCgV/5My/8AxVOfxkZ7nWINJ0TUL5dKZ4pbmNrdYjMsauYwHlV84ZeSoHvjmqfh/wAbalqfgfR9XufC+qTXt/bRym3tFg2uDErtKrNNtWMlsKruJD/d4Jo9nDsH1qv/ADv72Wv+FbeE/wDoFf8AkzL/APFUf8K28J/9Ar/yZl/+KqH/AIWJY3Caf/ZGk6rq0moWH9owxWkUYYRZAO7zHUBgSBjOT2zUn/Cf2Fyto2jadqWsLPYx6jIbGJCba3kyY2dXdSS218IgZ/kPy9Mns4dg+tV/5397Hf8ACtvCf/QK/wDJmX/4qj/hW3hP/oFf+TMv/wAVS/8ACdWP9rfZhYXxsvt/9nHVdsf2YXOdvl/f8z7/AO73bNu7jNUPHfjPUPCes6Itrb202nzCafUmlVvMjgjaFWdCCANolLnIPCHpR7OHYPrVf+d/ey9/wrbwn/0Cv/JmX/4qj/hW3hP/AKBX/kzL/wDFVT8QeM76w8daPo2lwW0tnLNHHqE0isWQzBzEsZBAziN2Oc8bePmzVzTvHlhqV9axrYX8FnftIthqEqR+TeMgJKoFcyAlVdl3IoYKSM5GT2cOwfWq/wDO/vYf8K28J/8AQK/8mZf/AIqj/hW3hP8A6BX/AJMy/wDxVRTfESwsk1BtY0vVNLFnYNqK/a4483ECnBZArsVIJUFX2MNwyBzjQt/FAa70y1v9Jv8ATrjU5JY4IrhoXI8uPeWJikcYIBxgk56gdaPZw7B9ar/zv72VP+FbeE/+gV/5My//ABVH/CtvCf8A0Cv/ACZl/wDiqik+IVl5sEFlpWqX91cXd5aQ29vHHud7aTZIdzOqqvUgswyB2JAMf/Cex2ztFNZ3moXM+rz6ba29nbIjl44zJtO6Ug8KfnJUeoUAmj2cOwfWq/8AO/vZZ/4Vt4T/AOgV/wCTMv8A8VR/wrbwn/0Cv/JmX/4qoz8QbR7Oza00fVbu/upriEaZEkQniMBIlLFpBHhTtHDnO5dua1dB8SWmu+EbXxEsU1lZXNv9pVbrYHSPkhm2MwGVGeuQDzg5APZw7B9ar/zv72Z3/CtvCf8A0Cv/ACZl/wDiqP8AhW3hP/oFf+TMv/xVYFl471i/8E+J7q8hh0/UrTS21TTxHGci2lhZ4WZXJy6sjq3bK9BnFaF78SINJhVH0fVdUaBbSK7uLNYBHFPcbRGh8yVDkl0OQCo3jJHOD2cOwfWq/wDO/vZf/wCFbeE/+gV/5My//FUf8K28J/8AQK/8mZf/AIqkufH1jbXkw/s7UZdOtrwWNxqqRx/Z4ZiwXaQXEhAZgpZUKg5yeGxVvPH6Pp2q3Fhp99BDpt2bOS+uLZHhMy3CxMip5yO+d2Qw+UDqdwKUezh2D61X/nf3st/8K28J/wDQK/8AJmX/AOKo/wCFbeE/+gV/5My//FVzeseP9dGjeO/J0u4099BZktL7bC6jEMTgMvmMWY+YWGE27SoOGyK35/iHY2VtqUuqaXqti+nJBM8EsCNJLFNIY0kQI7ZG4HKnDjH3c4BPZw7B9ar/AM7+9kv/AArbwn/0Cv8AyZl/+Ko/4Vt4T/6BX/kzL/8AFVRm+JtrarffbvDuuWr6YFk1BJIoT9khZQwmZllKsuN3CFnGxsqO/bUezh2D61X/AJ397PLLvRNP0D4s6Ra6Tb/Z4XtGkZd7NlisozliT0ArsvCX/Hndf9ftz/6Oeuc8R/8AJZNG/wCvE/ymro/CX/Hndf8AX7c/+jnrSmkqUrfzfoVjJOU6bk7vk/VnQ0UUUjlCiiigAooooAKKKKACiisXxD4w0LwpJYr4i1GLT1v5DFBLNkRlwM4Zui8d2wOOtAGbqpx4ytf+vOf/ANDiqxuqnqcsc3iuylhdZI5LGZkdDkMC8RBB7irGa64fAi1sSbq4G0P/ABkLqJ/6l6L/ANHmu6zRmqsM4TxIob44eCyyg7bS+IJHQ7F/xqDx/wCI7rT/ABjpumX+tXHhzw/cWjyvqVtEpaWcNgQ72Vgny/NnHPSvQs0ZpcorHmPwikjk8UeNJILu+vYnubZo7nUE2zTL5RwxG1eCOnA4xTPAWR+z/qYxz5eo/wDocleo5ozS5QsePa/k/sx6GAP+WOn/APoyOtzxZqEXhT4vaX4o1pZV0WXSZNPNysTOtrN5u/c20HAYHbn/AAr0XNGaOULGb4d8Uab4ps5bvRXmmtY5PLWd4WjWU4Bym4AsOevStbdUeaM1VhlLXDnTU/6+rb/0eldjb/6hfpXF60f+JfH/ANfVt/6PSu0t/wDUL9Kxq9CZElNf/Vn6U6mv/qz9KwJOKsmxqms/9fo/9ExVe31m2zY1bWP+vwf+iYqt765G9We9CPuR9F+RwWtSxw/H/wAOPe8RyaVcR2jN087dlgPfZ/MV6Jvrn/EvhnS/Fenpa6vE58mQSwTxOUlgcfxIw5BrO0jwNBpeqW9/ca9r+qy22TCmoX5kRCVK52gAE4J5Oad00SoSi3puec+JhpWq+Gda13w/4b1bUWi86SPxNNfKjI6k/NHlwxRSMYVQMDGK6Dxw1xrfh74eLLeT2819qFsJbiBtsgLwNuKnseTz2zWvL8KtHexu9Oj1PWYNKumdjpsN4FgjZsklRtzgE52klc9Qa2rvwlp95a6DBLLcBdCmimtirrl2jTaN/HIx1xiq5kZKjLW5w974C0rS/iZpWjaRPf6fpWrWMz39pb3cgFyYipG5iSedwyQQSB7mp9HC+BfFXjXTPDySLp9ppKaja2TOXWKXa+Qu48BiOa7y50O1uvE1jrkkkwubGGWGNFYbCsm3ORjOflGORTIfDtlF4ovtd3Svc31sltLG5Bj2KTjAxnJzzkmlzF+xs7rv+h5Bp2h6trXgeDVLLwhqdz4iuoBcw+ITq8KyGU/MGGZAQnbZgcds10/izTJvEPxA8D6brkk0BudOuRqEdvJs8zCIzx7l6KWGDg8jI71uw/DixtEa207W9dsdNZi39nW19shXJyQp271HsGFbV14dsrrxJpetu8y3OlxSxQIrjYVkAB3ZGScDjkfjT5iVQdrPyOS8R6Z4Z0+60rwraaFqGsvDbyTW+iW90RAkZfmWQu4GNxIG4kDOAKg+G324SeNdDtYZ9FS2mRbK0mmE/wBhaSInggkYzhgAcCuq17wfZ67q9rqy3t/pmpW0ZhW7sJgjtGTko25WBXPPSo9F8D6foMesCxvdSMmsKPtE8l0WlVghXer43BjknOTz0x0pcysP2Uue9v6scp4ItdM8L69pmn+JfDk2m+JJVeOLVhO00WouFO9vMzncwydrjjt2r1jfXIaf4HtbTWLXU7/V9X1i4sg32Uajcq6wEjBYBVXJxxk5NdRvpN3Lp03FWZW158+G9S/69Jf/AEA1pR2ni2QFtO1vRYLY/wCrjn0eWV1HoXFyoP12isfXXz4d1H/r1l/9ANdrp3/HjH9K0pbs5carRj8/0MX7D43/AOhh8P8A/ghn/wDkyj7D43/6GHw//wCCGf8A+TK6SitjzTm/sPjf/oYfD/8A4IZ//kyj7D43/wChh8P/APghn/8AkyukooA5v7D43/6GHw//AOCGf/5Mo+w+N/8AoYfD/wD4IZ//AJMrpKKAOb+w+N/+hh8P/wDghn/+TKPsPjf/AKGHw/8A+CGf/wCTK6SigDm/sPjf/oYfD/8A4IZ//kyvHfix4X+JuqfETQZfDt0Li/htXAvtLtpLGO3UvyJGaZwc+meRxg19DUHpQB5z4RtvENndXUPjDULXUNUW1t/MntYfLU/NL17E+4VR7dzZ+EH/ACKN1/1/P/6LjrRX/kbNR/69rf8A9ClrC+Fms6Zp/he5i1DUbS1ka8Zgk86oSNiDOCenB/Kqr6OHp/kdOGTlh6qXeP6nXeKtBudf0+1isb2KyubS9hvIpZrczIWjbIBQOhIPswrGvvAV1rMGpT65rEdxql9BFarPBZmKG3hSQSbUiLscswyxZz2xgDFdB/wk+gf9BzTf/AuP/Gj/AISfQP8AoOab/wCBcf8AjUcy7mXsqn8r+4x5PBs1344XX766sFEccsSCy08w3EsbrtEc0xkbzEUHIG1fmCnjGDjy/DK8uPDuhaXe6rpd+mhwtbQR32jma3ki2IiM8JmwZlCHEmcYdht5rsP+En0D/oOab/4Fx/40f8JPoH/Qc03/AMC4/wDGjmXcPZVP5X9xj+F/Aw8MzaU6agbhdO0k6YAYdnmDzFffwePu4xj8aoaN8PtT8N21lHoPiKO3ZNLt9NvHlsPN81Yd2yWIeYBG+JH+95i/dypwc9P/AMJPoH/Qc03/AMC4/wDGj/hJ9A/6Dmm/+Bcf+NHMu4eyqfyv7jmLX4ZWth4rl1a2g8PzRzag2oM17ogmvI5Gfe2y5Ei4+fJUlCVzjkAV0GreGodY1+wv7qRWgtbW6tZLZo8iZZwgOTnjATpg5z2xU/8Awk+gf9BzTf8AwLj/AMaP+En0D/oOab/4Fx/40cy7h7Kp/K/uOa0T4bDSNH021k1ia9urPVE1Ca9nizJciOMxRoeeNsYjXdznYTj5qh8P/C218PXqfY00MW0QlWG5j0UJqUYcMB/pYk+8N2N3l5IHPJJrq/8AhJ9A/wCg5pv/AIFx/wCNH/CT6B/0HNN/8C4/8aOZdw9lU/lf3HH+HfhfceHNQe/tL/Rlu/7MbTwYtE8tZsujebOBNulc7CCSwzuzxzmxYfDm60mytG0rVbK0v7TUZb2IR6aRZRCSLymiS3EuUQj5uJPvlj0OK6j/AISfQP8AoOab/wCBcf8AjR/wk+gf9BzTf/AuP/GjmXcPZVP5X9xh6F4Ek0i+067n1Y3ktnc39xIxtwnnNdSbz0bC7TnoOfapLfwP5Gt2mof2hu+zazc6p5fkY3edA8Xl53cY353d8YwOtbH/AAk+gf8AQc03/wAC4/8AGj/hJ9A/6Dmm/wDgXH/jRzLuHsqn8r+4828YeEZ7PWLJhPffZ5LnULxry1sbycRPO0eITHZyLLnaG+cuEwGBUkrjrLXQ7vxJ8KLfRL2FNC+026280NvAUC2wbBRULZj3xDG0klN+Dkrzu/8ACT6B/wBBzTf/AALj/wAaP+En0D/oOab/AOBcf+NHMu4eyqfyv7jl9R+FlnLdSz6Rql9ZtcaXdaXci7uZ77zIpUwmPNlOzYw3ADrkjvkclquiahY+Nr65gsLm7uI7mz+yWc2n3s1vfeVFEqyebFIttFhg2DMrsjKWzjaB6r/wk+gf9BzTf/AuP/Gj/hJ9A/6Dmm/+Bcf+NHMu4eyqfyv7jAuPAl3M95YDWkXQL7UDfz2Rs8z7i4kaNZt+BG0gyQYy2GYBhwRYl8Eeb4W1PR/7Qx9v1N7/AM7yP9XuuBNs27ucY25yPXHatf8A4SfQP+g5pv8A4Fx/40f8JPoH/Qc03/wLj/xo5l3D2VT+V/cYGqeBLnUF8VW0WrRQ2PiNQ7xmzLSQTeVHFuD+YAV2xfd2g5P3scVY8ReCP7f1K+u/7Q+z/a7O2tdnkbtnk3Bm3Z3DOc7cduvPStf/AISfQP8AoOab/wCBcf8AjR/wk+gf9BzTf/AuP/GjmXcPZVP5X9xk6z4J/teHxWn9oeT/AMJFYpZ58nd9n2xum77w3ffzjjp1rqIk8uFEznaoGfWs3/hJ9A/6Dmm/+Bcf+NH/AAk+gf8AQc03/wAC4/8AGjmXcPZVP5X9xx/iT/ksmjf9eJ/lNVrRfC9hq4urm6uNVjf7XcLi01e7tk4mf+CKRVz74rN1i/tNQ+L2kS6fdQXUa2bKXgkDgHEpxkd+R+ddV4R/487n/r8uf/Rz1VP+FL/F+hri01Okn/J+rG/8IHpH/P54g/8ACj1D/wCP0f8ACB6R/wA/niD/AMKPUP8A4/XSUUjmOb/4QPSP+fzxB/4Ueof/AB+j/hA9I/5/PEH/AIUeof8Ax+ukooA5v/hA9I/5/PEH/hR6h/8AH6P+ED0j/n88Qf8AhR6h/wDH66SigDm/+ED0j/n88Qf+FHqH/wAfo/4QPSP+fzxB/wCFHqH/AMfrpKKAOb/4QPSP+fzxB/4Ueof/AB+uF+JvwRPjOHSrTRtUu7aOGdnuptR1K6vNqbcDYksjDdn/AHfrXr1FAHk/hnwDp3w71C10vS7q8uVa1meR7mYsC2+LJVPup+AyeMk4FdZmo9cOPF1p/wBek/8A6HFRurtp/AjRbEmaM1HurI8WahcaZ4M1q/spPLubXT55oX2g7XWNipweDyB1qxm3mjNYnhO/uNT8F6Jf30nm3N1p8E0z7QNztGpY4HAySelUfC+qRHSdVurvxGNVhtr6cSXMtuLdbVUxmI9AQnPzd80hHU5ozXGRfFXwfNfQWcOpyvPcnEKrY3BEnup8vBHuOKwrDx3YaB448Yx+J9aeK3jurdbSCRnlKjyct5cagkDucDHrS5kFz1DNGa5fU/G2l2/gefxJp10l3a+SzW8kcbyK74OAQoyPmGDnGOc4qPwL41t/GGg20+SL8W8cl3GttLHGrsOQjOMMMg9CfrTur2A6zNGaj3UbqdhlTWT/AKDH/wBfVv8A+jkrt7f/AFC/SuF1c5s4v+vq3/8ARyV3Vv8A6hfpXPW6ESJKa/8Aqz9KdSPyh+lc5JwEbbdY1j/r8H/omOrHmVSvM2fiW9ikGBdMJoz2YhQrD6/KD+NP8yuKTtJn09GKlSi12Ra8yjzKq+ZR5lTc15C15lHmVV8yjzKLhyFrzKPMqr5lHmUXDkLXmUeZVXzKPMouHIWvMo8yqvmUeZRcOQteZR5lVfMo8yi4chHrb58P6h/16yf+gmu807/jxj+led6m5mtDZoN0l3+5VR6H7x+gGTXo1ipS0QH0rej1PJzKy5F6/oWKKKK6DyQooooAKKKKACiiigAoPSig9KAOSH/I2aj/ANe1v/6FLXO6toXgvR/LfVLZYPOJ2YkmOcdeFPHUV0P/ADNmo/8AXtb/APoUtc74wijn8UeFYpo1kjkvNro4yGBeMEEdxXRWsqXNZO1t/kaYHmdfkUmk73s7bJszv+Lc/wCftFH/ABbn/P2ivTf+EY0D/oB6b/4CR/4Uf8IxoH/QD03/AMBI/wDCuTX+WP3Hb9Yp/wA9T/wL/gHmX/Fuf8/aKP8Ai3P+ftFem/8ACMaB/wBAPTf/AAEj/wAKP+EY0D/oB6b/AOAkf+FGv8sfuD6xT/nqf+Bf8A8y/wCLc/5+0Uf8W5/z9or03/hGNA/6Aem/+Akf+FH/AAjGgf8AQD03/wABI/8ACjX+WP3B9Yp/z1P/AAL/AIB5l/xbn/P2ij/i3P8An7RXpv8AwjGgf9APTf8AwEj/AMKP+EY0D/oB6b/4CR/4Ua/yx+4PrFP+ep/4F/wDzL/i3P8An7RR/wAW5/z9or03/hGNA/6Aem/+Akf+FH/CMaB/0A9N/wDASP8Awo1/lj9wfWKf89T/AMC/4B5l/wAW5/z9oo/4tz/n7RXpv/CMaB/0A9N/8BI/8KP+EY0D/oB6b/4CR/4Ua/yx+4PrFP8Anqf+Bf8AAPMv+Lc/5+0Uf8W5/wA/aK9N/wCEY0D/AKAem/8AgJH/AIUf8IxoH/QD03/wEj/wo1/lj9wfWKf89T/wL/gHmX/Fuf8AP2ij/i3P+ftFem/8IxoH/QD03/wEj/wo/wCEY0D/AKAem/8AgJH/AIUa/wAsfuD6xT/nqf8AgX/APMv+Lc/5+0Uf8W5/z9or03/hGNA/6Aem/wDgJH/hR/wjGgf9APTf/ASP/CjX+WP3B9Yp/wA9T/wL/gHmX/Fuf8/aKP8Ai3P+ftFem/8ACMaB/wBAPTf/AAEj/wAKP+EY0D/oB6b/AOAkf+FGv8sfuD6xT/nqf+Bf8A8y/wCLc/5+0Uf8W5/z9or03/hGNA/6Aem/+Akf+FH/AAjGgf8AQD03/wABI/8ACjX+WP3B9Yp/z1P/AAL/AIB5l/xbn/P2itXTfDPg/V7U3GnWgmiDFC3myrgjtgkHuK7j/hGNA/6Aem/+Akf+FcF8M/8AkWrj/r7b/wBASrp2dRRlGP3BUqt0ZVKdSd1beXe5taf4V0XS7xLuxshFOgIV/MdsZGDwSe1avhH/AI8rn/r8uf8A0c9OzTfCP/Hlc/8AX5c/+jnrrqRjGnaKtr/meT7SdSpebbdup0VFFFchqFFFFABRRRQAUUUUAFFFFAHGeIDjxZaf9ek//ocVM3U7xJ8vimyY9DbzKPrujP8AQ1Bur0KS9xGi2Jd1YPjpv+Ld+I/+wVdf+imrZ3VHPFFc28kFzGk0MqlJI5FDK6kYIIPBBHarcboZzfgTxBpB8EeHLNdVsjdf2bbR+QLhN+7ylG3bnOc9q4VMH4LeO1JlGdWvOYlyf9YvX/Z9T2GTXpNv4R8M2dzHcWnh3SYJ4mDxyxWMasjDoQQuQaqeKfCkes+Eb7R9J+z6c11KJmKxYjlfeGbeFwTuxgnrz3qHB2FY5XS9Xbxp4q8Obv7JsF0MvK32fVYLh52MewJGsZJC9zuxwMYrU8GW8B+KXjq7aFDcLcW0aylfmVTFkgHsCQPyFVbjwXrmuXGnR6va+HdLt7K5juTNpcbtOxQ52qWVdgOPeu9htLW3uJ7i3toYprkhp5EjCtKQMAsRycDjmlGL6hY888Iqf+EH+INnbxgJDq+pwwRIOi7BhQPqa6D4Y6rYXnw90S3tL23nnt7CJZoo5QzRnGMMAcjkEc+ldHa2dpY+d9itobfz5Wml8qMJ5kjfedsdWPcnk1DY6TpmlyTPpmnWlm853StbwLGZD6tgDPXvVKDVh2NLdRuqLdRuq7AQao2bWL/r6t//AEcld9b/AOoX6V57qJ3RQIOrXUGPwlU/0r0K3/1C/SuTEbomRJRRRXMQYXiDw/FqsPIw6nKsDgqfUHsa5J9D1yBtkdxFIo6GWEk/owr0qkKKeoqJQjLc6KWJq0VaDPNP7K8Qf37T/wAB2/8Ai6P7K8Qf37T/AMB2/wDi69K2L6UbF9Kn2MOxt/aGJ/m/Bf5Hmv8AZXiD+/af+A7f/F0f2V4g/v2n/gO3/wAXXpWxfSjYvpR7GHYP7QxP834L/I81/srxB/ftP/Adv/i6P7K8Qf37T/wHb/4uvSti+lGxfSj2MOwf2hif5vwX+R5r/ZXiD+/af+A7f/F0f2V4g/v2n/gO3/xdelbF9KNi+lHsYdg/tDE/zfgv8jzX+yvEH9+0/wDAdv8A4uj+yvEH9+0/8B2/+Lr0rYvpRsX0o9jDsH9oYn+b8F/kea/2V4g/v2n/AIDt/wDF0q6Rr7HBltgPVbds/q9ek7F9KNi+lHsYdg+v4n+b8F/kcnoPhY21x9qvHaacjBd+w9B6D2FdaoCqAKXpRWiSSsjknOU5c0ndhRRRTICiiigAooooAKKKKACg9KKD0oA5H/mbNR/69rf/ANClrA8Vf8jd4T/6/h/6MireP/I2aj/17W//AKFLWB4q/wCRu8J/9fw/9GRV0Yj/AHf7v0NMB/vS/wC3vyZ6dXHtNqviXxdrFhZa7c6NZaK0UBFlDA0txLJEkpZmmRwFCuoAVQcliSeAOwrn9Q8Jrc61Lqul6zqWi3dxGsd01j5LLcBfuFlmjkXcoyAygHBwScDHOZnFWfinxPd+KNBtYo4r6+hXV7K5Q3JtbW5a3mt0Wd8ByDtJwArEM5HAJI1F+JEQ+w6lfwXdnbLpOo3d7ao8biOS0lSORPubnIYuFYMoIGSvI26rfDzT4v7KfStR1PS59KiuEguLeZHdzOyNK8nmo4kZimcsDyxOM7SM2HwNF/wklppz6bM+gWejXllPPdSoxvpLmSJ3PytuySkhZiF+Zvl9gCrYfF+0nhvFmg025uorSO5gg0fVkvg5eVYhE7BFEb75Ix3GGJBODVnxD4i8a2N34ehh0fTLWW71c20qf2mzxXCfZpZFUObfcoypJO0EFFA3BiRsHwV9o0W50nVvEOr6pZzRLGi3JgVoCpDJIjxxI29SoILFuRzmluvBn22xgju/EGrzXlteC9g1BjB5sUgQxgKvleUF2swxs53EnnmgBnjW81KFfD9rp2ozaZJqOqpazzWyRu4QwyuQvmoy9UXnbWHqHja78DX2q6br96urC3t7W4sru6aK2ZvtEzxBJ3VQiqrJuMgUYTPBI+brfEPhxPENvYo2oXlhNYXS3cFzaeVvDhGTkSIykYc8baz28A6dNY3qXt7f3eoXjxSSarLIguUeFt0JTaoRNh5ChApydwbc2QDlbv4l6rqtnAPDKaPLdQaza2d01tqv2i2lSXBUJKITkHJVjtVlKnAbgm7rfxcs9C1i7srxdKj/ALMMKX6S6sI7gu6qzfZ4THmZVVwckpuOQBkV0V14Rk1DRvsOpeItVupUuorq3vXW2Wa3eNgy7QkIQjI5DK3BNDeEWj1abUNN1/VNOkuvLa8S3W3ZLqRFC+YwkhbaxVVU7NoIUcUARW/iXWtUvrz+xdCtriwtrmazFzcagYXaaMEE7BE2I/MGzduLdSEI6854U8Za3c+HfBV54lZUfVY3eWa2mVhOi2ry75UMA2nK/cjIwcfMwytdZZeE4tO1ua+stU1KK2nuXu5NNWRPs5mcYZ/ueZyctt37dxztqrpfgGw0yDSYPt19d2+jySNZQ3HlFY0eJovKO2MFkCscZy2epI4oApWPjy/lfSp9T0FLLT9cjkfTpVvfMlJETTIs0ewCMtGrH5XfBGPepPDPjm+1u40X+0tEj06313TzfWMiX3nPgKjFZF2KFyJAQQWyBztPFWNN8AWWnPaB9T1K9ttPjePTrW6kjZLJWUp8hVAzEISgMjOQCfU1c0/whYaanh5YJrlh4fszZ2u9lO9CiJl8LycIOmBnPFAGJ4+8R6zp95DbeG3Il0+1fWNQQRq5mt42A8j5uhk/eYIwcx9ag1nxiNJ8S3mrW8sl9py+HoLq3gSbbFK8k7Kj88LnK5bHC+uMVu3fgHw3qeuXura3pNpq91deWoOo28c4gRFwEjDL8qk5Y9SSx5xgDnNb+GcNn4NmsdCF1fyLaQ2KQXEkZ/0Zbnziqhgqs6qWVQ52HaofI3ZALUPxA1dbvUNPvfD9ouowajBpltFbam0sc00kXnEs5hXYix8k4ZuCAvTL7jx/qNpvsZ/D8Z1pNSi09rWO/wAwkyxNJHIJTGCU4w2UBGGwGwA1Lwz4KupdKudPvob3RtPtrqG60rMVjDd2067i8gFqvkbDkABgSf3gYEEV0MHgaxjaKa5vb68vV1BNRlvJ2TzJ5UQogYKgUKFOAqqvTPUkkA5nxP4t8S2Fvq402OGO+s7zSopY5LtWhiE8iK6xn7PuYMW2kvyAxZcEBSt34p8RaL4n8TXT6ZHewadpdnd3dsNTYR24AnMnk5j+diF7qgO0ZI4rqNT8F6fqv9rma4uon1VraSR4mXMLwENGyZUjIZQfm3DjpSv4NtJ4dYW7vr24l1nT47C7mcxhiiJIu8BUChj5rE8YzjAHSgDF1v4i3mmTavLZaCt5p2jRQXF3cG+EbtHKob90mw7mAycMyg4Hzc8beheIr2/12/0fWdLj068tbeG7RYrrz1khlaRVJO1drhomDLyOmGOaiuvAumXen6xZyT3Yj1i3it7gq65VY02KV+Xg465zWpHotvF4muNdV5ftVxZxWboSNgSN5HUgYznMrZ57Dj1ANGvLfhp/yLVx/wBfbf8AoCV6lXlvw0/5Fu4/6+2/9ASqpfxo/M6F/utT1j+p2OaTwh/x43P/AF+XP/o56TNL4Q/48bn/AK/Ln/0c9dlf+H8/8zzqfx/15HRUUUVwnSFFFFABRRRQAUUUUAFFFFAHKeMrGV4Yry2QvLbP5gUfxDBDL+IJ/HFYtvdRXUCzQNuRhwfT2+tegzwrPGUcZBFcTqnhWe3upLnSpPJZzl1xlH+q+vuMGumjVUfdkXF23IN1G6qJTWo+GsYJD6iVl/TaaTOsf9A2H/wJb/4iur2lPuVdF/dRuqhnWP8AoGw/+BLf/EUZ1j/oGw/+BLf/ABFP2lPuF0X91G6qGdY/6BsP/gS3/wARRnWP+gbD/wCBLf8AxFHtKfcLov7qN1UM6x/0DYf/AAJb/wCIozrH/QNh/wDAlv8A4ij2lPuF0X91G6qH/E4P/MOhH/bw3/xFWINE1bUm2XLrBCeqQ5DEf7x/pik6tNdQuh+nRnV9eiEXzW9mxZm7NJjGPwBOfcj0r0NF2oBWbo+jw6XarHEgUKMAAdK1K4Kk+eVzNu4UUUVmIKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKD0ooPSgDkG/wCRs1H/AK9rf/0KWua8Z3MNn4j8M3Vy+yGC7MkjYJ2qHjJOBz0FdI//ACNmof8AXtB/6FLUl1ZWl6qre2sNwFOVEsYfH0zXbOm6lHlXkThqyoV+eSutfxTRJ/wsnwn/ANBX/wAlpf8A4mj/AIWT4T/6Cv8A5LS//E1S/sHR/wDoE2P/AIDJ/hR/YOj/APQJsf8AwGT/AArn+r1e6On22D/ll96/yLv/AAsnwn/0Ff8AyWl/+Jo/4WT4T/6Cv/ktL/8AE1S/sHR/+gTY/wDgMn+FH9g6P/0CbH/wGT/Cj6vV7oPbYP8All96/wAi7/wsnwn/ANBX/wAlpf8A4mj/AIWT4T/6Cv8A5LS//E1S/sHR/wDoE2P/AIDJ/hR/YOj/APQJsf8AwGT/AAo+r1e6D22D/ll96/yLv/CyfCf/AEFf/JaX/wCJo/4WT4T/AOgr/wCS0v8A8TVL+wdH/wCgTY/+Ayf4Uf2Do/8A0CbH/wABk/wo+r1e6D22D/ll96/yLv8Awsnwn/0Ff/JaX/4mj/hZPhP/AKCv/ktL/wDE1S/sHR/+gTY/+Ayf4Uf2Do//AECbH/wGT/Cj6vV7oPbYP+WX3r/Iu/8ACyfCf/QV/wDJaX/4mj/hZPhP/oK/+S0v/wATVL+wdH/6BNj/AOAyf4Uf2Do//QJsf/AZP8KPq9Xug9tg/wCWX3r/ACLv/CyfCf8A0Ff/ACWl/wDiaP8AhZPhP/oK/wDktL/8TVL+wdH/AOgTY/8AgMn+FH9g6P8A9Amx/wDAZP8ACj6vV7oPbYP+WX3r/Iu/8LJ8J/8AQV/8lpf/AImj/hZPhP8A6Cv/AJLS/wDxNUv7B0f/AKBNj/4DJ/hR/YOj/wDQJsf/AAGT/Cj6vV7oPbYP+WX3r/Iu/wDCyfCf/QV/8lpf/iaP+Fk+E/8AoK/+S0v/AMTVL+wdH/6BNj/4DJ/hR/YOj/8AQJsf/AZP8KPq9Xug9tg/5Zfev8i7/wALJ8J/9BX/AMlpf/iaP+Fk+E/+gr/5LS//ABNUv7B0f/oE2P8A4DJ/hR/YOj/9Amx/8Bk/wo+r1e6D22D/AJZfev8AIu/8LJ8J/wDQV/8AJaX/AOJo/wCFk+E/+gr/AOS0v/xNUv7B0f8A6BNj/wCAyf4Uf2Do/wD0CbH/AMBk/wAKPq9Xug9tg/5Zfev8i7/wsnwn/wBBX/yWl/8Aia5T4a/8i3cf9fbf+gJW9/YOj/8AQJsf/AZP8Kt29tb2cXlWkEUEec7IkCjP0FXToTjNSk0TUxFD2MqdJPW27XQmp3hD/jxuP+vy5/8ARz0zNP8AB/8Ax43H/X5cf+jnrav/AA/n/mcNP4zoqKKK4TpCiiigAooooAKKKKACiiigApCAeopaKAIzBGeqik+zRf3BUtFAEX2aL+4KPs0X9wVLRQBF9mi/uCj7NF/cFS0UARfZov7go+zRf3BUtFAEX2eL+4Kesar0GKdRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABQelFB6UAce//I2ah/17Qf8AoUtWqqSf8jZqH/XtB/6FLVrNenD4Ecb3YtFJmjNWIWikzRmgBaKTNGaAFopM0ZoAWikzRmgBaKTNGaAFopM0ZoAWikzRmgBaKTNGaAFopM0ZoAWikzRmgBaKTNGaAFqTwf8A8eNx/wBflx/6Oeos1J4P/wCPC4/6/Lj/ANHPWGI/h/P/ADNKfxnR0UUVwHSFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFB6UUHpQBxsv/ACNmof8AXtB/6FLVmq0v/I2ah/17Qf8AoUtWa9Sn8COOW7CiiirJCivEfifaXs3xcOo6Uz/btD8OJqlsik4Yx3Z3rgdcxlxjvXf+KPGKW/w2Gt6I3m3OpxRx6ameXmmwEH1Gckf7JqOfe/Qvl2OvpEdZFDIwZT0IOQa8q+E+kR6BH4y0iRmuY7S7VJCzH96fJG85/wBo5P41q+HfFuh+Hvg3pmtWmlS2Ni6lLXTIJWnkaR5GAjVm5Ylsnn3oUrq7Bx7HoNFcto3iXxBdXMkev+EZtIj+ztNHOt7HcIcfwNtAKNz7jrzWZ4S+It/4rt7bUY/DMtpojxM1zqM12oWFlUkhUIDOoIC7hjknjAJp8yFZneUV53/ws3V7jSZNe07wVeXPh5FaT7abyNJnjXOZFgIyRxnqCRWzrHj6xsNA0rUNMtptVn1oqum2kGFecsu7knhQB1J6Uc0Q5WdXRXKWvjC+tNL1O98Y+H5dCi0+ETmRblLmOVeeFZQPmyMbSB1FY83xM1bT9Pi1rWvBd3Y+H5ChN79sjeWJHICu8IGVHI7kijmSDlZ6HRXIeKPHn/CPa5pOmWmkT6tNqsMr24tZAGZl24HIxghiSxIAA70vh3xpfarq+o6Jq+gvpOs2UC3C2zXSzRzxtkBlkAHfg8cfnRzK9gs7XOuorzH4da/4qv8AxF4gg1HTRJarrEqSySamZPsOEH7qNSnzKDjoVHJ4rS0T4ian4i1ea10jwrNNb2eoPZ3t212qJCFk27l3Abzt+YqOgwMkmkppoHFneVBeX1pp1sbjULqG1gBCmWeQIoJOAMnjkkCuKPxC1bUri8fwj4Rn1nTrOZ4JLxr2O38x1PzCJWBLgevGax/iB4jsvFnwTXWNN3rDPdW2Y5Bh42E6hlYeoINDmrOw1F3PTZL60hvYbOW6hS6nDNDA0gDyBfvFV6nGRnHSp64LxF/yW7wb/wBel9/6AtXrvxpqNxrl9pvhTw82stprBLyeS8W2jWQjPlqSDubGM9APWnzb3FY6+iuIvfibZW3w9bxVHYzMsNyttc2krbJIJPMEbg4ByVznjrx0zW14a1rVtaS4l1Xw9No0Hytama5SR5kbP3kXmNgAMqc/e68GhSTdkFmbtFFFUSFTeD/+Qfcf9flx/wCjnqGpvB3/ACD7j/r8uP8A0c9YYj+H8/8AM0pfH8v8jo6KKK886gooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoPSig9KAOMm/5Gy/8A+vaD/wBClqxmq8//ACNl/wD9e0H/AKFLVivVp/Ajil8TDNGaKKsRxDabdP8AHg372crae3hj7ObgxkxGT7Vu2bumdvOPSuY8IeE9bt/Hkei6nbSjw54YuJ7vTZXQ7J2m/wBUoJGG8sM/Q8GvXqKj2avcrmOF8Kade22ueOnuLSeJLu/3W7PGVEy+UBlSfvDPGRXM2/hjW5fgb4XS206Y6pol7FqH9nzL5by+XK5KEN0OGzg+lewUUezQcxymmeLbjxG09rF4Z1vT4xbOzz6jbCAB8YCKCcseTyOOOtZvgfQbuf4G22g38M1jc3Gnz2zpMhR4i5cZIPI+9mu9op8vVi5jynTvEWvaV4Cj8JyeC9Zl1q2s/sEbxQA2jkLsWTzsgBcYJ7/zp+oeFdW8L6P4E1Cys5NXm8MB47u1tQC8iyx7XZAfvFSOB1Oa9ToqfZ+Y+Y8+8QyX3xL8Ca7o9lomp6VvhQ28upxC3M0iuH2hScgfIBk4HNZniDxBrnjDwdL4XtPB+sWeqX0a29xLd24jtLcZG9xLnDDg4wOf0r1Sim4N9Q5jhNR0e7h+KHgySC3nms7GxuoZblYyUQ+WoXcRwCccZqb7De/8L6OofZZ/sP8AwjPkG58s+V5v2rds3dN2OcdcV2tFPkFzHnnhGS+8P+OvEel32i6myarqj3lvfxW+62EbIPvSZwCNuMdckVf+GNheadpOtpf2s1s0uuXcsazRlC6FhhhnqD2PQ12lFChYHK55X4U1TVfh1oUnhe+8K61qUlpPKbO60+3EsVyjuWUs+RsPzYO7p+lVNS8Ja1Y/A1tPms5J9VudRS8mtbVTIYy9wHKjGc7R1P17c16/RU+z0tcfNrc4vXbC8m+L/hS9htZntbe1vFmnWMlIyyrtDN0Ge2etchL4VstE8Ya/J4k8P67qVvqV615Z3mky3DqA/LRukTgqQc4JHTv0r2Oim6aYKR5V4k8OoPg7NZ+GfDmoWP2jUIrj7DKWmnP75dzsNznkDJGeB1xXquaKKajZicrhmjNFFUIM1Y8Hf8g+f/r7uP8A0c9V6seDv+QfP/193H/o56wxP8P5/wCZpS+P5f5HR0UUV5x1BRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABQelFB6UAcXcf8jZf/8AXtB/6FLU+aguP+Rsv/8Ar2g/9ClqbNetT+BHFL4mLmjNJmjNaEi5ozSZozQAuaM0maM0ALmjNJmjNAC5ozSZozQAuaM0maM0ALmjNJmjNAC5ozSZozQAuaM0maM0ALmjNJmjNAC5ozSZozQAuaM0maM0ALmrXg7/AJB0/wD193H/AKOeqmateDf+QdP/ANfdx/6OaubE/wAP5/5mlL4/l/kdJRRRXnHWFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUVkXepTT3bWembd0fE07jKxewHdvbt39KqMXJ6ETmoK7NYsB1NJvX+8PzrE/sm2k5vDJeP3a4csP++fuj8BR/Ymk/wDQMsv/AAHT/CtPZruY+2l2/H/gG3vX+8Pzo3r/AHh+dYn9iaT/ANAyy/8AAdP8KP7E0n/oGWX/AIDp/hR7Ndxe2l2/H/gG3vX+8Pzo3r/eH51if2JpP/QMsv8AwHT/AAo/sTSf+gZZf+A6f4UezXcPbS7fj/wDb3r/AHh+dG9f7w/OsT+xNJ/6Bll/4Dp/hR/Ymk/9Ayy/8B0/wo9mu4e2l2/H/gG3vX+8Pzo3r/eH51if2JpP/QMsv/AdP8KP7E0n/oGWX/gOn+FHs13D20u34/8AANvev94fnRvX+8PzrE/sTSf+gZZf+A6f4Uf2JpP/AEDLL/wHT/Cj2a7h7aXb8f8AgG3vX+8Pzo3r6j86xP7E0n/oGWX/AIDp/hR/Yulj7unWqn1WFVP5gUezXcPbS7fj/wAA3c56UVhfZLiy+fS7hhgf8e87l429gTkr+HHtWjp2ox6hCxCmOWNtssTfeRvQ/wCPcVEoNamkKqk7PRlyiiioNgooooAKKKKACiiigAoPSig9KAOKuf8AkbL/AP69oP8A0KWps1Bdf8jZf/8AXtB/6FLU2a9el8COGXxMXNGaTNGa0JFzRmkzRmgBc0ZpM0ZoAXNGaTNGaAFzRmkzRmgBc0ZpM0ZoAXNGaTNGaAFzRmkzRmgBc0ZpM0ZoAXNGaTNGaAFzRmkzRmgBc0ZpM0ZoAXNW/Bv/ACDp/wDr7uP/AEc1U81c8G/8g2f/AK+7j/0c1c2K/h/P/M1o/H8v8jpKKKK806wooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAKOsXhsdMmmQbnC4QerHgD88VVsrYWdokIbcw5dz1djyWP1NM8Sn/R7dezXUAP081anzXRTXunFWf7y3kPzRmmZozVWM7j80ZpmaM0WC4/NGa5Hxp40k8Ny6dpmkac2ra7qsjJZWQfYMKMvI7fwoo/P8yKVtP8UYLqCTULTwtd2zSKJoLSSeKVFJ5IZ8qxA9hnFIetrnd5ozXAax4s8TX/jq88L+CrbSUl061juLu61ZpCpMn3URI8E8YJOcc/mvizxh4i8KfCS/8Q6hptjDrVmUUwCRpbdszrGHBBVsFW3AHBHQ0aDszvs0ZrlfAPim48U+HXm1SCK21WxupbLUIIc7I5o2wduecEYIz6965rVPibqUXxasfDel2lpJpH2pLG8upQxk89o2kKxkED5VC5yDycUaBZ3sen5ozTM0Zp2JuPzRmmZozRYLj81QuW+xarbXicLM3kTAdwclT+B4/wCBVczWfrZxpoYdRcQ4/wC/qinboJytr2OjByAaWo4DmFfpUlch6QUUUUAFFFFABRRRQAUHpRQelAHE3X/I2X3/AF7Qf+hS1LUN3/yNl9/17Qf+hS1JmvYpfw0cMviY6im5ozWhI6im5ozQA6im5ozQA6im5ozQA6im5ozQA6im5ozQA6im5ozQA6im5ozQA6im5ozQA6im5ozQA6im5ozQA6im5ozQA6rvgz/kGzf9fdx/6OaqGav+DP8AkGzf9fdx/wCjmrmxX8P5/wCZrR+P5f5HSUUUV5h1hRRRQAUUUUAFFFFABRRRQAUUU13WNSzkAAZJPagB1FZq6lcXXzafaiSLtLM/lq304JI98Uv2jVf+fWz/APAlv/jdY+2h3/BiujRorO+0ar/z62f/AIEt/wDG6PtGq/8APrZ/+BLf/G6PbQ/pMLo0aKzvtGq/8+tn/wCBLf8Axuj7Rqv/AD62f/gS3/xuj20P6TC6NGis77Rqv/PrZ/8AgS3/AMbo+0ar/wA+tn/4Et/8bo9tD+kwujRorNN/ewDfdWSmMfea3lMhUeuCAT+GavQXEVzCssDh0YZDA9auNSMtguSUUUVYzC8Tf6i2/wCvuD/0atT5qDxN/wAe9t/19Qf+jVqTNdVL4Dz67/e/JfqPzRmmZozWljG4/NGaZmjNFguea+JrqPQPj14e1nVpBDpt9pcumxTucRxXG8uNxPTcCAPX86h+I1/4t8KXFlrWn+LmexvNVgt10xtPg2rG55HmYLHp1689a9E1XSdP1zTZLDWLOG9tJfvwzJuU+/1965rTvhR4I0rUIb2z0GLz4GDwmaaWZYiDkFVdiq8gdB2FQ4voaKceoeJfBekeKtYOqaZq8+k+INPXyDf6dOBJGMbhHKnRl5B2nBx3xXnPibxNqniT9nDxYuuSQ3N3peorp7XsC7Y7wR3MOJVHvntxx+A9O134a+EfEmpvqOr6NHLeSALJNHNJC0gAx82xhu4AHOeBV658HeHrrwm3hmXS4V0ZgoNpFmNThg45Ug53AHOee9Di2NVErHB+Jdfh+FfxG1TVrlT/AGX4h09rgL2+3QLwvoN6kfU1nroU+g/8K3XUstql9rUt/qDkctcSxlnz7jIX/gNep674b0fxNFax67YpeJZ3C3MAZmGyReh4IyOeh4PcVLqOiadqt7YXd/b+dPp0xntX3sPLcgrnAIB4PQ5FHKw9orGlmjNMzRmrsZXH5ozTM0ZosFx+az9bP/Es/wC28H/o1Ku5qhrR/wCJaP8ArvB/6NSiwm9DpLf/AFC/SpKjt/8AUL9KkrhPXCiiigAooooAKKKKACg9KKD0oA4i8/5Gy+/69oP/AEKWn5qO9/5Gy+/69oP/AEKWn17NL+Gjgn8TFzRmkorWxAuaM0lFFgFzRmkoosAuaM0lFFgFzRmkoosAuaM0lFFgFzRmkoosAuaM0lFFgFzRmkoosAuaM0lFFgFzRmkoosAuaM0lFFgFzWh4M/5Bk3/X3cf+jmrOrR8Gf8gyb/r6uP8A0c1cmL/h/P8AzNqPx/I6SiiivMOwKKKKACiiigAooooAKKKKACsnWG86a1s2PyTy4cf3lCliPx24rWrF1P8A5Denf9dW/wDRbVlW/hsT2NAHAwKXdTM0Zri5jO4/dRupma4Twt8ULfxN461Lw8umvbR26yPZXpm3LfLFJ5chUYG3DdOTkc8U029gO+3Ubq4rxr431Hw1r+gaLougLrV9rf2jyka9FsE8lFc8lWByGPp096PDHj251XxPceGvEegzaBrUVv8Aakga4W4jnh3bdySKADg9Rj+Rw9bXA7XdRurmfAPi3/hOPA9h4iFl9h+2eZ/o/m+Zs2SMn3sDOdueneujzSbs7MB+6qFk32bWbm2TiN1WYL2UsSDj8Vz+NXM1QjP/ABU7/wDXtH/6E9OnL95H+ug1ubdFFFegaGF4n/497b/r6g/9GrS5pvij/j2t/wDr6g/9GrRmuyj8HzPMxLtV+S/UdmjNNzRmtbHPcdmjNcJ8RfiT/wAIDc6TENHk1MagJ3cxziMwxwqrO2Cp3YVicZH3etdpBdQ3VpHdW8ivBKgkSQHhlIyD+VLRuxTTST7k+aM1wfgj4mR+NfEWp6fb6W9ta2iCW2u2n3faoy7IH27RtBKkjk8V3WaFZq6CV4uzHZozTc1zni/xFdaBN4fWzjhcanrMNhN5qk7Y3VySuCMN8g65HXih6CV27I6XNGabmormYw2ssqgEohYA+wp2FcnzRmua8AeIrrxX4D0vW9QjhiubyNmkSAEICHZeAST29a6PNJaq43dOzHZozTc0Zp2Fcdms/XJBHpRdtxCzQkhVLHiVegHJ+gq9mqOrn/iXj/rvD/6NWiwXJIPHekCFQbTX+nbw5qH/AMYqT/hPNI/58/EH/hOah/8AGK6C3/1C/SpK849s5v8A4TzSP+fPxB/4Tmof/GKP+E80j/nz8Qf+E5qH/wAYrpKKAOb/AOE80j/nz8Qf+E5qH/xij/hPNI/58/EH/hOah/8AGK6SigDm/wDhPNI/58/EH/hOah/8Yo/4TzSP+fPxB/4Tmof/ABiukooA5v8A4TzSP+fPxB/4Tmof/GK8w8UftFL4T+I0ml3WjXN1ojRRuGa1ltLuJiPmPlzBd444BC9fvdq9zrCfwX4el8VP4ln0uCfV2RUW6mG8xhRxsB4U+4GfegDlrTVrfXNUl1KzS4jhuLOB0W5gaFx80vVWAP8AQ9QSOav02/8A+Rsvf+vaD/0KWlr2qP8ADR58/iYtFJRWpItFJRQAtFJRQAtFJRQAtFJRQAtFJRQAtFJRQAtFJRQAtFJRQAtFJRQAtFJRQAtFJRQAtQ+HvF/hrRLea11nxDpWn3H2mdvJu72OJ8GZ8HazA4qWtPwX/wAguX/r6uP/AEc1cmL/AIfz/wAzWj8fy/yF/wCFj+CP+hy8P/8Ag0g/+Ko/4WP4I/6HLw//AODSD/4qukoryztOb/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KrpKKAOb/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KrpKKAOb/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KrpKKAOb/4WP4I/6HLw/wD+DSD/AOKo/wCFj+CP+hy8P/8Ag0g/+KrpKKAOF8UfFzwpofhi+1LTNf0TVbq2j3x2UOpxb5zkfKMEnOM9j9Kx/CHxY8O/EfVLFNIaa3v4t0k1lcJh0XYQWDDKsuSBkHPTIGa73xP4ftvFXhm+0O+klitr6PypHhIDhcgnGQRnj0rl9H8CeHPA91p9t4b0yK13OwkmPzSy/u2+855P06egrCv/AA2TLY67dRupmaM15nMY3Ob+IviVvCvgDVNTt9xuxF5Nqqglmmc7EwB1+ZgfwryHUNVtfCeg+B7/AE/RPEFtN4XmVb25u9ImhjeCYbbgl2XHLNkZ7n1r2jxB4YsfEs+lPqUk+zS71L6KGNgEklQHbvBBJAznAIq5rWk2uv6He6TqKs1rewtDKFODtYYyD2I6g1pGpGKKTR518S5tUk+Knw5l8MfYZb9hqTW/25nEDAwJksUBP3c4x3xW94a8Ja4PGk3i3xnfWU2pGz+w21rpyOILeLduPL/MzE98D+WL0HgTTobzwvdNd3003hiGWCzeWRSZFkjEZ8z5fmIUDGMc9c10+aHUVkkK5578Azj4H6B/28/+lMtei7qwvCPhiy8GeFrTQdLlnltLTf5b3DBnO92c5IAHVj26VtZqZzTk2gb1H7qownPid/8Ar2j/APQnq3mqdv8A8jM//XtH/wChPV0XerH+ujHHc3qKKK9U2MHxR/x62/8A19Q/+jFpmad4p/49YP8Ar5h/9GLUWa7aHwfM8nFu1X5L82PzRmmZozW9jlued+O7WG/+LfgC0ukEkFxHqsUiHoytbAEfka5m38QX2mfD69+HkU5PiGDUBoNqx+8YJclJuOgEO7njG0V6nqPhuz1TxNouuXEky3Wjef8AZ1RgEbzkCNuBGTwOMEfjVOTwPo0vxAi8Yukn9pxW32dRuHl9xvxjO7aSuc4x2rJwd7o3jVjZJ9Pzuzm/CWm22i/GHV9MsU2W9noVlDGP9lSQPx4rK8D+D9I+I/hqTxP4xjuL7VL66n2l7mRTYqshVY4wCAuNoPTvXotv4cs7Xxbe+IY5JjeXlvHbSIWHlhUJIIGM559a5+8+Fukz315PYarrWkQ3zmS7s9NvfKgmY/eYrg4J74Io5GHtV3tscSPEOrz/AAQ0+0k1S4Z7nW10d9RV8Stb+cV3bvXaNua0vE/gTQ/CWteDJvDyz2aSeILeOW1+0O8cp2ORIVYn5xjGR/eOe1d5d+CdBu/BY8KvYqmkrGESKNiCmDuDBuu7POe5znOTWNb/AAr0qO/06+vdX1vU7zTblJ7ae/vfNZAuf3eNuNpyCcDJ2jmlyMpVY9NNyOzb/jIbUhn/AJl2Lj/tuaTQGB+IXxIKnI3WY4/69BWt4j8C6f4i1i21b7dqOl6lbxGEXmm3HkyPETnYxIIK5JPSneG/Auk+FX1Q6W90Rqmw3Anm8w7lUqWBIzlsliSTye3Sq5Xcj2kbfI8zi1bUNM/Zs8Lw6V54k1G7jspGtpBHIEeV9wVzwpONue26tbTPDer6Z4t0S88MeCLvw5Elxs1ORtThkjuLcgg70EhLMDgg4zmu2tvAeiQ+A4vCM8ct3pkSbVM7jzM7iwbcoGGBOQRik0rwWum6hBdT+Ide1IWxJhgvb3dGpxjJCqu/AP8AEW/Op5HoW60dbeZ1OaM0zNGa2sc1x+apasf9BX/rvD/6NWrWapaqf9CX/rvD/wCjVpWC51tv/qF+lSVHb/6hfpUleYfQBRRRQAUUUUAFFFFABQelFB6UAcLqH/I2Xv8A17Qf+hS0uabqH/I2Xv8A17Qf+hS0Zr3KP8OJ50/iY7NGabmqOo6i1lJBHFbtcSTsVVFPJPHA4OTzWplKaguZmhmjNZn2zWP+hdvv+/b/APxNH2zWP+hdvv8Av2//AMTU80e5Ht4ef3P/ACNPNGazPtmsf9C7ff8Aft//AImj7ZrH/Qu33/ft/wD4mjmj3D28PP7n/kaeaM1mfbNY/wChdvv+/b//ABNH2zWP+hdvv+/b/wDxNHNHuHt4ef3P/I080ZrM+2ax/wBC7ff9+3/+Jo+2ax/0Lt9/37f/AOJo5o9w9vDz+5/5GnmjNZn2zWP+hdvv+/b/APxNH2zWP+hdvv8Av2//AMTRzR7h7eHn9z/yNPNGazPtmsf9C7ff9+3/APiaPtmsf9C7ff8Aft//AImjmj3D28PP7n/kaeaM1mfbNY/6F2+/79v/APE0fbNY/wChdvv+/b//ABNHNHuHt4ef3P8AyNPNGazPtmsf9C7ff9+3/wDiaPtmsf8AQu33/ft//iaOaPcPbw8/uf8AkaeaM1mfbNY/6F2+/wC/b/8AxNH2zWP+hdvv+/b/APxNHNHuHt4ef3P/ACNPNGaypNQ1WKNpJdAvERAWZmRgFA6knbVyxuxe2UdwE2b8/LnOMHH9Kaaew41Yydl+pZzRmm5ozTsaDs1qeCv+QXL/ANfVx/6OasnNa3gr/kFy/wDX1cf+jmrjxn8P5/5m9D4/l/kdLRRRXlHaFFFFABRRRQAUUUUAFFFFABWHq5xq2nseglb/ANAYVuVk67Ytd2uYjiRDuRh1BHQ1lWi503FCauhc0ZrGh11I18vUUaGVerKhZW+mOak/4SDTv+e7f9+n/wAK8JqadmjmszVzRmsr/hINO/57t/36f/Cj/hINO/57t/36f/Cl73YNTVzRmsr/AISDTv8Anu3/AH6f/Cj/AISDTv8Anu3/AH6f/Cj3uwamrmjNZX/CQad/z3b/AL9P/hR/wkGnf892/wC/T/4Ue92DU1c1VtTnxJIR2gjB+u5j/WqUmv25XFoslxIeAAhUfiSKv6BZSqZLq65mlO5jj8h+FdeEpzdRSa0RpBO9zdooor2DYwPFX/HnCfS4hJ/7+LVfNX/Elo11pUipw2MqfQjkfrWNaXK3Vqko4JGGX+6e4/Ou7DO8Wjx8cmqil5FrNGaZmjNdNjg5h+aM0zNGaLBzD80ZpmaM0WDmH5ozTM0ZosHMPzRmmZozRYOYfmjNMzRmiwcw/NGaZmjNFg5h+ap6mc2iAdTPD/6MU1ZzVOb/AEvVLa0j52N5smOwH3R+fP4VMtItsunec1FdTsrf/UL9KkpsS7YwKdXlH0gUUUUAFFFFABRRRQAUHpRQelAHB6l/yNl7/wBe0P8A6FLSZpdS/wCRsvP+vaH/ANClpte7Q/hRPNqfGxc1n3X/ACMmh/8AX2v/AKGlX6z7n/kZND/6+1/9DSrn8LOet8HzX5o9OoorhPH+gnVdUs79bfR9aTTbSdrjQtXcLHKjYKzo2GCSKUKhmQghmGV618+e0d3UVtd294jvaXEU6pI0TtE4YK6sVZTjoQQQR2IxXAaN4hn8T3pn0zX5tC0qxsLC7gt5oonaaOZN+bhpAzbSAE+R1OQx3E4xl6Bc6rpA/tCDV5fslx4xvbKTTvIj8pkkvJlLFivmbwxDZDBcADb1JAPWKikureG5ht5Z4kmn3eVEzgNJtGTtHU4HJxXmPhjxN4z1SSz1o2OpXFhNLci8gl+xJaQxp5gURFGNxvV0RCHBzlzheAKEGoapdah4P1ifxGNSvNQ0q8vo7cQwqtu5tw37oKoOwE7fn3nKjnqCAevyyxwQvNPIscUalnd2wqgckknoKIpY54UmgkWSKRQyOjZVgeQQR1FeZ6h4pvL/AEjQ7b+0I5l1Pwje314ihMyOIoNj8DKjLy9MA8+nGZ/bWpaXpupyaPLb2t3Do/h9Ybg2kbsDLO8bbzgM67eMFuOdu0kmgD2KivLtZ8Sa74en1XRzrV9fNFe6csd99iilu4obhmEoSOKMK7KImYfuyRuPDYArp/As2rtod7d+Ir++uEa8mNpJqVtHbSC2U4RmRY0KkgEncAe+BnAAOqqK1u7e9t1ns54riFiQJInDKSCQeRxwQR9RXjvhTxPAvjbT/EbRalGPFdxNBctPp1xFCqEj7CRK6BG/dpjCk5MxI7k17TxBrNn4d0/S9GvNTtGNhqN1EdK00XkklyLtliSQGOQIhy3JCgkffXHIB7fRXms2oeInXV7e78USaTcaBpENzIfIt2NxI0TO8s26PHlhkK4j2fdb5umJNO1fXPEN9qk15fyWVra6Ra3R01baIq0k0Ds6SF1ZioI6DB9SRxQB6MSFUljgDkk9qitbq3vrSK6sp47i3mQPFNE4dJFIyGDDggjuK8q8J2l3deJtIvTqtzAj+D7OY2kEFvHCRyDGFEWVTPzYUggnAIXAEfgq/wBY0Pwl4NX+2JLm21LQJCLV7eIJbNFAjxlCF3dAQ29mBJyAo4oA9eoryzRL3xXqd54ZtZ/Ftwo17Q21K4kSxtg1u6eThYcoQAfO+beH+7xtzkdt4J1a51zwRpWo6gyvdT24Mzou0M44LAdskZx70AXte/5FvUv+vSX/ANANcDoR/wCJLB/wL/0I132vf8i3qX/XpL/6Aa4HQ/8AkDQf8C/9CNengvhZ5mI/3hej/NGhmjNJRXoEi5rY8Ff8gqX/AK+p/wD0a1Y1bPgn/kEy/wDX1P8A+jWrixv8Jev+ZvQ+P5f5HS0UUV5J3BRRRQAUUUUAFFFFABRRRQAUEAjBoooApT6XbTnLxgn6VD/YVn/zzX8q06KAMz+wrP8A55r+VH9hWf8AzzX8q06KAMz+wrP/AJ5r+VH9hWf/ADzX8q06KAMz+wrP/nmv5Uf2FZ/881/KtOigCjDpFrC2VjGfpV1VCjCjApaKACiiigBksYljKt0IrjdS0250u9e5sV3xyHMkR6N7j0NdrTJIllXDjIqozcHdGdSnGrHlkcNHrFo4xK5gfusq7cfj0qT+1bD/AJ/rb/v6v+NdHceH7SdslB+VVv8AhFrP+4PyrrWK7o815drpP8P+CYv9q2H/AD/W3/f5f8aP7VsP+f62/wC/y/41tf8ACLWf9wflR/wi1n/cH5UfWl/L+P8AwBf2c/5/w/4Ji/2rYf8AP9bf9/l/xo/tWw/5/rb/AL/L/jW1/wAItZ/3B+VH/CLWf9wflR9aX8v4/wDAD+zn/P8Ah/wTF/tWw/5/rb/v8v8AjR/ath/z/W3/AH+X/Gtr/hFrP+4Pyo/4Raz/ALg/Kj60v5fx/wCAH9nP+f8AD/gmL/ath/z/AFt/3+X/ABo/tWw/5/rb/v8AL/jW1/wi1n/cH5Uf8ItZ/wBwflR9aX8v4/8AAD+zn/P+H/BMX+1bD/n+tv8Av8v+NH9q2H/P9bf9/l/xra/4Raz/ALg/Kj/hFrP+4Pyo+tL+X8f+AH9nP+f8P+CYv9q2H/P9bf8Af5f8aP7VsO17Af8AdkBra/4Raz/uD8qVfC9mD9wflR9aX8v4h/Zz/n/D/gnPPqjXB8rTYmlc8CRlIRf6mt/w/o32RWmnJeaQ7nc9Sa0bXSre1+4gz9KvAYHFYVK0qmnQ7aGFhR1WrCiiisTqCiiigAooooAKKKKACg9KKD0oA4LU/wDkbLz/AK9of/QpaZT9XGzxZPn/AJaWyf8AjrN/8VUde9h/4UTzanxsWqNx/wAjJof/AF9r/wChpV2s3Ummg1HTruG3ef7NN5hRB1wVOO+M4rSavFpHNW+D7vzPU6zdX8OaH4g8n+3tG0/U/I3eV9ttUm8vdjO3cDjOBnHoK5r/AIWDd/8AQvTf9/T/APEUf8LBu/8AoXpv+/p/+Irxvqtbsd/16h3/AAf+R1F5oWkajqFtf6hpVldXloQ1tcT26PJCQc5RiMrzzxUg0rThGIxYWoQXBugohXAmLFjJjH39xJ3dcnNcn/wsG7/6F6b/AL+n/wCIo/4WDd/9C9N/39P/AMRR9Vrdg+vUO/4P/I6NPDGgRa4dZi0PTU1QsWN8tpGJ8kbSfMxuyQSOvQ0tl4b0PTbt7rTtF0+0uJHMjzQWqI7OcgsWAyScnn3Nc3/wsG7/AOhem/7+n/4ij/hYN3/0L03/AH9P/wARR9Vrdg+vUO/4P/I6K08K+HrBpWsdB0y2aYOJDDZxoXD435wOd2Bn1wM1OdE0pldW0yzKukSMDbr8yxHdEDxyEJJUfwk8Yrlv+Fg3f/QvTf8Af0//ABFH/Cwbv/oXpv8Av6f/AIij6rW7B9eod/wf+RqeLPCEHiWwaOL7HBO80MsxubMTxXaxk7Y549ymRBuJA3DDAHsQU8K+DoPDuk39lN9jmj1CYyzW1rZi3tEBRUKRwbmCqQuWBJ3MzHvgZn/Cwbv/AKF6b/v6f/iKP+Fg3f8A0L03/f0//EUfVa3YPr1Dv+D/AMjrp9Osrm1jtbmzt5reJkaOGSJWRChBQgEYBUgEemBiuS8SfDqDWdRtrizTRFgt7d4UstU0cXtvEWfe0kSCRAjsT8x53YXpjlP+Fg3f/QvTf9/T/wDEUf8ACwbv/oXpv+/p/wDiKPqtbsH16h3/AAf+RsWngrQ4tL0i01HT7fV5dIgSG2u9RgSaZdoHzBmGQcgHjHNbAsrQTTyi2h8y5ULO/ljdKACAGPcAE9fU1x//AAsG7/6F6b/v6f8A4ij/AIWDd/8AQvTf9/T/APEUfVa3YPr1Dv8Ag/8AI6dvD+jPLZSvpNi0mnp5dm5tkJtlxjbGcfIMADAxxUiaRpscNtFHp1osdpGYrdFgULChXaVQY+UEcYHbiuU/4WDd/wDQvTf9/T/8RR/wsG7/AOhem/7+n/4ij6rW7B9eod/wf+R1sWmWFvJbPBZW8T2sJgt2SJQYYjtyi4Hyr8q8Dj5R6CpbW1t7G1S2soIreCMYSKJAiqPYDgVxv/Cwbv8A6F6b/v6f/iKP+Fg3f/QvTf8Af0//ABFH1Wt2D69Q7/g/8jqNe/5FvUv+vSX/ANANef6J/wAgeD/gX/oRrQv/ABvd32m3Np/YMyefE8e/zCdu4EZxs561Q0iN4tKhSVSjDOVYYI+Y134WnOmmpI46laFWsnDt59y9RSUV2FC1teCf+QTJ/wBfU/8A6NasStzwSP8AiS7v78sr/wDfUhP9a4sb/DXr/mdGH+P5HS0UUV5B3BRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBxPiuE2+sWd1/C5MDn/e5H6gD8ap11XiPTF1LTJIz1I4I6g9j+dcXZztLGY5xtuIjslX39foeor18FUUocnVHBiI2lzdy1RTc0ZrvOcdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAdRTc0ZoAivJzb2csqjLKvyj1bsPzxXZeG7L7Do0EPXYgBPrx1rj7G3Ora1HCgzBbMGkPZn7D8Ov1x6V6JDGI4lUdhXk42onJQXQ7cPHTmY+iiivPOoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAEZQykGuM8S6DMtwL7TsLMnBBHDr/AHT/AI9q7SmvGsikMMirhOUJc0SZRUlZnmlteJcFkP7uZPvxN95f8R71YzW/rPhSC9PmIu2ReVdThlPsRXNz6ZrNgcDbdIOzja35jj9K9aljKcl7+jOGeHlHbUlzRmqRurtP9bp030R1P8yKT7fN/wBA27/8h/8AxddPtqX8y+8x5J9n9xezRmqP2+b/AKBt3/5D/wDi6Pt83/QNu/8AyH/8XT9rS/mX3oOSfZ/cXs0Zqj9vm/6Bt3/5D/8Ai6Pt83/QNu//ACH/APF0e1pfzL70HJPs/uL2aM1R+3zf9A27/wDIf/xdH2+b/oG3f/kP/wCLo9rS/mX3oOSfZ/cXs0Zqj9vm/wCgbd/+Q/8A4uj7fN/0Dbv/AMh//F0e1pfzL70HJPs/uL2aM1R+3zf9A27/APIf/wAXR9vm/wCgbd/+Q/8A4uj2tL+Zfeg5J9n9xezRmqP2+b/oG3f/AJD/APi6Pt83/QNu/wDyH/8AF0e1pfzL70HJPs/uL2aM1R+3zf8AQNu//If/AMXR9vm/6Bt3/wCQ/wD4uj2tL+Zfeg5J9n9xezRmqP2+b/oG3f8A5D/+Lo+3zf8AQNu//If/AMXR7Wl/MvvQck+z+4vZozVH7dOemm3f4+X/APFU9ZNRmO2DT8Z7ySdPwApOtSX2l94+Sb6Mt5qp5k+pS/ZdLPU7XuByE9h6n9B+lXrXwxfagw/tGUmPvEi7VP17n8TXX6bo1vp8SrGijHoK4q2NSVqf3m8MO3rMi0HR4tMs0RFxgd62KAMdKK8ttt3Z3bBRRRSAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigApjRI/3lB/Cn0UAVmsLdusa/lTf7Ntv+ea/lVuigCp/Ztt/wA81/Kj+zbb/nmv5VbooAqf2bbf881/Kj+zbb/nmv5VbooAqf2bbf8APNfyo/s22/55r+VW6KAKn9m23/PNfyo/s22/55r+VW6KAKn9m23/ADzX8qP7Ntv+ea/lVuigCp/Ztt/zzX8qP7Ntv+ea/lVuigCp/Ztt/wA81/Kj+zbb/nmv5VbooAqf2bbf881/Kj+zbb/nmv5VbooAq/2dbf8APNfyp6WcCfdRfyqeigBAoXoAKWiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP//Z)

Figure 19 - Block Diagram

* + 1. **Description**

As illustrated on figure 24, this system has four basic hardware and four basic software components. The core of the system, the microcontroller, runs three of these major algorithms.

The first one is the object detection algorithm. This and the distance measuring algorithm work hand in hand with the cameras. The cameras feed the current condition of the crossroad to the microcontroller. The microcontroller can either use a real-time image or take photos within a certain time interval. The microcontroller can then use the data coming from the cameras as an input for the vehicle detection algorithm. This will give the microcontroller the number of cars on each side of the crossroad. Additionally, the microcontroller can also use data coming from the camera to determine the amount of accepting road available on each side of the crossroad.

Taking the above two parameters as an input, the scheduling algorithm will allocate some amount of time to selected lanes. Other than the parameters stated previously, this algorithm uses additional parameters to select the lanes and allocate time for them. We will see the details of these parameters and the decision-making process in sections to follow.

The normal operation of the scheduling algorithm can be interrupted by two conditions. These conditions are:

* Receiving SMS from the GSM Module
* Detection of emergency vehicles

Upon receiving an SMS, the microcontroller will decode the message and give way for lanes for specified amount of time. This feature is meant to be used by authorities or traffic police when an exceptional condition occurs. For example, if diplomats, military convoy, higher government authorities, bank money moving vehicles and the like are crossing. In such a case, priority will be given by sending an SMS message to the system. The system will halt the current allocation and give way for the priority vehicles until they have crossed, at which point the system will resume from the previous state of the crossroad.

The second exceptional case is when an emergency vehicle like ambulance or firefighting truck is detected. Just like the previous case, the system will give way for the side containing an emergency vehicle. After the emergency vehicle has passed, that is when it is no longer within the sight of the cameras, the system will resume with its normal routine of operation.

In all the above cases, the microcontroller will send control signal to the traffic light. The system will refrain from sending signal to the traffic lights that will cause the vehicles from crossing the crossroad.

The last feature of this system is sending of traffic record an API. The system can do this by either using a GSM module or an ethernet cable-based connection established to it. This record will contain a time stamp and the number of vehicles. This can be used as a statistical data by the Ethiopian road authority.

Based on this data, different decisions like widening the roads, using overpasses, adding traffic lights and the like can be taken. This will assist in decreasing traffic congestion.

* + 1. **Wiring Diagram**
  1. **Software Design**
     1. **Coding platform and selection**
     2. **Scheduling Algorithm**

A smart traffic light system needs to have an effective scheduling algorithm to accommodate the different and varying number of vehicles that are trying to use a shared resource. This shared resource is the crossroad. The algorithm needs to consider different parameters to be able to make a fair decision so that cars coming into the crossroad from different sides can use the shared resource effective. The following are the parameters we are going to consider in our design.

* Density of cars
* Waiting time
* Number of cars crossing intersection
* Acceptance capacity of roads after intersection
* Priority vehicles
  + Emergency vehicles
  + Priority vehicles

In scheduling algorithm such as in CPU scheduling, there are a certain property that are considered by the algorithms. Some of the basic properties are:

* *Resource Utilization*: - this refers to the usage of the resource by the entities involved in the process. For example, if we consider CPU scheduling this property corresponds to the computer’s usage of the CPU or the amount of work handled by the CPU.
* *Throughput*: - refers to the amount of a product or service that a system can produce and deliver within a specified period. In our previous example, this is the same as the number of processes that are completed per unit time.
* *Waiting time:* - this refers to the total amount of time an entity spends waiting to get a resource. The resource would be the CPU and the entity would be computer processes waiting in the ready queue.
* *Turnaround time: -* refers to the time interval from the submission of an entity to be processed to the time of completion. For a CPU scheduling this is the sum of waiting time, executing on the CPU and doing I/O.
* *Response time:* - refers to the time from the submission of a request to the start of the first response.
* *Fairness: -* refers to the fair share of the resource, without having any entity suffering from indefinite postponement to utilize the resource.

Ideally, the goal of any scheduling algorithm is to optimize all the properties. That is:

* Maximize resource utilization, through put, fairness and efficiency and
* Minimize waiting time, turnaround time and response time.

Unfortunately, this is not possible. What needs to be done is make the right amount of trade off to maximize the algorithms efficiency.

Besides the properties listed above there are a few additional things that needs to be considered. One is the two types of scheduling(interrupt) and the other is deadlock.

1. *Interrupt: -* is a condition where the current use of a resource is stopped by an external entity. This is before the current resource has completed the current allocated time. Based on whether interrupt is allowed in the algorithm, there are two types of scheduling algorithms.

* *Preemptive scheduling: -* Interrupt is accepted.
* *Non-Preemptive scheduling: -* Interrupt is not accepted.

1. *Deadlock: -* is a condition that happens with entities sharing a resource where each entity is looking for a resource held by another entity to be released. That is if we have entities ‘a’, ‘b’, ‘c’ and ‘d’. ‘a’ is waiting for ‘b’, ‘b’ is waiting for ‘c’, ‘c’ is waiting for ‘d’, ‘d’ is waiting for ‘a’. The image below illustrates this condition in a crossroad.
2. *Ready Queue:* - a queue is a data structure that allows the retrieval of data in the order of insertion. This method of organizing and manipulating data is know as First in First out or First Come First Serve. Entities in the ready queue are ready and waiting to use the shared resource.

Diagram

Description automatically generated with medium confidence

Figure 25 - Crossroad deadlock

In figure 19(b), we can see that car ‘1’ is waiting for car ‘2’, car ‘2’ is waiting for car ‘3’, car ‘3’ is waiting for car ‘4’ and car ‘4’ is waiting for car ‘1’ to move. If we consider a realistic case where many other cars would be lined up behind each of these cars, this situation is hard to resolve. So, it is better to avoid it. Avoiding this situation is known as deadlock avoidance.

The parameters listed above relates to these scientific parameters as explained below.

* *Density of cars:* - this is the number of cars ready and waiting to use the crossroad. That is, we have four ready queues if we consider a road or eight if we consider lanes. Lanes with a greater number of cars are given priority, this does not mean that they get to cross always. Rather we can consider them as lanes with priority.
* *Waiting time: -* this parameter relates to fairness as it is used to avoid indefinite postponement of lanes or sides with less amount of car. To ensure fairness, we assign a maximum waiting time limit.
* *Number of cars crossing the intersection:* - this parameter relates to resource utilization and efficiency. Both need to be maximized. To maximize the number of cars crossing the intersection, we must give permission for two lanes to cross simultaneously. This is possible for a limited combination of lanes. From the labeling given on figure 26, the following are the possible lane combinations.
  + A2 – C2

B2 – D2

A1 – C1

B1 – D1

* + A1 – A2

B1 – B2

C1 – C2

D1 – D2

* + A1 – D2

B1 – A2

C1 – B2

D1 – C2

These lane combinations can be related mathematically as follows:

* For x<y: y = x+4 or

y = x+1 or

y = (x+7) mod8

* For y<x: y = (x+4) mod8 or

y = x – 1

y = (x – 7) mod8

By using these mathematical relationships, we can check if two lanes can cross the road simultaneously.

* *Acceptance capacity of roads after intersection:* - if the accepting road of a lane is full and we give green light to it. It will eventually create the condition illustrated by figure 19. This will significantly lower the efficiency of the crossroad usage because no cars will be crossing. Therefore, this parameter is related to deadlock avoidance and efficiency. To avoid this, we must postpone passage for that lane for some amount of time.
* *Priority vehicles: -* the normal operation of the system could be interrupted. This could either one of the following two cases:
  + *Emergency vehicles: -* if the system detects an emergency vehicle on one of the sides, it interrupts the current state and give way for the emergency vehicle. This will be done by giving a greenlight for the left most lane of that side, until this vehicle has crossed.
  + *Priority vehicles: -* another way the system could be interrupted is if the authorities forward a command. This command could be given to allow higher officials, convoys and the like to cross.

The system must resume with the state it was in before it was interrupted once these vehicles have crossed. Since the system supports interrupts, it is preemptive.

A picture containing text, whiteboard

Description automatically generated

Figure 26 - Labeled Crossroad

1. **Implementation**
   1. **Software implementation**
      1. **Cascade Classifier**

In our project we needed detect cars and to do that we used Haar feature-based cascade classifier, an object detection method. The algorithm is trained from a lot of positive and negative images. Positive images are images which contain the object to be detected and negative images are those which don’t contain the object of interest. They merely contain the background stuff the object of interest can be in.

In order to train the cascade classifier, we used a software tool called Cascade Trainer GUI. It was the simpler alternative. To start the training, you create a folder for your classifier and inside you create another two folders named “n” and “p”. The folder labeled n is where you put the negative images and the folder labeled p is where you the positive images. One important point is to never include any positive images in your collection of negative images inside folder “n”.

Graphical user interface, text, application, email

Description automatically generated

Figure 27 - Cascade Trainer Input Tab

Common, Cascade and Boost tabs can be used for setting numerous parameters for customizing the classifier training. Cascade Trainer GUI sets the most optimized and recommended settings for these parameters by default, still some parameters need to be modified for each training. Pre-calculation buffer size can be set to help with the speed of training process. For example, if one has an 8 GB of RAM on their computer then they can safely set both of the buffer sizes below to 2048.

Next sample width and height must be set. They shouldn’t be a very big size as it will make detection slow. It is quite safe to always set a small value for this. Recommended settings for sample width and height is that to keep one aspect on 24 and set the other accordingly.

Graphical user interface, text, application, email

Description automatically generated

Figure 28 - Cascade Trainer Cascade Tab

For example, if one has sample images that are 320×240 then first calculate the aspect ratio which in this case is 1.33:1 then multiply the bigger number with 24. It would be 32×24 for sample width and height.

The feature type can be set to HAAR or LBP. HAAR classifiers are very accurate but require a lot more time to train so it is much wiser to use LBP if you can provide your classifiers with many sample images. LBP classifiers on the other hand are less accurate but train much quicker and detect almost 3 times faster.

After all the parameters are set, “Start” button at the bottom is pressed to start training the cascade classifier. The log screen will be shown while training.

Wait for the training to complete.

New files and folders will have been created in the classifier folder. The classifier folder will contain XML files that are created during different stages of training. Inside classifier folder, you’ll notice something like the following.

“stage#.xml” files are temporary files that won’t be needed anymore.

“params.xml” contains the parameters you have used for the training. (Just a reminder file)

“cascade.xml” is the actual cascade classifier and if the training completed successfully then you should have this file inside classifier folder.

“neg.lst”, “pos.lst” and “pos\_samples.vec” are temporary files created for training the classifier and they can also be removed without having any effect.

* + 1. **Scheduling Algorithm**
  1. **Hardware implementation**

Implementing the hardware takes interfacing the microcontroller with the LEDs and the GSM module. Instead of directly connecting the resistors and LEDs to a breadboard, we first built a prototype of a crossroad. To do this we first had to solder three LEDs and their respective resistors. This is given on figure 29 below.

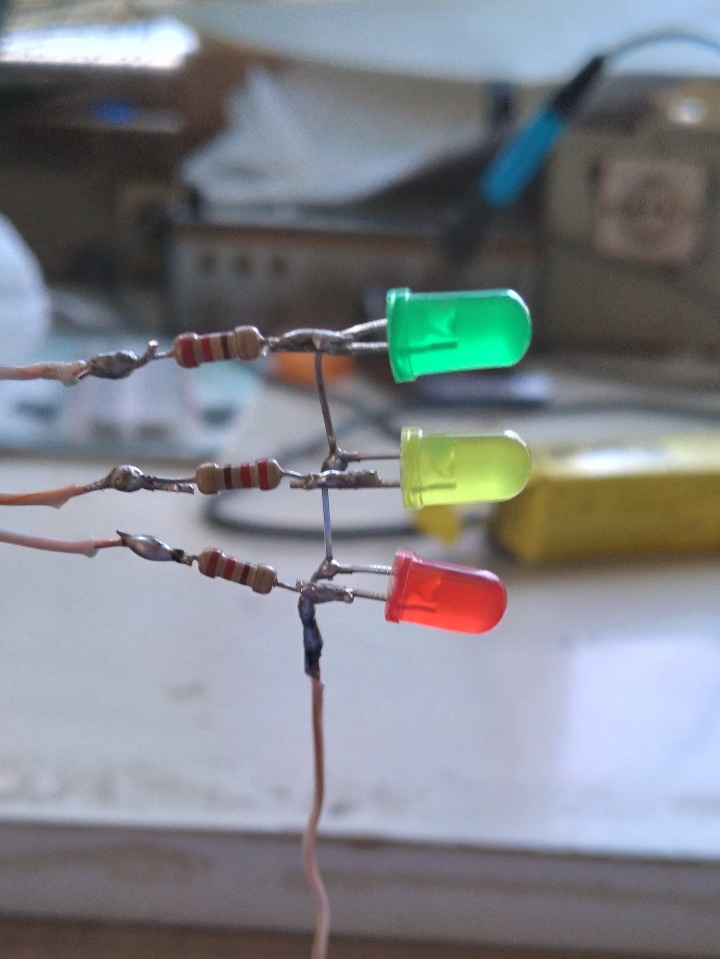


Figure 29 - Soldered LEDs

We then placed it in a box, and it looks like the one given on figure 30. This box is meant to simulate a single traffic light. Since two traffic lights are required for each side of the crossroad, we made 8 of such boxes that simulate a traffic light. For half of these traffic lights, we used similar pattern of colored wires. The colors used were, green for green LED, orange for yellow LED, blue for red LED and brown for ground wire. Note that the cathodes of these LEDs have been shorted. For the remaining half, we used stripes of the colors used for the first half of traffic light boxes.

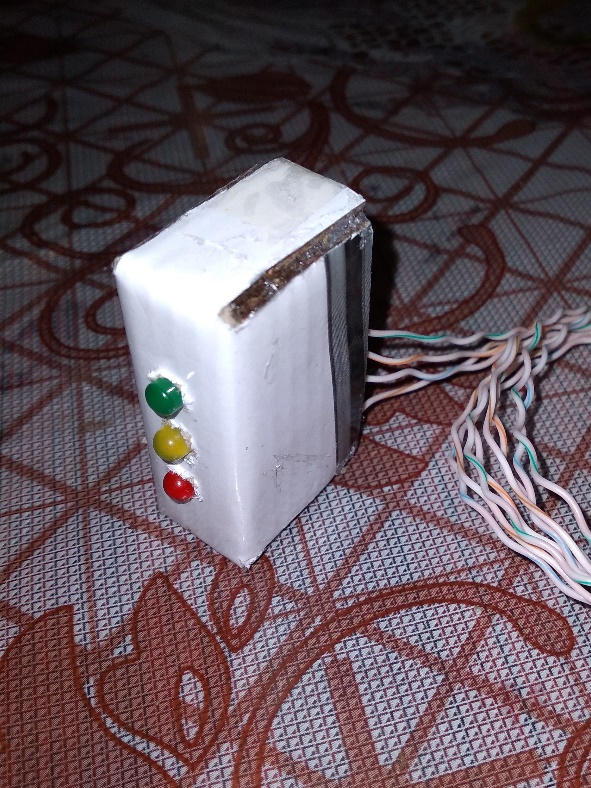


Figure 30 - Traffic Light Prototype

After building these traffic lights. We proceeded to making a prototype of the crossroad. For this we had used a picture of the crossroad made using photoshop and a carton like the one we used for the traffic light prototypes. Here all it takes it sticking a paper print of the crossroad picture on the carton. The picture is given below.



Figure 20 - Photoshopped crossroad

We finished the prototype by fixing the eight traffic lights on the crossroad prototype we made using the above picture. This prototype is then interfaced with microcontroller. Additionally, the microcontroller is also interfaced with the GSM module.

The GSM module uses UART for communication. So, we connect Tx of the GSM module to the Rx (pin 10) of the raspberry pi and Rx of the GSM module to the Tx (pin 8) of the raspberry pi. The configuration of GSM SIM800L is given on figure 18 and the raspberry pi pin configuration is given on figure 19 above.

For this project, we are only interested in NET, Vcc, RXD, TXD and GND. NET is where the Helical Antenna is connected. All the connections on the GSM module are soldered.

1. **Results**