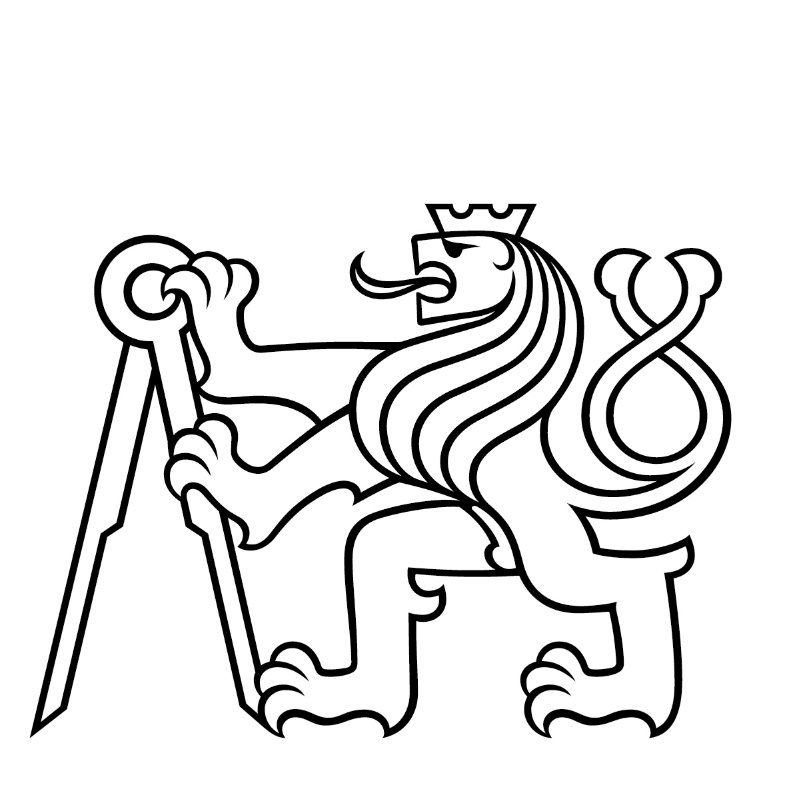
CZECH TECHNICAL UNIVERSITY IN PRAGUE

Faculty of Electrical Engineering



Finance Management Application

(Backend)

Author: Ivan Sedakov

Study programme: Open Informatics

Branch of study / Specialization: (BPOI318) Software

Thesis supervisor: Ing. Šebek Jiří

May 2022

**Author statement for undergraduate thesis**

I declare that the presented wort was developed independently and that I have listed all sources of information used within it in accordance with the methodical instruction for observing the ethical principles in the preparation of university theses.

Prague, date ………………………….. Signature …………………………

**Abstract**

The main goal of the work is to implement backend support for a web application that helps manage finances. At first, were analyzed existing applications for similar purposes and were chosen the best features and options. Then were represented application functions, implementation, and technologies. Finally, the result of the work and gained experience were analyzed.

**Keywords**: web application, backend app, .net, C#, finances, income, expense

**Abstrakt**

Hlavním cílem práce je implementace backendové podpory webové aplikace, která pomáhá spravovat finance. Nejprve byly analyzovány existující aplikace pro podobné účely a byly vybrány nejlepší vlastnosti a možnosti. Dále byly zastoupeny aplikační funkce, implementace a technologie. Nakonec byl analyzován výsledek práce a získané zkušenosti.

**Keywords**: webová aplikace, backendová aplikace, .net, C#, finance, příjmy, výdaje

**Contents**

[1. Introduction 1](#_Toc103844250)

[1.1 Motivation 1](#_Toc103844251)

[1.2 Aims 1](#_Toc103844252)

[2. Research 2](#_Toc103844253)

[2.1 Analysis of similar existing apps 2](#_Toc103844254)

[2.1.1. Spendee 2](#_Toc103844255)

[2.1.2. CoinKeeper 2](#_Toc103844256)

[2.1.3. Wallet 3](#_Toc103844257)

[2.2 Analysis of technologies 4](#_Toc103844258)

[2.2.1 Backend 4](#_Toc103844259)

[2.2.2 Database 7](#_Toc103844260)

[2.2.3. Architecture 8](#_Toc103844261)

[3. Analysis 10](#_Toc103844262)

[3.1. Requirements 10](#_Toc103844263)

[3.1.1 Functional 10](#_Toc103844264)

[3.1.2 Non-Functional 10](#_Toc103844265)

[3.2. Use Cases 10](#_Toc103844266)

[4. Design 18](#_Toc103844267)

[4.1. Architecture 18](#_Toc103844268)

[4.1.1. Controller Layer 19](#_Toc103844269)

[4.1.2. Operation Layer 19](#_Toc103844270)

[4.1.3. Repository Layer 19](#_Toc103844271)

[4.1.4. Services 19](#_Toc103844272)

[4.1.5. Models 21](#_Toc103844273)

[4.2. Solution and Files Structure 22](#_Toc103844274)

[5. Implementation 23](#_Toc103844275)

[5.1. Configuration 23](#_Toc103844276)

[5.2. Logging and Profiling 23](#_Toc103844277)

[5.2.1. Serilog 23](#_Toc103844278)

[5.2.2. MiniProfile 24](#_Toc103844279)

[5.3. API Controllers 27](#_Toc103844280)

[5.4. WebSocket and SignalR 29](#_Toc103844281)

[5.4.1. WebSocket 29](#_Toc103844282)

[5.4.2. SignalR 29](#_Toc103844283)

[5.5. App Services 30](#_Toc103844284)

[5.6. Mappers 30](#_Toc103844285)

[5.7. Authorization and Authentication 30](#_Toc103844286)

[5.8. Data Context 32](#_Toc103844287)

[5.8.1. Entity Framework Core 32](#_Toc103844288)

[5.8.2. Dapper 32](#_Toc103844289)

[5.8.3. Repository 32](#_Toc103844290)

[5.8.4. Indexes 33](#_Toc103844291)

[5.9. Caching 35](#_Toc103844292)

[5.10. Project Installation 36](#_Toc103844293)

[5.11. Design Patterns 38](#_Toc103844294)

[5.11.1. Repository and Unit of Work 38](#_Toc103844295)

[5.11.2. Dependency Injection 39](#_Toc103844296)

[5.11.3. Facade 41](#_Toc103844297)

[5.11.4. Observer 42](#_Toc103844298)

[5.11.5. Strategy 43](#_Toc103844299)

[5.11.6. Builder 43](#_Toc103844300)

[6. Testing 45](#_Toc103844301)

[6.1 Benchmarks 45](#_Toc103844302)

[6.2 Unit Tests 46](#_Toc103844303)

[6.3 Functional Tests 48](#_Toc103844304)

[6.4 Conclusion 48](#_Toc103844305)

[7. Conclusion 49](#_Toc103844306)

[7.1 Summary 49](#_Toc103844307)

[7.2 Future 49](#_Toc103844308)

[Bibliography 50](#_Toc103844309)

[Supplement A. Abbreviations List 54](#_Toc103844310)

[Supplement B. Diagrams 55](#_Toc103844311)

# Introduction

## 1.1 Motivation

Financial management has always been one of the most important things in human life. [1, 13] Failure to pay enough attention to own finances leads to disastrous consequences and can even destroy the future. Most people need to control incoming and outgoing finances, have an idea of ​​their debts, monetary goals, and statistics, plan for the future, and manage the present. A financial management application can help deal with all these troubles and make people's lives easier.

Of course, such applications already exist in our world, but programming has no boundaries and limits for improvement. Humanity goes forward and always needs modernization. Developers update user interfaces, improve the performance and quality of resources, and apply new features and technologies. Our application has been developed using the most modern technologies and methodologies and includes the best features and capabilities of existing financial management applications.

## 1.2 Aims

The main part of such an application is the implementation of the backend since it contains the main logic of the program and connects all the parts and services of the application. Therefore, it is this part that contains the most bugs, errors, and dark places and most of all needs detailed analysis, a clear structure, strict rules, competent documentation, and should have the best performance. [5]. Once correctly implemented, the backend can be used with almost all types of modern applications such as web, mobile, and desktop applications.

This work is devoted to the backend part of the application. The following chapters provide an analysis of existing financial management applications, the requirements and use cases for our application, the implementation, and a list of technologies used.

# Research

The chapter contains an analysis of existing projects on the market with similar functions and purposes, as well as an analysis of world backend technologies, databases, and a comparison of various types of architectures.

## 2.1 Analysis of similar existing apps

Three similar applications were analyzed for their functionality, user interfaces, and main features.

### 2.1.1. Spendee

The Spendee [16] is a finance management application, which was developed by a Czech startup company Spendee Ltd. Suitable functions for our application:

* Ingoing and outgoing transactions.
* Statistics and Graphs.
* Transaction Categories
* Accounts with different currencies.
* Import/Export of transactions.
* Budgets (constant payments during periods).

Premium Subscription functions:

* Auto Categories.
* Connection to the bank account.
* An unlimited number of accounts.

The Spendee has a user-friendly interface, and mobile and desktop applications, but a small list of features. Without a premium subscription, the app is too trivial.

### 2.1.2. CoinKeeper

The CoinKeeper [15] is a finance management application. It was developed by a Russian IT company. Suitable functions for our application:

* Ingoing and outgoing transactions.
* Accounts with different currencies.
* Transaction Categories.
* Statistics and Graphs.
* Import/Export of transactions.

Premium Subscription functions:

* Joint finance management.
* Disable ads.
* Extended Statistics and Categories

In comparison to Spendee, all the transactions should be created manually. The Spendee has a “Connection to the bank account” function in the premium version. The user interface is not bad, but some sections were made completely non-obvious and don’t have windows help. Also, without a Premium subscription, there is the ad, which is very inconvenient for this type of application.

### 2.1.3. Wallet

The Wallet [14] is a finance management application, which was developed by a Czech startup company BudgetBakers. Suitable functions for our application:

* Ingoing and outgoing transactions.
* Accounts with different currencies.
* Transaction Categories
* Budgets (constant payments during periods).
* Shopping lists.
* Debts.
* Goals.
* Import/Export of transactions.

Premium Subscription functions:

* Connection to the bank account
* Insightful reports.
* Advanced budgets, Categories.
* An unlimited number of accounts.

In comparison to CoinKeeper and The Spendee, Wallet has many more features in both versions. The interface is user-friendly and very obvious.

|  |  |  |  |
| --- | --- | --- | --- |
| Feature | Spendee | CoinKeeper | Wallet |
| Accounts | + | + | + |
| Transactions and Categories | + | + | + |
| Statistics and Graphs | + | + | + |
| Bank synchronization | + (Premium) | - | + (Premium) |
| Goals | - | - | + |
| Debts | - | - | + |
| Without Ads | + | + (Premium) | + |
| Rating | 2 | 3 | 1 |

Table 1: Comparison Table

After analyzing all applications, The Wallet was recognized as the best, because it has a huge number of interesting features and has everything that users might need in the premium version. The Spendee is a balanced choice, it has all the basic options and a user-friendly and practical interface. CoinKeeper was chosen as the worst because it doesn’t have any interesting features and has an ad.

## 2.2 Analysis of technologies

The most interesting frameworks and technologies for me were analyzed for choosing the best one for this project.

### 2.2.1 Backend

* Gin

Gin is a high-performance micro-framework that can be used to build web applications and microservices. It contains a set of commonly used functionalities, e.g. routing, middleware support, rendering, that reduce boilerplate code and make writing web applications simpler [17]. Gin with Golang language is a modern and new technology compared to Spring Boot and ASP.NET. But it already has an active developer community, lots of tutorials, and comprehensive tools. Go is very fast and comparable in performance to C++, making it the fastest language and a great choice for modern web development.

* Spring Boot

Spring Boot is an open-source micro-framework used to build Spring applications with the help of microservices [18]. Spring Boot is based on Java and is the oldest framework on our list. It has a huge community and lots of material and courses. Java is the most supported language on the CVUT and one of the most used languages in the world from our list.

* .NET

.NET is a developer platform made up of tools, programming languages, and libraries for building many different types of applications. ASP.NET extends the .NET developer platform with tools and libraries specifically for building web apps [19]. .Net was developed by Microsoft and integrates easily with services such as Azure. The framework uses C# programming language, which has an exceptionally expressive syntax and provides good security and performance. .Net has a huge community, is very readable and minimizes version conflicts, is fast enough for web development, and is backed by one of the biggest and strongest companies in the world.

.NET and Spring Boot are both popular web frameworks that have everything a developer might need. And I think the main reason why someone prefers one or the other depends on the language of that framework. Those who prefer C# will choose .NET, lovers of Java or Kotlin will use Spring Boot.

I prefer C# and I feel uncomfortable with Java. The main reason is syntax and used libraries. I prefer attributes over annotations, Entity Framework with LINQ over Spring Data JPA, and other things that are specific for everyone. The next important point is performance (request per second, RAM usage), where Java has always been the worst choice. Performance Tests results are shown in Figure 1 and Figure 2.

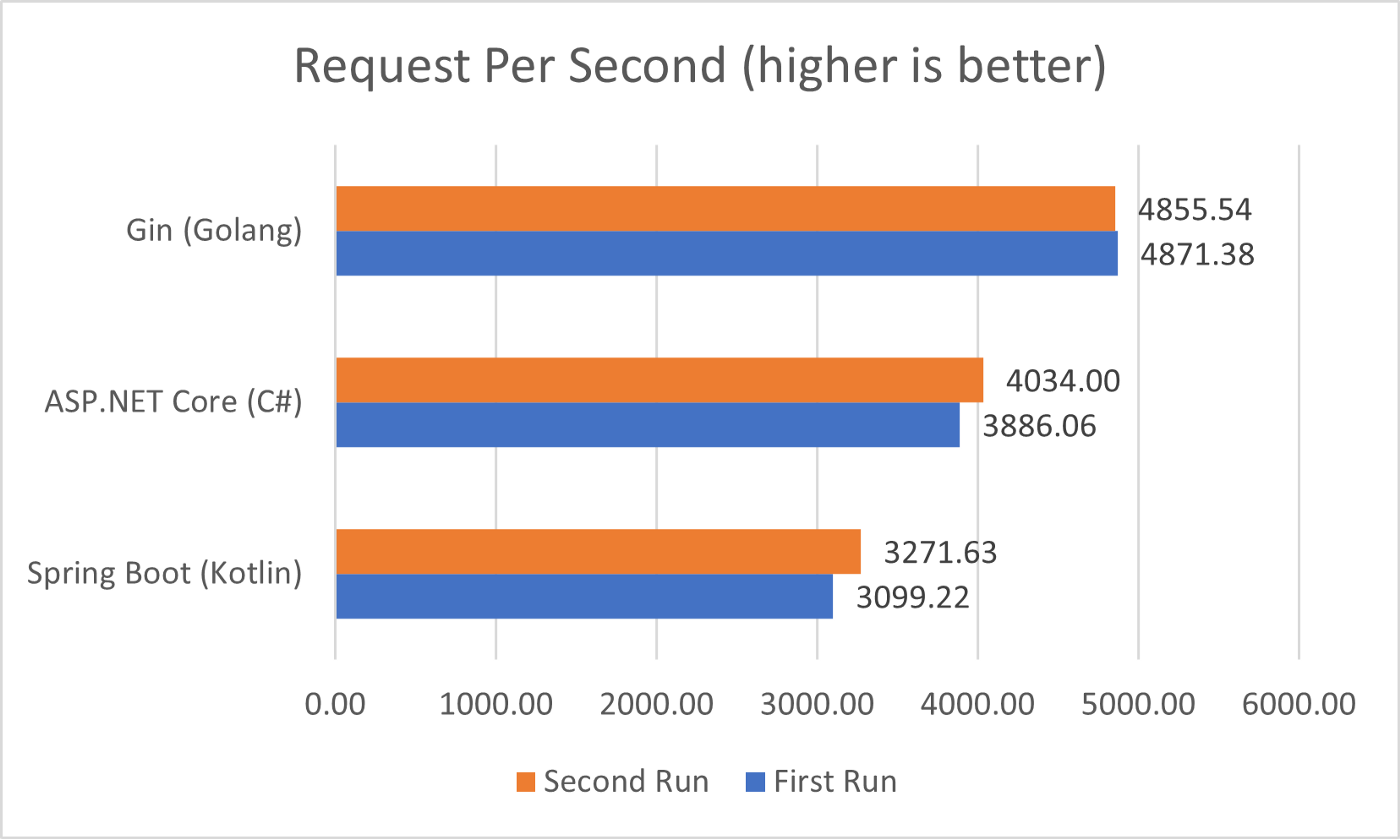
Gin with Golang looks like a very interesting and great choice, but I have no experience with it and my project doesn’t need such good performance as Golang provides. I often use C# and should choose a language that I love and know for this project.

Figure 1: Request Per Second, [20]

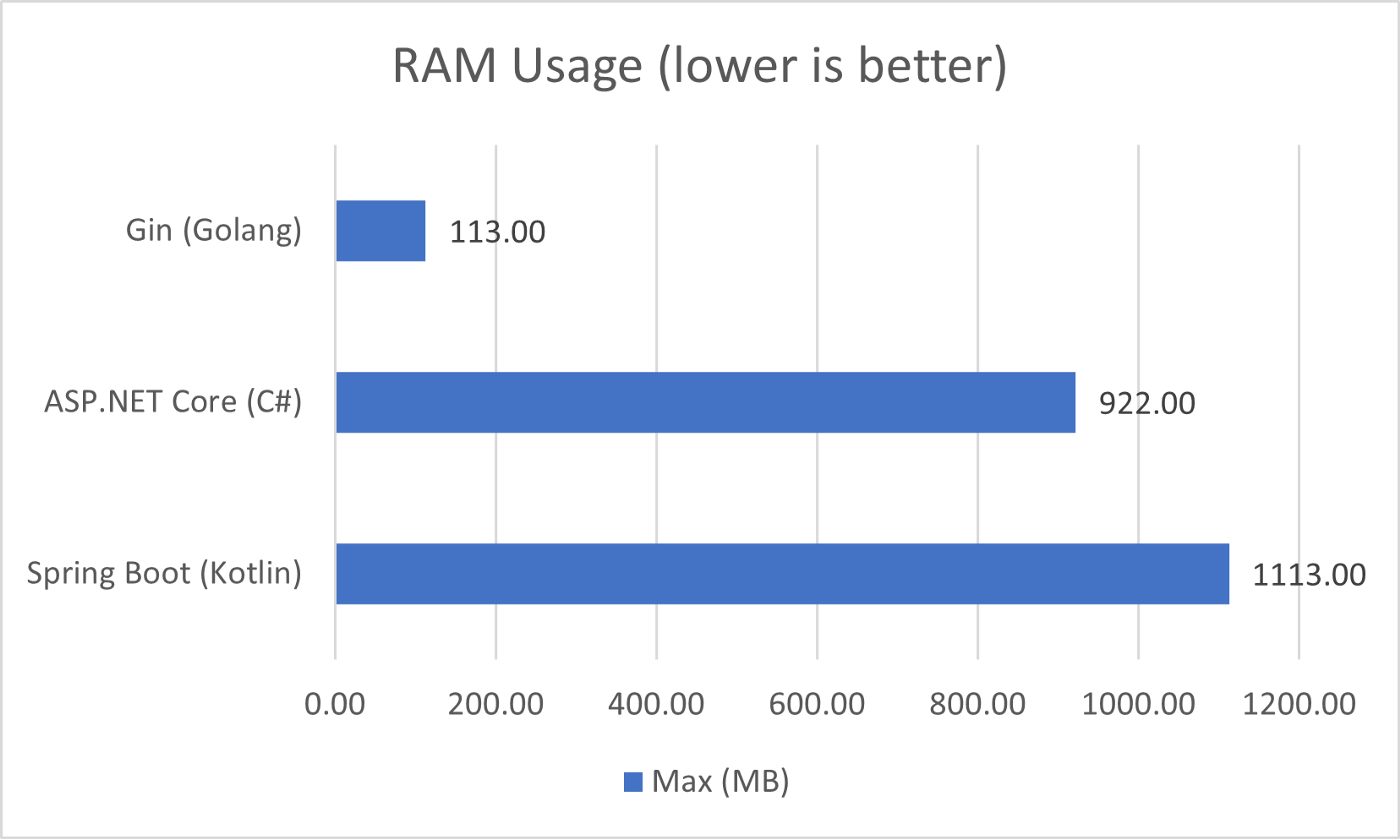


Figure 2: RAM Usage, [20]

### 2.2.2 Database

Difference between SQL and NoSQL

SQL databases are primarily called as Relational Databases (RDBMS); whereas NoSQL databases are primarily called as non-relational or distributed databases [21].

|  |  |
| --- | --- |
| SQL | NoSQL |
| These databases have fixed or static or predefined schema | They have a dynamic schema |
| These databases are not suited for hierarchical data storage. | These databases are best suited for hierarchical data storage. |
| These databases are best suited for complex queries | These databases are not so good for complex queries |
| Vertically Scalable | Horizontally scalable |
| Follows ACID property | Follows CAP |

Table 2: SQL VS NoSQL, [21]

The App uses a relational SQL database because of:

* Data is easily structured into categories.
* Data is consistent in input, and meaning, and easy to navigate.
* Relationships can be easily defined between data points.
* Complex Queries: update transactions inside a group by checking group rights and user permissions.
* Vertical Scalable: increasing the power of CPU and RAM to an existing machine instead of adding more machine resources is more appropriate.
* ACID property.

Relational Databases

The most widely implemented relational databases are MySQL, PostgreSQL, and SQLite [37].

They were compared on the advantages and disadvantages of choosing the best one for your project and goals. [Table 3] shows the most important pros and cons of these databases.

PostgreSQL looks like the best choice for our project. It has free hosting, which is necessary because the frontend part is implemented independently. We do not need very high speed, we store data in the cache and use cache preloaders as much as possible. The application will have many users writing data to the database at the same time, use complex operations, and deal with large amounts of data.

Table 3: Comparison of relational databases

|  |  |  |  |
| --- | --- | --- | --- |
|  | MySQL | PostgreSQL | SQLite |
| Advantages | **Security** | **SQL compliance** | **Testing** |
|  | **Speed** | **Data integrity is important** |  |
|  |  | **Complex operations** |  |
|  |  | Free Hosting |  |
|  |  |  |  |
| Disadvantages | **Slowed development** | Speed | **Working with lots of data** |
|  | **Licensing and proprietary features** |  | **High write volumes** |
|  | **Temporary free hosting** |  | **Temporary free hosting** |

### 2.2.3. Architecture

* Monolithic Architecture

A monolithic architecture is the traditional unified model for the design of a software program. Monolithic, in this context, means composed all in one piece. Monolithic software is designed to be self-contained; components of the program are interconnected and interdependent rather than loosely coupled as is the case with modular software programs. In a tightly-coupled architecture, each component and its associated components must be present in order for code to be executed or compiled. Monolithic programs typically have better throughput than modular approaches, such as the microservice architecture and they can be easier to test and debug because with fewer elements there are fewer variables that come into play [24].

* Microservices Architecture

Microservices allow a large application to be separated into smaller independent parts, with each part having its own realm of responsibility. To serve a single user request, a microservices-based application can call on many internal microservices to compose its response. Typically, microservices are used to speed up application development. [25]. Modular architectures reduce the risk that a change made within one element will create unanticipated changes within other elements, because modules are relatively independent. Modular programs also lend themselves to iterative processes more readily than monolithic programs. [24]. The main advantage over Monolithic Architecture is that the modified program component does not affect other parts of the program.

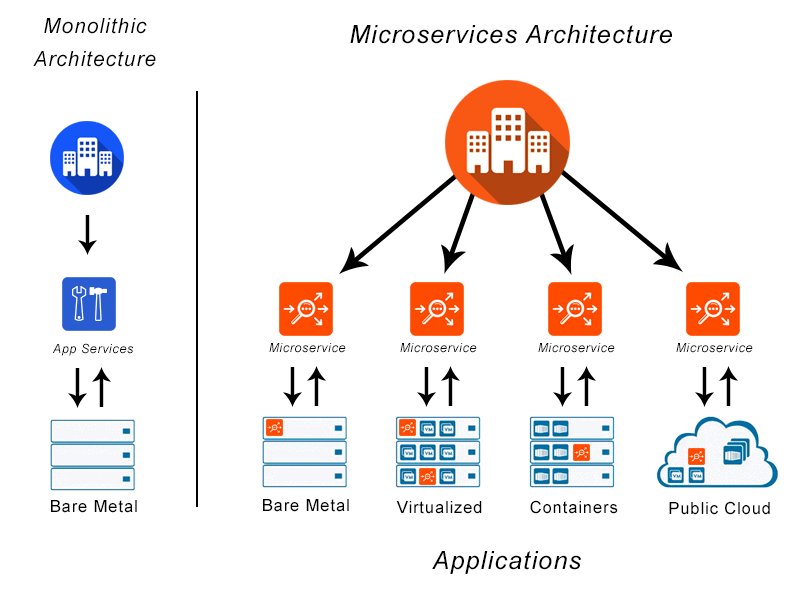


Figure 3: Monolithic Architecture vs Microservices Architecture, [23]

The Application uses Monolithic Architecture, which is the best choice for the following reasons [22]:

* Small team
* The simple application
* No microservices expertise
* Quick launch (quick demonstration)

# Analysis

The chapter defines functional and non-functional requirements and contains information about application use cases. It was determined after analyzing existing applications and feedback about them from their users.

## 3.1. Requirements

### 3.1.1 Functional

FR-1: Swagger API Documentation

FR-2: Authentication, Authorization, Registration

FR-3: Accounts

FR-4: Transactions, Subscriptions, Debts, Goals

FR-5: Groups, Roles, Rights

FR-6: Notifications about Subscriptions and Debts Expired

FR-7: Dashboard

FR-8: Statistics and Graphs

### 3.1.2 Non-Functional

NP-1: Backend: .Net 6, C#, PostgreSQL

NP-2: REST API

NP-3: Monolithic Architecture

NP-4: Easy Vue.js Client App connection for Monolithic Architecture

NP-5: Repository and Unit of Work Patterns for Data Access Layer.

NP-6: Cache as much as possible, Cache Preloader

NP-7: Message Service

## 3.2. Use Cases

The use cases were created after a detailed analysis of an existing application and reading comments from their users about improving the functionality of the application. Apart from the initial options, it also contains enhancements such as subscriptions, goals, and debts. These use cases provide the application with all the necessary functionality that a user might need to manage their finances.

UC-1: Transaction, Subscription, Debt, Goal entities

* CRUD Operations
* GET/DELETE by User Id
* History Mode for Debts, Subscriptions, Goals (shows old and not active)
* Pagination support for Transactions and History Mode

UC-2: User Registration and Authorization logic  
UC-3: Group Operations

* Users can create Group with rights and roles
* Users with required group rights can add/delete other users to the Group
* Users with required group rights can change other users rights and roles
* Users with required group rights can add/delete transactions and subscriptions from their own accounts to the group’s accounts

UC-4: Settings

* Users can change their personal data

UC-5: Notifications

* Users can GET their own notifications Count and all their notifications
* Users can change the read status of their own notifications and delete them.

UC-6: Categories

* Users can create/delete own categories
* User can add/update/delete category from transaction

UC-7: Dashboard

* Get Last Transactions, Subscriptions, Debts, Goals
* Statistic Data

[Figure 4-13] contains Use Case Models.

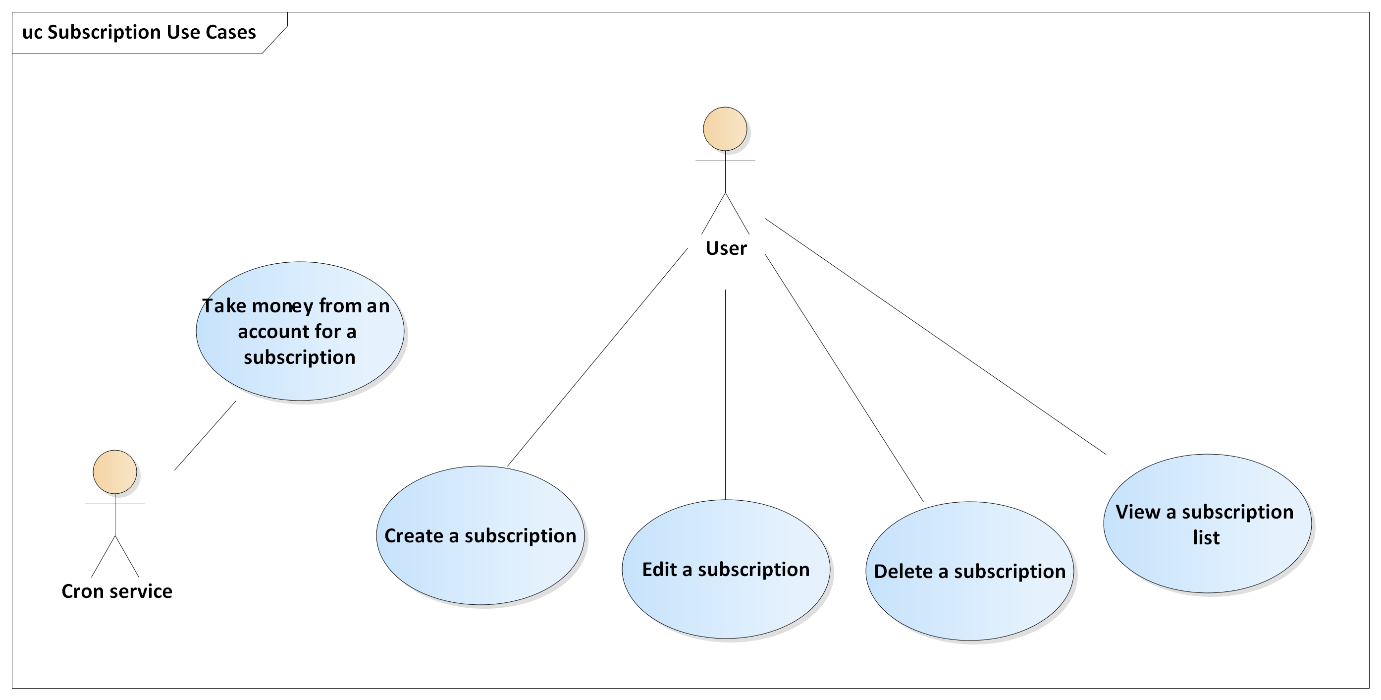


Figure 5: Subscription Use Cases [Tikhon Zaikin]

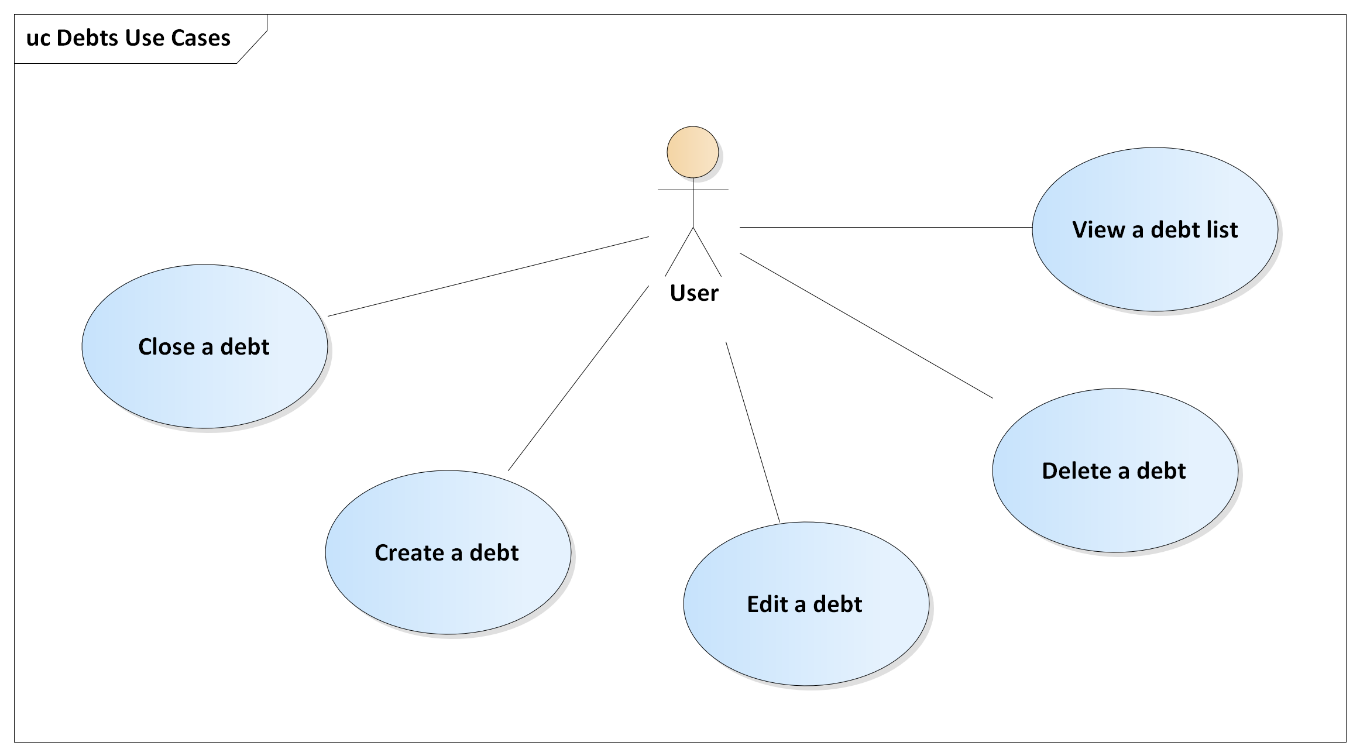


Figure 6: Debts Use Cases [Tikhon Zaikin]

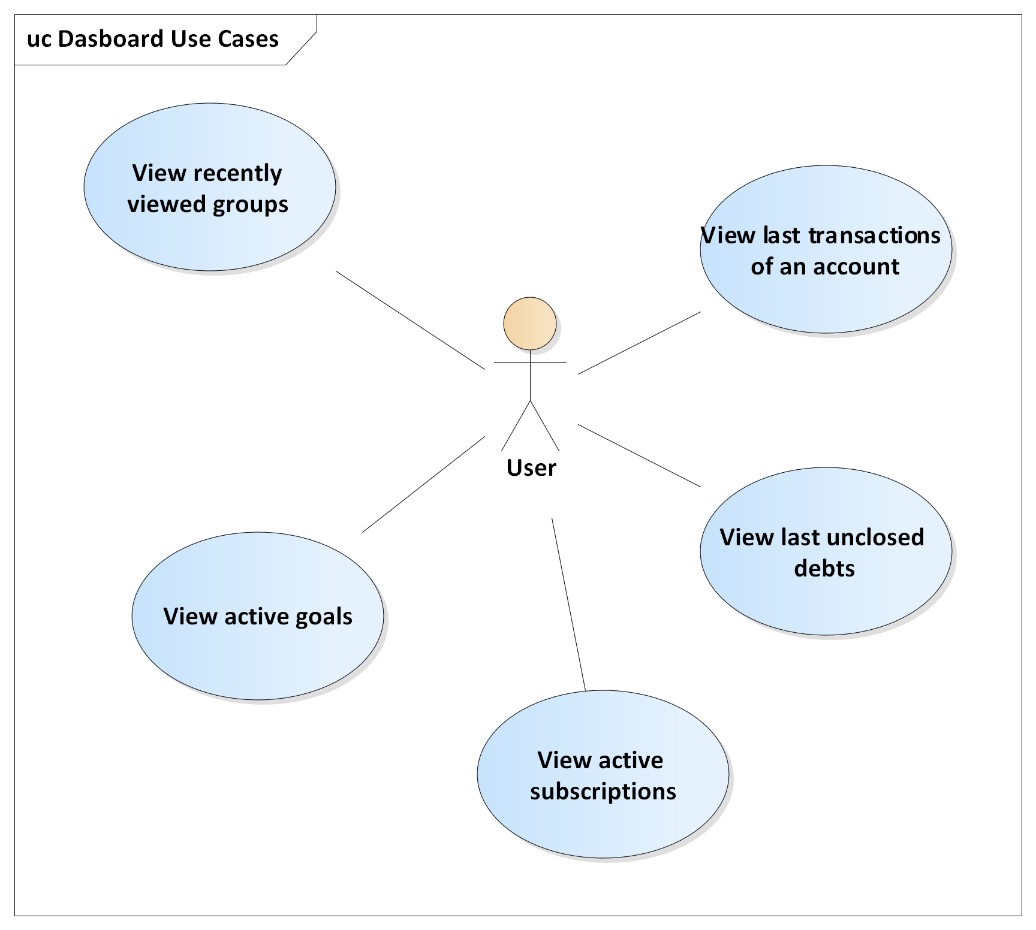
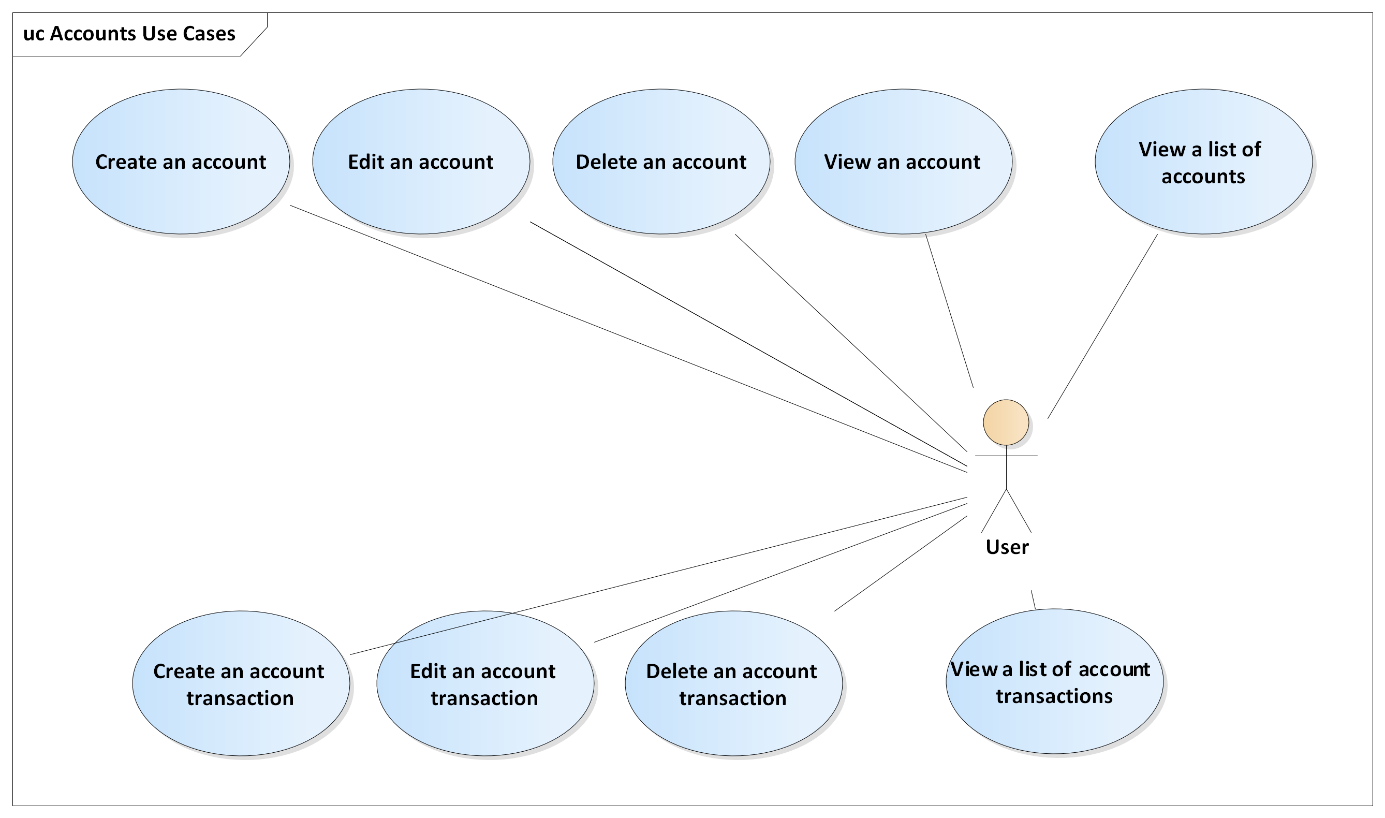


Figure 7: Dashboard Use Cases [Tikhon Zaikin]

Figure 8: Account Use Cases [Tikhon Zaikin]



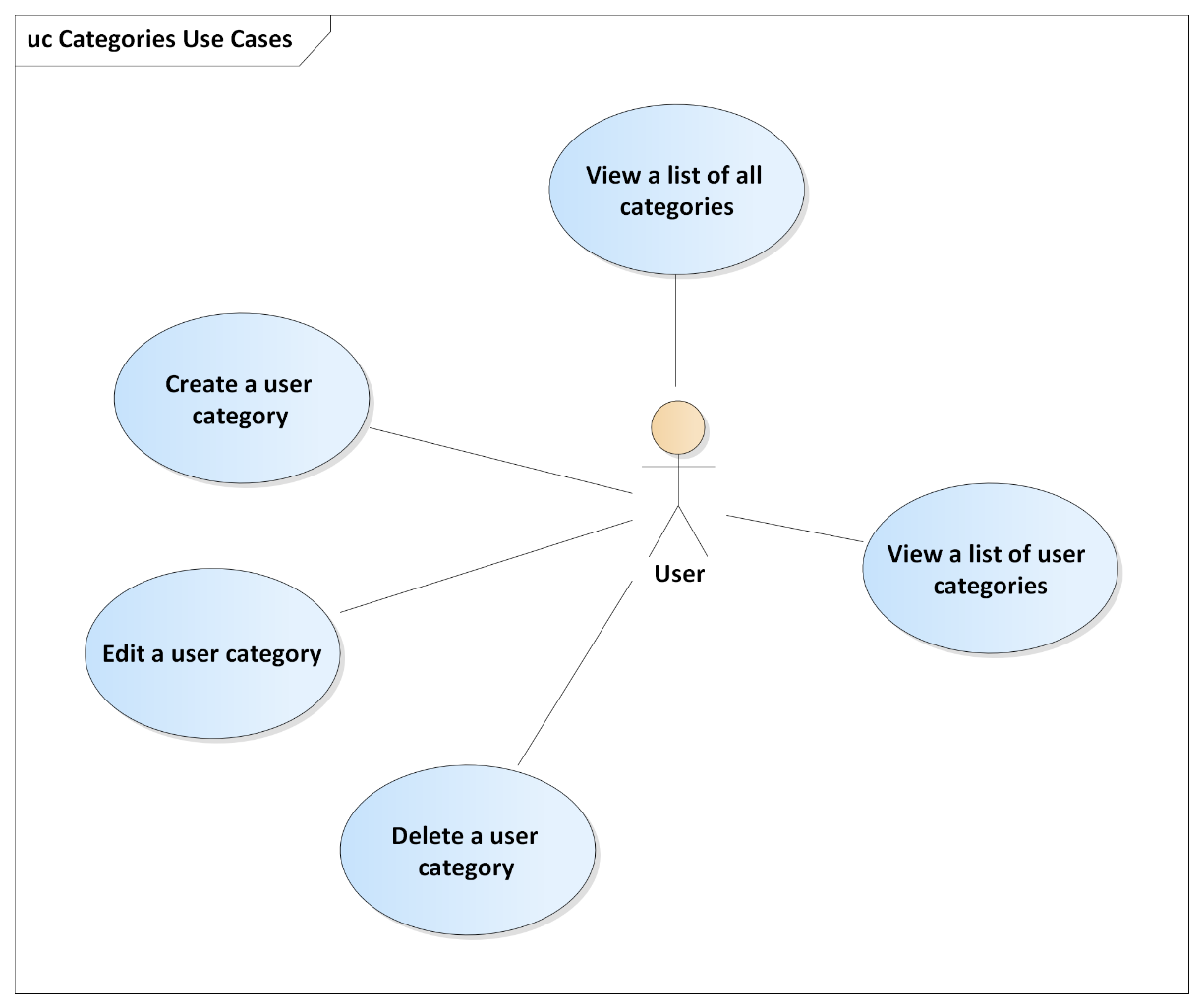


Figure 9: Categories Use Cases [Tikhon Zaikin]

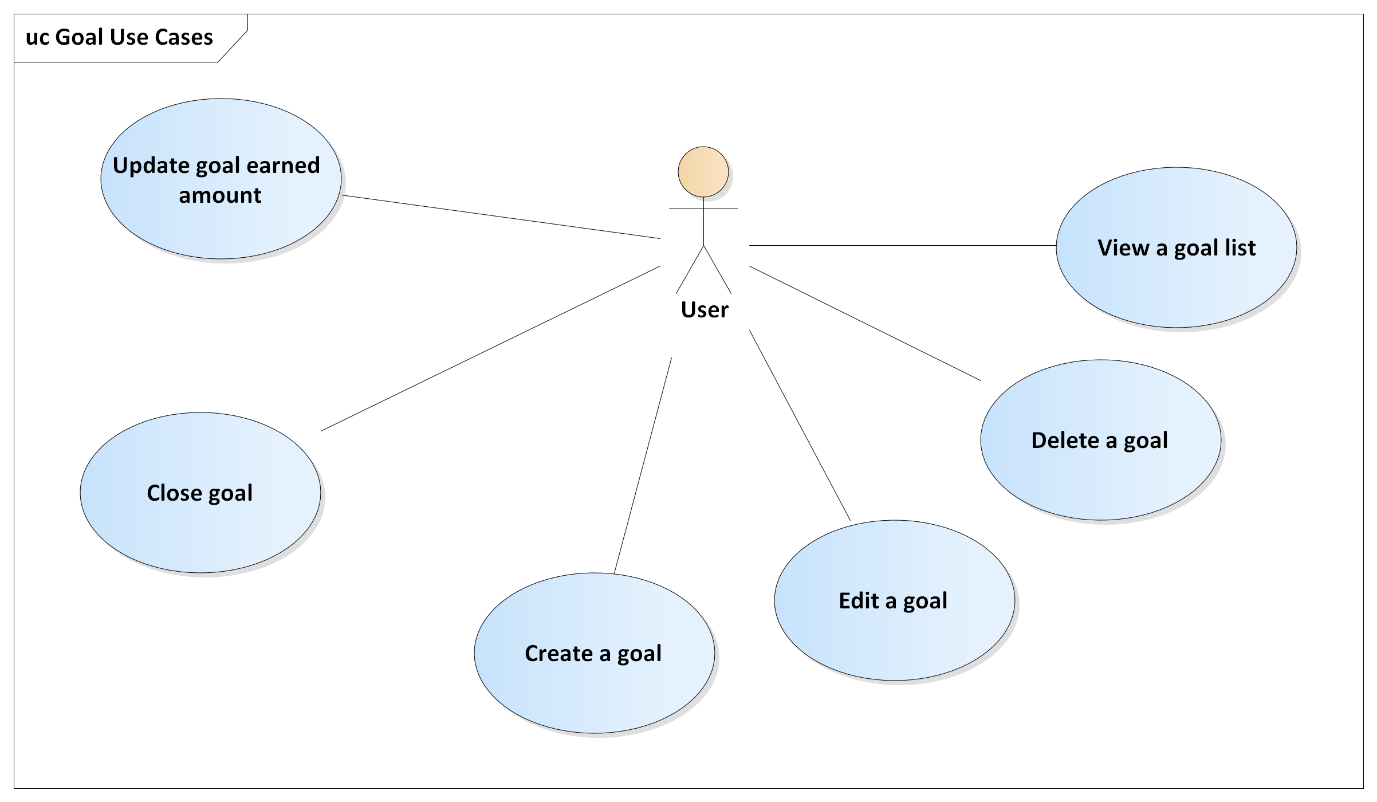


Figure 10: Goal Use Cases [Tikhon Zaikin]

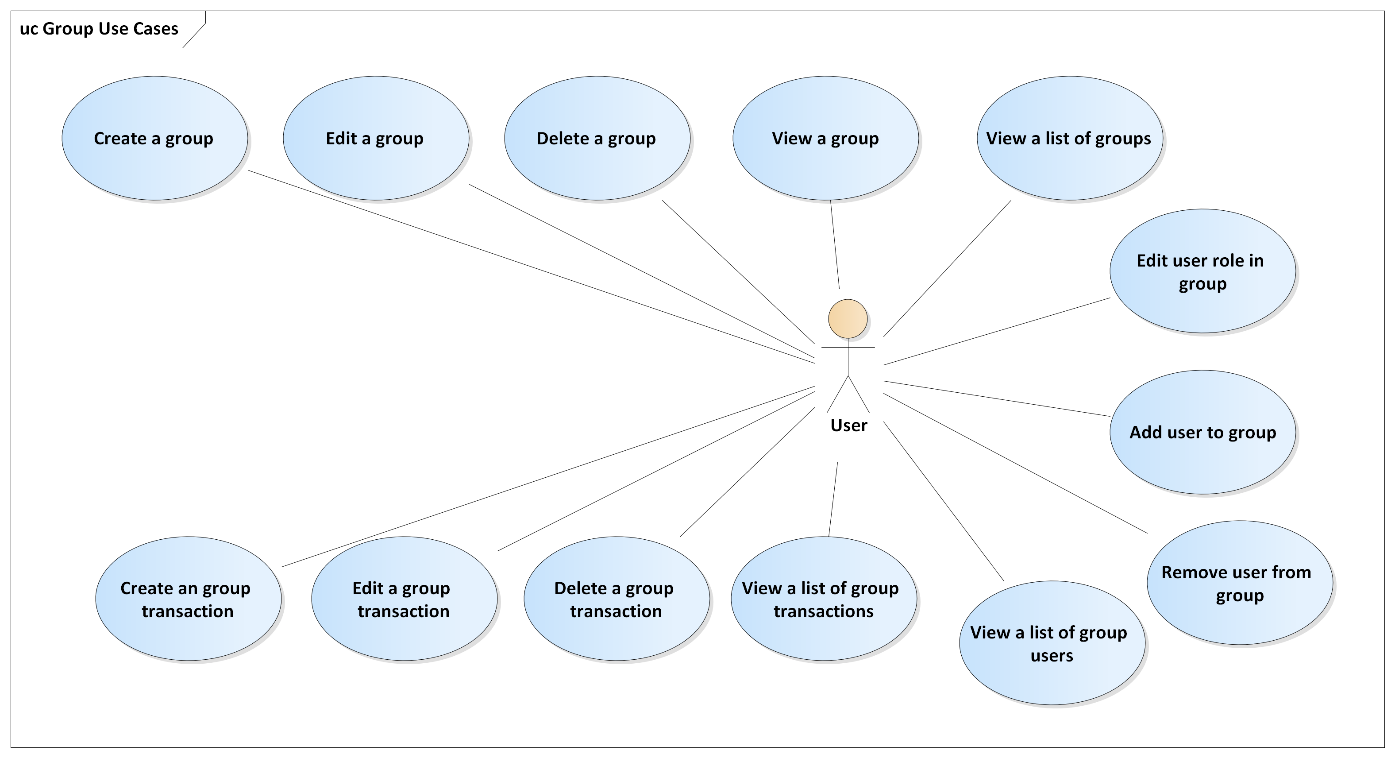
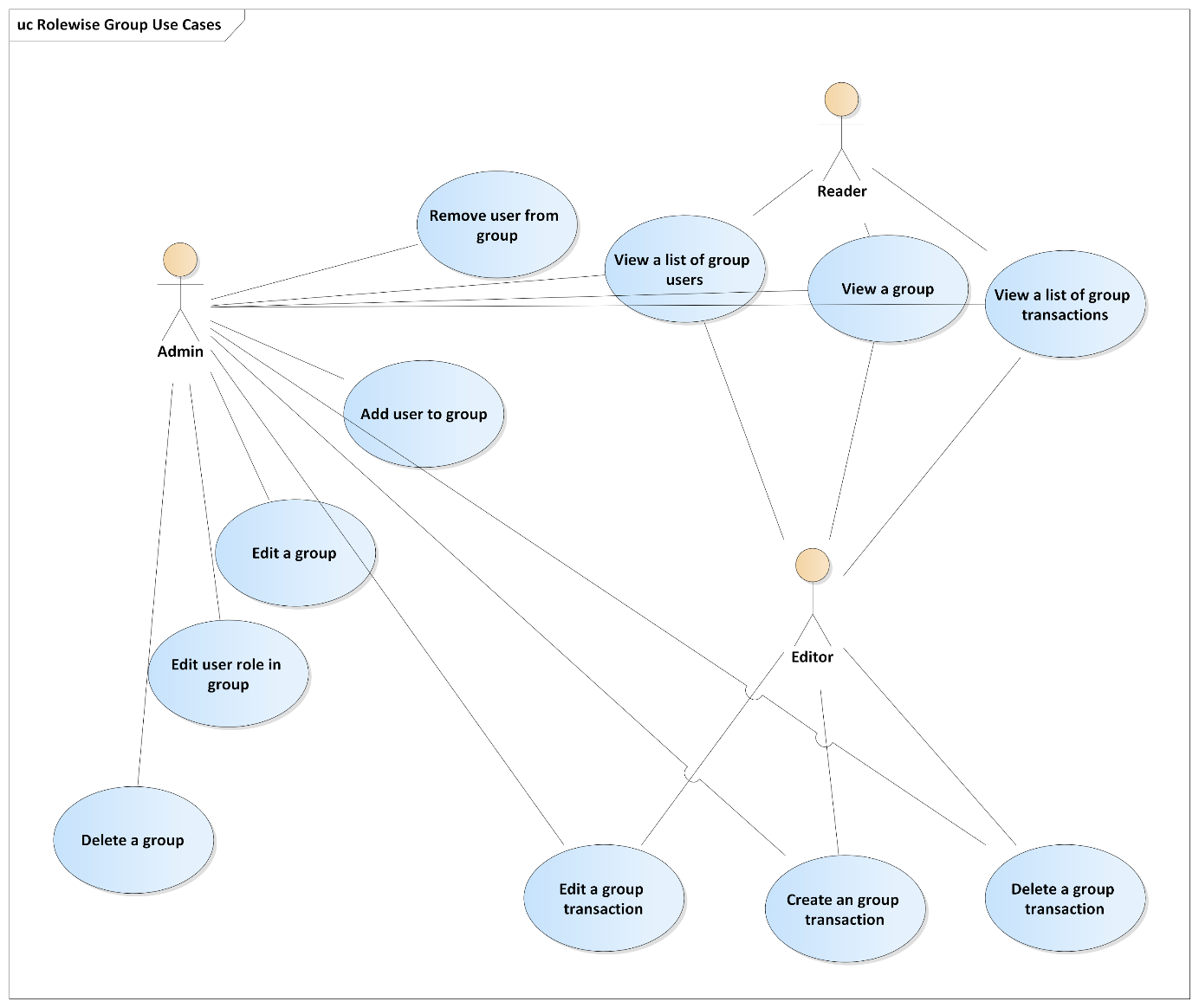
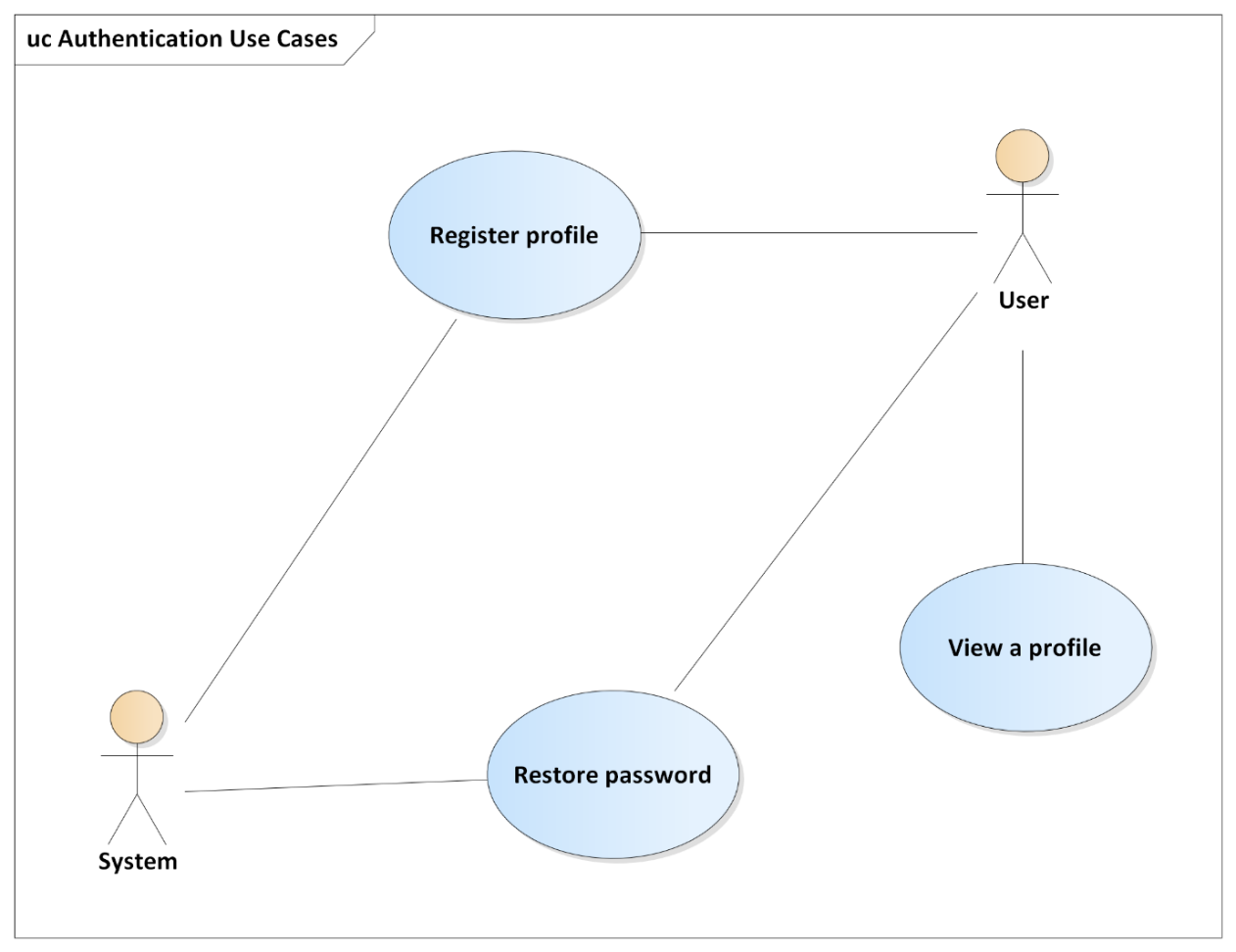


Figure 12: Rolewise Group Use Cases [Tikhon Zaikin]

Figure 11: Group Use Cases [Tikhon Zaikin]



Diagram

Description automatically generated

Figure 4: Systemwide Use Cases [Tikhon Zaikin]

Figure 13: Authentication Use Cases [Tikhon Zaikin]

# Design

The chapter provides information about the application architecture, solution structure, and entity models. It contains a component diagram and a business domain diagram, talks about each layer of the application, and shows the request path from the API controller to the database.

## 4.1. Architecture

The application has a multitier architecture that means a client-server architecture in which data management logic and application processing are physically separated. Web application architecture defines the interactions between applications, middleware systems, and databases to ensure multiple applications can work together. [45]. The application has three main layers, each of which is responsible for certain work and logic. There are also helper layers for Operation and Repository layers. The Helper and Mapper layers help to separate the logic and make the code easier to understand and keep it clean. The data access layer helps the Repository interact with the Database and provides all the necessary operations. [Figure 14].

This system allows to divide the entire application into precisely defined layers, where each layer has its own responsibility and provides certain logic and functions. This gives a clear idea of where some method should be and what it does.

Chart, diagram, box and whisker chart

Description automatically generated

Figure 14: Component Diagram

### 4.1.1. Controller Layer

The Controller layer is the conductor of operations for a request. It controls the transaction scope and manages the session related information for the request. The controller first dispatches to a command and then calls the appropriate view processing logic to render the response. [29] The Controller checks authentication tokens, users’ rights, and roles via Attributes. The Controller provides Endpoints for API Requests.

### 4.1.2. Operation Layer

The Operation class is a layer between Repository and Controller. It provides the main logic of the application: checks if parameters are correct (Guard Library), Maps Model to DTO and vice versa, uses internal and external libraries, manipulates with data via Repository, and prepares response by request from Controller.

### 4.1.3. Repository Layer

Repositories are classes that encapsulate the logic required to access data sources. They centralize common data access functionality, providing better maintainability and decoupling the infrastructure or technology used to access databases from the domain model layer. With using Entity Framework and Dapper, the code that must be implemented is simplified, thanks to LINQ and strong typing. This lets to focus on the data persistence logic rather than on data access plumbing. [28]

### 4.1.4. Services

The Service is an independent application that runs parallel to the main application. It is used for background processing, iterative tasks, and logic separation. The main app communicates with the Service via database or API. In the database case, the Main App can create a new row with task info in a table which is tracked by the Service App

[Figure 15] shows the process of the user request handling which goes through Controller, Operation, and Repository layers.

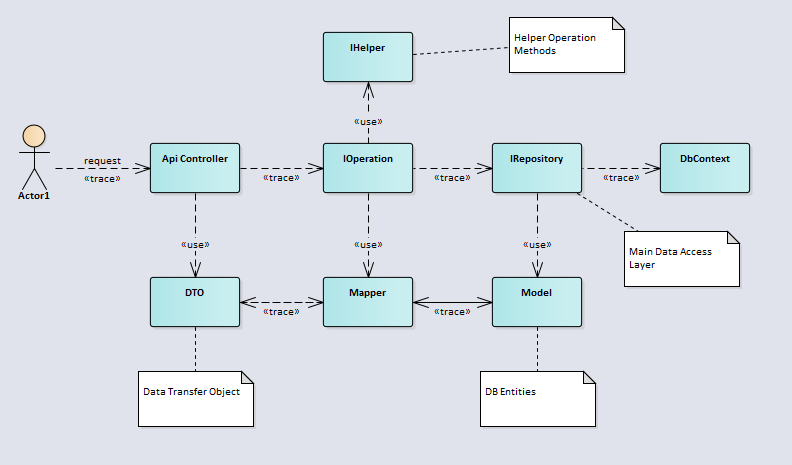


Figure 15: Process of user request handling  
API Controller takes request via Endpoint, sends it to IOperation, IOperation gets Data Model from DB via Repository, converts it to DTO via Mapper, can use some Helper class for other logic executing.

### **4.1**.5. Models

Database Context and Class Models are auto-generated from database tables by update-models-from-db.bat scripts inside FinanceManagement.Infrastructure. [Figure 16] shows the structure and organization of the models.

[Id] is a Primary Key for a table and is used as a Foreign Key for every table that has references to that table. A many-to-many relationship is represented as a separate table (for example, [UserGroupRole]) that has two Foreign Keys and additional information about the relationship.

Enum is stored as a table with [Id] and [Name] columns and [enum] schema. This helps to keep a single integer instead of a string for all data and also makes it easy to refactor (such as changing the priority). [GroupRole] and [NotificationType] are examples of Enum tables.

The [Message] table is used for the MessageService which sends emails and SMS and does not depend on other objects. It is used as a communication medium between the main application that adds data and the service that reads that data and processes it.

Diagram

Description automatically generated

Figure 16: Business Domain Model

## 4.2. Solution and Files Structure

[Figure 17] shows us the structure of the solution. FinanceManagement.Web is the main project which has a starting point of the application and contains web technologies such as controllers, Vue apps, and HTML Templates. The Core libraries are used for logical separation and contain the specific part and implementation. For example FinanceManagement.Core.Caching provides caching support (cache modules, dependencies, invalidation, providers). FinanceManagement.Infrastracture is the basic library for FinanceManagement.Web with Business Access Layer and Data Access Layer. This is where operations, helpers, DTO, models, repositories, factories, configurations, etc. are stored. Service projects have their own starting point and run in parallel with the main app. Test projects provide all kinds of tests like Unit Tests, Benchmarks, and Functional Tests.

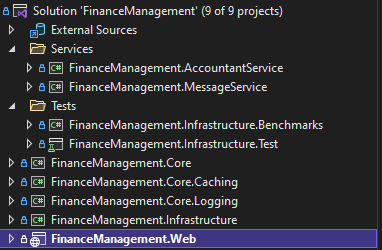


Figure 17: Solution Explorer

# Implementation

The chapter contains information about the implementation of the application. It analyzes all used technologies and external libraries and explains why they were used and what it brings to the application.

## 5.1. Configuration

To configure the differences between development, staging, and production environments is used the Database Table with values and keys. Connection strings, common constants, and external library settings are stored in appsettings.json file inside the project. ASP.NET Core configures app behavior based on the runtime environment using an environment variable. [30]

## 5.2. Logging and Profiling

### 5.2.1. Serilog

Serilog is a diagnostic logging library for .NET applications. It is easy to set up, has a clean API, and runs on all recent .NET platforms. While it's useful even in the simplest applications, Serilog's support for structured logging shines when instrumenting complex, distributed, and asynchronous applications and systems. Serilog provides diagnostic logging to files, the console, and many other outputs. Unlike other logging libraries, Serilog is built from the ground up to record structured event data. [31]

Features [32]

1. Community-backed and actively developed
2. Format-based logging API with familiar levels like Debug, Information, Warning, Error, and so-on
3. Best-in-class .NET Core support, including rich integration with ASP.NET Core
4. Support for a comprehensive range of sinks, including files, the console, on-premises and cloud-based log servers, databases, and message queues
5. Sophisticated enrichment of log events with contextual information, including scoped (LogContext) properties, thread and process identifiers, and domain-specific correlation ids such as HttpRequestId
6. Zero-shared-state Logger objects, with an optional global static Log class

The Serilog Row [Figure 9] contains a lot of useful information and may be sorted by properties. The Environment, ComputerName, UserName, UserId, ProfilerUrl (contains the URL of the MiniProfiler Page with detailed query analysis [Figure 18]), Application and ApplicationVersion properties are set by the application itself. The ConnectionId, Elapsed, RequestId (trace identifier value on the HttpContext) RequestMethod, RequestPath, SourceContext, StatusCode are default

![Text

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAAAAAAAD/4RCyRXhpZgAATU0AKgAAAAgAAodpAAQAAAABAAAIMuocAAcAAAgMAAAAJgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFkAMAAgAAABQAABCAkAQAAgAAABQAABCUkpEAAgAAAAMwMAAAkpIAAgAAAAMwMAAA6hwABwAACAwAAAh0AAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowNDowMiAxMTozMToxNAAyMDIyOjA0OjAyIDExOjMxOjE0AAAA/+EKeWh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpNaWNyb3NvZnRQaG90bz0iaHR0cDovL25zLm1pY3Jvc29mdC5jb20vcGhvdG8vMS4wLyI+PE1pY3Jvc29mdFBob3RvOkl0ZW1TdWJUeXBlPkx1bWlhLkxpdmluZ0ltYWdlPC9NaWNyb3NvZnRQaG90bzpJdGVtU3ViVHlwZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjItMDQtMDJUMTE6MzE6MTQ8L3htcDpDcmVhdGVEYXRlPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMAAgEBAQEBAgEBAQICAgICBAMCAgICBQQEAwQGBQYGBgUGBgYHCQgGBwkHBgYICwgJCgoKCgoGCAsMCwoMCQoKCv/bAEMBAgICAgICBQMDBQoHBgcKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCv/AABEIAVAEYAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APyn+23n/P1J/wB/DXo3w5/ZY/aT+LPwj8SfHnwD8Pr2+8I+EYZZNe1xr+GCGARIjyBRLIrTMqyRlljDsA65HIrzWvoH9hDxn4P8IeHfjxB4t8V6bpb6x8BtX0/SU1G+jgN7dvd2TJbwhyPMlYIxCLliFYgcGvSrSlHC1px+KMJyXa8YuSTW7va1k09fk8461IJ7OUU/RtJ/de555B+z38cJfgfJ+0dcaCtn4N+3NZ2uraprlraNfzKyq6WkE0yzXmwsN5gSQJht2NrYh+BnwH+OH7Svi268CfA/wheeINWs9IuNUurO3uo4zHaQKGlkzK6rxkAKDuZmVVBYgH7W8N/E34C/EP8AYw8JaT468QfB2Twf4X+A+u6VqOlatHpy+L7PxWLi4ltGsw/+m7JJZLeRWt8QsrTmbJxjz/8A4J7/ABr+An7IX7PmtfHDxr8Xr7SvGXibx5pNhpeneE9HtNX1K30nTZ4dRuPPtpL+0MNtdTLDAXZ/mETAI43Fbl7tapBuyWz33k4RbWl1dKbSfwNWbdmZxnKWFp1FH3pPWPXSMZyS6XSbjdu3PF3skz41+23n/P1J/wB/DR9tvP8An6k/7+Gv1T8KfBr9nLwVotx46+Fcv7PuteB9U/aYkk1DxR8RF0CSNfCN1pVnevp0Mt6WdZoPOaPybdvtCSIcKAZK+Sf+Cgfj39n4eDPh78M/2YNC8Cr4dOkXmo3+paPoVi2svN/a2oR20V7eBDdKy2Ytz5LuuQys6thCuDrSjJRad/duuzlTjU17WT5V3kmtLXOhRjKo1F3ik5J9GlLlVvN6O3SLT1OA8U/sO/tbeDPhqfix4g+HLR6THY6feXUNv4isZ9Qs7e+YLZzXFhFcNd26TEgI0sShiQB1rW8Rf8E5v23/AAv4k0TwjqPwjkm1HX9cfRrK203xPp14YNQSD7Q9rdG3uXFjKsOZWS5MRVFZjgKxHv3h6Rv2bvhFoPi5PjL4F8e654w1TQPEHxh8VN8YtEvL6x0iwu4LiDQrazkvftlxOvkxPMViJzHHDGGVWNdJ8TNG8M6heeOPht4R/ba+HGh3vxi/aUm8R+H/ABPpXxItfI0vQDZak093eTQzD7GXjvVtxbzGOSR90e3ad1bS0lKK3Tat/wBvQVr/APb03zWSahJxTirvlpVHPl5tmm7pNr4JyvbzcYrlu2lOKbUnY+U5/wBgH9sGDxda+Dm8CWbyXnhu41+31iHxtpMmkHTIJPKnujqa3ZsljjkIRi0wKsyg4LAHz/4y/CD4tfs++O5vhr8XdBm0nWILeG48lb6K4jlgmjEkU0U0DvFNG6MCrxuynsetfYvir4Y6N8U/jR4Z/ZzT49+B/h/8DfB/hW7tLSO1+OXhu4vPEtlBdpdXHnvb6g1ut9fXUiSRxXDJDFtyuRbtn5v/AG6vFfjHxp8e5tb8U6Z4V020TR7Oz8M6H4N8aafr1lpGkW0f2a0tPtdhPNG0iRxfPuYOWYuVUOtZKcmovu5d17qclF67NpR93VpqTfL7qfVyW5ubol562jf1SfNdrT4UnLVrGH7LH7Sf/DPMn7Vsnw+vYvh/HdJbjxDPfwxrI7zNApjiaQTSL5qsm9EKhlYEjBxT8Zfs9/HD4efCnQfjT450FdJ0HxR83h/7drlrHe38XzYuI7EzfajbnacT+V5R+XD/ADLn0P4D+M/B+j/8E/fj94M1bxXptrrGs614PfR9JuL6NLm+WG6vGmaGIkNKIwylioO0MCcZFfUvx/8Aib8E/i78LL3xqfEHwFvbVvBvgWz+DsE0ejpr9jrNvJaQ3dtqiyf6QtoiJcrMt1/ofleVs/iJucpRqVEtoygl6Spxm/WSb5Vsm9HZmUZXrRg1um77JPmUVfsknzS3tGLZ8b+Bf2J/2rfiV8LY/jH4L8Ai80O5sL++sA3iSwhvr+1siRdz2tjJcLdXUcRBDtDE4BBGcg1H4u/Yx/an8CfB9Pjt4o8B/Z/DbabY6jNLH4isZbu1s7xitpcz2Uc7XVvDMRhJJYkVjgA8ivoj4T+GPE/gf4WeIP2gLL4z/CvxB8T9X/tvw14P8P8A/C4fD2mWPgTTZJbiG9vILe5vYV/febOtpBbr5KxytNzujU9R8Z/Gvw31LS/iV+0N4a+OvgG4sfiN8G/Bfh7wv4VPieymvX1WCfSPPivrBpN9sluNOn3vPGISkq4c7mFU9ZtJ2Xu+bu1N8vS7doJPRKTad7FU+WVSMZuyd7vZJKVOPnaylOTvvGHNonc+Qfhj+y38dPi58O7j4teFm8O2fhu31htJfVvFHxD0fQ4nvRCsxgj/ALRu4DK4jZWwgbg/WtS//Yh/ax034RP8crv4fj/hH49Bj1yTy/E1g98mlvL5SX5sFuDdi2ZiMTmLyyCG3bTmvqP9kzxXGYo/BPxe+Jn7NNx4Cj+Muqah8UvCWvW2iItnbNaxxyXWjs7FZYXjjKwf2YodJUjBJjY45TUvCv8Awq79kvWvFfwy+Nfgrxl4r+I/hQ6fqF7q/wAZNDW88H+EYnSWLRo7K5vVuZb2VIoxJGkZESIIYlLs2MqsqkYycLPSPLvu43tK2y5no/5Yy05kk7pwUpJPu0+jspNaLXVJar+aUejuvl34DfAv42/tO/Euz+D/AMCvCd54g8RX8Ustvp8N1HCPLjQu7tJM6RxqFB+Z2AzgdSAbHw4/Z5+PXxb8LeNPG3w98G3eo6T8PNL/ALQ8ZX630Ucem2+4qGJkkXzGJVsJHuchWIBAJH2F/wAEufi3+zF+yJ8WrP4W/Ej4sSaH431Xx1Zf8JD4y0mPStS8OvocMQnjsRqn9pRi3R7gpJNKscgJgjjI4atr4EftIfsH6X+zd8Sf2dfBXxs8ZeH9Pk+F/iKXXJPEHgvS7dvE2sXN3bCO4gYayfPmjt0WKCyAHyGd/NJJBMVUlTw9SdPVqEpLs5KPMvO32Wt+btH3lnQftJuMtPegv+3ZOUX87xTT25XfVrlPkDx7+xf+1T8MfhNH8bvG3gBrPw61nYXc8qeILKa6s7e9BNpNc2cU7XNrHNjCPNEiscAHJAPlH228/wCfqT/v4a/Rr9sD4ofBLXv2S/HkegfEj4eXn9seBfBFjoPizR/F1vc+KfGM1l5Hm2mqaarF7JIArMWENu2baEPJPnA/OGr5v304rZNpenS/n8l6dXNPmlh4TkrNpX9bJvTsm7J6p23vdKT7bef8/Un/AH8NH228/wCfqT/v4ajp0LiOZZGXIVgSPWqKLDprCRee7zbev+sP+NQ/bbz/AJ+pP+/hrYk1KyEBl85W4+73P4Vh02B6D8WvgL8Qfg1oHgLxH4n17T7iD4ieFY/EGirYXUrNBbPczW4SfeihZN8DnCl12lfmzkD2fR/+CXfxF1T49eJP2Y7v9qr4YWHjjwqt3LqmiXcniBs29tbC5luEmi0l4WQREkLvEhKkbM4zvftC/te3Pg34N/s8+EPhbqHwz1z+zfhLBDr66x4B8O+IbrTrz+070m3klvrS4ltmEZRvJ3KBv3bcsSfU4/jj8Fz/AMFqvi98Vm+L3hf/AIRfVPC3iCLTvEn9vWw0+6kk0Pyo0iuN/luzSfIoViS3yjniscZUqUVN01eyxLXrS5PZq3Z3a3vLpZoiPNLD4eT3kqDl/wBxIx5/SzbdvstWd0nf5s+Cf7DVl+0P8UrP4NfCX9uD4Val4g1OSRNKtJLXxVAt55cDTyFXl0RVUKiP/rChJQgZyMw+Ef2IU8ceEPGHxL8O/tm/DCXwn4Fh0xvEXiZ4PEyW8Ul/PLDBCsR0b7Q77ovmIi2ASJ8x+YLa/wCCTvjfwZ8Of+Cgfw98Z/ELxdpeg6PZTakbzVta1CO1toN2mXaLvlkZVXLsqjJGSwHUit79jP4xfC74YfsMftEaT490Xwj4ivtXu/CP9keDPFWr3Vv/AGt5V9cGVo0s7q2uZfJDLIfLkAX5S+VODrH4JtvZRa+c4xf4N2+96D5tbW/r+v6vY8n/AGkv2ZviJ+zPd+Hp9f8AGeheJND8XaN/anhfxV4T1KW40/U7cSNG/ltLHFIro6lXR41ZT1HNd94f/wCCcPxr15tG8LzfFvwLpvjrxF4f/tjRPhjqWvXMeuXVu0RmiTAtzbRTSxYdIZZ0kIIyoOQPPv2kP2p/Gn7Sh8MaZrPhHw74Z0HwXof9leF/C/hOzmhsdPgMjSOV8+aaZ5HdizvJIzMe9fX9/pv7K/7TP7V9j+1L8S/Efwj1v4a+MtH0mXxdYeMviJPpOueFHtLGO3uraCyt763mnkZovkYRXEbjaV25OfPxdavRg9bK87O13ZX5E1dK7Vm3e104ppyTPRwNGlWvzLmklH3btXenNbq7O6SWut9otHy/Z/sh3tj8HvCXxo+Jn7TXgXwVYeNv7Q/sLT/EEOvTXb/Y7k20+9bDTLlI8SAYBfJDDjOQND4efsVQ/Ez4deJPij4c/bL+GS6T4Ps7e68UNc2/iZZNPjnm8mIlRo58zdJgYi34zk4HNe1XnjHxJr/7FXwY8I/s8eKvghdyaLJ4oXXdN+ImoeDHvNPWbVne1Aj8QsZoQ8WW/dgbhtLZ+U15T+zj4m8MeCP2Wf2mvAvi/wAYaFZ6zqei6La6XYrrFs39ozQ6sGlW08tytyFUFswll2fMDtwaxeIxEozknZqTSWl7KfKm1Zvazvd3vfY7/qeEp46FF6xbSck207q7tK6T1/uo8E1vTpdO8T3HhvQfFMOvRx3jQWmo6StwIb75sK8SzxxzbW7B40fnlQeK2/jh8LPFnwD+KmsfB/xb4hsbzVdCnW31KTSLuSWGOfy1Z4dzKhLxsxjfjAdGALAAnv8A9gbw1oi/Gub43eNLJZvD3wp0W48X6pFI21bia12iyts9CZb17ZNp+8pavoX/AIJ2fFzT0+H3iX4h6/8AtNR+HfFesfFa21LxBptv8RNI8JXF1a7POku7i8vbWebULUyNKpsIRgtuLA+YMdVbEVKM+WOvKle/96SjHVLS1pOWlkuV6K7OGjh6dam5y0u3ypa/DFykkm7tu8FHW71Wr0Pg/wC23n/P1J/38Nbl14Q1e0+HVn8SG8XaO8N5q01gukxa5E2oxNHGj+dJahvMSFt21ZCNpZWHbn9JtQ8V/EDw74I8Va1+xv8AtJeBfAejzftba9Mus3HjPTtP0270w2mnuPLllkWO6txkM1vGzF1xhG2/LzPjpP2Y/wBqJdF8A/DbxLoqeDbP9orxR4p1/TLO4RHtfDVvYwT3F0YAd8MEywSpGzBVLOqjHQcf9rSspONlaLb1fKmqTd1boqjs768ktj0MRkscPVdOM+d3lFWWkmvapcrvrd01pb7cd7q/wl8ZfhJ40+Bmu6X4Y8Za1aSahqXhuw1mSzsriRpLCO7hE0UFwHRdk4jZGZRuADr8xOQOQ+23n/P1J/38Nfc37I/x/i+KXi/44fHPVfj2fBfizxVrlhPpuk2PxA0rwnezWZnmYpFq+oW83lQQIIUa3gXdKqoCGCha9R+Ofxc8OXHjL4q2v7C37UHw78FeMNT+K+jatqHiJfG+n6XHq+ito1tuEV+7JFcJHf8A2mSe3Q7mLNmNs7DSzDEU5+znT1sm9dE5OGmiatFTd5J/Yd9b8uLy3D1I89Oppdpab8qlrurOTirRf86s3pf8yPtt5/z9Sf8Afw0fbbz/AJ+pP+/hr9ENB+NmsXegXi/spftZfCzwR4mX42X+o/EbVF1ODw5Y69YtHbi3uooruUPd2Cst3utELFjIW8o7xVr4TfG6yFj8O7j9nv8Aai+Gfgrw7pfxM127+Nmly6pb6DBrdvJqLyJcfYLp/N1Czk08rDFboJTGcLtUjcr/ALSqcqfJa9t21a8VK8vd0j9lPVt20WvLP9l0+VtVL2bVkk27SlGy96zdoqTV7KLWr0v+cv228/5+pP8Av4aPtt5/z9Sf9/DX6NfCHXPgD8SPiB8AfiH8N/jT8PPCvhP4Z/FzxReappfirxdaaRc6dpk+srd2Xl21y6ySo1vtUGMMFYYYrtYjS+En7Y2heFvil8A/hjb/ALQ+g2XgO+1DxkvxG05tetVsZYZ9Y1VoF1AltvlvHIjxrKdpEgdR82TEs0rexhJUnzSv7rbVrKUlfR2uo6abtFRyqlzVHKquSPLZpJ83M7O3vL4Xvrtqfnv4o+F/xP8ABfgDwv8AFHxLpMltoXjNLx/Dd99uif7YtrN5M52K5ePbJ8vzqueq5HNc/byapeXEdpaSTySyuEjjjYszsTgAAdSTX6FfDr9o8618Pv2X9S1f9prwrcaf4H8Va9beJNE8deMjPFbz/aJv7KkntPOMwiSDEcN5saO13ISQo2nd+JmufDzx/wCPvhz8fPGvj+z8QyfCPQde8W+LNHuPiBYeLbq0+z3MZ0q0k1qzVVuY57ySAR28uZI0Mg3YOKr+1JU6n7yD5bzu1vyx5mtHvJxitn1T0TSeksljK8KdVc1o22acm1F63VkpNpNpNtNdGz5c8Hf8E4/jX40+Lfib4KWXxi+HNrrvhdpYry1vvGBSW6uIbM3dxb28AjNxM0KK6SOIvKV0Zd5xmvJ/gx8IvG3xx8QaloXhnWbSxj0bw7fa3rGp6rcyR21nZ2sJkkdyiu2WO2NQFOZJEHAJI9X/AOCevxY0u3/bvs/i18XvG+n6cuoWPia51bWtYvo7aFrm50i/GWkkIUNJNIFAzyzgDJIFVfClxc/AP9g3VvGdvI9r4i+MXiVNJ0mZTtli0LTHSe6ljYHcBLetbx+h+yOO1VKtjKM3CbV3Tp2stpylUjK3dR5VO2nupnP7DB1OWVNPlU53u9XCKjJdNG03FO3xNfLyb4kfC/4n/CKTQ4viHpMmnt4k8OWmvaKPt0U32jT7kEwTfunbZuCn5Gw4xyorm/tt5/z9Sf8Afw1+lU/7XusprHhf47N+1fpV9NZfsiX1jpi6p47t7u7tfFsdqvnCS0mlZ0u5ZBFhnQNOYxjfs42/2GPjZ4A1T4d+Atc+M37W+n3tprw8RT/EvR9c+KGjaLaG6umnTZqWmT27XesyyZjZbh5USMFdrAJtbOrmWIo05ydO/K5LRvW0qiS2fSC12bkrLVJ7UsrwtacIqq1zWeqTVuWDbvzLrKyj2jLX3Wfl19tvP+fqT/v4aPtt5/z9Sf8Afw1+iXwt/bAs9P8AiF8EfgLq/wAfdDh+GM37O1zY+OdFm1q1GmtqLWGpgQXhLbfPEkdoEWQ71LKFA8whrHhr42fDzUf2Eo/AOvfGbwjp+j2vwNuLNLPTPHdmbe61XduWzufDFwv2r+0fM5/tKBgpI8wHadtVXzKtRcv3V7bWe65qse2/7u6Wt+eNtbJzh8ro4jkTrWclrdLR2pu3xbLnd27JcrbsrtfnL9tvP+fqT/v4am09dX1W/g0ywlkknuJlihj83G52OAMk4HJ71+oHjn4gfs8N+zX468IeMv2ktG8ZeFv+FbaGfDOkyfEvRUtZrq2ktZHTTvDltBHPpc6L5qkyTGWT5gyv95eB/aZ/aV+JvhrV/G/jzw5+2f4FvPh7L4l0m6+E3h3wz4ijuNU0q1SdTGNPtrSVZtEaG13xT+aqeYC0e1y2a0p5jKeIjTcLXaV7tK3NFa+67S1bs1tFtve2dTLIxwsqkal2le1k7vlcrr3tYqyTknf3lZNnxn46+AHxR+F154y0L4k6jpGia14F1G2sta8PXviS2N9LLMWH+jRpI32pU25kaIsEDKTwa4P7bef8/Un/AH8Nfpp8bPjz8Fb/AOLPxx8SfGj45eGfGHhPxB8Tfh5qej2Nv4ut9XN34dt9Ru3ubeKGOV22xRl2e2ADRiUFlXzBmnrfxvig1nXJ/wBpz9qz4f8AjSyvfjn4X1D4Px6T4sstQ/sKzh1RJLq6RYXP9kWgscRNFL5fzKfkyC7c+HzLEyjFVIavkT3Vm4UW9LPVOpLRvTkld6NroxeV4WnOfsqmkVJrZtpOpZ3ulZqEdUteZaapP81/tt5/z9Sf9/DR9tvP+fqT/v4a/RK4/a20D4xxfEBPjh+0B4V1SLwz+0xoeofDuPxRcRXdnZ6Wl5dLJJb28RDSWPkrCJRCNhVtx5bceR/4KkfFTwt8TPgnoFzf/FbStU8SL8QtSmh0G3+JFh4we0094VxNbahaoslpZu4GyxnyykgjaEK1dPM60pQTpWu0nq9OaNOS6K9uezXTlbem2MssoeznONW/Km7NWvaVSPSTtf2d0+qklva/w39tvP8An6k/7+Gj7bef8/Un/fw1+jnwC/bS8AeE/EX7Jvwc+Ifxm0f/AIVrpfgW4uvGGjteW8lrZ68LvVPsD3+EkMTRTG0lXzVYRAiXZgknurT9p/wtZ/G/4V3nxK+Ivw9vvE2gXHih9L8XeNPj7YeKbyWKa22xWsuqaZp1tb6VG0hZ7WeZpHgYsDGikCvXqc1Oo4rWzklbqotx+9tc3Km/caabb5V4sXJwg2t4xl6c0eaz20V0m3ZKV07JXPyp+23n/P1J/wB/DR9tvP8An6k/7+Gv11sPiVc+LPG/iDxH8HP2jtFX4gWn7K2qJfaxq3xC0vWJ/D13/b1ibeK78SW4W2umVDiOaTDwjaZJCSHHIar+0J4SvIptIh/ag+Hq/tOt8CbbT1+Ly+JLNbA3w1N5ZbNdXEhtlvzppWH7XvAL5Hmg9M51HDl0bvzfg6yuu6/dK7X88bc2l9uXXR9UrvRa+z3vt/Eb13UW3ZXt+XP228/5+pP+/ho+23n/AD9Sf9/DX6ceO/2v9E+F/gPxl4n0X9pLwnqHxytP2fdN03xN448Oa1aTjWNYOvQNGlvcKSl9eQWJ+eeHcwKbgxMeVvXv7THh7x14f1DxV8LP2ofBGg/HrxR+zb4JWHx9q3iqysZmv4b25/tizfUZGEdpfvD9lDLIySFUAyMZFcz6a6tadbSmk13TUFK+nuu6Tdk8Y80qfM1bVKz3+GlJ37W9pb1i721t8B/tL/Aa8/Z21Pwbpv8AwnMmsf8ACW/DrR/FW/7Gbf7J9vhMn2bHmPv2Yx5ny7uu1elea/bbz/n6k/7+Gv1r1H9o34Sf8LX8YTan+0d4W1b4sXPwD8Iadpfjnwr8VNK0MXF9byTHWLa012e2uLWzuJCYj8yIXXIDR53DmfFH7R1n4qk+KkP7Onx1+Gfw1+NV9H4TF94wf4p6fKuvWUFvIt6E1w21laPdtKbd7gQIEk8tgrScgZe0mpT0uueaVv5faSUbXtzRjFK8t+rT3Gn8Kemkbt7X5Iyd+zbbSWzdlda2+Ffj/wDst+Lfg9+0fYfs2+EvFE3ijVNVsdEk02VbX7IZ59Ss7e4SDa0rgbWuBHuLYO3cQucDS8TfsP8AxX02PZ4E+JXhPxtcweMLXwxqlj4T1a5eTTtTuCywxS/aYIVZHZXQSxtJHuRhu4rr/wDgqHruifGr9v6/n8LfFPwrryappfhyym8U6brVu2lSXQ0uzhml+0JiNI1lD7j8oQKchcEDurO+8KfsoeMPh34U8EeNfBd98PfCnjrStb8eeLdH+IWjX194jvllVPtCWVvdyXQtbdZHEcQj3AF5HALHb34WNOtyc+l5pXvpbmjfV2slHm1erbjtZ39PBYejLDOVVN2pxbd7PmdO/wAKvrz2cteWMVJbuJ4h4v8A2K/iton2EeB/iF4Y8btdeM4/ClwvhLUrlzY6vJ/q7eX7TBDw+GCypviJRvn4rM+Mf7LnjT4Q+D5/Hlt8U/C/izTNP8RNoOtXHhTULqX+zNQCM4hmFxBDkMEfbJHvjYxsA+cZ98+GPib4afsjNat43+MHhXW11X4+aLrdufCXiC31TytIsjdeZezfZnfyQ32ldsT4lO1soMV5/wDGHSPC3wY/Zo8afDu4+K/hPxFqni/4oWmoaND4V8RW2pf8S+0hvAbqYwOwg3m5QLHJtkyGyoxms5RisPz9bL72qF15W56mj193f3ZX9itluXR57dFP7W3L7fkfnz+zpa7e/otUeIa/4I1fw/4A8P8AxBk8a6HdQ+IZLtI9L0/Xo5tQsPIkCE3dup324fO6MsMOoJHSue+23n/P1J/38Nfol+yf+0f8Nvhf8BPgLqVt8YPC+n6/4U+G/wAWzNb3usWvmWF9cLusI5opG+V52A8qN1/e9FDV4d+3D8fpv2if2Rv2evGHj74q2viz4hW0Piq18XXVxqUVxqkMC6jEbJLsA+Yi+WXMXmAZXcVyM1hKUoyjFa3V35azXzfup9NH5a/KU7ypuT0tJxXnZRlfpZWlZb6p/Lh3/Yo+Kq+EbjWE+IvheTXrXwYPFd14Fj1G6bVotJKLJ5xH2f7Pu8pll8nz/NCEHZniue+Hv7Mvxd+JHwI8ZftG6Pc2tt4a8E+SuoTX11Ikl5JJIiGO3VUYSMnmxs+4qFEi8kkCvcfg3beCvg/8GvF9hqXx3+HureAvFHwxuJGksZLGy8ULrE0SlNO8uJzqDKlyoV1kZrV4gWwAxFdDo/x3/ZD8S/s4+O/hd4R+Knirw/omlfC610zR/D+teF7CKa5vDqVrcXNzERqp+2XE0y7mULH5cKjG4RBW7K1OnB1LdItpXvZpz+/SKWm/Mpr3Xyr6XC5fgKnsHV93mdmuZXlf2dmnsl70pP8AwuFrpyfh+qfsT/FXSvCeoavL8RvC8mvaP4Pj8Uat4Hi1K6/tWz0tlR/OfNuLfcsciSNEJzIqsMrniuH+DHwe8b/G/Xb3S9A13TtLsdJ09r/XNe1/Uvs1jplqGVPNmkwzcu6IqorOzMAqmvor4cweB/g78C/HXh/UPjx8Ptc8CeI/hrI+lz6U1hY+KJdYl2SR2MsUDm/KRzgq6Ts9sUUEcEAY/wCyj4h1j4H+Gfit8HPB/wAd/Cvh3xz4l8O6Pd+FfFNr4qto7M+VJ509muoFxFbXDRTbcll2vGy7lOMqUIxxDVtEm7b+9eennZRT395aq3Mksll+Fl7ByTinfm1TdkotWd7e83ZPRJ6NLlbflPw0/Zy1X4o6/wCLrHR/jh4Rs9H8F2C3mp+LNSuNRTT5oWuI7dWi22jTndJKuN0K8ZJxWbpfwO8VeL/jhpvwI+FvjnSPF+oatdwwWOq6DNdfYnLqGZy1xDFIqRruMjGMBQjHkDNfT3jb4r+K9R+Kvia//Z9/bF8MeHPHn/CA+HrbxZqFvqdlY2Pi/VIVIvZYdVndIUkjJjJYMvnnzMEgcyfED9ov9lfQfi/4r1a7+IWqL488ReH9F0bW/Hfgfw3Z3+mvMIIv7XmgZr20Aa5lXy2mRSojWQru8040o0acqlOMn9rldn8WsrST25NFdrVXVk3oXVy/AwozblZp3u7JW0fIvfdprVWl82kuZ+G3H7E3xL0Xxd498O+N/ir4S8Paf8OdWt9M8QeJNWv702L3c7MsUUPk20k8hbY7Z8oBVUlivGfO/jN8MPHPwJ+J2rfCbxxdwtqejzrHPJY3ZlhlV41kjkjfjcjxujAkA4YZAPFfanjv4pfDm4+L3x+uv2dvjB4J1LxH4k8W6VcW5+IN5pkWiXllHJM1wbX7XcSWN26SeQVmk2yhGk8pFO4nzO6+JHwpk/4LAeD/AIp6b8RdPm0GP4n+HL7XPEdxqxbT4pkmtTeSpcTtxapIsuxmbasajB2AVjQpKtOhBytzKKb82ottd0m2nayTXLq/ec5xgcDg8LVqUNXGcktb+6p1IperUYu1m7PmvrZfJ/228/5+pP8Av4aPtt5/z9Sf9/DX6JeM/wDgpb8a7f8AZJ8aeIdC/a0H/CdWP7Q7W3hea31i2OoweGmt5JGS1A+dbAyxQZCDyjtVTwcH2/wR+0Z8EvDP7RPxgj+FXxw+H+n6RrnxysdTuNT8O/FfTvDF4tibKAyXi3FyJLTWbEymbfYqN3mGRuS4xx060qkISS+JX9P4Oj6LSrvey5JXsk2vBrx9hG7d9Xt/dc197cNEk21JW1sn+P3228/5+pP+/ho+23n/AD9Sf9/DXa/tOXXhS+/aO8e3vgTW7DUtFm8YalJpWoaXYi1trm3NzIUkiiBIjjZcFVHABAHGK4aqpVHUpxna10nb1Kqw9nVlC97Nq/exJ9tvP+fqT/v4aPtt5/z9Sf8Afw1HRWhmSfbbz/n6k/7+Gj7bef8AP1J/38NR0UASfbbz/n6k/wC/ho+23n/P1J/38NR0UASfbbz/AJ+pP+/ho+23n/P1J/38NR0UASfbbz/n6k/7+Gj7bef8/Un/AH8NR0UASfbbz/n6k/7+Gj7bef8AP1J/38NR0UASfbbz/n6k/wC/ho+23n/P1J/38NR0UASfbbz/AJ+pP+/ho+23n/P1J/38NR0UASfbbz/n6k/7+Gj7bef8/Un/AH8NR0UASfbbz/n6k/7+Gj7bef8AP1J/38NR0UASfbbz/n6k/wC/ho+23n/P1J/38NR0UASfbbz/AJ+pP+/ho+23n/P1J/38NR0UASfbbz/n6k/7+Gj7bef8/Un/AH8NR0UASfbbz/n6k/7+Gj7bef8AP1J/38NR0UASfbbz/n6k/wC/ho+23n/P1J/38NR0UASfbbz/AJ+pP+/ho+23n/P1J/38NR0UASfbbz/n6k/7+Gj7bef8/Un/AH8NR0UASfbbz/n6k/7+Gj7bef8AP1J/38NR0UASfbbz/n6k/wC/ho+23n/P1J/38NR0UASfbbz/AJ+pP+/ho+23n/P1J/38NR0UASfbbz/n6k/7+Gj7bef8/Un/AH8NR0UASfbbz/n6k/7+Gj7bef8AP1J/38NR0UASfbbz/n6k/wC/ho+23n/P1J/38NR0UASfbbz/AJ+pP+/ho+23n/P1J/38NR0UASfbbz/n6k/7+Gj7bef8/Un/AH8NR0UASfbbz/n6k/7+Gj7bef8AP1J/38NR0UASfbbz/n6k/wC/ho+23n/P1J/38NR0UASfbbz/AJ+pP+/ho+23n/P1J/38NR0UASfbbz/n6k/7+Gj7bef8/Un/AH8NR0UAFFFFABRRRQB0svxf+Ik/wgh+A0viHPhO38RSa9DpP2SH5dQeBbdpvN2eYcxIq7C2wYyFzk1zVFFH2nLq7XfeySV/RJJeSS2QdLf1vf8ANt+oUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFABJwBRvogCiui8S/CL4seDNNbWfGHww8RaTZrIEa61LRZ4Iwx6LudAMn0zXO0eRz4fFYXGU/aYepGcb2vFpq/a6vqFFFFB0BRRRQAUUVa1PRtY0VoF1jSbq0N1bJc2wurdo/NhcZSRdwG5GHIYcHtQS5xjJRb1e3mVaKKKCgoqxdaRq1jY2up3ul3ENtfKzWVxLCyx3CqxVijEYYBgVOM4Ix1rQ1TwB410XTl1fUfDV3Hamzt7t7hY9ywwzlvJaQrnyvM2kqHwWGCAQQSeZjLFYeLSlNK7stVq07NLu76W76Fif4peO7n4W2vwVn13d4Zs9em1q2037LF8l9LDHBJL5m3zDmOGNdpYqNuQASSefqxpelaprmow6Pomm3F5eXMgjt7W1haSSVz0VVUEsT6AZo1XSdV0LUptG1zTLizvLaQx3FrdQtHJE46qysAVI9CKXKk20t/wAdEvysvSxpKvGVRUnLVK6V9Ur9F2u/S7K9FFFMoKKKc8Usaq0kbKJF3IWX7wyRkevII/CgBtFFaGr+Ftf0HTtO1fVNOaO11a3afT7hXV0mRXKNgqSAyspBU4ZeMgZGQiVSnCUYyaTk7JN7uzdl3dk3p0TZn0UUUFhRRXSaB8GvjB4r0iHX/C/wp8SalYXG77PfafoVxNDJtYq210QqcMCDg8EEdqaUpbHPisZhMFTU8RUjCLdryair9rtrXRnN0U+4t7izuJLS7geKWJykkcilWRgcEEHoQe1Mpb6o6E1JXQUUAEnAFdK/wc+Kwv8AUdMt/h3rF1No4U6stjYvcCy3JvxKYgwjIXqrEFSGBAIIAc9fF4XC/wAapGPXVpaXSvr5yS9Wl1RzVFFdJcfB34uWmrWeg3fws8SRX2pK7afZSaHcLNdKi7nMaFNzhV5O0HA5NNRk9kFbFYXDNKtUjG6bV2ldRV29eiWr7LVnN0Vt6/8ADT4j+FNQs9J8UfD/AFvTbrUH2afbahpM0Mly2QMRq6gucsBgZ5I9azn0PWo9abw1Jo90uordfZm09rdvOE+7Z5WzG7fu+XbjOeMZoswo4zCYimp0qkZJptNNNNJ2bunsno33KtFaVj4P8Xan4hfwjpvhbUrjVo5nik0uCxke4WRCQyGMDcGUggjGQRzUWm+G/EWs64vhjSNAvbrUpJWij0+2tXknZxnKiNQWJGDkYyMUivrOH1fOtFzPVaR7vy0euxSorZtfhz8Qr7QbrxVY+BNZm0uyZlvNSi0uVreBl+8HkC7VI75Ix3q3pPwe+K2uaRb+ItN+HWtPpd0yiHV306RLPl9m43DARqu7gsWCjnJGDT5ZdjCpmWXU03OtBWfK7yS961+Xfe2tt7B4A+LfxC+F2n+JNK8C+IPsNv4u8PyaH4hj+yRS/a7B5YpmhzIjFMyQxNuTa424BwSDzdWNX0nUtB1W60PWbKS2vLO4eC6t5lw0UiMVZSOxBBFV6XxNS8rfK7aXpdt+rb6nXCcZ004u6eqts7pa/NJa9kgooooKCiui8QfCD4teE9IbX/FPwu8RabYxlRJfahok8MK7jhcu6BRkkAc8k1ztDTWjOfD4vC4ym54epGaTteLTV+11fXyCiiig6AooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACn2//HxH/vj+dMorSlU9nUjPs0/uA+kvjz4C8KW37S2oa94++C/i6z0G+8XSQat4k1K8cac8c26MTRbbaLZtdllGZnBEZUhgch/hz4BfCLSNQ1vwfq3g288ReIvCej6bHqWnaTDPeyXd3cSSPczLBHd2zOsCmCEeW4C5LOrk5HzVRShKMUlbb/K3p36flc/P48G5pTy2lhKWYzhyQjC8edXcGrSs6smrx54ySaT5otW9mr/TNh8I/gNP4p8O+DrX4VXHl+JtS16GS61bVJ1vdPW1VzHGqwTmHejfKS3mAheRkk1wX7T93FqWhfDXW7Lwda2NnN4FgSG6tPtDRTMk0ge3DSSOD5RxkA7wZjvJ+QL5HRS5v3fL6fgrHXl/CWKweZUcXWxs6vs76Sc2m5e1TavUaXuzhHZq1O9ryvH3Sz8K/sx/Fazh+MF/4ig8H22lxr/wmHg60yZLmQDCHTgTyspGCpP7o5JOME+S/ETxLofi/wAZX3iDw14QtdB0+eQCz0qzZmSCNVCqMk/MxAyzcZYk4GaxaKqVTmVrWPUynh/+y8VKrLE1KqS5acZyuqcG03HvN3VlOfNJRUYp/E5Fe6fFf4VeKPFurfDrXL3wxrEfhdvA+gw6t4ig02Rrazh2ASyNLtKLsU7jk4HevC6KlNaXWzv+DX6nTmWW4nGYmjWoVVB0+Zax5rqSs7e9GzW6buu6Z9O+OPgl8EbLxRD4Aj+E2taJeavqF5pWh6xqEctvaSStCTaTIWvpzcnzhGvmKscTLM2VVgopvhP4K/AW6k15NP8Ah/qfiifw/rtpot5Y6LDPdzFY4ALi+2Le25jEtwJQJMvEgRf3eCTXzJRT5o817f0v6d+912Pk1wXnawapf2tV5rJOXvavnUnL+JdXiuWykkt+rR658X7Hw5B4T+G+mJ9og0hJtWiX7QymaO2GrzD5ihZdwTrtJGemRXomnaUvi34gfFjw34wszJa3nxP8P2M9tuZAbT+05okjBUghfJ2qCDnGCD3r5frX8Z+NdY8eahb6xr6QteQ2MNrNdxqRJdeWu1ZJSSd0mwKpYY3BATltzGKfuRinrZt+t7f5fideK4TxNajToQr2s5tzt7ycsRDEKyuv5HFvmvfllbdH0j8F/D/w3sPHGj+OvDHwzsdNuIPFXiHQ1hTUL2VWig03zo5jvnJ8776EjCESMQgYKy8z8P8A4P8Aw68WeFNF1i4+GEUmi6xpGp3niLxlb6ndJH4duY2n8u2UNKY0WNUhIE4d5RNw1fPtFEXJRalrov8A0lJ/e9ejV7JmEuCsdGc50swqKUlGN26jaUXWa19qm7OqnG7cU4K8ZJ2Xv3ivwn8GvCzeMTb/AAZ0+4/4RPwxo9xbLcaxqH+l3N59k3yS7bhflXzmwibfcnjGl4t+D/wcvvE/iTwVoHw9s9I/sPUvD32XUpNauyXW/li85JjJIyCNVm2qyqHUJksxJr5vorX2kb6x/q9zePCOYR5JLMat48u8qjTa9jdtOrZ39nU0aa/fNbQV/sTw38KPAHwy+LXgvxDoPwzm025vtc1nSTBqdreWok2WoMU0ccl5M5LEtGrMwWQOSIlOxq89034c6d4i0C3vb/4d3Wt+INP8DNcaX4FuNQvtqyf25f28qpH53nhYIo0Hko4JOWbLbyfn2ij2keVprrf0923bq9fwOLD8D5pR/eTzGc6lopzandqM6skm1Vuk1V5XZqSUfdlFvT6Y1T4R/BDwnfWUc/wxtb641bxppGk32nXWtXbDRTc2kclzbK8MyeY8bllDMTgnDbsYrhfiVoGmaB8C9W0OBGaPRfi5e2WkNM250g+zYkUH6xwE++DXkNbGueNdV13w7pHhSWC3t7DRY5fssFtGV3yysGkmckktI21FJ4AWNQAAKiT5ov8ArrF/hZ2669db9mF4WzPC4ijOeMnVtKLlzOWnKt4qU5Wbtyu2rUm5Sk173f8Aws0L4QfGXwbb/DHXL3TfB/irT5JJNN8S3UhW11OEsWeG6JPySKMlHGAQNnBxnB+Nes/CZrqw8F/B/Q86dokbxzeIrhSt1rMzEb5mGcJGCP3aYyASTySBw1FU6l42t8z2MPw/9XzZ4t4mpKneUo0nL3IzndTlf4pJpvlhJuEG5OK1jylelfDH/k3T4of72h/+lb15rRULQ9LM8D/aWGjS5uW06U72v/DqQqW3W/La/S97O1n9LeA/gj8Cden8G+Irzw1HcWfxAv8ATbXTtMTUrhTZSQpIup4PmbypmSMLuLYEvBHFHhj4B/DnWL/Q5fiH8JZvCus3FnrLw+C7e4uZpNX+ziH7O6pNcpLkl5hsWWPzfIyhUGvItL+PnijQvEnhTxDoWgaRZx+DQTpGmxxTNbmRnLySSb5TIzOxy3zgcAKFAxXDAYGK1c4a6dX8ttvx32T76nwdPhXibEVqjnj6lNNPl96Umv4sIqyqKN1B0pTbUnKabjKMvePcLDwp4A0X9rnwRo2k+DdV0G0kvtNkutJ1y2MLrdGTgeU087xxuwj+SSQsNxyQMGt34EWvj7xX4b8J6tpIu5bzSvjHNqPi6aNtv2SJorUme4/uJhLkbm4+8vU4PztZ3l3p93Ff2FzJDPBIskM0LlWjcHIYEcgg8g1f8Y+Kb3xt4nvPFmpWdrBdX8vm3S2cPlxtKQN8m3JwXbLkDA3McADAExqcq2639PejJW/8Bs/wPSxnCmMxVOFKVfmapqLnNOesedO8XJN86qNv39HCN+Y911D4Y+D5Ph2Pib4P8J21n4qmvlksY5NWkijs9PN8wi14xM25VLbIiD+6Ufvdm0jFP4u+DPG0fwf0nwRq2gapZ+ItU+Ik32iz1q6E1xrV5JAkZvLZ9sYFsX+UDawJkX942K8DoqI8kYKNtNF9zT/G2v5WSSujwnjaWIhUli+fkqOa5oyk0rWjBN1Lcsd7cu+seWSufRPhhfDcXxsMketWNv4Z+Dvh1kt9QvI5fss2oo2xZmEau2ZL+XzBtVmKRgAHArXj8IaFefFnTf2obrxfpVxo0PhP+173XJIbkWb63bBbMLhoRMN10YZsGMscthSMV8v0VSnor77/ADd9fLdaLstdrc1fgerUqe0hjJRbp+yl7sXenJN1H3VSdSTnz3snZcjtc+j7ibULP9pf4a/FTwj42+1Wvjm80uLWL7SZp4Yby6guYYbyMrIkchRnjSQrIoyXzjGKT9mi+8EeH/jjdat/wmmm2nirUPiBFp9jZ31ndMyWLXQM5heOGSPzZgfIG9kCoZMsAwI+caKqNTlrRnb4XLTyk4uy7L3bddGaVuB4VstngpYmSUqapXUYpuEZycFLRqSUXGEklHmUX8Klyr6Y+GfhjxVp97fa7f30+o6Nb6T4gg0HxTa3rNpGiBluPOS6geFGDuzfKHdc+YjBJAABi6l4TPjP4MDXfH3w1srKx0P4dQN4d8a2OpTss063HyWjZfyDIzSSq0QTzEbJLYxXgNT6ZeR6fqVvfy2EN0sEyyNa3QYxzAEHY+0g7T0OCDg8EdayjZQUfJL7r6/j/wAF3D/U7FQxH1iGJtJSg04wlF2i5tpWqpc0+ZqV17Ntyk6V5Sb9J+P+p2mkfF/Q/FF9ptvqF83hvQr7XrG/UlJ7s2UDyJKoIPzjaWHGdx9a6n/hFP2Uv+Thv7d/4kfX/hWvnH7b/aXX7Nv/AOfT+Lzeu35fvcV4t4t8U63438TX3i7xHd+ffahctPcSYwNxPQD+FQOAo4AAA4FZ9aRqWbbW7b9Lu9vRbdjr/wBV8RWy3C0frVSjOnBQn7OVlKFlzQV17uqtCpFRqQXwyV2XNf1SHW9dvNZt9JtrCO6upJksbNSsMAZifLQEkhRnAGTwKp0UVmfX04Rp01COyVl1283qfTXx7+Ftxrf7Rs2pRfs5eL9WjvNetEudQur6RNLvomjRWCGO2Qxe0nnsFKkkEZFNvfgF8PLK48SJ8OfhH/wmlrpPha1u/C96upXcv9vSPerFPNi2lT/VhpI/KTaf3OTksDXzPW14f8dav4b8LeIPCNjb27W3iO1t4L6SZGMiLDcJOpQhgAS0YByDxnoeRqpQvqu/5WX46/8AB1Pzv/U/O8JgMPQw2Of7pU4WXtYqUVKHNJ/v201FSSjFxTUnG1+SUPe774DeA7C/1RvBXwW/4SrVo9c0y31Lwh/bFyf7Aims45Zl8yGRWbE7SRedIWSPy/mBIJp+j+Gfg/8ACn4v/DOy8GeE9O1j+0vG06L4kvb+7L+VDq728LxrHMkWVQKdxVlYopwQWDfM9FEanJVjNLZ3t92nytvq9Xqb/wCpmZVqfs8RmNSUXFxavUXNek6ev71qyk+dJJN/8vHUlaa7i81zTvAvx3vNX8Z/Cy1mtbXVpxf+GLxZ408ttysv7xjIrYbcpYnDYOCABXeXnhX9mP4U2c3xgsPEUHjC21SNv+EP8HXeRJbSEYc6iAeFiJwFB/enBBxkjwuiooy9lTUbXsevjOGZYz2X+1VIJRjCooSaVSEdbatyg73vOElNxcouT92UVYhmJC7efujtSUUVJ9QFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFOjUSSKhdV3Njc3Qe5oAbRXt0X7PHhX4H2E3xF/aA1ax1bTHj/4pTR9C1Ld/wAJE7IGWUSL80duu4bmIBJ4x0D+cfBu2vL74q6Hbab4Ah8TySaigTw/cZ2Xg7oxB4AGTuPyjGWBUEHR05Rkk+p87heJsvzHCYjFYO86VKN+fSMJNJuUYyk0rxslOTtGLfK5c0ZqPMUV9KftSfBT4VfCz4WXl18HfCkOsw3HiRo9c19tSFy/h6RMbbFQh+UEuVLPnOAGyxQj5roqU5UpcrDhfiXB8V5Z9ewsJRhzOKUrKWlr3im3HV6KVm1aVuWSbKKueHPD2s+LvENh4U8O2El1qGqXkVpY2sQ+aaaRwiIPcsQPxr9GP2hv2EfhX4h8M+CfhHoWm+BoZvhv8VPDvgrxjr3w81/R59S1TT9SitLW7vr5LaSWeG4j1WK6jj+1xhlFwqhSEIGcvdim+rSXndpfg5Rut7NtbM9/2kfaOLe0W+vRXtotLpOzdk2rdT826K+/fB3/AATY/Y++K3xas/BfgzW/iho+kab8ZNY8A69fazqWn3E2qmz0e7vfttmEtI1g2TWhWSBzPlJ4T5iFq8zg8J+CfgT4w+An7TH7IXin4jeD4fH3iS/sXs9c8SRtqCQ2mpQ2zSpdWUFqGt7iKbY0ewhXimTfIBkThp08VWhTV1zOPTbmipRv6pp23tfTRmeMrxwmFnWevKpO3dxck1tv7r12031R8nUV99fCm60iP/gvP4q059T8T6VrWofF/W7Tw94i8L6lYQy6TcSz3CNM8V9YXkVyvlM6+WVQ5bcHGMV4D8HPgT8Jdb+DXxP/AGnvjbH4q8Qad4N8QadpUPhrwbqdtYXUtxfSzEXl1dzWtyltbKsDoMW7mSaWNAYwCTNGo6tCNW1k4p+l3FJeeskvmvO3bWpxp4irQTvKEktt0+d3300g9NXo9tObwOivsv8AYc/YN+BP7Ttpp/in4iad4i8O6F40+JjeF/Akg8eO19IREksiC3tvDl2t20Eb7nnkksIGwQTEFZlXxV4C/ZK8Af8ABOH7d4q+A3iHUfE+j/G7UvDeo+JNK8Y2FvcS3kOlxkP5r6RJILAsC62TMWDB288k4CrVVRhJtarl00v7zpq3qvaQfo09rtZ017V+7tdq/pza97Pkl06a62T+M6K+o9QmsL//AIJIWa+Ede8T6fZx/Hi3s9d0HUdQ0+60+8v30eaT7fDssIrq3IREj8lrmWPAZsZIK+h33/BOT9m+98c+Pvg3o03xI0zWPhP4v8LaR4h8Sa5qFmLHxGmo6hDYzm1tVtFbT2Yy/aLbfPdiSFMsOcjocJc/Ku9l56Qbfklzx3d2mtL3Sz9pH2CqvRdfJ3aS0ve9t9k762tJ/DNFfVX7aP7Iv7Nvwr+FXiX4jfs+X3jiP/hCfjbd/DvWI/GWqWd1/ackVo8322Fba2h+zKJIJk8tmmLK0bbkO5K+Vawp1I1Y3j5filJfg0/z1NJR5fx/BtP8UwooorQkKKKKACiiigAooooAKKKKACiiigAooooAKK+n/wDgllo3w4v/AIhfFPX/AInaFpt5ZeHfgfr2r2tzqXguw8Qf2dcwvalLuKxvytvPKgLbVkZAckFgCa7H9gDxl4F+IH/BT3Qb7wf4x8TWt5qyy2/hfxd4X8IeHfCT6dKNOlEskmjxWl/YsrIJI9qFGYt5pbeSKlyjGpyv+Xm/9KSXza38762aFf8Adyl2dv8A0lv5JSvpd6bHxfRX1l+yJ+yp+zB8WfgXovxf/aAm+IF1q/i7472XgDT7XwjrVjYwQC6ggmN5KbiznZinmSny1AD/ACLmPBY+gfs8f8Ep/hX408RN8MvjP4vvdL1fxJ408V6D8O9WsfFEiSamujKyS3P9mR6LdK0aTI28zahabl3BcbQ7y6kYuSe6TfrZRbS9FNP0v2drSjJ+69L217XkrtK/8rvufBtFfaV1+wf+yxP8H7Gy0nVviAvj+7/Zqm+K02p3GrWJ0eFoTzYi2FqJpBIIp/3hnTyiY+Jfmx5n+0R+z98AfgFZ+E/hGdO8X6p448T+DtF1z/hObjxNa2fh2M6iFnAhs/sMk1zbxROIjcfa490qSny1CbDtCMqlTkirvmUUu7bktL+cJb9uzRnGdOVPnvpbmfkrQd3/AOBx0V3rtoz55or9KPhp+wv+wD8GP2ytD+C118WJPEnjnwj4j2a14S8Sadd3lpr8MGm3M91JLZ3Wh21vZxh44po0F5fLLExCuSVdsqb4H/sr/tcfBbwr4D/ZO+E9ldtqHx0hXVtY8mDRL9La+07VNSn083sltcPFb2FtFFGcRTIz20jRRyZQyYwq06nM4O6jy3e2knFKWv2dXd9HFp67TUn7KooSVm7273Sk2vVcu19b32TPzsor7+H/AATY/Yz+w6P8Yx468bX3gHUfg34n8Ytb+H9bE11NNo99bwlYLrUNGsC0U0c+Pns12upZXlTG7lH/AOCfPwIsfFb/ABM1K81qy+E//CnPDvjO+u/EHjoWd1olxq0wggs5Lmz0K+e9JlScKIrGPK4LMm3EhCpGc1DZu61XX39PV8kkvle11fRWl8Lvtt1+Hb/wOP42vY+LKK/Qy4/4JS/ssfDb4n+OtJ+L3xS1j/hH/D/xQ0bw5ZSX3j3SfC7WOm3mmxahcXz3WqWpTUZreOeNDaQRQzNt37UEiovC+Cf2N/8Agn63w4b4+/FT43+IND8B+JPiPqmg+D9Sk1S+Mttp9n5OLqX7N4culu7mUStKtrJ/Z52IBvJZ2iPaJxuuyfTryWWr0b542vo9dfddlzRvGzT5m0n3tzX89OR6b7ae8r/FtFfpn8Bv+CRX7D3xL8F+Ff7c+IfxOuNc1zwz4e1O4vtJ1Kwh0+VtVXVAhiSayaZEU6XJJh8sRKicHLjwf45fsafsX/AT4GW9t41/aJvIfidqHw303xPosMf9oSWmqXF4sc6WkVsNFEHkeQ7xi8GqODLES0KZaNHKpGKm3f3Gk1Z3u4ue2/wq9t9Ukm3Ycfemordrm8rXSvfa12lv57anyJRX3J+0x+wp+xj8GrT4rf8ACFx/E/UJ/grf+FX8Tf2p4q06JNct9WzvgtfL05jaSRbocTSecHw+YV+U1wX/AAVk0D9mzwd+1HrXgz4IfBfVPDN5Hb6LcNNb69Zto89tNo9rKPs1jb6dAYXZnVml8+RZH8xtg8zCKNRVHaOutvwT077/AIMXN7yXdX/T9V9663t8sUV9Yf8ABP79ljxB4u+NfxM/Zp+MXwik0vxVqXwf1JdB03xh4b2Xmm37SWclvcxxXIRopPKLMsgwQjkghSTXu3iL/gmL8BPDXwT8PSfEb4h6fceH/CPh/wAQeKbzxhoOnz6fc+JdNur3S4tNnluLXT9TlS3SCZ5i32e4EJZk+VWaZXKpGNVQbteLkn0057r1Sg2r762vyytnKrbZX96MX0tzJOL13TbS02um7Jq/5s0V95+B/CX7Hfg/9lz9oXRvAviTxV8Q/AMviH4fvYW/hnUGs9Qlv5U1EPZi7vtMjLLHOZMTfYAZlVAI4y5Mfyt+2L8FPDn7OX7UHjb4IeEPEVxqul+G9dktbG8vNnn+XgMI5tmF86Pd5cmAo3o3yr90Oc1DEOi97J/+SU5NP09okrNqS95OzsumVNqPN/Wt7fl1s7prdM81oooqjMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCSe9vLqKGC5u5JEt4/Lt0kkLCNdxbaoPQbmY4Hck96dYahf6Vexalpd7NbXEEgeG4t5CjxsOjKw5BHqK0vAngDxh8S/EUfhTwRoc2oX0iM/kx4ARFGWdmJAVQO5IHQdSKb4I8G6r4+8Y6f4H0e4tIbzUrpbeCS+uVhiVz03MensBkk4ABJANWk7HFWxmX0Y1YVJxXJHmmrr3Yvm96S6J8stWrOz7Mz01LUY7KbTY7+Zbe4kWSe3WU7JHXO1mXOCRubBPTcfU1DXb+Kf2d/iv4G8Iah418a+HP7JtdO1ZdOaPUJljluJjnPkqf9cq45ZcjByMgMV4iiUZR0aFgMwy3MacquCqRqRTs3Bpq9k7XWjdmvwLWha7rnhfW7PxN4Z1m607UtOuo7rT9QsbhoZ7WeNg8csciEMjqwDBgQQQCCCK7b4IftH/ABG+DHxdsfilb+J9avYz4ksNW8T6YmuzQDxCLa+jvPKun+bzd0sYbdIr4fD4JFef17B8U/2I/jV8Kvh38PfiNdrp2tR/EgxxaPpPh157q+s7qW3trm3s7mLyl23E0F5byxxxmQsr9iCKn4WqnZ2v69Pnb5uy7HZy+0vC3S/yj1+V7+W/Q7Xw1/wUz+Mlt+29p/7YvxD1TxN4sh0PWtZvfDnhXWvG1xMukQ38U8YtraeVHEKRiVPuRqG8lRtXjb5RN+1Z+1FcfEiL4yXH7SXj6TxfBY/YofFT+ML06lHa8/uFufN80R/M3yBtvzHjk0uufso/tSeGNQ0fSfEv7Nfj/T7rxEszeH7W+8G30MmprFH5spt1aIGYJH87bM7V5OBzWl4e/Zl8T+F/jV4f+Ef7Vfhjx58M/wDhImjWzlvvAbveHzZPKilW1vJ7PfCZMqZBJxtbAYjbU0KUbxhT9Fr+Hq+vVhiJxp05VauyV27dE9/RP5JjE/bX/bLi8WSePo/2tvicuuzaethNrS+PdRF29qrmRYDN528xB2ZgmdoZicZJrN079qj9p7R/iPffGLSP2jvHlr4u1SzFpqXiq38YXsepXduNmIpbkSiWRB5cfysxH7tePlGPSPBv7BWr+Kv23/E37JSeIfE91ovg/wARajp3iHxr4X+G9/rktlb2zyRrdvp1iZJQskqImA5CmTljjnyTwF8Ffiv8X/F954I+Cnwz8SeMtSs45JpLHw34fuby5FujhDM0MKM6LllBJGAWAJyRRTnGajKHVNr0e/yet/n5m1SnUpyqKWji1GWq36Lzty+dtO6vteGP2uv2r/BJ1Y+DP2nfiHpH9vam+pa5/ZfjS+t/7RvHxvuZ9ko86VtozI+WOBk8Vn+DP2jf2hfhzaa1YfD348eM9Bt/EkjP4ih0XxRd2qaozBgzXAjkUTkh2BL5zub1NX/DH7JP7Vfjd9Yj8Gfsy/ELV28O38lj4gXS/Bd9cHTLqMZeC42RHyZFHJR8MO4rrNL/AOCdn7X+u/s22f7Unh/4IeJNQ8O32qSWtva2HhrUJrs2yWy3H9pbVtzH9hKsVFwHKl1YY4zUy9jGm5StypJPtZtJfJu3l12RPvOpbrd+t1e/zWvnr5nJxftb/tWQfDv/AIVDB+038Qk8JnTW04+F18aXw077GV2G2+zeb5XlFSVMe3aQcYxVPWv2lv2jvEnhzQfB3iL4/wDjbUNI8LXFvP4Z0u98VXkttpEsCbIJLWJpCtu0a/KjRhSg4GBXQ65+y/f+FP2SNP8A2mPF134o0q81jxYum6FouofD3UIdP1KwNs0v2+HV3UWsh3o8f2dSZCEZ84BrA1T9mX9pLQ/C2i+Odb/Z88cWei+Jbi3g8O6xdeE7yO11WW4XdBHbStGEnaQcoqFi45XNayvGTT6NX9bXXz19U7rdNELllTTVrNNr02fy0+6z2aZh638T/iX4m0q+0LxJ8Q9c1Cx1PXH1rUrO+1aaWK71NlZWvZUZiJLgq7AzMC5DMCeTWHXtPw//AOCff7Vvjb4iaT8L9f8AhHrngvVfEWm6jd+F18daDfaZHrclnatcyW1q8kGJJmjXCg4TcyhmXcCeetP2V/itqXwj8I/FnRbGPUH8e+JrzRPB/hbTbe5uNX1WS1WIzTwwRxMrRK8yRDD+Y0mQEIUsJjy3suyfyb5V+Kt8uw37qu9N/wAFzN+lru+2j6pnm9Fd5P8Ass/tO2vxAb4TXP7OXjyPxVHYpeyeGZPCF6uoLbM6xrMbcxeYIy7KofbtLMADkgVNpv7JX7VesePtQ+FOkfsy/EK68UaRax3OreG7bwXfSahZQuFKSy26xGSNGDKQzKAdwx1FEZRls+/4b/d1Da77fra333X3o89or2L4Hfsh+KviXZfETWPiBZeMvC2n/Dvw7qFzqWoW3w11LVYotWthkaZeNbqBpzMBJumnIWLym3D043wd+z38fPiJ4H1L4m/D/wCB/jDXfDejeb/bHiDR/DN1dWNj5cYkk86eONo4tsZDtuYbVIJwDmm9PuT+TbSb7bdelns1dxXMk11bXndWurb9fvut07cfRXbXX7NH7R9j8N2+Ml7+z942h8HrbxXDeKpfCl4umiGQqI5DcmPytrF02tuw25cZyK4mjrYX2VLowooooAKKKKACiiigAooooA0vDfjTxj4N/tD/AIRDxZqWk/2tpsunap/Zt9JB9ss5ceZbS7CPMifau6Nsq2BkHFbXwr+PPxy+Bd1eX3wR+M/izwbNqMaR6hN4V8RXOntcqhJVZDA6FwCSQDnGTjrWp+zJ+zp4l/am+Len/B7wn428K+H73UnVINQ8X64tlbGR3WOOJMK8s8ryOiLFDHI53bioRHdeb+JngLWPhV8SPEHwv8Q3NtNqHhvXLvS76azdmhea3maJ2QsqsULISCVBIxkDpRL3ZK/2k7eaTs/ub/ENJX8rX9Xt+X4Gtr/7Rf7QfivUv7Z8U/HbxlqV5/b0Ot/atQ8UXc0n9pxRJFFfbnkJ+0JHGkazZ3qqKoIAArS8N/teftY+DNNvNF8H/tP/ABE0mz1DUpNR1C003xrfwR3N5I4eS5kVJQHlZwGaQgsSMkk10P7O37E/j39ofw3ZeLrb4g+FvCun6z4yt/CfhmfxQ9+za3rUyBxZ26WNpcuCqvEXllWOJfOjBfJwPMPHngbxX8MfG+sfDjx3o0mna1oOpT6fq1hIys1vcwyGORCVJVsMpGVJB6gkYNS1GL5Wvl8ov8nF+ji9mgS5lzLo9/PX9eZevMujLy/Gb4wLt2/FbxIPL8Nt4dTGuXHy6O2d2nD5+LU7mzB/qzuPy8mri/tD/H9fhX/wotfjl4wHgnGP+EOHia7/ALKx5vnY+yeZ5P8Arf3n3fv/ADdea9M0T/gnX8adf+GEnjuw8VeGf7aT4eS+O/8AhX5kvjrJ8OpJtN+dtqbRFKfvVje5WZ48FYyWVW8J07T7/V9Qg0rSrKW4urqZYre3gjLPLIxwqqBySSQAB1NXaU5unu77eabW3dS5l5Sut7gmo01VWi6P5J3/APAWmn2aa0segXf7Yf7XGoaPpvh6/wD2pfiNNp+jbf7HsZvG9+0NjiF4B5KGbbFiGSSIbQPkdl6Eg874M+Mfxd+HFvDafDz4p+JNBht9Wj1S3i0XXLi1WK+jRkjulETriZUd1WQfMFdgCATXqXxi/wCCfXxe+Dfw08RfEu88X+F9dj8D6xZaT8QtL8Pz3kk/hi/uVJS2uZZbWO2mdXUxP9lmuBHJgMQGUnwmojKDqScd9LtddFJO/VWaknqtU0wcfdUWtFdJdt01bp1TXqmd54r/AGp/2nvHl1Ne+Of2jvHmtTXOm3GnXE2reML24aWzuBGJ7ZjJKS0Ugii3xn5X8pNwO0Yb4S/ah/aY8A6rDrvgX9ojx1ot9baLDo9veaT4uvbaWLTojuis1eOUFYEJysQOxTyAK4Wimklt/W/+b+9g/e3/AK2/yX3I+qv2cP8Agp94v+EHgHUvCnxBb4lavq2peNrTxFeeMvCHxcm0PVtSFvaC1TT7+4ktLtruzCKu2PKbOcEgjHnPi/8Abv8A2mL/AOL/AI4+LHwq+LXiX4cr488SXGsatofgPxJdaZaGWV2YBlt3QSMA2N7AsxJJ5Y143RSlGM5873tb5WirW22jH7vNkxjGEWkt3f5+8/l8Utu/krdxpH7Tn7SegfZ/7B/aE8cWP2O3tre1+x+LLyPyYrfzvs8abZBtWL7RPsUYCefJtxvbLZP2lP2jJvhd/wAKPm+PvjZvBfkiL/hD28VXh0vyxJ5gT7L5nk7RIA+NuN3PXmuJoqt7367+dtEVd8yl1Wz6nS658Z/jD4n/ALc/4SX4r+JdQ/4Sj7KfE327Xbib+1vs2Ps/2nc58/ysDZv3bMfLip/Fvx8+Onj7wVpPw18d/GnxZrXhzQfL/sPw/q3iO6ubLTvLjMaeRBJIY4dqEoNijCnA44rk6KF7ui8n81s/l0DzOxf9oj9oCT4gXHxZk+OfjFvFV5Ymzu/EzeJrv+0JrYxiIwvceZ5jR+WAmwsRtAXGOKm0L9pj9o/wvqei614Z/aB8b6deeG9LbTfDt3Y+K7yGXSrJvvW1syyAwQnvGhCn0riKKXLG97f1r/m/vfdiaT3/AKta33WX3Lsj0jSP2yf2vfD3ijVvHGgftVfEix1rxB5A17WLPxxqEd1qXkqUh8+VZg83lqSqbydoJAwDXnuoahf6tfz6rqt7NdXV1M0tzc3EheSWRjlnZjyzEkkk8kmoaKLK9/l8uxXNIKKKKYgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKdG5jkWQKp2tnDLkH6im0UAetePf2mNO1TwTN4X+Fvw3sPCFxr0anxnd6V8v29lG0RRD/ljAQNzRjqzMDxkv534DvfCGneMdNv8Ax9pN3faNDdK+oWdjOI5ZYx1VWPT35BIyAVJ3DJoq5VJSldni4Dh/LMrwNTC4WLiql+aXNJzd1a/O253jG0YO/uxUVGySPZPjz+1Npn7Q3g77B4x8CfZNZ0vUi3hq80+8PlQWT/fhmVs+Yw2phwFJPPygFX8boopTnKpK8i8kyPLOHcD9Ty+DhSTbUbtqN91Hmbsm7uy05m3u2a/w/n8F23j3Q7j4k299N4dj1e2bX4tLVWuXshKvnrEGZVMhj3bQWUbsZIHNfdvgP/gof8JP2nPj5H8P9a+ANj4YbXvjx4S174f33huO7Z1mtdQhs0W/S51CSGH/AIlpEX+iRIu+NcoVClfz7oqd5Rb2TvbbrF+ujimlt3TPTlTjK762tfsrNP0um07WbXVH6qfAz9oX4cf8PKI/2ffBXjHxvr2pXn7QHizxV4l8QeJNNhtBps0GjanZR2tkkd5cNOAGcmd3hLLBbqIkwSPknxB+0j+zZrd98H/h5d+PPiVeeF/hnqWqa1qHi/UvCVnJq2qahe30V08CWJ1Ty4YR5CfvDdu5eaVynIWvmGiscNS+qyjOL96PLZ2/liorTsklp1aTld6hiKNLFQlTkvdle6v/ADNuWvnzS9Lu1tLfYfhj9qr9jTw//wAFNLj9uKTxf8TpNCbxbceKIdHX4e6cLs3U9xK7WRP9s7BEqOpFxkszZHkqAGPGeB/jt+zJoXwy+KX7MuqeMviFb+EPHGsaTrOn+NNJ8HWS6o89m0hNle6adTEUtqTPI6lbzKSwRSbG3FU+b6K0pxjTpKkvhStb5prz0cY29Nb3d9pVJSrzrP4ptNv0Ul6a88//AAJ2taNvsz9h39sH9hv9liy0ubxF4O8SX2t6D8UDrg8Tf8Kp8P6nfa3pEUcYtLRZNQunbRJBKrSu1qZnyflmB2snB3f7RP7OHxD/AGaPE3wA8cXXjDw23/C3tQ8aeFLvw/4Vs9QhmhuLT7OLK4jkv7b7NtKRnzIzMACw2HAz830VNSmq1+ZvVJfc6bTttdOnF9r3dryd1B+z0jor3t/4H/8AJyXe1tdEfR2m/Gb9lO1/YDk/Zrn8b/EL/hLH8dReMQy+AbE6d9sj02S0Gn+f/awl8os4Y3Pk7gB/qCa9W1T/AIKN/s4af4/8efGXw3a/EbVNZ+LXi/wtqvijw/4gsbMWfhyDTr+G/njtLhbtn1FleEQW3mQ2gjhb5skYPw3RW3PLmT7O68tIp/eoRT9NLXlfN04yo+ye2/zu3f5Nt9tdrWPsLxd/wU0sjNrXjPwV/wAJRJ4ob9qc/E7w/d6wY9i6WtvLDHZyuJnZZNhijaNQ0flrtDkAA9F4j/4KWfs2wftlaD49+Gvwm1/SfhL4f8C6v4c0fRZ9J024vtMk1UXUl7fxWdwZbOV/Nu3TypGKSxRqrkBio+G6KxjThGnGC2je3TeCpvb+4raeq1sPl1k7u8ra36qftE+2km3qmrOzTR9fWn7f3g3w74i8VD/hPfEHiLTL/wCBOu+CfCkmn/CPQvCB0q6v7gTbPsulXTxfZt3mSNJuMm6Z8RnJJ4P9l/8Aar03wtY654U/aL+LfiTUvC+qaPp+kT+Fbz4f23iq11DT7UzGG1L3WqWM+mpAZWaFrOVJEaRirRlRu+faKqMIxnztJvzSf2nK9tm7yd7p3vqXOUqkeVt/e+0Vo91pFbbW0tZW+ov2dfj7+xV8MPiN8YvFV9H8QPDGh+PPC/iHwv4R8N6D4XtdX/srTdQULDNNcXWqQO8kSgAxYbfjPnZrpPgZ+29+zX8J2+E/jHUtR+JlxrXwLXxBbeFNDs9Js003xPFdXFzcW09zIb3fpUjtc+VcpHHehooYwrnt8c0U4pxpqF72SWu+ikk/X35f+BXtdRspWlzprSbba2WtrrTZaLa23rf7EuP+Civw4vbCw0a80zxUdPsf2Ub74aQ6asMP2eHXLgyE3McZuNq2pPk7pMCU+Uv7s7Vr47oopKEYyckt7/jKUvzkwWkbf1olH8ooKKKKoAooooAKKKKACiiigD0/9jjx78JPhN+0f4T+Lvxl1rxHaaX4R16y1qGHwx4ft9QuL2a2uopRblZ7y1WJHVWBlDOVOP3bZJHR+OPGP7GnxI/bU1r4meO9a+J158M/E2t6lq+rDSdC07T9dtprlp5o4IY5Lq5t3RJniVpGcFk3kIhwK8Iur6zsU8y9u4oVPAaWQKD+dQXHiPw9aOsd1r1nGzfdWS6RSfpk05S5uVP7PNb/ALeSTfrpFrs4rzuJW5vO34Xt+b+/0t9lfsjft9/C74R/s/QfAf4hXvi7QW0Tx5JrOj+KPBvh6yvdSudIuUhW/wBHE091btp3nm1h3XURmZkeSIp5ZZZPJPiZ8X/gT+0D4p+MXxx+LmjeLtN8c+LvEB1bwDp/h2a1k0q1knu3kuotQeYCZ1WJlWNoQCXBLAA4rxtHWRQ6MGVhlWXvVa817Q9O/wCQhrNrB/12uFX+ZpT993l2svL4U7evKvLdpJybdwm6ekVZOXNbpe8nt6ylfq07N2St96aV/wAFWvBGifCDQ5tEtPE+neLtD+Ea+EJPDGm6HZxaVq2pR2c2mW2sXup/aPtNykFlMzR6e1qYkm3FZFLvIfmLw/4y+A3w58B+B/iF8OV8ZN8XNB8WjUdaGrLZt4fNtBL5lt9nCf6QZdyx7w/y43Y7V41c/EDwPap5k3i3T8f9M7tWP5KSaxr/AOO3w9swfIvbi6I7W9sef++9tTKovrDruXvtpt6X0k5fNXb0fRtbWSiUeekqUtYpWt5cvLb7kvn727bf6G/tkf8ABTL4WfG74SfELwL8L7PxZGvxK1DT5z4X1PRbPTtI8JRQ3f2+6+zG3uZm1G6ur075byVIJHVV3AgKqfEdcD/w0T4L/wCgVqn/AH5j/wDjlH/DRPgv/oFap/35j/8AjlY0/Y0laL07drJL9Ourd2222Ozt/WvX+raLZHfUVwP/AA0T4L/6BWqf9+Y//jlanhb4w+DvFd+ul2slxb3EnEUd1GF3n0BBIz+NaqpTfUVjqqKKKsAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAp0aiSRULqu5sbm6D3NNooA9ui/Z48K/A+wm+Iv7QGrWOraY8f/FKaPoWpbv8AhInZAyyiRfmjt13DcxAJPGOgfzj4N215ffFXQ7bTfAEPieSTUUCeH7jOy8HdGIPAAydx+UYywKgg85Pe3l1FDBc3ckiW8fl26SSFhGu4ttUHoNzMcDuSe9OsNQv9KvYtS0u9mtriCQPDcW8hR42HRlYcgj1FaOUeZWVkj5rC5PmkcDiFjMT7WtVi43tKFOKSajywjK8W7805KXPKT0lGMYRj9HftSfBT4VfCz4WXl18HfCkOsw3HiRo9c19tSFy/h6RMbbFQh+UEuVLPnOAGyxQj5rqZNS1GOym02O/mW3uJFknt1lOyR1ztZlzgkbmwT03H1NQ0VJxnK6Vh8LZLjshy14bF4mWInzN+0lzc0k0rc15SV1ay5bKyWnNzN7Hw80TRPEvj/Q/DniXWY9O03UNYtbbUNQmk2rawPKqvKTg4CqSxODjHSvqz9pzw9qPjL9vi4/4J1eG/hz4H+HfhFviRYeFdDm0/4a6d/aVtZG4igtr2TUZIv7QumliZLhme6xN5mchGAHx3Xb6/+0x+0h4r+Hdr8IfFP7QPjfUvCdlHBHZ+F9Q8V3k2nQJDjyVS2eQxKI8DaAoC4GMYpRdPnpucbqMrtdGrx/GPK7ecnqt39GuZc9n8SST7W5r2/wAV1f8Awre7PsH4Mf8ABPH9jL42+HfE3xN+x/GDwhoPgTxP4g0fXtJ1rWtOuNR1QWGkXOoLJbt9ggS2nQ2rJNaus23zo/3wx83cfFb/AIJKfsP/AA11/ULuXxf8VpND8O+HfFWqa8q6tpj3c50qw0q/jSA/Y1Rd0eoPExfO5o1cbATHXwd4s/av/al8e6hb6v46/aU8f61d2en3VjaXWreMr65khtbpBHcwI0kpKxyoAsiAhXUAMCK7z4Bf8FD/ANoL4M+JfE3i7XfiN4y8SalrXgrWNF0e+u/G13HPot7fQwRf2nDI3mMJkW3h+6UZhFGN67FxzyhUlGVpW9yy/wAav73b3uiekXpsrlxkozi7XXPJtf3GvdXe8Hu95Jd3Zel/E39gT4KJ+zt4k+Pvwrj8dW80fwx8J+KPD3hfWNStry6t5tU1mbT5orhobOE3ERjiEsDokJYSKSGHB77QP2Xf2Rv2d/jJ+0x8CPG/wf8AFni2TwT8H4tWsbzUvEVhDc2ySR6NNKsKyaVL9mvEluZtt0MhId0ZhJJkr410n9qH9pfQfiPqPxj0P9ojx1Z+LtYthb6t4qtPF17HqV7CBGBHNcrKJZExFF8rMR+7T+6MVNH/AGg/j34d+Ir/ABg8P/G/xfY+LZLcQSeKLPxLdRai0QiWIRm5WQSlRGiJt3Y2qq9ABV8v7ucU/ijUXflck1G3dRut7X2suua5ozhLflcfK9uXmemzdm7dL/M+jfgD+yX+xF4l+Ba/tO/tE/FbXPCPhXxB8RLnw/oVkutXUk+j28EUcztcXFn4fvY726KTKyQMlgrrCzB8ORFk67+z3+w58Jf2d/h38U/ijrfxM16f4iy+KILTXPCN5Y29rZDTbyS2tbsWN3beZcLMWgZ4GuIGRRIRISQi+NeEf2tf2qvAGrazr/gP9pn4g6JfeI737Z4hvdI8Z31tNqlxknzrh45Q00nzN87kn5jzya5PWvHXjbxJoem+GPEXjHVb/TdHa4bSNPvdQllgsTO/mTGGNmKxGR/mfaBubk5PNTUjKdROLsrJW/7dSfS97pu903zO97K2sZcur1d29ul5W0WisnHTVadm0/1DX9l79nLx18NNL8Z+GPg34Vh1nwR+ysLjxdYQ+GYNt7JqHhZryw1lvl2tdR3dvdo0+3zd0tud2QK800D/AIJJ/AvWNPtfDviHX9e0Pxd4e8ceB9F+Iei2XjBtV+yLrk8MUsId9BtLaC5RZ45F8m5v0XDK+fldvhy0+O/xwsLq4vrD4yeKoZrrw2vh66mh8RXKtNo4VUGnMQ+WtQqKogP7sBQNuAK3dQ/bF/a61bS9P0TVP2p/iPc2WkyW76XZ3Hji/eKzaB0kgaJTNiMxvFEyFQNjRoRgqCOiUoyxjqte65qVv7vtJTcb9nGVn+DSik8lGUaKhF663b13p04Ky8nBtPpfq22fel5/wRj/AGQ/GesaN4V+FvxK+JGn31zdaBe6hdeIJ7K6jbS75tWV4oora1WT7V/xKJGU/OoM6JslILn4s/a5+HP7IvgaPw7dfsu/F+fXbm5W6i8UaHcXV9ef2ZJG6eTIt3daNpXmCRWcGIW5MbQkl2DgLxd1+0f+0NfeWL348+NJvJezeHzfFF23ltZyyS2hGZODBLNLJER/q2ldlwWJMHxV+Pnx1+Os9ldfG740+LfGUmmrImnSeKvEd1qDWquQXEZuJH2Biq524ztGegrjhTrKTcpXV0+1vdin6pyTaXS+5s5RvdLol07u72vfVa36W2OSoooroMwooooAKKKKACiiigAooooAKKKKACiiigD5++K2s6pq3jjUI9Skbba3DQ28THhEBwMD3HP41zle5fET4P6Z41uP7Xsbr7HfFQJJNuUlx03D1x3H61xMn7PHjZT8mo6aw/67Sf8AxFcNSlU5n1KucYdY1c2i6edUufs68LD57bB+GcVWr0az/Zy8Qv8A8hDxBZxf9cUeT+YWtiy/Zx0FEA1HxDeSt/EYY0jH67qPY1H0HdHkNFe1W37PfgaGTfLdahMP7klwoH/jqA/rWxp/wo+Humj9z4Yt5Pe4zL/6GTVLDzFzHz7RX0iPBXg1TuXwlpn/AIAR/wDxNPPhLwqSCfDOn8dP9Cj4/Sn9Wl3DmPmutHwnpWp6z4is7HSI2aY3CsrKPuYIO4+w619Bnwl4VLbj4Z0/I7/Yo/8ACrVrp+n2KhbGxhhCrtURRBcLknHHbJJ+ppxw7vqw5iaiiiuokKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKdG5jkWQKp2tnDLkH6igDW8CeAPGHxL8RR+FPBGhzahfSIz+THgBEUZZ2YkBVA7kgdB1Ipvgjwbqvj7xjp/gfR7i0hvNSult4JL65WGJXPTcx6ewGSTgAEkA+iePf2mNO1TwTN4X+Fvw3sPCFxr0anxnd6V8v29lG0RRD/ljAQNzRjqzMDxkv534DvfCGneMdNv8Ax9pN3faNDdK+oWdjOI5ZYx1VWPT35BIyAVJ3DRxpqSSd+581hcbxBisDiMRXoexai1ThpOpzJO8pWmoNSlbkipK8VeUk58sOh8U/s7/FfwN4Q1Dxr418Of2Ta6dqy6c0eoTLHLcTHOfJU/65Vxyy5GDkZAYrxFeyfHn9qbTP2hvB32Dxj4E+yazpepFvDV5p94fKgsn+/DMrZ8xhtTDgKSeflAKv43RUVNS9x3Q+FsTxFistc87pRpV+ZpxjblSsrcslKXMnu27NO8bWim5LKzu9RvIdP0+2kmuLiRY4YYlLNI7HAUAdSTxivVvj1+yfN+zmLrw74++PvgG48aaa0MWsfD7RZtSu9R0+dwpe3luEsf7PMsOdsipdvtZWUZYEV5z4J8V6h4E8Z6R440m3t5rrRtUt762iuot8TyQyLIquv8SkqMjuK+jfiD+0x+y1dfta2f7d/wAPZ/HjeJ2+IFh4v1D4c614bsl09LkXMdzd20erx3zSPH5ok8p2sVbaVDDILFRjCU6acrJytJ9UrxtpbZ3ld9Eltu/o1L49LtJcq7v3r3flaNu93vax5B4h/ZJ/as8I65pHhjxX+zL8QtL1LxB5x0HT9Q8F30M+peSnmS/Z43iDTbE+ZtgO1eTgc0l5+yV+1Xp3jqH4Xah+zN8QbfxNcaf9vt/Ds3gu+W+ktd/l+etuYvMMW/5d4Xbu4znivq/4Jf8ABRv9l79mnxdpf/CB3vxU8WaZc/FrVPHGuax4o0iytdRspJdIvLG3ht0jv5luZ2e8Lz3TyQlhEm2LJ45b4Sf8FIPAvw++BPh7wbfL40/4S/R/hV4+8OzeILPytx1LW7yO4s50nNwJdiEOZHIDqzZVXyTXJ7StraOyv2u+S9vlP3W9n8S0aLlyxslrrb5c7XN84WlbdN2bumfOVr+y/wDtL3vxMuPgrZfs7+OpvGVnai5uvCUXhG8bU4YSqsJXtRF5qptdDuKgYdTnkVV8L/s8fH/xx8QNS+E3gv4GeMNY8VaP5v8Aa/hnS/DN3cahY+W4jk863jjMkex2VW3KNrEA4Jr6w8If8FJfgPB4Fh+GmveHdcsY7j4H+GPCN54iuPh/oniQ22paTf3FywGm6nL9nu7SVJ0AZ5IpEeCNgnyjHG6p+2l8Mfiponxa+FPxy+JHjabTPiBqHh+/tPiB4a+Hek2N/OdKh8iKxvNGt76G1Nr5b5QR3X7uS2hk2uWITaPNzST6Xt/etK10+nu+9Z6u1lumTF80U2rXt5te6m01ZbyvG6eltUcN8Pf+CbP7aXxO+Fniz4q+FfgB4skh8I6pb6ddaKfCuotqF9cvNJDLHawpbsJWt3iInUspiyuRk4GVpv7JWuwfsseKf2kfHY8XeH5NG1q20/QdOuvhvqT6frDNcGC5zqoUW1rJA6spikJZ2UoMMMVvfAr40/s7eDfhD8YP2bPiB4j8aQ+HPHl7o9xoPirR/CNpc30R066mkX7RYSajFGvmxzHIS5fy2AwZBzWp8Gfi9+yJ4K/ZF+JnwE8V/EL4kLrPxA1HS7mO40/4d6fNa2I025uZIQWfWY3kMySpv+RfJO4DzgAxzqSqRjOUf7nLo7tXp8/pb95o020tNWh8qdS3ZvtbZ2V+vR3Vldedjx1P2e/j5L8LD8c4vgf4wbwSud3jFfDN0dKGJfJ/4+/L8n/W/u/vff8Al68Vf8VfstftD/DjTNP8T/GD4KeL/BXh/UNSjsl8TeK/COoWlhHIxPWQwEsVCuxVA7kI21WIxX0BB+3V8BbLw3c/EiGLx9ceOrr9n1Phh/wht3Z2raBEBapYm8W9+0+cYTCn2r7H9kH+lO377b81W/2iP+Chfwf+Pt/8e7HUI/G0Wm/FSbwXF4YlvLC3uJNIttKZftW+I3YVTgymJI3KsXIZo9xI0ruVPEOFNcyvv0tzNfjG0k1prbdMS5fZ3lf5f4Yv8JOUet+W60kjxv8AaB/Yy1z4CW/g2O3+NPg/xtqXj7S7PU/DOh+C7TWpLu6sbppEt7jbd6dbr88kTRiIMZtxX93g5pP2jP2LviR+zB8Gfhv8SvivpuuaHrXj6XWln8I+IvDM2nXWlLYzQRo7ecweQTLMHGY02gcbs5Husf7c/wCyV4E/aE+BXxv8BX3xH1qP4XeBrfwbrVlqng+w02WW0WC+ibU7WWPU7nFyhvA6W7Kq5i5nXOR5D+1Z8ePgF45+AHwm+AXwJm8Z30fw8l16TVNc8ZaXa2cmpSahNaz+ZHDb3M/lAPHKuxpHIAQ72LEJPvc+m13913bT05Xfq5WS0dpi5cseZa2V/W2q377W6K7e1/A6KKK0KCiiigAooooAKKKKACiiigAooooAKKKKAO8+BH7Pnir49XuuTad4i0fw/oXhfRn1TxT4r8SSTpp+k2oZY0Mn2eKaZ3kleOKOOKKSR3cYXaGZe5+Mv/BPb45fA3wd4p8feMdS0N9J8M2/h67jubeS6RtWs9ZSd7O5to5reOQJ/o8odZ1hkRhgoTnGn/wT/wD2x/DX7LFx468N+OdOuP7J8a6BBDbaxY+G7XWLjRNVtLhbixv0sruaGG5MUgZgjyKA/lycmPa3rPxY/wCCtFxqHw38ZeEvgn44+KGha9daL4R0Xw143bWjbarqNvpb6jLe3eoTwXPmRzXMt+X8tGmU8hpDjJmu3GneHxWja2q1qWlfzUbadE3K0nfkmi5SqSUlor29bRt8tZa9Wkvdt7/D6v8A8Efv2qtKtdDvU1bwrdR674q0/RI3tb27xa/atNt9RF7MWtVAtIorhVkkXcyyI6hWG0tzXjj/AIJ2+N/g/BqGo/H347/D3wHYw+KtS0HRbzXZtWuP7fnsJmhu5rOKw0+4m+zpINnmzRxKWYAZIIHrX7bH/BWm7+Neg+HtM/Z/17xho002j3unfEGbxBaWrNq8dzp+kW0m1/NmbczWE2ZPkcLIMNl3A7yD/grF+zVqv7SHhb4/S6/8XvCbeB/GWvXNvZ+GdHs5l8U6HqWpnU/sF6P7Tg+zFJ3dGANzHIqxsQpG0XV2i49W093ypKOvneV7dbOTt7iTVOXNgYzlf2lo3ja13yyb1u0rvl9GrXs24/LLf8E/vi+nxVsfho/i3wuLW/8Ahj/wsCPxd9quv7Lj0D7E10bpz9n89SNjQlPJ3ecNoBBDV213/wAEf/2o7Dxb4s8J3viPwbF/wiHhvTtau9QbUrr7PeQ3jyxxxQf6NvMqPBcI6uiKpgfDHKlrt1/wUP8AAF7+wjffAe48F61/wsuSO48NWHi1RF5MfhCfUo9Tks2k8zzTJ5yvCI9mzyZD84+7XbW//BXHSr/9p7x74x8T3vjC4+Ger6Hqtv4M8Npptn9qsbm6W2CtMPOUFB5Mn/LWTYZZGRcyybsv30qnKkkmpWb6Wd43t3hKPX44TVrNSDHe0o0Zuj70k7K3VKy5krveUZaO3uSi1qrHgX/DCXj+w1r4rad4t+J/g/Q7P4N+JLPRvGWsahNqEluJbi9ks0lgW2s5ZpYhJExb92H2kEITkDpvCP8AwTM8a/Ea58Ar8M/2kfhnr1r8Rtc1PTPD99D/AG7aJv0+0N1dTMl7pcMrwIoEfmRJIPNYJ1Dbew+OX/BTeX49+Ev2hfh5488f/EjVtC+Jfi7TL/4c6drd99st/D1jBqklzLGYJLopbt5BjVUh3KWjCllUBqr+E/8AgoF8HPA37d3w8+MHhPwZr9j8JfhX4fm0Twb4bWzt5L5bd7C5jkuJoWm8h7ie8uZJ5jvwQ2CX2jOMJYh4dOS9666dEk3f5+6lpu2n7tjevGEcVUVN+6r27btKz3fe9ulmlc8v8WfsVr4FTwr4j8WftO/Dqz8H+NtDu9Q8K+PPs+vyaffva3f2W4tBFHpTXsc6ONx8y2SMrgiQkgHf8Q/8E0/ib4X8Q6lBrHxp+HsPhrQ/Bem+J/EXjqW71OPTdJtdQLfYbeeGSxW+F3OArJbratIVkRiAMkbvjf8AbA/Zi+P3i74E+Lfj94B8Rw2/gLS30/4ieF/CulWdvpOpxQTNNbtp9qk0MNp9pJ23SRxwouS6B2OKr+AP29dN8Zah8YD+0Pr3izQ7z4o+ItJ8R6b4w8A28dxe+HNT025lktVht5rm23QLFM0SbbiNohFEV3YwOi8uV6a3lbr7vPaLe2vI3KytrFRaXNdZpXs27XUfvfxLrpGzT0d+ZSjdRs+S8IfsNS+LtEu/HZ/al+F+l+DU8T2/h3SPG2tTazb2Gs6nLAszwW8Z003SiFHTzZp4IYU3r+8IOas3v/BPXx74K8F6543+PPxk8D/DeHQfHt14Pu7PxQNXuJ5NTgt47hwg0zT7tTGY5FKyFgrduCCfbP2o/wBvv9j/APbPXTfB/wAbdU+LNvpfhXxFp2oaL4msfD2n3Wqaxb/2RY2OpQXMMuoqltLLNYJNHcebdEeawaM4GXax/wAFTtA+KPw/8ZWN/wDGz4ufB3xF4n+L154qW7+Fempdxyaa+n29nBYzSHVrCRmQQBmbDKxG4KM4Wa3tIxl7PWyVv/AqOvTXldZ2tdcsfdb+LX937ODe7Scv7rcZvlW9/sJvbmvZpPT4VlVY5GRZFcKxAdc4b3GQD+YFNqS5k824kl86STdIT5kn3m56nk8n6mo60WxE7czt/X4v836hRRRQSFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRTo1EkioXVdzY3N0HuaAG0V7dF+zx4V+B9hN8Rf2gNWsdW0x4/8AilNH0LUt3/CROyBllEi/NHbruG5iASeMdA/nHwbtry++Kuh22m+AIfE8kmooE8P3Gdl4O6MQeABk7j8oxlgVBB0dOUZJPqfO4XibL8xwmIxWDvOlSjfn0jCTSblGMpNK8bJTk7Ri3yuXNGajzFFfSn7UnwU+FXws+Fl5dfB3wpDrMNx4kaPXNfbUhcv4ekTG2xUIflBLlSz5zgBssUI+a6KlOVKXKw4X4lwfFeWfXsLCUYczilKylpa94ptx1eilZtWlblkmyiivtj/grV4k+D/w8+Nms/CD4OXVl4fv/Duq6Tc2+geH/gb4e0WLTj/Z8Upki12zm/tC4O+QPskiRSznn90hOLkoyS/r+tfTu0fRat2XZv7l+v39k9j4nor7m/aS+HXj39sv9pn9l7wN4iudU8U6x4u+AugS61e6h4n+y3NxGs2pTXNxLfTw3JQrEkkjSGGZiEOI3YhTrf8ADtn9jh18O/FiLx940uvh/rHwf8VeMJotB1j7RdyS6LcRKRb3GoaPp5eKWOTAD2abXUkSSJglVJ+yi3Po5rTX4OZt/NRdu7TS1REakZKPmotf9vWSXybV+h8B0V9fS/so/sO6N8Q/Csvjnxx4q8M6H48+ENl4m8KeHfFHiyC0uDq09+1uLO51aPSZobe3aKOSeO4ls442Ur5kkK/ObXgn9gH4M+G7f4o+P/2qJdY8C6L4H8VaXodv4duPGj3U1o97bPcrNc6ppOg6lFIhjWMRstrHHI02PMQqqS1f3mnpa97tWupqnbffmaWmyabsmm3zR5Ytfatbu7x5769OXXzs0rtNHxvRX6Bfscfskfs9eAv2hfhV8Z/A+peNvihp/ib9oQ6V8Nb3ws39nQWNhpk9vcNqGpJcWEs0zFJFdrdEtgsdtO5lAYbPiv8AaA/5Lx42/wCxu1L/ANKpKiVRKVNWfvJvXS1lTaVt72qa9E01du9tIx5oyknonbTW+s4v7nBrz32tfkaKKK0JCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKK7n9nb4g6J8N/iZb654n1O2sdNmtZYL68uPhrpHixoVK7lMen6syW7uXVF370dFZipPKN96+Hv2XPgJdf8FBtU+K/iXwf8M10ORvC7eBfhZqfiTRdFXVW1Oztj/aF3pl7Jb7FiiZriSwhhYPczwwxiWISOaUW5K9rPr59F6uz3a7/DdqJSspWWqV/kml+bXR6b62T/NGivvL4a6Z8LPg5/wVB8Xfs/8AxH0XwlJoOvfGRoNB8K6P8L/C/iy1u4J9Tlii0+S8d5JtFiCGJHjtUkniBYGFJEUH5G8d/A/4l6X4s8fLo3w5vLrS/AeuzWfibUPD9rc3mm6P/pLwRh7kqdkbOhSN5SC+O5zWEK0ZxhJbSTfpblTv00ckt/VK6vryS5pR6ppet72t62/GyvZ24aivv3Uf2cPhVB+y54V+EXwo8SaDp3ibWP2f7z4k+JNR1T4Q6dqv9pALLJPE+u3czT6WYlg+zxR2cCqrrukk8yYhMHWdK+Ev7Yf7K90n7OuqeFvBH/CvvCPg/TvG1h4q+Dfh7Sorq/mngsZr5PE8TyXSmS5/esJvJ3xCQkkB1rWXu1JQjq1JL8ZxcvRShbvquZRVyKb56cZ7J7erUJJadWpp9uibeh8QUV+o3ib9jD4Qat8Fvg/4M+A/wp+E/ipfD/x+stBvfETfEDQmuPHdr9nt3uHuLmyuLmZYpriWUrZoJpre1EbtBw1eE/8ABR7w38KtY+Anh34nfBbRdB1HSrP4o+ItA1DxRbfD/T/CuoW08XlNDpctjp9pbw3EKwKs6Xj7pnMzq8VoQYWylVjCUl/LJL1TVNp+Sbqpa2d1Z2k1F3RjKqk9tL+nx6Ppf3Hazd73V4pyXxfRRRWpIUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEk97eXUUMFzdySJbx+XbpJIWEa7i21Qeg3MxwO5J706w1C/0q9i1LS72a2uIJA8NxbyFHjYdGVhyCPUVpeBPAHjD4l+Io/CngjQ5tQvpEZ/JjwAiKMs7MSAqgdyQOg6kU3wR4N1Xx94x0/wAD6PcWkN5qV0tvBJfXKwxK56bmPT2AyScAAkgGrSdjirYzL6MasKk4rkjzTV17sXze9JdE+WWrVnZ9mZ6alqMdlNpsd/MtvcSLJPbrKdkjrnazLnBI3NgnpuPqahrt/FP7O/xX8DeENQ8a+NfDn9k2unasunNHqEyxy3ExznyVP+uVccsuRg5GQGK8RRKMo6NCwGYZbmNOVXBVI1Ip2bg01eydrrRuzX4BXofi/wDa6/av+IOm2GjePf2nfiHrlnpV/DfaXa6x40vrmOzuoc+VPEskpEciZO11AZc8EV55XtX7Rf7FOvfs5+Nv+FR6h8bPBvirx0uo2dlJ4F8H2et3GoLJcxLLEFafTYbeUkSRLtjmdy0igKfmxDa0X9f0u/Q7lv8AJ/dbX71067GB4j/bQ/bE8YXWl33i39rD4l6pNomoLf6LNqXjvUJ2sLtVZFuIS8xMUoV3UOuGAdhnBNdr8F/+Cj37SPw18aeIviJ44+KfjjxhrmqeAdY8OaDrGreO7z7XoM99HEv26CaQyOrxmGNtqFCxRfnXaDXBa3+yN+1f4ZvrHTPEn7MXxD0+51SzuLvTbe+8F30Ul3bwIJJ5YlaIGRI0IZ2XIRSCSAc0z4Lfs2fFX4y+MfCui6V8PPFzaR4o1ZrWHW9F8G3uqfuYXj+2zwQ26Frs28biR44yWAwDjcKIqMrxXVP7mrP0vZq/l5Ez5Y+9Ly/8lfMl52ethNG/av8A2pfDnjvVfil4e/aU8f2HibXoo49c8RWfjK+iv9RRAqos9wsoklChVADsQAox0FVvB/7Sv7Rvw98Yat8QvAHx+8baHr/iB2fXtc0fxVeWt5qTM+9jPNHIHmJcliXJy3PWtbxL+y58S7345+Lvgx8CPBXjDx+3hbWZ7Mz6Z4Fv4bySJJ/JSWaxKNNaM7bR5UoDKzbTzxVHQ/2U/wBqLxP461b4X+Gv2bfH2oeJtBjR9c8O2Pg69mvtOVwCrTwLEZIQwZSC6jO4Y6ilCUZRjKPbTpp1+Xf8SqkVTlOE7aSV9U1zLReTfZ/cL4d/av8A2pfCDas3hP8AaU8f6Wde1Q6nrp07xlfQ/wBo3pYMbmfZKPOmyoPmPlsgHPFcNqGoX+rX8+q6rezXV1dTNLc3NxIXklkY5Z2Y8sxJJJPJJruPB37Kv7UHxEtL+/8Ah/8As3+Ptdg0u8ntNUm0fwfe3SWdxBt86GUxxMI3j3pvVsFd65AyKseHv2Pv2tvFvh608XeFP2W/iNqmk6hCJrHVNP8ABF/Nb3MZj8wPHIkRV18v58gkbeenNL92rS02Wvk9vk0tOmg7yvbu/wAevzu/xPOaK66H4AfHi5+Fj/HO3+Cfi6TwTGxEnjBPDd0dKUiXyiDd+X5I/efu/vfe+XrxWrr/AOyL+1f4UttMvfFH7MPxD02HWtUi0zRptQ8FX8K397ISI7WEvEBLMxVgsa5ZiDgHFXu7LyXze339Ba2v6/hv93XseeUV69+1R+wx+0v+xzq0Vp8afhpq1pptxHZ/ZvEkejXsemTz3FqtyLVLieCNWnRSyyRjlXikHIUmvIaLp7B9lPuk16NXQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAdJ8MPjJ8Xvgjr03in4MfFTxJ4R1S4tWtbjUvC+uXGn3EkBZWMTSQOrFCyIxUnBKqcZAqheeOvG+o+NH+JGoeMdVn8RSal/aEmvTahK1615v8z7QZy3mGXf83mZ3buc55ruf2fP2YdX+P8A4f8AGXjL/haPhbwjongPSrfUPEGreKv7QaNIp7lLaMIlhaXMrsZJFGAmADnPBq947/Ye/aN8KfFyH4NeD/Ad34+1K+8O2/iDRbj4d2Nxq0Oq6RMAYr+ARReb5JyFJeNGVvlZVPFEpcso336fi7X6bN262b6MmMoyjJLvZ+qS++ylG/bmS6owPDn7VP7UHg6x1vTPCP7R/j3SrbxNfT3viO303xhewR6rczDE01yqSgTySDh3fczDqTXN6F8RfiD4X8Max4J8M+O9Z07RfESQp4g0ix1SWG11NYnLxC4iRgkwRiWXeDtJyMGr+u/BH40eF4o5vE3wi8Uack2uS6LE19oFzCH1KIgSWQLoM3CEgND99SRkDNaWl/su/tM63p/iHVtF/Z18dXlr4RuJoPFd1a+Eb2SPRZYV3TR3bLERbsigsyybSoGTgVPuJN6ba+is18ldP5ruaR5uZJbp/O93+N0/O6fYpw/tAfHi2+Fj/Ay3+Nni6PwTIxMng9PEl0NKYmXzSTaeZ5J/efvPu/e+brzR4w/aA+PPxD8D6X8MfH/xs8Xa54a0Pyv7F8Pax4kurqx0/wAuMxR+RBJIY4tkZKLtUbVJUYBxXY3P7N/gW8/Yyk/aq8LfFHVrjUNN8ZWfh3XvDOoeFYreGGa4t7i4WWC7S9kadAsAB3wRHL8cLk8lqX7O/wC0Do/w0t/jRq/wL8ZWvg688v7H4sufDF3Hpk+9tibLpoxE25vlGGOTwOaqWknB94p+rScfVtNW9dCIyUqcZRej5mvlJxlpurSi0/T0MWz+IXj/AE7w9a+EdP8AHGsW+k2Or/2rZ6XDqUq29vf7VT7WkYbas+1VXzAA+FAzgCtX4q/Hz46/HWeyuvjd8afFvjKTTVkTTpPFXiO61BrVXILiM3Ej7AxVc7cZ2jPQVs6v+x5+1x4f/s/+3v2WfiNY/wBrX8ljpf2zwPfx/bLpFkd4It0I8yRVhlYouWAickYU4r+Lv2Vf2ofh+1gnj39m7x9obarq0el6WNX8H3tt9svpADHaxeZEPMmYEFY1yxB4Bpe7J/P8bJffay9LLsHurXy/DV/du/vOBor0O6/ZG/avsfHUfwvvv2YviHD4mm0/7fD4dl8F3y3z2nmCL7QIDF5hi8whN+3buIXOeK6r4M/8E7/2vfjd498UfDLQPgj4k03WvB+gzapr1hrnhvUIZbfbbtPDasi27OlxcKhEEbqvmnocc073i2uib+S3f9eg7O6Xml85NJfe2vvPEqK1vHPgLx18MPFV34F+JfgvVvDuuaeyrfaNrmmy2l1bFkV1EkUqq6ZRlYZAyGB6EVk0J31QBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABTo3MciyBVO1s4Zcg/UU2igD1rx7+0xp2qeCZvC/wt+G9h4QuNejU+M7vSvl+3so2iKIf8sYCBuaMdWZgeMl/O/Ad74Q07xjpt/4+0m7vtGhulfULOxnEcssY6qrHp78gkZAKk7hk0VcqkpSuzxcBw/lmV4GphcLFxVS/NLmk5u6tfnbc7xjaMHf3YqKjZJHsnx5/am0z9obwd9g8Y+BPsms6XqRbw1eafeHyoLJ/vwzK2fMYbUw4Cknn5QCr+N0UUpzlUleReSZHlnDuB+p5fBwpJtqN21G+6jzN2Td3Zaczb3bCvt39pf/AIKK/Db4wftKeFfjpof7Qfxt1Dwzo/j7w/rcnwo8QaNDHpOmw2KwiV7Vl1maNpyYnKL9niBM75ded3xFRU/aUuzT+53/AK69j1rJ3v1TXyas/wCtu9z7G1D/AIKd2OkteeMPCFr4ju/EyftO3vxF0+bW/LMUuiz2ZtTYTSCZ3EjxERPGoKeXwHOAK5H4kftJ/szeOfj94B07wu/jjwt8HfhjAD4XsY9DttQ1OSd717+4kktmv4oY2lnkMRcTsRFBCcMRsHzPRU0YRw7g4acrTXqoxgr97RirJ6K77kVqccRTnCd7TTUtd05OTXldyeq1s9GfW/xK/bT+Akfjf9pHxb8I9Z8fTf8AC9NFkSw/tLw/a6dJptxPrEd3PbSmHUJ/MgNsjx+YMFy5VolXLHmfhR+1b8OPFvwB1D4EftU/EP4lW0n/AAn2k+JNP8WeGLWHV7yeOzsnslsJVvL228tI4ihgkEjiIggR4xXzdRTpL2MYqP2VFLy5Zc0fuevns7632rS9tKUpbylKTfVucFCXycVtsnqrO1vujxF/wVg8DeLfiJ4f8dXPhvxVpMNj+1D/AMLG1fTdNaJkm0hLaxtoosmdRNeeXbS7gwWMmZsOA5A9O+Hn/Bar9njwVqulW/8AwjHxEj0TTdH8OWS6VZ2VoIk+wS629wEi+2BArfb7Ir0ybdtwXYm78yaKzlRpyoKi9ly2/wC3VTivwpR/HuxyqSlKT7pp+jlKX5ydux9ieO/+ChXgrxb+zlovg3wf4v1nwf4k0/4PxeBdY0e3+DPhvU4dVgjR4nC67LNFqNrBOm2R4xHJ5UhcoW4NN/ae/wCCiHw0+O8P7QlvZad4ukj+KK+D08Fx6vDCV02PSceekwFw/kg5k8sRbwd53bMmvj2inUpRqVnUl1d/nzOXru9NbLpYhe7FRXRW+SSX5Ja7u2t2e6ftr/Gz4H/tJ+ItN+NHgvV/Fdr4qudB0XTde8M6p4bto9PtTZ6ZDaSS298l88k+54FKq9rF8rnLZUBvC6KK06t92394R92nGC2ilFekUkvuSS/PUKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPcv2S/jb8FPh98Lvi18IvjZqXinTrT4jeG9P0+y1bwr4ettTks5LfUYbss8E97aBlYRbeJMgtnHHPuWh/8FMfgZ9l8WfCOTwlrei+DX8A+G/C3gjXr7wPofiq/S30a5nmR9Q0zUylnMbg3U0jCORTA6QhDLtLn4bool72j2/yvZ/K78u6YqcVT5rdXfWz1tBO1+/JH7tLXd/sj4ef8FIfB9h8SfGXiP4+z+IviRa/8JPpfjTwDfyeF7DRpP+El0y2FtaG5srW4Nva20kWyOXyWlYi2iO1iWxJ8IP8Ago94c0L4D+EfDOu+Pde8K/EDwd4h1zU18W2vwc8N+L5NWm1Gdbg3X2jVZoLiwuA+6N2iaQSIsZOCu0fGdFZ+zi428kvuSV7bbKKatZ8q0ug5Y9tL3tuuvR/4pO+95N31Pozw38ZP2VbX9g3XP2c9a8cfECPxZrXi618UM1p8P7BtNhurazubdLMSnVkkMTmdWM4hBQAgQvxXoXj79vf4CeIZfiR8UvCEPjpvGnxV+HGk+EL7wjqml2qaFoiwpZRzzxXSXbS3IUWf7iM20PlmU5LbcN8Y0V0Uaip4n2rV9VdbXSSi47OycVyt79VrqKMeSMVvy3s33c1Ubff9573bp8Oh+qvxx/b8+BP7F3/BRH4majqeo/EDxRqms/EnT7vxas2jWsUOjW2n2FzHbw6exv2a6cyXSL5kgt1SJGVUJII4LSf+CynwdsdK+FI1nwl441i+8E6poT61PqENnIfJt/DFzpF5NbmaaVZJhcXT3MaSoElwfMKFzX5z0Vx4fDxo4ZUW76xb6XcI8i63St532d7q5c/fqc/k18m2/wAL2XZaJWPtGy/4KMeD/BsmvaZofxS8V61ps3wi8TeGfCEOmfB3w/4MGhahqktq/mCPR7xkkjY2+6SXh1b7qNuY1kaH+3p8GE+LngvxHrWg+KItFsv2bP8AhWfiq7t9PtpbyK6bT7m2a8tomuES4jVpIsLJLCzKrD5cDPyLRV+xh110t8mpq2nlUkr763vfUX21NbpqS8mnCSdttHCLttpa1tDW8c2fgXT/ABVd2fw08R6tq2hoy/YdQ1zRYtOuphsUsZLeK5uUjw+4DEz5AB4JKjJoorVAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFOjUSSKhdV3Njc3Qe5ptFAHt0X7PHhX4H2E3xF/aA1ax1bTHj/4pTR9C1Ld/wkTsgZZRIvzR267huYgEnjHQP5x8G7a8vvirodtpvgCHxPJJqKBPD9xnZeDujEHgAZO4/KMZYFQQecnvby6ihgubuSRLePy7dJJCwjXcW2qD0G5mOB3JPenWGoX+lXsWpaXezW1xBIHhuLeQo8bDoysOQR6itHKPMrKyR81hcnzSOBxCxmJ9rWqxcb2lCnFJNR5YRleLd+aclLnlJ6SjGMIx+jv2pPgp8KvhZ8LLy6+DvhSHWYbjxI0eua+2pC5fw9ImNtioQ/KCXKlnznADZYoR811MmpajHZTabHfzLb3EiyT26ynZI652sy5wSNzYJ6bj6moaKk4zldKw+Fslx2Q5a8Ni8TLET5m/aS5uaSaVua8pK6tZctlZLTm5m5tPVXv4UdQytMoIPfmv0Y/4KCWf7Idj8SfHP7Ld5pfw7k8RX3xY0Wz8CWPw1+HMeh33hDT9wS9jvrxLC2jvPMSUBEDXYV/nLDaBX5xKzIwdGKspyCO1auvePvHfinxlL8RfE/jXVtS8QXF2t1Pr1/qUs15JOCCJWmdi5cEDDE5GBzxUycZ+yjL4Yybl3fvUpJf+SNPraTSau7+/WhUnRmqbtJppPs3GSv30bT9Ur3PrjVf2Pf2HfEP7X+r/ALH/AMPJfjFb6v4S8VaxBq15cXOmal/bum6XY3dzcR2kUUEDWt5JJaiGEN9oRvM3sAR5R0v2d/2fv2TdJ+MP7Mfxxtfh145m0H4pePG0uHwf4i8X2M0lpfWWr2kS3rXA0tEv7CRZij24ggbfG6ifHT44PxF+ILePf+Fqt461k+KP7UGpf8JJ/akv2/7aJPM+0/aN3medv+fzN27dznPNaviz9oD48+PfH+n/ABX8c/GzxdrXinSPJ/snxLq3iS6uNQsvKkMkXlXEkhkj2OxddrDaxJGCc1WDl9XqUZyu3Hl5vNrdrtzKytootcy1em2IVOrzRgrRfNa+ujvyp/4brVaySs9L3+1Pgv8AH9Pjd/wV/wBBhvPHPxlg1C38TX+j+Fta1b4nWOsXGg3Uk1yk00CX2jyQfZDExRbMRKUPzec2AB5f/wAErPH/AI/8Pftl6l4I0Xx3rFro/iDwz4q/4SDS7XUZIrbVPJ0PUpIjcQoRHNsfLruUhWOVwa+fPh5+0F8evhH4g1HxZ8KPjd4v8MarrGRq2peHfEl1ZXF7l9586SGRWky3zfMTzz1rZ0f9sn9r3w94p1bxxoH7VXxIsda8QeQNe1iz8c6hFdal5KlIfPlWYPN5akqm8naCQMA1x0MOqeBdB7ulODfS84uN7eTbl5uy0smtfbS9vUn0coSS7cnNv6qVlva118TPZv2W/wBkP9kbW/2arD9pT9rr4132g6Vrnjqbw7Z/2Xc3sI01beCKaaVzbaLqS3FwyzBo7V2tAyRMRM24+VX139nv9hz4S/s7/Dv4p/FHW/iZr0/xFl8UQWmueEbyxt7WyGm3klta3Ysbu28y4WYtAzwNcQMiiQiQkhF8e8Nftf8A7WngzWtY8S+D/wBqL4i6TqXiK6W58Qahpvja/gm1OZRhZbh0lDTOASAzkkCuP1rx1428SaHpvhjxF4x1W/03R2uG0jT73UJZYLEzv5kxhjZisRkf5n2gbm5OTzWlSM6lRSTsrJNL/Ck+ndNpq1+Z3WitnTfJHXVpt69ryt9ycdNU2t9Wn90/8KV+FVp8ao5rv4P6F/YsP7DsfiS4/wCKbha3XUD4f/5CRAj2+eboj9/9/wA0/e3V4/8Atg/Bj9jb9mDWLz4XeCpvir/wn1j4a0DWNI8QXOs6dLpr3V3b293NA8EdvFNCqRS5SdZnYuApiAHmHw+T9oD48y/CpfgVL8bPFzeCFbK+DW8SXR0oHzvPz9k8zyf9b+8+79/5uvNZOu/ELx94o8Tw+NvE3jfWNR1q3W3WDV77UpZrqMQIqQhZWYuBGqIqYPyhFAwAK0qJVMRKpFtJyb03s51Jr0tzpabqC1s3ExjGUU09Vbbo5ctGGu+jVOXo6ja1SZ9Gf8FKfGXjD4heEf2efGnj7xVqWuaxqHwNtZdQ1bWL6S5urmT+1NRG6SWQlnbAAySTxXy3XefE39qf9p7416BH4U+Mv7R3jzxdpcN0tzDpvibxfe39ukyqyiQRzysocBmAbGQGI7muDqUvem7WvKUvTmk5W+V7fK/kaR92jTg3dxhCLffkio3+dr+V7a2uyiiiqAKKKKACiiigAooooAKKKKACiiigAooooA9D/ZV+B3/DRXx40H4X3urjTNJuJnu/EmtSfc0zSreNp7y6Y4wBHBHIwzwW2jvXv8i/AP8AbJuv2gv22vjppHjBdH8D3GhQ+D/CfgvVraxZrGeWTT7O0eW5t7gRLFFBa5dUb7snyEsNvzD4B+LvxE+F+leJNG8BeIjpsPizQ20bX2htYmlubB5Eke3ErIXiR2jQP5bKXUbWypKn0H9nD9tD4i/svfB74lfDv4VX+taLrXj9dHW28XeH/Ek2nXWkrZXMkzhfJXfIJlkMZxImBnO4HFRU5pONtl23u2r76aJLl00blo72JiuXmfVtL/t1Wf3t35u6jCzTTPc/ip+w9+x1+zrofxK8efFSb4oa3pfhP4jaFoOi6To2tafp96ltqWl/2gy3bzWcy/aLdd0bBUUPJHt2xBiUh+Dn7Cv7KPxH1L4VeHUuvijqH/C9da8RReDPEFvcWNpH4bs7K5kt7d720+z3H2+UbPPuFiuLZY42G0n79fJOqfEz4ka3pWpaFrXxA1y8sdY1j+1tXs7rVppIr7UMOPtcyMxEk+JJP3rAv87c8nOp4O/aE+Pnw78D6l8Mvh/8cPGGheG9Z83+2PD+j+Jrq1sb7zIxHJ50Ecixy7owEbcp3KADkDFLkk9W+2mtn7sU13V5JyUtZK7Wz0VONSNFRcryu25WW7lJpqO2kXFOL0937/rTSvjD8O/gd/wSkjn+Ddv8TPDmqeIPilqmi6trHhn4pQ2Q1O7h0a1xLceTpqtcacTMzJYF9y73zcMXyvnnxY1Sx1r/AIJV/Du48Ka14otNJsPixqWn3XhvWNS0+8szqCaZazTX9u8On29xEJDcFRBLNOqKowxJzXzhJ4y8XzeEofAE3irUm0G31B7+DRWvpDaR3Tosb3Cw52CVkRFLgbiqKCcACuwvv2t/2rNT+Hq/CTUv2m/iFceFF0+OxXwzP40vn08WqAKkH2Yy+X5ahVATbtAUYHAqq0I1vat7zdK3l7NU7/e4Oy2XMmtYpG16XPBqNlHndt7c/NtfW6Ukm93Zp/Ez6e+Kfhnx1+2l8Mv2L/h78SPi3qE2r+Nn1zR7jxV4kvJb+eJX14wIS0j75SqBVSPcM4VAVGMVo/2KP2BPHn7UPw9/Z7+FPx08SS32s/EC60DxloIuby4vbK0RP3dyJr7QdNS3nEiSRyWxin2naRJ1A+bvGv7YP7W3xJ8Pr4T+Iv7UfxG1/SlninXTNa8bX91brLEwaNxHLKy7kYAqcZUgEYqPxT+1v+1Z4413RvFPjX9pv4haxqfh24efw/qOqeNL64n0uVwA8lvJJKWhZgqgshBIUZ6UlHV20vUnPTqpzU7bdPej5p3Vna2FSNSVOcYuzcbRf8rSkr/fyvytazTafdaf8Ev2b/2hvjd4L+CP7LVv4+0O+1TxBdWXii58dX9jf29pYROG/tKOS2ityqpbpcTTQuhEYjAWaTJI9Hu/+Gff2y/iT8cfj98SYPFUfgX4U+DbJfh54d8I6lDZyNpdvd22mWFqz3cE/kq0Tq7sEJV5JH2P/qz8xfDr4xfEj4T3WuX/AMP/ABI2n3HiLQbrRdXuvssUsstjcgCeNXkRmiLqNpeMq+0su7DMDl6N4x8XeHNK1TQvD3inUrCx1y1W21qzs76SKK/hWRZFjmRSBKgkRHCsCAyqeoBojGSjGN72Td3/ADu6vba0VZx2tzTVuWxtLllWutI80dOvs1JScb95L3X/AIYyu3e31r8Jf2T/APgn/wCN/hj4g/ah8WfEvxp4f+HMfjbT/DWkWPiLVHt7+znbT1urt5rnTdE1OO4xIWWBTBaiVEZmdGGw4HwA/ZZ/ZJ+LqeKvBPgzx7qvxD8eQ+Mrmx8B+F7HxhB4QOvaOmxYb6GTU9MuIZZ5GcsbN5reYLG2wSkgDwT4VfH347fAma9ufgh8avFvg2TUljXUZPCviS605rpULFBIbeRN4Xc2N2cbjjqa0fDf7V37Ung3SNX0Dwh+0n4+0qw8QX1xe69Y6b4xvoIdSuZwBPNcIkoWaSQAB3cFmA5JpSjJ81n00/8AJd27vVp672k1vaSiN4xSb1vdt/8Aby2VujWl7NxUtNUfQHwN/wCCd3gP4p23wZvL+Xxh5Pjv4deMvEXi6WwaLbp0mkSX0VvsJt2EMTSQWqSeZuJabarIXUDP8ZfEDxf41/4JE+DYviJ4u1rXLXQ/j3dadplvfatJKbKwj0S2K2tuZd4gjXc21FXYpYkL1B8L8KftP/tLeBPBC/DPwP8AtD+OtG8No0rL4f0nxbeW9ipk3eYRBHKI/n3Nu+X5txznJqxc/tb/ALVl58PP+FRXn7TfxCl8J/2aun/8IvJ40vm077IqhVt/sxl8vygoACbdoAAxRiIyrKqla0nFxXRctZ1dd/s8tJeS5v7pd480Xa1ua/ezjy+XnLprp5nvX7efh/8AY40nw18FbfwD8GfEXhS48S/CHQb8+IrfxNYz2sUbXt1HcSXltBpUL6hehUYPOs0JYiMGMbMNx/7VPwK+Fnwl0/Qfjf8AsfXGu3ngpvFM1jovxJ/4WNbahJd3cIWWJfsKabYX2k3SKPMKTo2cq0Tum2WTyfTP2kP2iNF8A2fwq0b49eNLTwvp94l3YeG7XxTdx6fbXCT/AGhJY7dZBGjrN+9DBQQ/zA7uah+Kf7QXx6+Oc1hc/Gz43eLvGMmliQaXJ4q8SXWoNZ7ypfyjPI/l7tiZ24ztXPQVquWNRPpzuXXWLadnqndLRWaSd5O97LOmnGKUtfdUem6Vm1p131vZaKz94+j/ANtX4x/DKy/aW+H/AIf8aW/j7xn4i+G9gLHxz4+1fTV8La/4ovFmaWykkivre8dDbRG3j867ikmnRMOqgI1dT+03+zp4N8Z/tg/tQfFv4/eNvGXi7TfhXcWc95a6VNp9lrOvzXU8FnAzTR2f2a2jjZ1aSRLRvlCgJltw+Q7P47/HDTvig3xv0/4yeKoPGjSM7eL4fEVyuqFmjMTN9qD+bkxkoTu5U7enFdBP+2f+2HdeMrf4i3P7V/xKk8QWunyWNrrsnjrUGvIbV3V3gWYzb1jZlVigO0lQSMgVjGn/AAm/iSqcz86ji3y6WVnHTRKzStaEU6l7zb/wa9XGDdot9rNpdr7an11+2h+y18L/AIx/tc69D4++J+ofD19F8E+D7a10bVr7wyt0i/2DaZjmOta5o7NJHtCsYoWXdncIzhTU/ZWvPgR+yx8Df2kPFXgsfEC98R+DbDQbH/hPvB3xK0nS7y4s7zVoRssZ7CHUorEnaiytHd3azKm0GIk7fhrxh438afELW28S+PvF+qa5qTQxQtqGsahJdTmONBHGm+Ri21EVVUZwqqAMACm6V4z8YaF4f1TwlonivUrPStcWFdb0y1vpI7fUFhk8yITxqQsoR/nXcDtbkYPNNxm5tp2Tvdervu9e/rcKlpU4R35FTSe3wRjHZadLrtofpj+yf8Gf2dvGfhr4H3HxG0/RfEll8cpvEkviyHWPDdtrXibX9Qe6uoriaXVbiETaVb6dBHDO1zbSRyTzSMwjwzyxfP3wu8a3XhH9iv4hfFb4t/Dn4c6l4emtz4B+FP2j4UeH4r2+1WRR52pfb4rIXbNZ2imQzO58ye4iy5YNXzT4X+PXxz8EeAdU+FPgv4z+LNH8L62ZDrPhvS/EV1b6ff8AmII3863jcRy7kVVO5TlVAPAFY+qeN/GmueGtK8Ga34u1S80fQTOdD0m61CSS207z3DzeREzFYvMcBn2AbiATkirlGLlJRXuvp5OV2vlFuEZXur3VrJKoSlFLumnfrdX1VrL3m4uStb3bLR6foD4v/Zf+G/7Of7Lf7UH7PvgjTPFT6hoa+AtN8SePvEmpQrpGoXc+pWs5Ntbx2qtaRqJt3z3M7NHtbC5r54/aS+E/wS/Zm/aTX9nb4V/Brxr4t8aeD/FtjZXk/jDVIpdN8VTKELxRaPa2cdwkFzKy+UBeyO8Lr/FICvkviL9pL9onxf4Gt/hh4s+PfjTVPDNrYxWVr4d1HxTdzWMNrG0bRwLA8hjWNGhiKoF2qYkIA2jFx/2s/wBqiXRtB8OSftL/ABAbT/C01vN4ZsG8ZXxh0iSBDHC9qnm7bdo0JVDGFKqSBgcU4e4o63ad27Wv8OvlazfKtHzWb91N4xj7sk7O6t5bNa976Xe6tdLWy+pPH9r+z237QXwL+DH7RXwf8O6l8RbXWjZfFLT/AIW2+meHrC2mutSgNjp92lrYyWtzPbRtMlysUSMRIsLTl4mYdw3xc+Ffx/8A+Cz+i/DT4s+H/if4m0/w/wDGC90zQ9M8TfFSG+03TrqPVCA1vaNpYWGxxAi/YkYEhEBnYLg/EXjz9q/9qX4ptpjfE79pTx/4jOi6gt9o517xlfXn2C6X7s8Pmyt5Ug7OuGHrXNWXxI+Iem+Pf+Fq6d481q38Uf2k2of8JJDqky3/ANsZy7XH2gN5nmliWMm7cSSc5qaPNTq05v7Dk9PO33Narq9ne+xiqcq9KrGLtzxS11s1zfhdrTRJe6lbQ9h+PfxD0n9sT9oXUNX8b/tC614XtLGzlit9U+NXjHUvErCRblybe3l0zSS8ER8wskP2cRptf95llWu5/wCCdVl8Nbzxb8WPgpr/AMNfh/42t1+GPirUbLxreaDPdXAaz0yZoHsvtoQWyeYFmEn2eO5yFBdVylfJs001xM1xcStJJIxaSR2yzMepJ7muz+Fn7Sf7RXwMsbvS/gl8fPGvg61v5llvrfwr4qu9PjuJFGFeRYJEDsBwCckCphTjDDuktPdlHTu01f5Xvpba3W514it7XHKtFaKpGdn/ACxkpcvbVLl1vbfpZ/QfwU/Y4/Y4i/Zb8G/Hb9q74+X3heX4hX2tQaRdWsl+ItMWydYFP2e20W9W/k80l3ia7siIzGFYliy/RnwD/Zt/ZRsfht8MvhV42i8I6ho/xE+CN/rd81r4PsrvXE1D7PeXF7rd1q80Pm6ZZWJgjt4IYXVpZVYSJtEjv+f3hj9rr9q/wUNYHg39p34h6T/wkGoS3+v/ANl+NL63/tK6kAElxcbJR50rgAM75ZgOSax7D48fHHSvhjdfBLS/jL4rtvBl7IZLzwjb+IrlNLncur7ntQ/lMdyK2SpOVB6gVFanUrUZQva/b/DJW++Sk2t3HRRlyyjhT5YVIt6pO+trr3k7r/t1cvK7rXdrmjL1H9qP4IfAD9mjw14e+HbaD4213xvrngXSPEX/AAmK+IrS10Em+QXAjtrL7DJNdQxxMIfP+1x7pkkOxQmw834a/Zs8B+KfFfhHwro37YHwzuJPE2rW9pqUjyarp8fh+F13S3N3PqdjaW2yIAgiOZ2ZsBA2Qa5df2h/j+vwr/4UWvxy8YDwTjH/AAhw8TXf9lY83zsfZPM8n/W/vPu/f+brzXH10uUfbSlbTmul5Xul5aaO2vW6ZMoydJRTs7We29kub702lsr21R+mfxz/AGB/gx8d7T9mv4e/CDR/BHgnw7q2ueItF1DXtF8V+H9U1rW7W2a38i4kaxun/tK8lEMxKxNJHbS3SxMUUqD8y/Ajx7+wn4X+N+tTWXgHVPC9r/whusWXhbWPjFPB4qsLDXGCizvLuxtNKjGxYxMnltBeKk0sblGEZI8Aj+JPxFhsdD0uLx9rS2vhe6kufDNuuqTCPSJ5JFkeW2XdiB2dEcsm0lkUk5ANddfftkfte6p4ysfiLqf7VXxIuPEGl2sttpmvT+ONQe8s4ZceZFFMZt8aPgblUgNgZzWKjU6yvfmv0fvRtfTd3ba2SvdJtByrmbirL3bLokpN21vpay1u3azet19n/F79hv8AZe8WeJ9Q+K/xN8c6To9l4R+C/hXVvHsXg/Sbrw5Z3mtajdTQJdeRb6ReyabC1tFDKYxpsW9p4WaODzmK/JXjb4J/s0aj8bfE3hn4T/tgeGbDwXY/Z5fD3iDxlpWulr5ZI1aSACz0l5GeFy0Zkkgt1kCh1RdxReL8LftAfHjwN8QL/wCLPgn42eLtH8Var539qeJtL8SXVvqF55rh5fNuI5BJJvcBm3MdxAJyRWN428deN/iX4pvPHPxH8Y6r4g1rUHV7/WNb1CW7urlgoUGSWVmdyFVVGScAAdBRGMua7210XS7ul52vZPTRJWKilGHKm3tq/KKV9btXababfxbtpM+8P+CdXwz+D+ifCPwfdfEzQfB15N41+OU+geF9U1DwHaa7D4vWK0jA064kv9Nmm0O0e4MCpeW4a5P2yXfa4hE0Wj8B/CP7K3jbQ7j4LanpHw60Oy8J/DnxbJ8XPDNx8ObnUfEVpq9s16Vv4Nde1kW3tIdtmIiL2PLDymilaYZ+G/hp+0X+0H8FtKvtB+Dnx28ZeE7HVGDalZ+GfFF3YRXbBSoMqQSKsh2kj5geDiq83x1+N1z8Lo/gfcfGPxVJ4Khm82Hwe/iG5OlxyeYZNwtd/khvMJfIXO4k9TmjEQlWhKN948vRPWCgntb3XeVmmpNprkknKRR5afK2tVK+m3xuWifVpqLe9r6uLUY/ekXwa+FH/DJL/DKP4aeC18YL+y6vjJvDs3hO0Z2Vp/OOvr4h+xfbxeLH8x00v9m+YRrclQYBm/FL9nH4e/su/sc/tVfBXwR4Z8ZzXPhfUvA+l6/421++iOna1ei7Sd/sdrHaIbRV87cEe5uWaOSJjtzz8Rr+0P8AH9fhX/wotfjl4wHgnGP+EOHia7/srHm+dj7J5nk/6395937/AM3Xmp/Fn7TP7SHj3whH8PfHX7QPjfWtAhtYrWLQ9W8V3lzZpBGyNHEIZJCgRGjQquMKUUgDAorU+eu5puzk3Z9VzuSv1uk3F663W0YxiiPNGmot7f8AyMY/ja7e/q25HdfCP9kPwT8Vf2iPh38DfDH7U3g3xGvjbxFFp+oXfhfTdaWTSYiy7nZdR061EjlS4RYy+WXDbQQT1vxi8J/sXfs+ePvCviT4EfGWa51Kx8QX1j4y0HWPC58WNptuqKiXH2XXND0e2ml3NOjWsqN5bRxuJQT8nzPYX99pV9Dqml3s1tdW0yy29xbyFJIpFOVdWHKsCAQRyCK9G1L9tP8AbH1nxLpvjPV/2s/iZdaxoqTJo+rXPjzUJLmxWZQswhlaYtEHCqGCkbgoBzitH9mz2bb872svTRpp9JXTukTHm5pXs00kvX3rvtfWNv8ADqmm0/oD9qLxJ8L/AIafHn4WfF/QNJ0PQfCvjP4O2Nxc6tD8B9BvLjUJBJcRy38nhy8EWnWk8txAEHkTMnkqssc0nmFW7bXfA2r3H/BRvUvhz8NPAfwz8MfDvVdB0rxn4mvdW+FugX39i+G00u3nub54dR06QaZO8RZ2tIkSJJ51Qb12yt8b6T+1D+0xoHxI1H4x6F+0R46svF+sWwt9W8VWni69j1K9hAjAjmuVlEsiYii+VmI/dp/dGMc/F/4sm+8Ramfih4i+0+Lo3TxZcf21P5mtK8nmOt22/NyGcByJN2WGTzzUxj7O0oJXXM9VdatyUX3V+W9uVNL4btNVJQl06Rj1vpyqUk/5mlJK97c3xWTUvv8A/ZZ1P9nz4rDWP2hfEHwW8B+DdF+IH7SFnoHhO3Hw103Wo5rf7MHj0J7O5s5odKgdHjL39oWm82Vv9HlVAY+C+DWr6j8FNQ+NnjL4u/BH4W/8K/8AhFqmr6Np/hnUfhvoWqNqHiK6uriGx0pdTurIX11FC3mztJ5okEFoB8oYLXyV8LP2g/j38DEv4/gl8bvF/g5dU8v+1F8K+JbrTxeeXu2eb5EieZt3vjdnG9sdTWNN498c3Pg//hXtx4z1aTQP7UbU/wCw31GU2f24x+Wbryd2zzinyGTG4rxnHFZujFJxi3y8qik3/dhFt+aUZOPROSdr87lUZS5rt/aUrd7Ocvxcknu3FNXXu8v3PqP7OHwqg/Zc8K/CL4UeJNB07xNrH7P958SfEmo6p8IdO1X+0gFlknifXbuZp9LMSwfZ4o7OBVV13SSeZMQnS/Fv4JfDPVf2avFHwe0H4e+B9O8deG/g/wCEdW8QaD/wiNjbReG1nmtnn1aHxAmni8vrh4ntmls55ljRb248ue88oInwXD+0B8eLb4WP8DLf42eLo/BMjEyeD08SXQ0piZfNJNp5nkn95+8+7975uvNS61+0d+0N4k+Gtv8ABjxF8ePGeoeD7OOJLTwne+KLuXTYFiOY1S1aQxKEP3QFG3titpPmlOTSfM09dLWc9LpbJSSS/u3i4NpxilzU1DXVLtf/AJ99G2ndxm3fX30m5RTUvqHwn8IvgB+zd/wVB+Gf7OHgPwp48l8UeEfjP4csdW8WeJNftFstUK3VuZZrfTI7FZLeKSRg8LNeTZh2kgl/l6i2/YC/Zv8A2o/inb+NPCPijxl4VsdQ+KXi7TPEdr4gu4r2512DS7IajLc6XHaWXmQlz5kJhEd60JdGBnZfLk+QLz9qn9p/UdB0HwtqH7R/j2fS/Ct1a3PhfTZvGF61vo81su23ktYzLtt3iXhGjClBwuKj8U/tPftK+OPGekfEfxr+0N451jxF4fbOg69qniy8uL3TTu3Zt55JDJD83PyEc80p80qcFfWLn71l9r2dny7fYd4fC+a97pF80dbLR209OfS+/wBpPms3pa1mfQvh79kP9hj4o/FtYvg78d9d1zwx4f8AhnrPivxxoWhzT3Wo+Zp5LCzsby+0nTllaaJkk3GzIhEc2RKAufmD4kaj8LtU8SfavhB4O1/Q9H+zqPsPiTxJBqtz5vO5vPhs7Rdp4wvlZGDljnjb139qD9pfxR8QdM+LfiX9ofx1qPirRYfK0bxNfeLbybULCP5vkhuGlMkS/O/CsB87eprE+JHxX+KPxl8Sf8Jl8X/iTr/irWPs6wf2r4k1ie+ufKXO1PNmZm2jJwucDJxWahNSTvprpfu5O97a6NRSeyje7bba0vLzt91krW9VJ827vaySRgUUUVqIKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKdG5jkWQKp2tnDLkH6igDW8CeAPGHxL8RR+FPBGhzahfSIz+THgBEUZZ2YkBVA7kgdB1Ipvgjwbqvj7xjp/gfR7i0hvNSult4JL65WGJXPTcx6ewGSTgAEkA+iePf2mNO1TwTN4X+Fvw3sPCFxr0anxnd6V8v29lG0RRD/AJYwEDc0Y6szA8ZL+d+A73whp3jHTb/x9pN3faNDdK+oWdjOI5ZYx1VWPT35BIyAVJ3DRxpqSSd+581hcbxBisDiMRXoexai1ThpOpzJO8pWmoNSlbkipK8VeUk58sOh8U/s7/FfwN4Q1Dxr418Of2Ta6dqy6c0eoTLHLcTHOfJU/wCuVccsuRg5GQGK8RXsnx5/am0z9obwd9g8Y+BPsms6XqRbw1eafeHyoLJ/vwzK2fMYbUw4Cknn5QCr+N0VFTUvcd0PhbE8RYrLXPO6UaVfmacY25UrK3LJSlzJ7tuzTvG1opt0ETXEyQIRudgoz7mvf/2lv+CdXxR/Zn8J+I/F2pfFDwX4qi8G+Krfw74ytvCcupNLot9PC8sIl+2WVurowQgSQtIobAJBIrwK0mW3u4p3B2pIrHHsa+7vj5/wVf8Ag/8AGHxRqHiqP4XavHLoPx20vx54Jt4NMstPi1myhSNLix1hLV9kk48oNFeOt3MN7x7lQnM1I80aai7Nt8z7JSpJffGVR9Nr3VrS+kXxXe1np3fLK3p7yir66N6a3XyL40/Zm/aR+G+oaJpPxE/Z98caDdeJrgQeG7XWvCd5ayarKSgEdsssamdiZIxtTccuvqMz+MP2UP2pfh7dGy8ffs1+P9DmXSrrU2h1jwbfWrCxtgpuLrEkQPkxB03yfdTcu4jIr65f/gqF8JNC/aG0r4i6N468Y6p4Lfxpq+t6n4Xt/gt4Y8OXuny32nXlkL9L7TbnfqN7El2cNMsIkKBiytjHRa38cv2Yf2fv2WPgfZ6XP481DwB4w+FPxI8I3OuXGjWSaxbzXt1Akl4tiLrySi3CnbAbrIiIJlLDaeb2lR201abt58sny9rppK6bT5tNVJJy5YySTvqrvW1uaza0v8OtrXVtd1f4X8M/s6ftB+NfEOn+EvBvwJ8Zatq2raKusaVpemeF7u4uL3TmYqLyKNIy0luWBAlUFCQRmpfCX7M/7SHj7xlq/wAOvAn7P3jfWvEHh92TXtC0nwneXN5prK+wi4hjjLwkP8pDgYPHWvrxv+CkX7Ktnp918LPDGheLrXw4/wAG/Dvg+y8T+IPh1oHiC8judJ1K6ud8uk38zWk0E8c6sR5yvDLEm3zNgc8B4K/bX+HmpfF74ga18fPi5r3ijwj4yGkwaxo9z8BdEKeI7aztXgiE1vbava/2PLbowWGWxnMh4Ysu3YdVzSqSS2V7N9fesnpd7atWv2VtTKMqnseaS100Wr2Ta6LdtJ81lbXc89+Gf/BOP9sj4t/CXxV8X/BPwI8UXVr4U1SDTp9Kj8L6jJfahcPPLDNHaxR27CVrZ4mE6llMWVBGTgVPCP7Gd94p/Z/8UftA3fx98D6LD4LuIrTxN4Y1i01xNVsbyZ7hLa1ZI9MeEyTG2k27Ziicea0RyB0/w1/aE/ZdsvBXxy+B2u6P4w8IeC/iVrum6h4Rm0DS4NbutFisb6eaG1mjub2185TDPs8zziwZATvyTUfwz+Ln7J/g79jP4kfAXVvHvxEfxF441bTNQtXt/h/YNZWrabJem3jeU6uJCJ1uIy7CL9wQwVZwATnKVR0akkraQcdNdfZqd1d2snUaTu7xjZ2fK+iMY+15XrZtdk97a6aPTXTrt0w/2ef2Fvi78dPhn40+NN94a8SaD4O8KeAdV8RWfiybwncTaZqtxZMqmwS6JSJXYmQbgzlTE3yHBx4jX2xH+3t+ynN8N9Q1q/0n4jf8Jxffs0x/Cq20eLTrH+xbB44ChvFnNz50iSukTmMQxmNnmbMxYAfE9aS5liJR+ytE+9pSV/nFRdul7b3MoPmpJvdv8HGLt8m2vO19rBRRRVDCiiigAooooAKKKKACiiigAooooAKKKKACiiigDvPgR+z54q+PV7rk2neItH8P6F4X0Z9U8U+K/Ekk6afpNqGWNDJ9nimmd5JXjijjiikkd3GF2hmXufjL/wAE9vjl8DfB3inx94x1LQ30nwzb+HruO5t5LpG1az1lJ3s7m2jmt45An+jyh1nWGRGGChOcaf8AwT//AGx/DX7LFx468N+OdOuP7J8a6BBDbaxY+G7XWLjRNVtLhbixv0sruaGG5MUgZgjyKA/lycmPa3rPxY/4K0XGofDfxl4S+Cfjj4oaFr11ovhHRfDXjdtaNtquo2+lvqMt7d6hPBc+ZHNcy35fy0aZTyGkOMma7cad4fFaNrarWpaV/NRtp0TcrSd+SaLlKpJSWivb1tG3y1lr1aS923v8Pq//AAR+/aq0q10O9TVvCt1HrvirT9Eje1vbvFr9q0231EXsxa1UC0iiuFWSRdzLIjqFYbS3NeOP+Cdvjf4PwahqPx9+O/w98B2MPirUtB0W812bVrj+357CZobuazisNPuJvs6SDZ5s0cSlmAGSCB61+2x/wVpu/jXoPh7TP2f9e8YaNNNo97p3xBm8QWlqzavHc6fpFtJtfzZm3M1hNmT5HCyDDZdwO8g/4Kxfs1ar+0h4W+P0uv8Axe8Jt4H8Za9c29n4Z0ezmXxToepamdT+wXo/tOD7MUnd0YA3McirGxCkbRdXaLj1bT3fKko6+d5Xt1s5O3uJNU5c2BjOV/aWjeNrXfLJvW7Su+X0atezbj8st/wT++L6fFWx+Gj+LfC4tb/4Y/8ACwI/F32q6/suPQPsTXRunP2fz1I2NCU8nd5w2gEENXbXf/BH/wDajsPFvizwne+I/BsX/CIeG9O1q71BtSuvs95DePLHHFB/o28yo8Fwjq6IqmB8McqWu3X/AAUP8AXv7CN98B7jwXrX/Cy5I7jw1YeLVEXkx+EJ9Sj1OSzaTzPNMnnK8Ij2bPJkPzj7tdtb/wDBXHSr/wDae8e+MfE974wuPhnq+h6rb+DPDaabZ/arG5ultgrTDzlBQeTJ/wAtZNhlkZFzLJuy/fSqcqSSalZvpZ3je3eEo9fjhNWs1IMd7SjRm6PvSTsrdUrLmSu95Rlo7e5KLWqseBf8MJeP7DWvitp3i34n+D9Ds/g34ks9G8ZaxqE2oSW4luL2SzSWBbazlmliEkTFv3YfaQQhOQOm8I/8EzPGvxGufAK/DP8AaR+GevWvxG1zU9M8P30P9u2ib9PtDdXUzJe6XDK8CKBH5kSSDzWCdQ23sPjl/wAFN5fj34S/aF+Hnjzx/wDEjVtC+Jfi7TL/AOHOna3ffbLfw9YwapJcyxmCS6KW7eQY1VIdylowpZVAaq/hP/goF8HPA37d3w8+MHhPwZr9j8JfhX4fm0Twb4bWzt5L5bd7C5jkuJoWm8h7ie8uZJ5jvwQ2CX2jOMJYh4dOS9666dEk3f5+6lpu2n7tjevGEcVUVN+6r27btKz3fe9ulmlc8v8AFn7Fa+BU8K+I/Fn7Tvw6s/B/jbQ7vUPCvjz7Pr8mn372t39luLQRR6U17HOjjcfMtkjK4IkJIB3/ABD/AME0/ib4X8Q6lBrHxp+HsPhrQ/Bem+J/EXjqW71OPTdJtdQLfYbeeGSxW+F3OArJbratIVkRiAMkbvjf9sD9mL4/eLvgT4t+P3gHxHDb+AtLfT/iJ4X8K6VZ2+k6nFBM01u2n2qTQw2n2knbdJHHCi5LoHY4qv4A/b103xlqHxgP7Q+veLNDvPij4i0nxHpvjDwDbx3F74c1PTbmWS1WG3mubbdAsUzRJtuI2iEURXdjA6Ly5XpreVuvu89ot7a8jcrK2sVFpc11mlezbtdR+9/EuukbNPR35lKN1Gz5Lwh+w1L4u0S78dn9qX4X6X4NTxPb+HdI8ba1NrNvYazqcsCzPBbxnTTdKIUdPNmnghhTev7wg5qze/8ABPXx74K8F6543+PPxk8D/DeHQfHt14Pu7PxQNXuJ5NTgt47hwg0zT7tTGY5FKyFgrduCCfbP2o/2+/2P/wBs9dN8H/G3VPizb6X4V8RadqGi+JrHw9p91qmsW/8AZFjY6lBcwy6iqW0ss1gk0dx5t0R5rBozgZdrH/BU7QPij8P/ABlY3/xs+Lnwd8ReJ/i9eeKlu/hXpqXccmmvp9vZwWM0h1awkZkEAZmwysRuCjOFmt7SMZez1slb/wACo69NeV1na11yx91v4tf3fs4N7tJy/utxm+Vb3+wm9ua9mk9Pi20+HHj/AFHwdqPxG0nwTq954b0m8jtdT8RWulzPY2s0n+rjkn27I2f+FWIY9hXsd7/wTo+N9p8NNX8bp4h8O3GueHfBdv4s8SeAbdr1tY0jR52Tyrm4b7L9jRmjkjm+z/aTcCN8mIFWVeQ8N/Ej4f6f+zR4y+HWqfED4nR+I9Y8Q2V1peiabqUUfhm+hjP7ybUIC/mSXK/8smUMFPU19W+OP+CvXhDW/h/qniPw5beJrPxjr3w1Xw7qXhO10GytdBOsSQQ2tzr892ty8+oT/ZrdI4YZbdBAjMivjcZK5vdlfo42a31hfba3PZN9NtNZx5pSq+0SjFfa8lpNJa6/Yu1vfdXsoy8S1/8A4JeftHadpuqW/hfU/DvibxL4b1bQ9L8ZeCdAuLttQ8PXmrEJZw3Mk9tFaSMZWWFxb3E3lu3z4VXZZLr/AIJd/HrUdQ0i3+GHjTwf43s9Q8eXXg3UtY8N3V8lnour20H2ieO5kvbS33RJAsspngE0OyFzvyUDfQ3iH/gtX4H8PeL9U+MPwp8NeJpNT8Saxot9cfD+70uz07Q9DaK+g1HVpY7mGeaTU7q8uIBH9qmt4HSJgMERRxrVsP8Agr38FPhx410lfBnhjxb4q8JzePpdS1LQda0Oz0a18P6AdNvdPi0jTbS1u7hJSqajczSXDyQtPIoLqHleUFpezu/i106c1o6X/l1lrfp8V4pT1jyWd29nZ21+FtNrvzWi1+DT5o/O7/8ABNz4w3174R1Pwd8QPCOv+D/GWl6vqNn8RbCTUYNFsLXSyRqM1013Zw3ESQAKSwgZZN6rEZHO0Sar/wAE0/jBofkeKtY+I/hC08AXHgmPxVH8U7pdVi0M2ElwLaNcPYC8M7zlY0gFsZH3B1Bj+evdvDH/AAV1+Hngi/0P4eXVl4h8c+D5tH1218Xal4o8Hafa/NfQ21va29locN3JaRWNnDY2yi0Fykc4eVSIRgm9p3/BZHwlDodz8Hdb1XxdrWkNoO+0+KHiLwfp+oa1F4g/tA3y6iukPei0SKEsIbeAXTLB5EMq52LCuVSVfmXJG61er1fuz0a0Ss1C2qv3ak/ZuXLzPpsvK3PFKSdne8XJyVm0k5WjZRl8/wCv/wDBMf45+BvGGvaF8U/GPhfwno2h/wBlLD4v1qPVGsdWm1JPMsYLOG3sZb2aWWMSPs+zKYhDIJfLYBSeHP8AgmX8YNU+Mer/ALPHin4s/Drwv480/wAUSaBpvhLXteuPtutXi2/2hTbrb20ojikjZPLmuTBG7SKgYsGVfeJv+CvvgLxhoWufCnxLqfjzQdKsrPRrfwD8SrLQ7PWPFNq9pby2t7eyfaLyFLe9vIp5j9pimeS2MrhGkLeaOTk/bt/ZO8Z/Fv4kftOaq/xC8D/EzxPfx6f4N1zR/Cljr0XhzQ47CGzEkIm1KyK6nJHGVNx86wqzGMCRhIjfteaUVsk7Purws3dK0tZLZaa8nu+/nH2kuXmsnpfqk9b7XvFaPRvXRTd7x+Kbu1uLG6ksrqPZLDIySIf4WBwR+dR1Z1mLR4NYuoPD19c3WnpcyLY3V5aLbzTQhjsd4lkkWNyuCUDuFJIDNjJrVrH4UaS5eZ8u33/jpf1sgooopkhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRTo1EkioXVdzY3N0HuaAG0V7dF+zx4V+B9hN8Rf2gNWsdW0x4/8AilNH0LUt3/CROyBllEi/NHbruG5iASeMdA/nHwbtry++Kuh22m+AIfE8kmooE8P3Gdl4O6MQeABk7j8oxlgVBB0dOUZJPqfO4XibL8xwmIxWDvOlSjfn0jCTSblGMpNK8bJTk7Ri3yuXNGajzFFfSn7UnwU+FXws+Fl5dfB3wpDrMNx4kaPXNfbUhcv4ekTG2xUIflBLlSz5zgBssUI+a6KlOVKXKw4X4lwfFeWfXsLCUYczilKylpa94ptx1eilZtWlblkmyiptPVXv4UdQytMoIPfmv1G/b6/Zb+FnjFdU+G3hPwr8PLM6x+0xpXgzw1r/AIB8C2Wk/wDCDwzWi+ZZamYra1lvWl88SpjzoswH/SVb92ZqRlGFNxV3NtJekqcX+NVeWjV7tJ/RLWWu1m7+kZS/KLWl3drS12vyzor7q1P/AIJ9/sKeMP2itG/Z0+Ev7QXiP/hIbHxdrFn4w8PbLy+vn0zT7G5unliN1oumRWt2z2jW/wBn3XahrhHEjrGwerH/AME8/wBnzxp8FdA+M3hbw38TPDB8Q/BXxv4ytNB8QeILS+l+0aPJAtkyypptt5ltOshkbEYLKy7HA+Zuf21PlUujXMvONpO67p8srdbpp2KlGUZKL3bSt1u5KNmvVry1R8P0V9zaJ/wTN+AXhzwlD8UfjL458RaLoum/BHwx4t8RWOpXk9nIupavf3NtjzrXR9QltrVEt8jdaSsXkjBkRW3Dz/4efs9/8E//ABb8aPHvgfRvjvqHiazhFj/wqixbxJ/wjI8QSyxNJc20up6hpEkMMsLAQI1xBaR3DMGDRZ2VrzXqOC1abTtrqna1lrdvbTbXYxjUjKj7Tpo9dFZpO93popJvW/k7M+WaK+0vhX8Mf2Y/Af7Jv7Rml/G/9mDxVL4n8A+M9EsNSVfHWmf2hpyvqN5CIba7/siYW+3Ysc8iiRLohSohGAfevgd4T/YHsfH37P8A8OPEXwW0S48W658NLEW+iap4XtruLVl1jMwv7yYQrFPNaRW86hpEDsbyDZ/q3MWUq0VKy11ilqtXKnzpLv2drpaybSTKqS9nJqeiipSbfRRaT/BtpbtpK12flnRX2B47/Y3/AGJPgv8As8eH9f8Ai/8AHvVbTx94m+Fdr4w0Szt5b4RX1xcZlh06O2XRJINjRgwm8OpDZNlmgCqUPZfFzSP2TPDnxp/ZVk+EvwG8QaDq3iDwv4M1K01aPxZYNaNnWJUl+2ww6VC19eYjZXuRNFk7MxfJht4q9VQ/v8j8n71/J2cXdX6eavNSpyU3K32XPtdLlt8nzKz8/W3wbRX6OfFX9gv9m/8Aaq/aT8TeN/Aeu+PdG879o7xH4a8aQX1xZ302pvDYXmrzSadFHDF9mZ5LW4t445XuDiSKQnIaI+Y/D79gz9mv4x+BfCH7QXhq68feG/Cl/wCGfF+s694P1LVrPUtXvY9ASKST+zrxbO2jYTidY8vbMIXhlJ83AUYU60Z0+Z6WipPyi1zX7vTolfukbSiudRTu22ku8k2uXtfR7uz6O+h8Y0V9Vf8ABS2z0Gy8Bfs5p4V8Ga54f0uX4IxT6dpXiTUVu7yKCTVtRkRnmS2tllDqwdWWFAVdSARyflWttVOcWvhlKP8A4DJx/T5d2Eo8sYP+aMJf+BRUrfK9r6X3stgooooJCiiigAooooAKKKKACiiigAooooAKK+kP2DPB3gaX4f8Axm+NWqeCrDxN4m+H/gu1vvDOjaposWqW9rFPfxWt7qzWM37m8NnbymRY5wYQzq7jCgj6V0L4Y/Cn4Zab8SvjP8QfEPhzXLO/+Avhbxb4b8RR/s1+F1m0aO/1dYQq6EZRp7TlMo8vmgkSE5YooKqfu+W/W/4KT/8AbXrt2baaM1U5pcq35ox67ylCN/Rc6uleXkk03+bVFfav7IPxY0Hxp4p+O0Vp4O8AeKNH0L4Q+IPFHhm/8SfAHwrZ3MWpQLarFP8AZo7e4SBVy2LdZXg5LFcsa+Ndf1q88Sa7e+ItRhtI7jULuS5nj0/T4bSBXdixEcECpFCgJ+WONVRRhVUAACI1OaSVvsqX33VtbPdPdLppulotm+za+5J/k187+rqUUUVoAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAST3t5dRQwXN3JIlvH5dukkhYRruLbVB6DczHA7knvTrDUL/Sr2LUtLvZra4gkDw3FvIUeNh0ZWHII9RWl4E8AeMPiX4ij8KeCNDm1C+kRn8mPACIoyzsxICqB3JA6DqRTfBHg3VfH3jHT/AAPo9xaQ3mpXS28El9crDErnpuY9PYDJJwACSAatJ2OKtjMvoxqwqTiuSPNNXXuxfN70l0T5ZatWdn2ZnpqWox2U2mx38y29xIsk9usp2SOudrMucEjc2Cem4+pqGu38U/s7/FfwN4Q1Dxr418Of2Ta6dqy6c0eoTLHLcTHOfJU/65Vxyy5GDkZAYrxFEoyjo0LAZhluY05VcFUjUinZuDTV7J2utG7NfgKrMjB0YqynII7V0ur/ABp+MfiBfEC6/wDFnxNfDxZcQT+KRea9cSf2zLC26GS63OftDRsSUaTcVPIxXNwRNcTJAhG52CjPua9//aW/4J1fFH9mfwn4j8Xal8UPBfiqLwb4qt/DvjK28Jy6k0ui308LywiX7ZZW6ujBCBJC0ihsAkEipnL2UYzk7K+n3wT/APJpQu+7j5Hcvelyrr+ib/JN+ib6M4TxJ+2B+1r4yvNH1Hxf+1H8RtWuPD98t7oE+peNr+d9NuQNomty8pMMgHAdMMBxmu0+J3/BQr4+fEfwZ8L4h8QPGFl44+G41sf8LI/4TW6k1XUv7QmVv9d8s0Plwr5H+tfcnHyj5a898afszftI/DfUNE0n4ifs++ONBuvE1wIPDdrrXhO8tZNVlJQCO2WWNTOxMkY2puOXX1GZ/GH7KH7Uvw9ujZePv2a/H+hzLpV1qbQ6x4NvrVhY2wU3F1iSIHyYg6b5PupuXcRkVPuxlfbV/faz/Dfy32Dl8ui+6+nyve3mFt+1d+1JZePf+Fq2f7Sfj+HxR/Z72P8AwkkfjG+W/wDsrymZ4PtAl8zy2lZpCm7aXYsRkk1LoH7X/wC1p4U8Ua1448L/ALUPxE03WvEjwv4i1jT/ABtfw3WqNEpSI3EqSh5yikqpcnaCQMCs3wz+zp+0H418Q6f4S8G/Anxlq2ratoq6xpWl6Z4Xu7i4vdOZiovIo0jLSW5YECVQUJBGal8Jfsz/ALSHj7xlq/w68Cfs/eN9a8QeH3ZNe0LSfCd5c3mmsr7CLiGOMvCQ/wApDgYPHWq2dvJ/dfX5XWvmK65ebpdfe9vm+n4FX4ffH747fCTxHqHjH4VfGrxb4Z1fVlZdU1Xw/wCJLqyubwM+9hLLDIrSAv8AMdxOTz1qGb42/Ga48aab8SLj4ueJ5PEWjwxxaRrz69cG9sY0zsSGff5kSrubAUgDccda9L+Gf/BOP9sj4t/CXxV8X/BPwI8UXVr4U1SDTp9Kj8L6jJfahcPPLDNHaxR27CVrZ4mE6llMWVBGTgbnw/8A+CZnxh+I3gvwzrWk/E3wTZ+JPGWi6zqfhf4e6pNqUGs36aZNcRXUIJsvskcwa2l2xyXCEgdjkDOXsox5nb3PwvFz08uS8tNle/Udua/m7Pzd7a/PTX0PKbH9pv8AaS0z4bTfBnTf2g/HFv4PuIpYrjwpB4svE02RJXLyK1qJPKId2ZmBXDFiTkk1Hpn7SH7RGi+AbP4VaN8evGlp4X0+8S7sPDdr4pu49PtrhJ/tCSx26yCNHWb96GCgh/mB3c1JF+zH+0nN8OYfjDD+z144bwjcbDb+KV8J3h02XfKIk23Pl+U26QiMYbliFHPFeo+Lf+CX/wC1n8MvE3w/sfip8MPEGkaJ46XR2uPEi+F79rbQG1C7+ypbXrTQxJFdo2C0BcffjAbLca8vv67tpfPovVdO1/MmVSPK5N3Vm++nV/59zx5Pjd8aI52uo/i74oWRvEw8SNIuv3IY6yM41LO//j7GT/pH+s5Pzc1pax+1D+0v4h+Ium/F/wAQftEeOr7xbo8Bg0nxReeLr2XUbGMhwUhuWlMsa/vJOFYD52/vHOp+1H+yh8X/ANlT4jat4S+IHgPxJaaPB4g1DTvDnifWPDNxp9tr8NrOY/tNsZAVdWXY/wAjuAJF+YggnzGohKM4px23X3W+Wll+BpKMo3T6/jr+Kv8AidB8Q/ix8U/i7qkWufFf4leIPFF7BG6Q3niLWZ72WNXkeVlV5mYgNJI7kA8s7MeSSefooqkrbClKUndhRRRQIKKKKACiiigAooooAKKKKACiiigDY8BfEPx/8K/FVr47+GHjjWPDeuWO/wCx6zoOpy2d1b70KPsliZXXcjMpwRlWIPBNdha/tkfte2PjW6+JNl+1V8SIfEV9Yx2V9r8XjjUFvbi2RiyQvOJvMeNWJIQsVBJIFee6dp1/rGoW+k6VZyXF1dTLDbW8KFnlkY4VVA5JJIAHc17B8Tf2KPipo37Q/ib9nX4CeH/EXxU1LwesUfiCbwb4Wnu/s90I4xdR7LYzHZDcM9v5hI3NHnaudoJa8t/O3y+K3opa9r67k3hqn5N/fp877LfRtbO3n998afjHqfifXPG2pfFnxNca14msZLLxJq0+vXD3WrW0gUSQXMpffPGwRAyOWUhVyDgVzNeg+FP2Sv2q/HeoajpPgf8AZm+IOs3Wj6hNY6ta6T4LvriSyuodvmwTLHETHIm9NyNhl3rkDIrY+Hv7LGs+K/2c/H37Q/ik+KtFsfCf2WLQ5I/h3qF5pus3T3AiuLeTUo1+z2DwqyN++Pzl1QAMRWa9nGOmyS27dPlrp6mqjOVRR6t2/wC3nprfbbW+yTb0TPJqK9E+EPwF/wCFkfDD4ifGDXvE76Pofw/0O3na4jsUuGv9SurlILOwVTLGV8z99I0g3+XHbyHYxwDn67+zd+0T4W+G1t8ZfE3wE8aad4PvIoZbPxVfeFbuHTZ0lx5TJcvGImD5G0hiGzxmrlKMd32/HZer7b2aezV43/H8Lfhrvtv2ZxdFdf4m/Z9+Pfgv4eaf8XPGPwQ8X6T4T1byv7K8T6n4auoNOvfNQvH5Vy8Yjk3orMu1juAJGQKt+MP2Xv2mPh7qGh6R4+/Z28daHdeKLoW3hq11jwje20mrTEoBHbLJEDO5MkY2oGOXX1GXvKy3vb59vUdno+6v8lu/TzOFort/Ff7M37SHgPW7rwz44/Z98b6LqVjocmtXmn6t4TvLee302Ntr3rpJGGW3VvlMxAQHgmpfCv7Lf7Tfju8h07wR+zn481m4udLt9St4NK8I3tw8tlPv8i5VY4iWhk8uTZIPlfY20nacLmi+v9a/5P7mJ+7v/W3+a+9HB0V7d8Jf+Cdn7YHxp8IeOvFvgn4H+JZG+H0y22saTJ4Z1A3txe+fHFJYwRR27b7qISrJJCxRkjyx7A8b4Q/ZY/ae+IMutQeAv2cfHmuSeG717PxEmj+D725Ol3CZ3w3IjiPkSLtbKvgjacjg021Hftf5d/QOtvPl+aV7etn/AFZnB0V6J8A/gLH8ZdM8ceKNc8YL4f0PwJ4Ludd1LVJLITiWYPHDaWSgyRjzLi4ljiX5sgFmCttKnY8f/sb+Pfh5+y54e/axvvH/AIL1LQ/EGvLo40nQde+23+nXTWzXSpdCJDBG3khWMYmaSMyKsiI4ZVJe7Hme2n/kzcV97TX/AA6CLUtu7XzSUn+DTvt80zyOivVPAn7LniDx38AJPjJpV/e3Wral44g8LeCPB2j6Oby98Q3nkefdlFSQSKsEb233Y5N73KL8vWtj9ob/AIJ4/td/s1fEmH4Z+Nvgn4jvpr68tbPRdW0Xw3fy2Or3U9stwLa0lkt0NxMqsytGqlg8UgwdpNEvdk4vfT8UmvXSS27230FzKyfk38k2m/S6f3HidFd/qn7KP7Umh+KND8Ea3+zX4/s9a8TxyP4a0e68G30d1qyxrvdraJog84VSGJQNgHJ4qVP2Q/2sZPG9x8Mo/wBl/wCIjeJLWzju7rw+vgm/+3Q28jbI5mg8rzFRm+VWK4J4BJpXWi76fNbr5Dvbf+r7feed0V3egfsuftNeK/HmqfCzwt+zr471LxPoaB9b8Oaf4RvZr/T1OMGe3SIyRD5l5ZR94eoqTwj+yh+1L4/GsN4D/Zr8f62PDuoS2PiA6R4Nvrn+zLqP/WQXHlxHyZE/iR8MvcClzR5ea+lr38u/p5h9q3W9vn29TgKK7D4cfs8/H/4xaLqHiT4R/A3xh4q07STjVdQ8N+Gbq+hsvlLfvXhjZY/lBb5iOAT0ruvEH/BPb9rfw7+zloP7Uc3wX8RXHhfXIby6Mln4cv3k06xt44pPt90fs4jhtZY5d8U28q6o5yAuTTfLe/S1/K+339PRhFqUkl1vb5Jt/dY8Vor1f4z/ALL2p/BP4F/D/wCKPi2bxRYa541a+e58NeIPh7qGlw2dvE0f2eeC+uFEOoLNHIsn7n/VgqGJ3CsjWP2T/wBqbw6mhy+IP2aviBYr4ouEg8MteeDb6IatK6b0jtt0Q89mT5gqbiRyOKXMtb9Hb59vX9dAdlGMrr3k2teibTfpp91ns0zz+iu58SfsxftKeDfFOi+BfF/7PPjnStb8SnHh3R9S8J3kF1qpyBi2ieMPPyQPkDcketZHxN+EPxZ+CniGPwl8Zfhf4i8I6tLarcx6X4m0SewuHgZmVZRHOisULI4DYwSrDPBo5k9fVfNbr5dQ62+fyexztFFFMAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKdG5jkWQKp2tnDLkH6im0UAetePf2mNO1TwTN4X+Fvw3sPCFxr0anxnd6V8v29lG0RRD/AJYwEDc0Y6szA8ZL+d+A73whp3jHTb/x9pN3faNDdK+oWdjOI5ZYx1VWPT35BIyAVJ3DJoq5VJSldni4Dh/LMrwNTC4WLiql+aXNJzd1a/O253jG0YO/uxUVGySPZPjz+1Npn7Q3g77B4x8CfZNZ0vUi3hq80+8PlQWT/fhmVs+Yw2phwFJPPygFX8boopTnKpK8i8kyPLOHcD9Ty+DhSTbUbtqN91Hmbsm7uy05m3u2SWky293FO4O1JFY49jX3d8fP+Cr/AMH/AIw+KNQ8VR/C7V45dB+O2l+PPBNvBpllp8Ws2UKRpcWOsJavsknHlBorx1u5hvePcqE5+DaKftJe5/cba9W4O/304/K66s9fv5pr5NOLXzUn+e6R98P/AMFQvhJoX7Q2lfEXRvHXjHVPBb+NNX1vU/C9v8FvDHhy90+W+068shfpfabc79RvYkuzhplhEhQMWVsY6LW/jl+zD+z9+yx8D7PS5/HmoeAPGHwp+JHhG51y40ayTWLea9uoEkvFsRdeSUW4U7YDdZERBMpYbT+ctFcyowVl0ty/9u8so2vu7czd22+jbSikScpS5n3v0te/Ne229tLW8tXf7zb/AIKRfsq2en3Xws8MaF4utfDj/Bvw74PsvE/iD4daB4gvI7nSdSurnfLpN/M1pNBPHOrEecrwyxJt8zYHPAeCv21/h5qXxe+IGtfHz4ua94o8I+MhpMGsaPc/AXRCniO2s7V4IhNb22r2v9jy26MFhlsZzIeGLLt2H5LorRRXNKT1vdu+qu3zbPTfpa3lfUiNOMafJHTZaaOySW++0V1vdXR9HfDX9oT9l2y8FfHL4Ha7o/jDwh4L+JWu6bqHhGbQNLg1u60WKxvp5obWaO5vbXzlMM+zzPOLBkBO/JNWvFv/AAUD8Q+Gf2bPhz8BP2edWutHuPC3hvXNH8QeIrzwlpkeoXEN7qdzcKtpfYmu7VHt5lWVIpYwWLL84+Y/M9FTKnGVP2ctU2m768zjB01zd/cdrbPRtXNeb33LzuvLW+nbVX7rofbHgf8Abp/Yv+Hv7MGq/DHwh8M9a03Xta+B9z4Q1GztfhvoTCfXJ2eSbVptdac6lNFI/lAWu1I4lUbVby0FcLrn7Uf7PHjKX4FfFLXr/wAaWPi74SaLoOi6l4es/DFpPpuo2un6pLP9ojvWv0lSRreT/VNbFfMXbvCnePmGitHrWdX7V07+acn93vy36WStZGPso+z5HrdNPzTUU/n7sXdW1v3d/pj9p/8AbZ8G/Hv4Q/EPwTFD4mn1bxX+0Vd+O9LvNZWNlh0l7Oe2it5H852WdVaFdihowkYAf5VFfM9FFZ06cKUbR7JfdFRX4JGl3+Lf3tt/i2FFFFaAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAew/sUfEP4W/BT4p3nx6+IurRf2l4K0O41LwLocmnSXA1XxBgR2KvhSkcUMj/AGp2dlyLcKu5mC1v/sffH79nf4dnx9qn7Rnhu+vvEniSOz/4R/xd/wAIDpPio6YwvPOvs6fq8sdq0lwgCC4be8XzbVO9s/P9FGqlzLtb8bt+r0T7pJO6ViXG8HHu02+ulrL0WrXVOUmnrp+oHxN/a4/Z9+L/AMBvEH7VOo+I/iN4T8IXv7Vmk6tZ6T4d0Ozlv76ay8O2R+zzD7dBDbgyW7Osy+dsbYwhzwvzb4A/am/Zc1vwv8e734wa9480PXPjlfPJJp/hfwPZalZ6Iv8Aa6akpWafVbV7jO0xFfKj28Nub7tfKNFYxowhdLa1l5JxhF+t1Bb7dLatnL70ZdVJS+cZynH7pSb8+t1oe1fGT4pfDjR/2W/h/wDs2fB/xIuqxtczeLPiDqH9nSQFtbmDW8Fl+9QMwtbRQNylo2kupirMMGvbfGP7d37HEf7KXjD4M/Cf4X6louoeKPh7oGi2ukwfDXQ7aK0v7O4tZ7y5utZjuG1DUxPJC7L5iRhPlBjJO5Piiitu7vq3e/XRNJeaSsle9kl1VzSm1RrQqRXwbdr8ynf1cld+rXwto+qPjp+1/wDAXx1+17of7e3hG58aX3iiHxfomual8O/EegWq6barZrA0trBqiX0kkkQeAJEGso8RsMgFMNHov7TP7NHwz/bU/wCGpPBPjr4qeILPxFqfiA+Jo9W8P2emarpNvqltcW/n2l1HqN0Lu6hW6eRWdLcM8KcpvJT5bopRjGnFRitEpJL+7NJSj3s0lrfmXRlRqSi7ry++N+V+qu7dO6Z9rfDz9u79lr4bfDHTP2YbJviFqng2H4Z+MPD9540vPDdjHqkN5rk1vJmDTRqDxC2h+yRkobwNI80jfJgBm/G7/gof8B9Y+CfjL4NfA+0+IFnHq3wd8IeB9F1DV7e1t5Zl0nUZpbl7n7PcttjntpAuxd+WZkYbRvb4roqKlOFR3kv+D8X4WnJW2sYxhGO3n8ruMn97in5a2sj7G8eft2/s9/Fr4z/Ha+8U2njTR/Cfxh8G6DplvqtjoNpe6lp93p405md7R72GORJHtJhkXAYBkbBJZRyv7Mv7Rf7L3w5+H+s/B39oC/8AEfjbwC/ii61HT/Atx8MbEG6by4Uivk1WLWILzSbp1hRHjh+0QqoIYXAYivmOiqlFSi4+Vvud0+109VfbfdJohFU48q2vzfNxUXrvrGKT1/N39q8XfFj4c+Dv2MtC+AXwq8QG91jxd4ik8RfEyZbKSP7L9n3waZpgldE84Ro09y5UGPfcIFYlCB1V98bf2Upf+Cd1v+ypaeNviE3iyHx43jH7RL4DsV043b6ato1h5w1Yy+UGBYXPk7iP+WANfNdFV9ma/ntf/t3l5V6Llj5+6rt3d6/l/u3t873+9yl5K+iSSt7R+2H8VfAHiNvBXwO+CXic6v4G+G3heOw0vVPsMluNT1G4P2rUr7ZMiyqJLlyihwCIreIYHf1vV/21f2ZdQ/bu8A/t6x3Hjz+07HVtBu/GXhA+FrIQWostOgtpjZXn9olrnc8AKLLBB8rnLArg/HlFODlTlzLfm5r+bbb8tW9kvSxjUo06tP2ctuXl+Vkr+um/r3Z7v+zl+1F4K8P/AB8j8XftRW2ueNPB0Vxrl/Y6PqdvHrMNjq19A4XUW068mS3u387yXljd0EuwFmJVQfa/jV/wUp+CHiP4Ya/4A+GFp4ut7zUvgTa+BY9Wh8IaV4fiuLpdcN9cyGz0yfybW1lt3kj8qMOcuUYOC0jfDtFQ4R5Yx6JW/CUfvtJq/VWTvyq3Z7aX1iVbS7kpeV1ONSyXRc0E7bfFazlJv7Jvf27/AIIeMvi74n1/xRr/AIjsvBnijwZ4X0bxB4T1D4Wadr8evyabpiWshmZ9Ws5rIpKrPDPazrP8+7dEygHY/ZV/bf8A+CfHwB8TN4qsvgdr+gzaf8YJ/EemCDwHoniS7m0FAhsdLjvtVn87THidS7zQCSVj0mVtrJ8PUVTvzuS0u76dXzRld9XrFaN2s5K1pNPn5YunGD2ioxXpGDgvnyvV7tpPdK3058Qv2lP2a/jt+z9o/wAF/G2ueOvBf/CH+MPEeq6Fb+GfCdnqVlq8Oo3CzwtdRyajafZriHBh3oJx5RUDG3B5e5+NnwP8e/sUeG/gD491fxXo3ibwHr2u6loLaR4btr+x1cX0dqUiuJZL63ks9sluylkiuPlYMFJG0+F0VjToxo0+SO1kv/AbWd976K9+2xpKTlVVR7pyfznzKX3qcvNX30VvqbVf2kf2VNB/Zv8AhN4C8FeIvHmreJvhX4xuvEkdnrngOxtdN1eW6nspJLR5o9VmkhjQWrASeTIZNwykfNeqeAP+Cl37Lnwa+LuufEnwa3xO8RQ+PvjZpvjfxXa+ItEsYW0W2tZrm4+z2ZS/kF5cNJcbDNJ9nUxxAbAT8vwLRW0veld90/ulCS/GnB99N9Xfn9jT9g6T2aafnfnv871JtW6y8o2+qPC37d2j2nhj4b27fEHxhoPijwn8Q/FviHVvGUfhax16UxatBAihba9uo47uR2SYTLMyriUsDIcivLf2t/H37OfxD8c6brP7OngGXRbddIx4kum0U6VFqmpNcTO9xFp4v76OxTy2iTyop/KyjFI4VIjXymip9nHS2lrfOy5Um97W6KybSb1R1SqynJt215un803Uf/k0nZ9E7LRu5RRRVGYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFOjUSSKhdV3Njc3Qe5ptFAHt0X7PHhX4H2E3xF/aA1ax1bTHj/4pTR9C1Ld/wkTsgZZRIvzR267huYgEnjHQP5x8G7a8vvirodtpvgCHxPJJqKBPD9xnZeDujEHgAZO4/KMZYFQQecnvby6ihgubuSRLePy7dJJCwjXcW2qD0G5mOB3JPenWGoX+lXsWpaXezW1xBIHhuLeQo8bDoysOQR6itHKPMrKyR81hcnzSOBxCxmJ9rWqxcb2lCnFJNR5YRleLd+aclLnlJ6SjGMIx+jv2pPgp8KvhZ8LLy6+DvhSHWYbjxI0eua+2pC5fw9ImNtioQ/KCXKlnznADZYoR811MmpajHZTabHfzLb3EiyT26ynZI652sy5wSNzYJ6bj6moaKk4zldKw+Fslx2Q5a8Ni8TLET5m/aS5uaSaVua8pK6tZctlZLTm5m5bGS0ivYZdQtpJrdZVM8Mcvls6Z5UNg7SRxnBx6HpX3N47+E/gT9ve50nVP2TNc8H+Gfhm/xC8O+H9Y8NzfCLTNK8QeD31KZ7O2d762iL6vbHa7b3vfNd+ZYU2iSvhqwv77Sr6HVNLvZra6tpllt7i3kKSRSKcq6sOVYEAgjkEV2XxQ/ab/AGkvjfp1ro/xo/aD8ceL7SxuPtFja+KPFl5qEdvLjb5iLPIwRsEjcADjipTjzQcle0k7dLc0XK/duKajf4W7p2ck/oveUm1po0n6p/d0vrr1Tsj64+Cn/BOj9lj9o3xDpsnhKx+Kng/Trf4tap4J1nTfFGtWNxfX5g0e8vo54GSwhW1nSS0CT2rJPtWZcSgjnmfgV/wT2+Cfiv4f/CTx/wDF/U/HOnweNvAPjnxN4gh0uS2jkEWihntTaLNBjbLGuW3swckFWQV85eKv2qv2oPHXibRPGnjb9o/x7rGseGZml8N6tqvjC9uLrSpGKlntpZJS0DEomShUnavoKZ4m/ai/aZ8a6wviHxl+0T461bUEs7q0W+1Pxde3Ey29zGIrmEO8pbZLGqpIucOqgMCABWMY1I3fNumvR8jV/nP37bL4VfcqXv1I6Wimm0t2ufmcb+UPcvu93bY9m+GfwH/Yu+Lnhrx18c/Cml/FaPwv8N/AlrqXiHwM+tadNq95qVxfNbD7PqCWYjWxjVoZZZnst6ZZdhBV6n/Zz/Zg/ZO+K3w18e/tM/EnXte8K+BPD/iPTNF0nSNQ8VXD3MElzDLI013qFh4dvhtzFtQfYoVdpdplVkUTfOvw6+KPxM+D/iZPGvwk+Imu+FtZjheKPVvDurzWN0sbjDIJYWVwpHBGcHvXQ6H+1Z+1F4Y8dat8UPDX7SXj7T/E2vRomueIrHxhew32oqgAVZ51lEkwUKoAdjjaMdBWnwybXbr0fNd9dbx91Nu8d1doy5anfqvmuVL5Pm97TSWzsnp9HfErRvhL+yj+yRY/Ff8AZNsfB/xCtfFHxa1zSbn4ieLvh/baxJaWFnHC2nWX2bVrV4bKWaKaadz5CyybBhtke0SfCj9hj4G/FLUPhx4I8bJ44Hi74v8AgPWPF8fjTRZLGx8O+HvJW9ZIWsRZsbhEe0xMUuLZYlnjCqMDPzX4N/al/ab+HPiHWvF3w9/aM8eaDq3iS4Fx4i1TRvF17a3GqzBmbzLmSOVWnbc7nc5Jy7Huajg/ab/aStfBOqfDW2/aD8cR+HNbmnm1rw/H4svBY38k7bpnmgEnlytI3LllJY8nNYzpy9k4wfvcqSk9/g5bbdZWm2km3GzT5pM1lze0i18Kcrq1r3m5J7vWMW4JNtWad/dSPqC+/YO/ZPX4WWtppt/8RG8bf8M1w/Fi+v5tcsF0oYaHzdPjgFmZjvXz9sxlHlny8pKAxMP7Wvwq/ZT8aar+z38Mfg58G9a8J618RPhv4ZSw8Rv4qsZLCFrnUri3klv4INKhe/uxgiS4E0OcIDGNmG+Uv+Fz/GH/AKKv4l/5Fr/hHf8AkO3H/IH/AOgd9/8A49P+mH+r/wBmp3+PXxzl+Fi/AyX4z+LG8EpJvXwe3iK6OlK3m+buFpv8nPmfvM7fvfN15q+WXNeWq5k7baXnpda/C4rt7veTbz5Zcujs+Vq/ZtQ1131jJ2/vb6WPpv45fssf8E9fhX8XNL+Ffhj4h+PPFWuWHxIbw14n8DeG7u6m1u8tSZIRc2/2zw9ZwW90k6oPsQa7Evm7UnXb5jdPbfsY/sy/slf8FAvgn+z/APEPTtZ+Jf8Ab/iSzk1DXLbWrKHQNQ87Wfs1tGtvJZXH2iGJIZI7uJpB5krPErRCPfJ8u6p+2l+2Lrk+mXWtftY/Ey8l0WZpdGkuvHeoSNYSNE8LPCWmPlMYpHjJXBKOy9CQeSPxW+KJ8L6T4HPxJ1/+xdAv2vtC0f8Atif7Lpt0zbmngi3bIZCeS6AMTyTWlGUqdSjKWvLK8unMrLRL7Oqcr6vXlukkaT1hKMVvFpX3Tu2m3b3rJ8uy0tKzaR1f7WqfCG0+PHiPR/g58O9c8M2On61fWt5p+teILe/zOl1KpMPkWVotvDtCqsJVyu3754A81rpvih8afjF8cNag8R/Gn4seJvGGoWtqLa1v/FGvXGoTQwhiwjV53ZlTczNtBxlie5rmaww1OVHDxpyd2klfvbr5X7dNjWtUjUquaVr/ANf0+u71CiiitjIKKKKACiiigAooooAKKKKACiiigD2j9iP4n/s8/C7x/rl/+0D4daZdS8Ny2HhrXpPCFj4ig8P6hJLFi+l0u+ZYLxViEq7WJK79yozBdvvVl+wV4W1vxH8RfjV+2B8VPDUXh7w/4T8M63pN98O9Jk8PaZqtnrGVtLvZY6DcvYRiOFwyHTQzzOu5kzvf5G+Fnxy+NfwN1G61f4J/GDxT4Pu76EQ3t14V8QXOnyXEYO4I7QOhdQecEkZq7on7S37Rvhn4jah8YfDfx/8AG2n+LtWhMWq+KbHxVeQ6lexnZlJblZBLIp8tOGYj5F9BSqXlKLW6Vr76Xbslpq2/ivotHGXuuKp+5zp7Sae+ulr626pWs7rZpp3v9CXX7NX/AAT68K/DH4hfH8+OfiJ488GaD8TNL8O+FZvC+oW+lSXdreWT3UjzNf6czmSAxyxhvJjEzRg7IlfcsPwMn+G837Hv7UOjfBbxD4806wtrHS7uR9UvNLMOuaWNahis4Lq1+wyS288YlaRpLe8Cs+Bt2jB+cfFvxo+MXj6HUrfx18WPE2tR61qkepaxHq2vXFyt/exxmJLmYSOfNmWNigkbLBSQDg4ra+HX7WX7VHwf8MDwT8Jf2l/iB4X0UTPKNI8O+Mr6xtRI/wB9/KhlVNzY5OMnvWfs+ZO/ZJK+nwxTvor+8nK9r6tPR2RTdSlKnJPWM+ZvbRVJSSXb3HGHk0pLVa+0WPj7x14s/wCCP3iDw54p8aatqWn6B8btFttBsdQ1KWaHTYW0zUHaOBHYrChYliqAAk5PNdJ43/4J/wDwD0VfiZ8JNEufHi+Mvhl8OdL8TzeM7q+tZND1ua6Fkws4bFbVZofM+2iOB/tcplaMnZ820fO9l+13+1hpngJvhVp37T3xEt/C7WMlm3huHxrfrYG2kBDw/ZxL5flsGbKbcHccjk1Wb9pv9oC/8IaT8MvE/wAY/FGu+D9FuLeSy8E654iu7jR1WBgY4/sjS+WEHTCgYBOMVrL3605PaTj36QUbu2r1SlbaXwvTVxGMqVCnFa8inp0fNVdRL7m6d+ifMuy+jf27P2N/2LP2Vfhx4k0bwh8QdW1Tx9pPiy00XR4f+Fn6NqC38Ig8y+vrjTLOz+06b5cqm3FtczLIGcNufYyt5P8Asu/sd+PfiJ+1j4J+Cnxj8Fal4U0/UvL1zXJPFVrLpip4ehR7m5vN8yrsia3hlCTHEZbHzAZI9K/ar/4Koal+0b8KfHXwxsfBXjKGHx/4gsdRvLfxp8Tm17TvD0dtNJMLfRbP7FbjTlZ3VCS8v7lPLxzuHzlqvx8+Ouu6pJret/GnxbeXs3h06BNeXXiO6klk0kjadPLNISbUgkeQT5eONtZ4aValJynq01b5QWui09/VpJLflsrWqpCLiqcX7tmm9ebWWmvlFtJ76Rbu7t/X/wC098CP2WvE3xs+Hvx0+MM3hT4beBfHfg7Uk1jT/hjrVjdaZbeItO3xJaLdaLBqMFqkyvYSO8dvOyebIWj3EkcvB+xJ8BfBGi/F74n/AB58B+PNJ0PwL4X8O614T0Dw38TdF1eXWIdUuDbRSnVYLE2zwSPtkWSODciZBSRsV83/AA5/aP8A2hvg9YR6X8I/jz408LWsV1LcxW/hzxRd2MaTSIiSShYZFAd0jRWbqyooOQBXovwm/wCChPx8+FnhP4q/Z/iD4wuvG/xOt9Hik+IyeNbqHVbD7DciQkzczTeZEPI/1qbU4+YfLUunKKUYOyV/PR3fW+qbsm3JcsUuW7bKlKTTvq3yr0SstOyaWvW7dpJe6fa+mfsI/sweHPgzqv7Otj4Nt7jXtc+LELeAfEHibSoJdct7hfD+lawui3c0UaZDxve2zRbRGZpI22Bunn/xw/Ya/Yk8NfErx58Xv2ifiK3gfwzrPxx8ReHdAtPDv2yztNEtLKZM7IbPQtQinlxKzJatLZApCNsjbmMPwufjd8aDcR3R+LvijzY/EzeI45P7fudyawxBbUgd/F2SBmf/AFhwPm4ra8Kftb/tW+A9R1nV/A37TfxC0W78RXzXviC60nxpfW8mp3Jzme4aOUGaQ5OXcljk81VSMp1JSvpZJLXS0aSeuju+SWvaSe97uMpRpKN7u6bfoqt7dlzTjK2101qrJe/XWgfsaaT/AMEw7Lxre/BHxDrGsw/GO90WTxVpXi6ytLi5nXSYpEl8yXR3mWwb762LneG3t52SQuf+3jqVt+zvrug/sxfCD4a+A7Pwbe/DfQ7y18USeAdOvtS8RG+s457jUl1W7t5Lobrh5o0NvLEkawhFVSjV8/eAf2gvj18KdJ1XQfhd8bvF/hux13jXLLQPEl1Zw6h8rL+/SGRVl+VmHzg8MR3NT6b+0t+0bo3wxk+Cej/H/wAbWvgyaGSGXwjbeKryPS3jkYvIhtVkERVmZmYbcEkk5JqoxiqspzXMm4NpuyajBQlF2Wik1zXS6/D7sbOMuWWisrSS8rzUlJXbd0k42vezfvau/wBR+M/+Cev7O1pq/wATvhl4df4i6brvwd8ReG9N13xH4gv7T7B4kW/vYrOY21qtor2DMZftFtvuLrzIUJIGdwrXH7Fv7Ffj39uBP2FfhXrPxR0fXNN+JN1ouqa94gvbDULXUNMtIbiS5khitrWKW3ui8HlxJi5VwwY7T+7PzH4h/aP/AGh/F3hXRfAviz48+NNU0Pw3LBL4d0fUPFF3Na6VJCnlwtbRPIUgMaEqhQKVU4GBWDc+PvHV543b4m3fjTVpfEjan/aTeIJNSla+N55nmfafPLeZ5u/5/M3bt3Oc80pRk+X3tr3fd+5Z2VrLSV4p2tK3mZcsn7R33sor+VWmmvN3cWpPX3bbaP1r9qP4R/staLqPhTTP2QPiZf8AirV9WmuLLXPC6SahqM1pdCVFtvKuLjRdKaYzb2XyVtiyPF99/MAX0/8AYE+EFz4Us/j3pPxd8N+EfB/irwr4JsGs774yeA1vrfw7dSavZRGSa0ubG6aNmilMe77OxAlBO1csPnXx9+0n+0V8Vtc0nxP8Ufj5418SaloE3m6DqGv+Kru8n02Tcr7oJJpGaFtyI2UIOUU9QKz9Z+M/xh8R6l4g1rxD8V/Et9eeLIki8VXd5rtxLJrKI6Oq3TM5NwFaONgJCwBRSOVGHT546PqpJ663asrfe79tLFztKpF9Iyg9lqoyUmmtndK22vXdn3Z8fv2Iv2Yr/wDaG+OfxP8AjDAvw78J/D7UfDukr4f0SSTTLa4vL6zVm1MPpul6utlZTNFI8MQt9rG4RWeB1MTcl8K/+Cen7Jvi7xl4R/sHxJ8RfiZ4X+KXxgufCngbVfBMiaW2l6XbLC89/fC706d5pVS4LeUIrdRHaTSlwrBY/lbwt+1J+014G1uPxL4J/aL8d6PqUWiwaPFqGl+Lr23nTToceTZh45QwgjwNkWdi44Arq/2d/wBu79o74BfGLTvidF8YfG2p2DeMrXxD4u8Pr41vLeHxNNHOksgvDudZXlCbWkkSQ4PIbGK0oxgq0VLSGi7KylBtuyb1UZbaxU3FXSi1M+f2em6+9+7JLXTVScXrdz5byd5M96+G/wDwTH+E/jr4i/Brwqmq+NJbHx9qfj2LxNcWc8DNZW+h3E0VtJE32YiPdsiErOHBL/LsyBXM+Mf2Nf2NvhP+zT4d8S/Fz9oG80r4geL/AIWJ4t8PR+ZqD281xMZGtrBbSPRJIZEZYxC9ydTjMcrMTDtj2v4rP+2P+0ppV/rlv8Nfjt448J6DrXiC61ZvDeh+Mby3tI5p5TIT5cTojOPlG/aCdoPFYujftLftHeHPhpN8F/D3x/8AG1h4OuIZobjwnZ+KryLTJY5STKjWqyCIq5ZiwK4Ysc5ya4cPTxP1SMaj97lV773s76rRata6/DtaTS2ly/W3NfCpOyW1uZNXurvRNNafFveKb9k+IP7OP7Mlr+ztp/xy+BVr4i8dabosOjH4ka1D8SLKxm0i5nEIuLN9HuNJW4h3yu8MN3FNeW4KZLOQ0Y9R+PHgr9kiH9rn9m/wX8Pv2edR0mTxFpPw7vL9b7XrC50y/srpYPOjubOPTIftNzJnE1yZQsrCQmFd2F+SvHn7Sv7RvxT8H2fw9+J3x+8beI9A09430/Q9e8VXl5Z2zRoUjMcMsjIhVCVUgDCkgYBprftJftEv4R0X4fv8e/Gh0Hw3fQ3nh3RD4pu/selXMRLRTW0PmbIJELMVdAGUsSCMmuz7X/cRTX+FRknHy1kmvJWd23J4rm9ny94OL62lpZ+d7O70s3dJWSXs2hfs1fD74yf8FA/ix8N9WtNS0/wz4V1TxdrDaH4NsolvLm002S5mGn2SFTHE7rGI0Ox1Qc7GA216D8Pf+CeX7OvxRsvBnxc03UfF/h7wv4k+FfibxVN4R8SeLdOgvBcaXeC0giOtzWcFpZ2108sRW5ntQiFHTLl1ZfmrxL+2J+1x401bSNf8Y/tTfEbVr7w/eG70G91LxxfzzabcFdpmt3eYtC+ONyEHHGa7r9nf/goF8UPhZ8Zde+M3xf8AEHjTx1rGveCbrw3/AMJE3j6e11/SopWRluLHUpo7lreVNhUHy2G2SQADdmsY06kKMYp/DFr1koTs9U/ik4Kz0XLe/vMVT2jqyktVKSdu0eaN18kpO61bla1oq/s1t+wn+xD4l1vxrrPw+8aa1qul+BfBfhufUtJn+M3h+zt5te1Kb/SbNfEc9ium7LSJXAVEkNyyMY5F2MgPgF4b/Zy8CftP/tAfCz9lH4ieOJNJs/hT4mt9A8aWviTS7uHUrC304yXUE8U2kETRzzRgLLA0DIi/JJJuEhqXP/BYrUNSvdYt7z4f+P7KG+8H6LoFl4u0H4wPaeM1j0+4nuGkudbbT5PtXnyXMnmKLeMbEiUfcJbyT41f8FI/2m/iD8c/FHxj+E3xU8YfDWHxNJa/atJ8J+Nr6AzrbW0dtDJdTRPGbu58qNd87KpdyzBVB2glGU+aDWjU1/4Fa3naGvKndtNxlKWjWsJVIVo1E0uV05eb5eRyitLJtppy0s/eitT1L9l/9g/9lj4v/Cz4M23jnVviBH42+NWoeJrLTb3SdWsYtK0ZtLSQpPJDJavNchmMCmJZYsjzGEinapPAP7FH7E/hz9lnQfjX+0D8R9aTVtf+HepeI7e1tPiNpOjz/bUuntrDTYtJnsrm/uUuHjc/bowYVCsSoVS1fL837RP7QNxr+n+K5/jp4yk1TSL68vdJ1J/E12biyubtt11PFJ5m6OSY8yOpDSHlia+kvhN/wVivPhP8IfCvw90j4ZeJln8J+B9Q8Ox6HY/EhrfwhrLXQuwb3UtDNm/2yf8A0ss/+lIJHiQ4UDaNHH9zKTbvporbKMrpNqybly2b62v7t4kU4v6zHmfuK721fvR3/wC3bq23b3rSX0L8dvAX7C8PjX9oT4b+A/hV4bj8aaT8Ir8XGlR+D4o4PD02lQF/t1s3liJJrpbi0QvDhw9pO7H96N/g3xr+Hlr+0b8Pf2PPhl4S8c+JdJ0DxrNqGh6Hpviu60/Uv+EcD62lnI8c1pY2L3Csw80rNuYcKHAyT8pSfGH4uTeJdY8aS/FLxG2seIrKaz8Qas2uXBudTt5VCyw3Eu/dNG6gBkckMAAQcV0fjX9sH9rb4k+H18J/EX9qP4ja/pSzxTrpmteNr+6t1liYNG4jllZdyMAVOMqQCMVjSouM6c6jcmnByV7J8qqKVui5vac22jVlZPRctoyUd9bPqk1BJP05EvRLd3b+8PC/7Hvwj+LX7Mmk/s2eDvDHxE8J+FV/ae1xLzUfEd5b3+o6zHpXh67ed7NUs7aOJ5RZtAsZ88RTFtzybSlcJ8SvF+o/Cn4U/sW+JvgLY+O/h1Dean4hNhFqXigyak1pc6zbbybq3trMSwzIxIxEqtG4BLj5j8j+Iv2uf2r/ABfq2n6/4s/ad+IeqX2k30V7pd7qPjS+nms7qNWWOeJ3lLRyKruFdSGUOwBGTSy/tfftZz+MLX4hT/tQ/ER9fsVnSx1xvG1+by3WYIJgk3m70EgjjDYI3BFznAxrh4yo4mFWTvblb82o8rfkpaaaqKWl76Y4yi8RhZ0I6XUknvbmk2n6xvvo5Pdrr9TeN/2Xfg98bv2x/wBq74vfHnxzcaP4Z+Hfjm5kuIbW8ubUzzXurywI8lxbaZqckMSBHyRaPud4lLRglxneD/8Agmn+zl+0R4Z8V+Iv2Xf2jb7ULTRfGy6ZpuranZP9muIbrT4G0+0KTW9pL576nI1iZ9qhxtlW3XlK+bJP2wf2tpfHsfxVl/ak+IzeKItMOmx+JG8bX5v0sy/mG2Fx5vmCIv8AN5e7bu5xmqN1+01+0je3+p6pe/tBeOJrrWtTtNR1m4l8WXjSX95alTa3MzGTMssJRDHI2WjKLtIwKypUZQw6pN7JJNaPRxu9bq7Sdu17NNXv2YirKtipVo7Sm5NPXRr4U7XWu76p3SUkrfavgX/glD+zte/G+9+GXjLX/ESaLefEy38EeF9cXxm0V5fajHYW8uoiOytfD18swgleY75Z7SJVUI8gKSSjx7xf+zF+x78AvgR4D8ZfH6f4lahrnja88VWFxfeD9U09bTSp9KvZLSGdbS5tt92kj+TuiNxAVVXYSEsqL4t4Y/a6/av8EnVj4M/ad+Iekf29qb6lrn9l+NL63/tG8fG+5n2SjzpW2jMj5Y4GTxXKeJPiJ8QPGWmWOi+L/HOsarZ6bNcy6baalqcs8VpJcSebcPGrsQjSyfO5UAu3zNk80OFeUo3lpazt1fLFadveUndW0kl9m7mnyU4tLXW6b10vLR99HHe+sX0bR9SfEf8AY0/Yv+DX7Nuh658UP2gtR0/4i+KPhPb+L/D1uv29re8urnMsFglomitC0RjBhN0dUXbMGLQqqla+Q67bTf2lv2jdG+GMnwT0f4/+NrXwZNDJDL4RtvFV5HpbxyMXkQ2qyCIqzMzMNuCSSck1xNbO/tpNbN6eSu7K3krK99bXsne6X8NR69fWyv23abS6XtdhRRRVCCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiinRuY5FkCqdrZwy5B+ooA1vAngDxh8S/EUfhTwRoc2oX0iM/kx4ARFGWdmJAVQO5IHQdSKb4I8G6r4+8Y6f4H0e4tIbzUrpbeCS+uVhiVz03MensBkk4ABJAPonj39pjTtU8EzeF/hb8N7Dwhca9Gp8Z3elfL9vZRtEUQ/wCWMBA3NGOrMwPGS/nfgO98Iad4x02/8faTd32jQ3SvqFnYziOWWMdVVj09+QSMgFSdw0caakknfufNYXG8QYrA4jEV6HsWotU4aTqcyTvKVpqDUpW5IqSvFXlJOfLDofFP7O/xX8DeENQ8a+NfDn9k2unasunNHqEyxy3ExznyVP8ArlXHLLkYORkBivEV7J8ef2ptM/aG8HfYPGPgT7JrOl6kW8NXmn3h8qCyf78MytnzGG1MOApJ5+UAq/jdFRU1L3HdD4WxPEWKy1zzulGlX5mnGNuVKytyyUpcye7bs07xtaKblsbK81K9h07T7aSa4uJVjhhjXc0jscBQO5JOK9h+NH7FPjD4NeOF+DY+JvhvxV8Rl1WHTbz4beD9O1q71a1unj3mLL6eltOynCEQTyksw27xlh4/YJYyX0MeqXE0Nq0yi4mt4RJIkefmZULKGYDJCllBPGR1r6W+Pn7V3wi+IH7Nd18ItU+Ifjz4t+KF1Kxbwv40+JHguw0y/wDDFlCZmmtoryLUL+6vIZvNVRbSSJDDtLoCxrGpLlpqS7q6W7u4rTorJtyutVs01aX0cdajXk/S9nbtfW2zVuqd1bkP2hP+Cd/7Xv7N3xLt/hj4z+CXiTUJ9QvLWy0TVNE8N6hLZaxdz2y3C21pI9uhuJlDMjRqpYPFIMHbmmfCj/gnr+178Vfj/o/7Nf8AwozxR4b8Tavbi78vxZ4Z1CzSyst/l/bbgfZ2kjthJhDNsK7iFzk4r1Dxj+1V+xF8S/2zfCv7YXxO8KeMvEFvOdLPjr4d6h4TsWsYpLXSI7Xfb3B1A/b4xcwxS/Z54IFkTcjtglW6TxN/wUe+Aek/FX9m/wAY+B/Deuapa/BvVtQn8TXTeAdF8Mf2nFd3MUpNrYaXK1tCyL5wClhuYKzOTIxWl7s4xeurT7JW0a3vra+yaas7p2wqTrewk4L3uS6X97s76eXk1d6NX+WfiD+zR+0T8KLnVbb4lfAnxjoP9h20Fzqz6x4Xu7VbS3nmaCCeQyxr5ccsqNGjtgOylVJIIqTw3+y1+034y8Y6h8O/CH7OfjzVfEGkW8Vxq2hab4RvZ7yyhlVWjklhSIvGrq6MrMAGDKRkEV7B8Lvjd+xt4B8NfFr4Gat4w+JuoeDvihpWkP8A8JLb+B9Og1PTryy1QXZg+xHVXikieP5fP+0qyt/yxYc13XiH9vr9nf4g/tOfEz4geJrzxRafDXx9DoEOoeAtV+Gem68dYjsdNW0PnzHVLKWwlicO0NxZyiQ79x2bdhmnzuK5t7X/ABS13fd2SbaV7JNM6MR7tafstYp6ea02Ta3V92rPfqeE+Df2NvF+pfDq9+K/xd+JfhX4X6Ha+JJtAtpvH39orc32pQruubeGzsLO6uv3AKCV3iSNGkRNxclRy9l+zb8d9f8ABurfFDwR8IfFXiLwbos1wt7420TwvfS6SiQ8vK1wYVWNAuGPmbGVWG4KeK9j8UftEfsifGb4LxfADxjpXjb4f6H4P+IOs6z8ObrwvodrrzjSdRZWewvY7q+s2MsJhg2XAmkLKXRlJVZD2vwv/bx/Zo+H958Nfildv8R7rxR8IfAer+GPDvhdNJs10XWxP9tWG8nmN55lkXS8PnwpDcbjEgEpHNZ1JyjTc4p3tdL/ALcvr589ocqd1zN+8otsd1UjG3WV30uptRS20cLScnezTWjkkvHf2ef2Fvi78dPhn40+NN94a8SaD4O8KeAdV8RWfiybwncTaZqtxZMqmwS6JSJXYmQbgzlTE3yHBx5/4n+AHx48E/D/AE34s+M/gn4u0jwrrHlf2T4m1Tw3dW+n33mIXj8m4eMRybkUsu1juAJGQK+qoP2+P2U3+HV9rl/o/wARP+E4vP2aYvhXbaLHptidFsXjgKG7Wc3PnSRyukTmMQxmNnmbMxYAZX7a/wDwUI8FftIeEPFLfDbxhrXh9vHEOkHxJ4Fm+DfhuGFntFhPlt4htpVv7qKKSMtD5sAYphGwM5qs6kKzUdUna/T4pK/f3o2faO0u4UvejeXm+32Yu3ybktdXZ26Hx5RRRWgBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB1nwe+Fln8WPEN5pGqfFbwn4Ns9P0uW+vNa8YahNDbqiFR5caW8M1xcTMWAWKGKRyNzYCqzD1LWv+Cd/xS8IeN/Gvh34g/E3wToOheA7PSrnWPHV5eX1xpU66mqPp4txaWk13M06OXVRb5VY5C+wLzyP7IviD9lvwn8Wh4o/a00LxJqnh/T9Plm0vS/D+lw3iXOpBl8hbyKW6tTJaD52kjjmjd9qoGUMWH0R4E/4KLfD3wvq3xS0vxB8X/HmrS/EK60zXNJ+J0nwv0tNW8Na1aia3JtNN/tUwRp9imaGGdLpGtSiGKJSqstOK5l6ff72t30fLe3mlpJySRDd82116rz21SejW/vXTXJaXAj/AIJUftC6L8QdQ+HHxP8AGHhHwXeQ+PLXwdoU/iCfUJI/EOrXMKTwxWa2VncSbGhlt5DJOkKILmNXKPuRfnnxx4L8T/DbxrrHw78baU1jrWgapcadq9i8iube6gkaKWMshKkq6sMqSDjgkV9+an/wWC+EfxHF5oPi6y8deErHR/F1nP4V8QeHtIsdU1y78Px2FnZXWmTXM11bHT5bsafBJLcwmdiJpYSrRhvN+Gvjx8UZ/jj8cfGXxqudGXTpPGHivUdbk09J/NFq13cyTmIPtXeF8zbuwM4zgdKz1TSvfTX7otfe3K66WtZWUpi+FXWtlfyet15201210b1UeUoooqgCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiinRqJJFQuq7mxuboPc0ANor26L9njwr8D7Cb4i/tAatY6tpjx/8Upo+halu/wCEidkDLKJF+aO3XcNzEAk8Y6B/OPg3bXl98VdDttN8AQ+J5JNRQJ4fuM7Lwd0Yg8ADJ3H5RjLAqCDo6coySfU+dwvE2X5jhMRisHedKlG/PpGEmk3KMZSaV42SnJ2jFvlcuaM1HmKK+lP2pPgp8KvhZ8LLy6+DvhSHWYbjxI0eua+2pC5fw9ImNtioQ/KCXKlnznADZYoR810VKcqUuVhwvxLg+K8s+vYWEow5nFKVlLS17xTbjq9FKzatK3LJNlFdJ8GbTTdQ+MHhSw1m1gms5vEljHdQ3UYaOSM3CBlcNwVIyCDwR1r7H+MXwP8AhX4bi/bQPiD4baX4fsdD+K2g6Z4W1NPC6D+w4JdauTKlkAg8oG0AYxxFQ8aqOhFZTkoOmm177a1dkrOC1fm5r+me97SP7z+4ovu3ze0eiWrsqbul3R8KUV9taJ/wTv8AgB8bfj14C8Pfs+azrknws8T+JtS05viT/wAJzbaxLqS2lnJetbJpiaVZ3umXhhhceXPDMCZUaLz0CtLn+Ef2Rv8Agnr8TPjXpXhj4d/HDxRq2i23gHxLrfjbTNBvZrm70yfTLZ7mEQ3eo6LpqzCZFIMf2UGNo2BkIdSJ9pG7T3im2uqUU5O63Widk1fbTVGzjL3ba8zilbq5S5Ur7XvvrZa63TR8a0V9mf8ABPfUf2Z/En7efw7+Hvwh+F0994T8WWUkPjTw38XvD+h+JGivIoLyQLaXb2SYiIWBt6Q28hYMrb1Ck4P7NPwk8E/Fvw7J+2J8ZfDWta/qV18XNE8I6D4L+Ftjp2gr/aE8fnLcyJBYywxQ7YdiwwWytLKT86nJO1GDq1lDbVJ9dXJRVl1u2tb21u7K7XNXrexg3a7tdLvaLk79rJNtWb076HyjRXt3/BSjj/goH8aBj/mpWsf+lcleI1hRqe2oxqWtdJ/erndiqP1fEzpXvytq/ezsFFFFaGAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRXtv8AwTq1zw1pn7Znw+0PxZ8KPCvi6y8ReKtO0Wex8X6W17bW8d1dwxSTJAXEUkojZ1XzklRd+4JvVHXkv2sdG0fw5+1P8S/D3h7Sbaw0+w+IGs29jY2cCxQ28KX0ypGiKAqIqgKFAAAAAqqkeTkf83N8nHluvukmEfe5vK343/yZ5/RRRUgFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBJPe3l1FDBc3ckiW8fl26SSFhGu4ttUHoNzMcDuSe9OsNQv9KvYtS0u9mtriCQPDcW8hR42HRlYcgj1FaXgTwB4w+JfiKPwp4I0ObUL6RGfyY8AIijLOzEgKoHckDoOpFN8EeDdV8feMdP8D6PcWkN5qV0tvBJfXKwxK56bmPT2AyScAAkgGrSdjirYzL6MasKk4rkjzTV17sXze9JdE+WWrVnZ9mZ6alqMdlNpsd/MtvcSLJPbrKdkjrnazLnBI3NgnpuPqahrt/FP7O/xX8DeENQ8a+NfDn9k2unasunNHqEyxy3ExznyVP8ArlXHLLkYORkBivEUSjKOjQsBmGW5jTlVwVSNSKdm4NNXsna60bs1+AV3Hir9p39pTx1YaLpXjf8AaF8caxa+G7mK48O22q+LLy4j0qaIARyWyySEQOgACsm0qAMYrl/CXhu+8Z+K9M8H6XLDHdatqENnbyXDERrJLIEUsQCQuWGcAnHY16d4s/Ys+Kfg61+MV1qWu6DIvwT1600nxUtvdTsbue4vZLNGtMwjzEEkbEmTyztIIBPAmX2U+r082mtvNOS+87FyylL+6lfyUr2+/lf3HNeN/wBp79pX4meINF8W/Ej9obxz4g1Xw3cfaPDup654svLu40ubcj+ZbSSyM0Dbo423IQcop6qMP8WftU/tP+PdZh8R+Ov2j/Hmtahb6bc6fBf6t4wvbmaOzuF2XFurySlhFKp2vGDtccMCKb43/Zf/AGl/hnqGi6T8SP2d/HXh+68SXX2bw7a654RvLSTVJsoPKtlliUzvmSMbUycuvHIy7V/2Wf2nfD/jq3+F+v8A7OXjyx8TXWntf2vh288H3sd9Naru3TrA0QkaIbHy4XaNrc8Gp92Vl6/lr+G/luVrH3vR3+ej+/bz21M/4V/Hn45fAu6vL74I/GfxZ4Nm1GNI9Qm8K+IrnT2uVQkqshgdC4BJIBzjJx1rQsP2qf2n9K8Q6/4u0v8AaP8AHltq3iuJIvFGqW/jC9S41hEQoi3Ugl3XAVCVAkLAAkDiu88I/wDBNz9q/wAS+BfiJ4z1z4fXHhW6+GmiWur6x4Z8ZWN3pmqXtnMLlvNtIJoR5oWO0uJG3MmVibZvYbayfFH7Bn7Umk/ES5+GPgf4Ta5481Kx0DSdY1BvAGg32qR2lvqNol1biXy4N0bFH2nKgbkcKWAzVS92VnvZfc02vvSb+RUYvVr1+5xV/k5xXzR5X4k8S+I/GWv3nizxfr99quqalcvcahqWpXTz3F1M5y0kkjks7kkksSST1qjXonhj9kP9rLxtp76t4N/Zf+ImrWsd49pJc6X4Jv7iNbhZTC0JZIiBIJVaMr1DqVIyCKo2P7NP7R2p+Ftd8cab8APG1xovhe6uLXxNrEHhW8e10ieAAzxXUoj2W7xggurlSgIyBUxceW8drX8raa+mq+9dxNuUtd7/AI/5nE0UUVQgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAOj+GPxh+LfwT1+TxX8Gvil4j8I6pNatbTal4Y1y4sLh4WZWMRkgdWKFlUlScEqD2FR/Ej4r/FH4y+JP+Ey+L/xJ1/xVrH2dYP7V8SaxPfXPlLnanmzMzbRk4XOBk4rxLxr8fLzS9am0rwxptvJHbyFJLi6DHew4OACMAHvnmsb/honxt/0DNL/AO/En/xysZVqbkr6228vT72NRa26ns9FeMf8NEeNv+gZpf8A34k/+OUf8NEeNv8AoGaX/wB+JP8A45R9Ypj5Wez0V4ld/H/x7cLthFjb/wC1Dbk/+hMay7j4t/EW6BEniiYZ/wCecaJ/6CopfWKYcp9A0V83v458ayNvbxdqeT6X0g/rR/wm/jQdPF2qf+DCT/4ql9Zj2DlPpCivm/8A4Tjxp/0N+qf+DCT/AOKo/wCE38af9Dfqn/gwk/8AiqPrMewcp9IVBc6pptkM3moQQ46+ZMq4/M18132taxqZzqWq3Nx/13nZ/wCZqtU/WfIOU+kD458FK21vF+l5H/T/AB/41LZeKvDGpTC207xHY3Eh6Rw3iMx/AGvmqil9Zl2DlPqSivluin9Z8g5T6kor5boo+s+Qcp9SUV8y6Vrer6Hcrd6RqM1vIrZ3RSEZ+vr+Nd037RniIWscceg2fnKgEksjMQzdztGMfTJqo4iL30DlPYKK8Z/4aJ8bf9AvS/8AvzJ/8co/4aJ8bf8AQL0v/vzJ/wDHKr6xTDlZ7NRXE/DH4ur43u20bVLFLe8WMvH5ROyRR1xnoR9TxXbVpGUZK6JCiiiqAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACitb+wbP8A56Sf99D/AAo/sGz/AOekn/fQ/wAKrlYGTRWt/YNn/wA9JP8Avof4Uf2DZ/8APST/AL6H+FHKwMmitb+wbP8A56Sf99D/AAo/sGz/AOekn/fQ/wAKOVgZNFa39g2f/PST/vof4Uf2DZ/89JP++h/hRysDJorW/sGz/wCekn/fQ/wo/sGz/wCekn/fQ/wo5WBk0Vrf2DZ/89JP++h/hR/YNn/z0k/76H+FHKwMmitb+wbP/npJ/wB9D/Cj+wbP/npJ/wB9D/CjlYGTRWt/YNn/AM9JP++h/hR/YNn/AM9JP++h/hRysDJorW/sGz/56Sf99D/Cj+wbP/npJ/30P8KOVgZNFa39g2f/AD0k/wC+h/hR/YNn/wA9JP8Avof4UcrAyadG5jkWQKp2tnDLkH6itT+wbP8A56Sf99D/AAo/sGz/AOekn/fQ/wAKOVgeiePf2mNO1TwTN4X+Fvw3sPCFxr0anxnd6V8v29lG0RRD/ljAQNzRjqzMDxkv534DvfCGneMdNv8Ax9pN3faNDdK+oWdjOI5ZYx1VWPT35BIyAVJ3A/sGz/56Sf8AfQ/wo/sGz/56Sf8AfQ/wqpSnKV2eLgOH8syvA1MLhYuKqX5pc0nN3Vr87bneMbRg7+7FRUbJI9O+PP7U2mftDeDvsHjHwJ9k1nS9SLeGrzT7w+VBZP8AfhmVs+Yw2phwFJPPygFX8brW/sGz/wCekn/fQ/wo/sGz/wCekn/fQ/wonKdSV5F5JkeWcO4H6nl8HCkm2o3bUb7qPM3ZN3dlpzNvdsb4G8TyeCfGuj+M4rNbhtJ1S3vVt2faJTFIr7c4OM7cZwcV9Y/GD9t79m3ULX4qat8F734h22tfGz4haP4g8RS614e09IvC8NpeSXzpaeXeOdRk+0SHaZBaqURQ2CSa+UP7Bs/+ekn/AH0P8KP7Bs/+ekn/AH0P8KzlFz5dbcrumnZrWLe3dwjfrZWTV3f03TjLmvtJJNbp2Ukrp9ueVumuqdlb7C0T9vz9lLwH+0V4C/aQs/Aet+LPGll4l1K7+IXjz/hB9P8ADNzqVrdWj26smlwX97p8t3G08k/nBLYStEiyrI0kk9U9F/4KH+DvA/xL0zXdK+KHinXND0P4f+LNI8M2ul/Bzw/4NfRL/VbNokkii0i7aORTL5cjykq6FCURixr5J/sGz/56Sf8AfQ/wo/sGz/56Sf8AfQ/wqfYrXzUl5WknFpLaKs3blS13ubcz5oyeri4tX7xlzK73autnpbTZK30P+yV/wUQ8Q/s2fB/xJ4X1LVfEWsa02s+GZfCFvc3An0+106wu7ua8sH82TMMM6XcieXHGyt50uQucn2HX/wDgol+wT4g+N/i34l2vwl8RWC3c3hKLwrrGtfDTQfEd7baZpditvdWAg1C5NvZSSvHHtvI/OcKP9WCAK+F/7Bs/+ekn/fQ/wo/sGz/56Sf99D/Cr5f3kqn2m02/NKMV+EV63kndSacKMVzabx5H/hve3l5drJrWMWv0Wtv+C0XwF07xDfXek+H/AIiWunXuqeLrp7O3tbVFb+1fEemajBuVbwKWW0tbqJ/Rpgq7kdmHE/Fn/gqh8M/H2jvrfw38Ra/4D8RaVfeLBo6j4J+GNeW+ttT1C8uomN/eTrd6ZLJHdtDciEzofvoCSyt8P/2DZ/8APST/AL6H+FH9g2f/AD0k/wC+h/hWUsPCVGNJrSMeVenvb99JSWt009VoraOpJ4iVZ7yk5P1bu/RX10s/PV3yaK1v7Bs/+ekn/fQ/wo/sGz/56Sf99D/CtuVkGTRWt/YNn/z0k/76H+FH9g2f/PST/vof4UcrAyaK1v7Bs/8AnpJ/30P8KP7Bs/8AnpJ/30P8KOVgZNFa39g2f/PST/vof4Uf2DZ/89JP++h/hRysDJorW/sGz/56Sf8AfQ/wo/sGz/56Sf8AfQ/wo5WBk0Vrf2DZ/wDPST/vof4Uf2DZ/wDPST/vof4UcrAyaK1v7Bs/+ekn/fQ/wo/sGz/56Sf99D/CjlYGTRWt/YNn/wA9JP8Avof4Uf2DZ/8APST/AL6H+FHKwMmitb+wbP8A56Sf99D/AAo/sGz/AOekn/fQ/wAKOVgfOvjv4U+LNI164k07R7i9tZpmeGW1hMmATnaQMkEdPesP/hBvG3/Qn6p/4L5P/ia+pv7Bs/8AnpJ/30P8KP7Bs/8AnpJ/30P8K53hYt7lcx8s/wDCDeNv+hP1T/wXyf8AxNH/AAg3jb/oT9U/8F8n/wATX1N/YNn/AM9JP++h/hR/YNn/AM9JP++h/hU/VV3DmPloeBfGx/5k/VP/AAXyf4Uv/CBeN/8AoUNT/wDAGT/CvqT+wbP/AJ6Sf99D/Cj+wbP/AJ6Sf99D/Cj6qu4cx8qXPhXxRZLvvPDd/Co6tJZuuPzFUDkcEV9df2DZ/wDPST/vof4VT1LwB4V1gY1XSYbj3mhRj+q0PC9mHMfKNFfR2r/s7fDPVQzR6fPaORjfazbcfgQV/Subu/2TbB5i1h42mjj7LNYh2/MOv8qzlhqi2HzI8Vor2T/hkr08f/8AlK/+20D9kr5vm8fcf9gv/wC21P1et2/ILo8bor3rS/2WfBdsVfVda1C6I6qrLGp/Qn9a2E/Z4+FKLtOgyN7teS//ABVUsLUFzHzbRX0l/wAM8/Cg/wDMvSf+Bsv/AMVR/wAM8fCj/oXpP/A6X/4qn9VqeQcx820V9Jf8M8fCj/oXpP8AwOl/+KpY/wBnz4UxtvXw8/8AwK8kP82o+q1PIOY+bKs2Gj6vqpxpmlXNxjr9ngZ8fkK+nbD4UeAdMYPY+HLVGX7r/Z0LD8SM1qJ4esY12I0iqOirjj9KpYV9WHMfLX/CC+Nv+hP1T/wXyf8AxNH/AAgvjb/oT9U/8F8n/wATX1L/AGDZ/wDPST/vof4Uf2DZ/wDPST/vof4U/qq7hzHi3wW+GniDS9d/4SjX7JrVYY2W3hl4d2YYyR2ABPXvXqda39g2f/PST/vof4Uf2DZ/89JP++h/hW8KfJGyJMmitb+wbP8A56Sf99D/AAo/sGz/AOekn/fQ/wAKvlYGTRWt/YNn/wA9JP8Avof4Uf2DZ/8APST/AL6H+FHKwMmitb+wbP8A56Sf99D/AAo/sGz/AOekn/fQ/wAKOVgZNFa39g2f/PST/vof4Uf2DZ/89JP++h/hRysDJorW/sGz/wCekn/fQ/wo/sGz/wCekn/fQ/wo5WBk0Vrf2DZ/89JP++h/hR/YNn/z0k/76H+FHKwMmitb+wbP/npJ/wB9D/Cj+wbP/npJ/wB9D/CjlYGTRWt/YNn/AM9JP++h/hR/YNn/AM9JP++h/hRysDJorW/sGz/56Sf99D/Cj+wbP/npJ/30P8KOVgZNFa39g2f/AD0k/wC+h/hR/YNn/wA9JP8Avof4UcrAyaK1v7Bs/wDnpJ/30P8ACj+wbP8A56Sf99D/AAo5WBk0Vrf2DZ/89JP++h/hR/YNn/z0k/76H+FHKwMmitb+wbP/AJ6Sf99D/Cj+wbP/AJ6Sf99D/CjlYGTRWt/YNn/z0k/76H+FH9g2f/PST/vof4UcrAyaK1v7Bs/+ekn/AH0P8KP7Bs/+ekn/AH0P8KOVgZNFa39g2f8Az0k/76H+FH9g2f8Az0k/76H+FHKwMmitb+wbP/npJ/30P8KP7Bs/+ekn/fQ/wo5WBk0Vrf2DZ/8APST/AL6H+FH9g2f/AD0k/wC+h/hRysDJorW/sGz/AOekn/fQ/wAKP7Bs/wDnpJ/30P8ACjlYGTRWt/YNn/z0k/76H+FH9g2f/PST/vof4UcrAyaK1v7Bs/8AnpJ/30P8KP7Bs/8AnpJ/30P8KOVgZNFa39g2f/PST/vof4Uf2DZ/89JP++h/hRysDJorW/sGz/56Sf8AfQ/wo/sGz/56Sf8AfQ/wo5WBk0Vrf2DZ/wDPST/vof4Uf2DZ/wDPST/vof4UcrAyaK1v7Bs/+ekn/fQ/wo/sGz/56Sf99D/CjlYGTRWt/YNn/wA9JP8Avof4Uf2DZ/8APST/AL6H+FHKwMmitb+wbP8A56Sf99D/AAo/sGz/AOekn/fQ/wAKOVgZNFa39g2f/PST/vof4Uf2DZ/89JP++h/hRysDJorW/sGz/wCekn/fQ/wo/sGz/wCekn/fQ/wo5WBk0Vrf2DZ/89JP++h/hR/YNn/z0k/76H+FHKwMmitb+wbP/npJ/wB9D/Cj+wbP/npJ/wB9D/CjlYGTRWt/YNn/AM9JP++h/hR/YNn/AM9JP++h/hRysD//2VBLAwQtAAgAAAACg5BUAAAAAAAAAAAAAAAAGQAAAGZvcm1hdHMvbGl2aW5nL2xpdmluZy5qcGf/2P/gABBKRklGAAEBAQBgAGAAAP/bAEMAAwICAwICAwMDAwQDAwQFCAUFBAQFCgcHBggMCgwMCwoLCw0OEhANDhEOCwsQFhARExQVFRUMDxcYFhQYEhQVFP/bAEMBAwQEBQQFCQUFCRQNCw0UFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFP/AABEIAVAEYAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APhrzpP77fma67w58K/GPizwjrHijStJmudA0hXe8vjMkaRhQGYDcwLkBlJCgkbh61x1erfAfWtP0fTvigt/fW1k154PvLW2W4mWMzzNLAVjTJ+ZyASFHPBrsm2qc5LdRbXqlf8AG1iV8SXdr8zko/h74lbwO3i97UW/h7zTBHd3V3FCbhwQGEMbuHmwTz5atjnOMGo/AvgPxL8StWn0vw1p82q38NtJeSQxyKpWKMZdsswHGRx1JIABJr6P03xN4W8RfBfQYNTu/Bz+H9L8H39lPa3YtxrcOrCSRoTCG/fbWdo2Bj+Qgyb+a5X9nvxt4W+EPw91LxLqWvz2PiLU9YtLa3t9JtYb27jtLaRLmXzImniKRyuETJPOw4B5xT0lKN9Ft9/Kn/7d/h2IUm6cZ21fT5Jv8Lr1R88edJ/fb8zR50n99vzNfcWk+DfCGi2U2p6G3w+1Hw1dePWafVPEQsGUaRLawztbo82WDx7yuyM+YGU8D5q8F/aC17wp/YvhPRvBVroQ0j7NNdTXNnZwG+Z/tdwsSzzgeaCIRGdjEZyCQeMZ87TStrp8rxUv1t6pmtk27PSzd++tv+D6HK6p8DvHui+Gjrt3pBSwWK3nkSO+gkuYY5yBA8lushmjVyQAXQZzV/Uf2c/iVpepabYTaA0l3qF2bCKO21C3n2XAj8xopjHIwhcJliJdpCgk8A16pp7H4b+EdLvx4i0LxTqesXGn6n4n1U+J7Ge4gs7eVJI7CKBp/OkkGxC5CH7qouQCa2PE1nZXE3ibR7D4k+G9NufGPjt9VstUtddi8u108w3JkmndH/c5WcR+W5VmOVxjmre7S6f5xX6vXybSa1MYy5rX7b/Jv80tPNddDwyT4AfECPV4NPOlws01jJqaXiataNZfZo22SSm6EvkhVbCnL8EgdxXK+MvB+vfD7XpNG1+1ew1CNEl2CZZUdHUMjo6MVdSCCGUkGvoPVfDFv4q8aaN4QHinQ/Cnwz0fTpYI1i8XabLPqUKTLLL5jR3BjE88rKyrIVRcZGRGa8f+OurahrXj6S5vodKs4FtYYLCx0bVbfUYLS0iXy4YfOgkdSwVOckMSckAMKjmennf7ru3z209b20NuXe/9bf8AB19LX1M7/hVfjH/hXj+OjpMyeFVkWL+0JJkUMxcoNqFt7DeCuQpGQeeKr6z8PfEvh3wppfiPU7UWGl6pzZefdxLPOnP7xYC/mmPg/vNm3pzyK63wHrWn2f7P3xU06e+toNQvLrR2trSSZVlnCSzFyiE5YKCCcDjIzXt3xA8TeG/F3hW51L7X4CuYDpehQeGI3FmupQXsbQpNHdhv3ghVVlDiX9zt2Y71Um05JdGrejin999CE/fUX1T/ADS+7W78kz560L4J+OvEvhZPEOnaV9o02SGe4hzfwJcXEUH+ueK3aQSyqmDkohAwaZq/wY8caD4PXxPe6X5WjmCC6ZlvYHmihmOIZZIFkMsaOeFZ0APrXrfhPS73Q/CureK4/EXhXVvGt59t0nTNP/4SfT7S30K2Z5EnmjjknQfPvkEKRjYFcvzlRW1401rR7m18Y+LbPxPoEtr4j8L6Lpen6V/aEEk5ukks/MSe3Lbo1j+zSbmkXZhxgnJFV1avbb79dPnor92xxs5JS0WuvzivwvJ+ivojwHwx8LfE/i7w7Lr1idOt9HjujZG71TW7PT0MwQOY1+0TJuO0g/Lmrtx8EPHdt4RbxNJpX/EpWzXUW239u1wLVm2rObcSeaIif49m3HOcc17b8JdWG1NN1/WfhpL4WXxRdXPiHSb+OxUQxmJVaWyJOGRlUiP7KMhlX+E1hXOlf8Iv8JdRvtF8SaL4h13xJp32aea88UWIn0fSEKslmsEk4kad1RQyqp2BQijJNZyckny+Vvmuvz69k+uhUY3dn3/V/jZfe10Z4n4D8C+JPid4mt/D/hiwm1XV7hXdLdJFT5VUszFnIVQAOpI7DqRUvhv4eeKfF2l+I9S0nTpruw8O2/2rVLgTIi20eSMncw3EkHCrknB44r6C/Zc8XeC/hD4tt9E1jXW03xLdavB9t1m0W0utLaxRBIsAu/tK+WrSEM7hW/1arjg1o+A/iR8L7X4b+MfCOm+JNZ0q0bw/qL3bahpVrEdTvJJogskZ+2ne6xqESHA4MjbyaKsnGEpQ1ai2vVK/3dO9/LUin7zs+6+5tp/PT0s++h4Br3wX8ceGPCa+JdS0o2+kmK3ndlvYJJoY5/8AUvLCshkiV8fKXVQelcL50n99vzNfXfxg8UeG7/4S+KBa6x4duPtmkaHb2erWepRy6vrDw+Xviu7UEmEJgnOyM5iTLPnFfINVf3pLsxRu4Rk92v8Ah/6/4ZP86T++35mjzpP77fmaZSo211JGQDmqGTMtwq7iXx9aj86T++35mtBrmPyy24H271mUAdX4t8Bat4N0/wALXl7dW8sXiLTl1O0FvI5KRGV4wJMqMNmM8DIwRzXotn+y7q91491jwXJ458L2viXShM9xYzNqB/dxxCV5FdbQoV2HON27g8dK1PiF8Xn0bwb8JdP0SXwzqf2bw3HHeC80bTtTltpvtM5MbPPDI8Z2lTsyOucc5rt18ceHP+G1fH+unX9L/sW60/UEg1L7ZF9mlZrHaoSTdtJLfKADyeKzrScL8vRVf/Jbcv6+pKu4U2937O//AG8lf8/keO+CfgbH8RPFNv4d0H4l+FbzVbpmW3haPVYxNtjMjEM1kAMBW+8R04zxlmkfBAa5o/iDWbT4ieF30LQltTe6myamsaNO7pGgQ2fmMcpyQmBuHPXE37J2uad4c/aC8J6jq1/a6Xp8LXPm3d7MsMUebWVRudiAMkgcnqRWp8GfGOieF/gX8W4NUttI1a6vJNI+zaLqtzLF9r2zyFyqwyxStsBDHa3HGeK0W0n2t+aX5DucJ8Sfhnq/wzm0lrrUbHWNN1e1+2afqukzvLbXMe4q20sqsCrAgqygg11On/s4eJL86dZNr2hWfifUbL7daeGLm8lXUJYyu9BgRmJXdfmVGkDEHpXKfEj4qaj8Sv7FhuLDTtG0vRbT7Fp+l6TE6W9vGWLMRvd3ZmY5LMxJNe/3Ft4H+JnxYtvG+s3nhHUvBus2to+pW+s63JZ6hpTQwLHLFHBHPG7sSnykLIp4xjvx1pzguy11++34b+luqOuhCM91d2Wn3X/4H39DxWH4QyQeD9B8R6z4z0Lw5a639o+x2+oLfvMfJlMcm4QWsirhvU9/rVvw78FV8TeHdY1uz+InhkWOjxRzagZE1MNbrI+xMj7H82W4+Xd716NNrF5qHwV+HVh4SvvA872R1QXlt4im0Vp7cPdlosLfnem5eflxngntXDfDjU7LQ/hZ8ZtM1DULG31G6tbKG3gF1EftLpdguIdrYkAAzlMjHPSo9pNqTvrd6eV7benmdXsacasab1WmvTbo/wDgHlt9btb6pNZ2t8mqKspjjuLQSBJ+cBkDqr4PYMoPsK0vHHhW/wDAPirUPD9/dwXF9YuIp2s5GeNZNoLJkgcqSVPHVTjPWuq+Aem2w8bSeJdRjEmk+FLSTXLhWOBI8WBBH6Zedolx3BNesfs6+Lol8P6zq114zXSNdvPEcd3e20et2miyyxY3tNLPNFI88W4uDAg65yPmradSUHZa2Sv82kv1v8uhzQpxnFyel27fJXf6W+e7PmDzpP77fma05dHuIfDtvrBv7No5rl7YWi3am6Uqobe0WdwQ5wGIwSCK+xLjVtV07Q9cufh54x0Lwvp7/Em/kF5JqlvbWs1qYbdhtdmCyxjgmNSdwx8pxxi66vgv4ojTdK0e8sl8PQ+N9U1m8tYXCtFpscEckkvl5yiOI3CkgDLAe1c/1t6Nqy0b8l7rd9O0n/4CzqqYJU5OKld3aXn8dra94r/wJHzD4y8I6j4FvrGy1G5ha7ubGC/aGF2LQLMgdI5AQMPtKkgZA3DmsDzpP77fma+mfhH8QF8U6x8S/E0/in/hHdd1W7t5ILSDWrXRp3hMjkql7PG+1IwEBjQZYBc5AArtvHXi6zk1nxynwx8a+HfDniC68R2d7PqI1a3tFu7I2cWdlwSqSKtx5rPGOTk5U5wa+sTi+WUddPldx/K+/k/O0fVoSXNGWl2vuvrv1a0XmvK/xh50n99vzNHnSf32/M19a2Hja4m0+4HgXx34V8NayPFc91rl0LhNLt7+ArH5UqJK2ZbcETZiUkktnb8wqfwn43j8jwi/hPxt4Z8OaTa69fT+K7VriPTo72NrlmWT7PK2+4ha3wiRjeVOBgEZB9ZlZPl7d9NL66aLp+m9l9VjZvm/LXVrTXfS/o/v+Q/Ok/vt+Zo86T++35mvrzwhfeFfEniD4V6to/iPw7oeheGfEuqT3Frqupw2UtvbSXomg2xSMGYGPAG0EA8HGDi54R+Mdrpfin4WaKni2wtvC882sjXLc3kQt2R7y6MYuSTjaVZSoc4+YEdc0nipcqahq76dtG9dOtgWFjeTc9FbVa3vo7a9D5P1TwvrWi+H9F1u8gaHTNaEzWE/nK3nCJ9knyhiy4bj5gM9s1kxtPNIscZkd2IVVUkkk9AK+svDvxI+2+H/AIKTXHjPSpbTQ9Rv4b6x13VPMSN/Mf7G0kO8uFWP5Um2lYsqc4GK0/E19pPiDX/CPinUtVh1Z/CNnf63qVnJrUGtTReXKv2SFr6EASLJM0YWN8soLDPOKPrTi/ejpd/cr2+bS/FPqi3gk7xjPXT0bem/a/8AkeJ6P+zj4k1rxdrPhuPxD4cg1PSy6SxT6nteWRIfNkjijCmRygDBjs2hlI3cZrg/BfhHUvHGoXlrZXENslnZT6hc3V1IyxQwxIWZmKgnk4UYHLMo75ru/wBnrxZBH8eLfXtf1K3tBcQ6nLc3t5MsSGWW0n6sxABZ2AHqSBUGkyP4B+A19qKFoNW8Y362Vs44dbG1IkldSOQHnMS/9smqnOrB8snq4x/8Cbkn62sn6GXs6UrOO15X9FZr0b29ThPEnhfWvCLaaurQNaHUrGLUrX98r+ZbygmN/lY4zg8HBHcCsfzpP77fma+xpPi9cLeaJ4nPjq1upIfhpPbW4utYjmmi1ZYhv3Qu5YSuwTlly5XjditL4F+NtKuvDvha58RePbe5gv8A+0ZNes77xBZWEPmymQYurR4zNeM2VIkLgKMYIC4MSxM4KTcb2v8AnK3Ty3813RpHC05uK57Xt08lfr3e3k+x8T+dJ/fb8zR50n99vzNfW/hb4wR2/iH4beFrjxVYx+C38ESW2r2T3UX2Q3JgusRznOPMDLDgMcgkY+9zLpvjbSbj4EppV14i0i00+LwjJAIbXWIfKlu85EMulSDzftO7/l5jIBPzdOKqpiZwv7l7efnJdv7u3miaeFhU5Vz2v5f4fP8Avb+X3fIfnSf32/M1Jbi4uriKGJmaWRgiruxkk4Ar7V1zxB4SPw18TafqPjGz8Q6J/YVj9gtG16yWF5Y2iYra6ZHGsls4G8Hc+5ucg9Ry3xM+JWtabeeJdUs/iLoVx4Ta/tJvDenaZerLd2sQcFfs0UTh7MpFuV94XcCVwxOaqOIcpqDju/1S7b+XkTLCpU3NS1S7eTffZdX5rQ+d9d+H+t+F5vENrrE1npupaFPFb3WnzX0f2hnckfulVj5oXHzFSdoIzXL+dJ/fb8zX2b428eeHLjxZ8S7zxH4m0zxBoOoa/wCHru1gj1OO9MunR3MxljRFdjhVLFowMqHGQNwzXvvHCx3mpN408c+H/EdtN4u0u58MLaalDc/YIUulaWUBCfskIgwpR9vI6dzlTxNRpc0dXb8VBv8AGT08nqa1sLTi5cktFf8A9u/yWvmtD4686T++35mjzpP77fma+tpPi3a+Ml8VDxL4r0q9TTPHtjdaIuqOk0ENqs0oZo41OWg2BN2zjBz1OawP2pPFVj4m8E6U8uu2t9rA1q5dbCPXbfXGit2QfPFcxgNFCWAxBJkjPGMYqo4qTcU4b2/FRfb+9r2syHhYcspKe1+nZyXf+7f5o+aPOk/vt+Zo86T++35mvr3wD8adK0nUfgR4e1bxFZ/8Ida6RJNqdmZY2hhvxLdfZ2uPlbaUfyXG8ELkNiumh+KFjD448Dyazq/h661rT31RrfV9a8ZW+rzsrxYSJ7u2to47VSxLRSOWZDnKqOK75Xi2t9X+Dt9+l7drPV6Hmq9k31SfpdX/AOBfv958OedJ/fb8zR50n99vzNffFv4lfVtc1W88PeL7IeK4fh3dLLeXet2t9Jp832+AxrNqcYEUpAPyu2CnG5uc1gXXxCsJlkt18a+Hh8aT4QitR4vF/CLbzxdMzwi83eULj7NhPNz143CplLltpvf8HNf+2f8Akytc0t+n48v/AMl+H3fE3nSf32/M0edJ/fb8zX2hr3xgtvC+g+Ir228Y6Td/EyHwXbWl/rmm3UUgvLw38ZVYpAcTTRwH5nTJ+XOflyLM3xMtNd0+6vtD8baHpfxR1TwLogXX7vUYLdzOk8v22FrliFiuGTychiGIUdKd+3n+bWnlpf0ZmrtXen/DRf8A7db5dD5X+JngOT4d3Xh6H+021D+1tDs9Z3eUYvK89N3l/eO7b03cZ9BXHedJ/fb8zX3lcfEbQf8AhLPEDTeL9LvvHcng7R7W31zSvENrp4knjZzexw6g8UkUMjfJ1VSw4BXrWLqnxHj1VvHC+EfE/hnwd8R5xpIm1hvENu4v4I42E+2/8uGIzFjE0gjGG2nBbtHM7y66vbtzNK3dJWu9/wAx9l5L8k9e13ovP8PmP4gfC2/8H/Ei18HWF6+t311FYvAwj8kvJcwxyKmCxAwZAuc84zx0q5qfwP122XGl6zpPiSaPU4tHuINJuZGe3upCQiP5kaAgkMNyllyp5rf/AGor628a/H+6ax1zStUW6t9Ot21S2uozZtKLWFHbzB8qqHDZPGMHIGK6eGex+E+seErHTdS0W58J6Tq9pqGsatZ63Z3FxqM4cL5iwRytKIowzBUC5xuZuTx1Ukp25urt+K/S/wA2vM7aNOLptzW0U/O7j2166vokn5HmusfBXXbH7N/ZmraX4lMuqLorjSZ5W8i8b7sb+ZGnBwcOuVO081T8ZfC3UfCGjy6omuaXrtlb3x026k0maV/s1wFLbHEkaZBCthl3Kdp5r1LwxqejfCMwnUvEGlakLrxlZagn9k3sd3ts4PN3Tv5ZOzPmjCnDcHiuU8YWdj4L+GfiPSH13SdWvdY8QQ3VqmlX0d1/o8STfvXKMdm4yqArYbg8cVDS5Obrp9/uaf8Ak0vPTyZ3zw1BXt59dre0s/nyx/8AAvNHm2oaHcaf4f0rVjqVjPHqBmVbW3vFe5g8tgp86IHdGGzlc/eAJFZPnSf32/M19bfCf4kaP4X8A/C2ZPEGl2mq6ToXi4tHNcxboJ5Bm3V0Y8M5A2qw+bsDXmnxw8ft8RPhH8JtQ1XXItd8WRpqsOpSyTrJdpGLlPIWbB3AbS23d1GcVk200u/+bX6fieHHVNvvb8E/1/A5pvgnrg0iW4Gr6W2qRaWNak0JZ5TepaEBt5/d+XnYQ2zfuwenasnw98Mtf8SeA/EPi+3eKHRtE2CZ55GVpmZlXbEADuK71JyQAGHrXpfg2PTfB/g3X4pvFHh6/wDC2qaBIxaBoLfVxeOg2221T9oIWUAEMTEVBPetaz8eeANS+HHifRLDXNV0rTbXw/FZ22n3un26PLMbmKSWVD9q/eyO4yRhdqDjO3B6JxUea3Z/J+99+yXndPbQ9ilh6MvZuel+l9/h1/Fv5cu6ueaXXwT1y10m7uG1fS31Sz0xdYudDWeX7ZDakBt7Zj8vIVlYqHLAHpXNeC/B+peOL65gtbq3sra0hNzd3+oT+Vb20QIXe7cn7zKAFBJJAANeueHI9M8HeBfE9pL4o8P6l4Y1LQWa3ktTb2+rtePtZYHRCbghXyGEhMZUZrP+FGoXHgfTPHPh7T/FGlaR4m1Kxs59O1SLUYkg+Vt8kIuSQschV8ckYKkZBocUptdLfjrp+HzWq3SI+r037NvRPfX0+Wuy89HscN4Z+HM/ijUNfit/EukW+n6LCJ7jVrl7lbZ0MixgpiEyHLOOqDvVO18D32seOLPwvomp2ev3V3IkcV1YPL9nO4ZJJkRWCqMliV4Ck9K9p1vxZfXHirWZfCnxC0vSPFH9jadFqVxHcQ29vrF0g/ftHduyoGXK8gjf82Dxy7xB8RvA9h4w12eTVroeKNRsrKwu9e0OwhubUuI1+2PGTPFzKw2lwMbQ2M7qqEIuUU31t676ry29PMqWHoxi23b/AC7bv3vJ/f1PM5PgnrNlq/im01LXNJ0m18OXMdpe6ldzTm3M0hIRE2RM7E7WP3AAAc4rkvGfhfU/Anie/wBB1ORDe2bhXaCQvG4KhlZT3BVgR9a+jde8U6RJ4v8Aio/hHxBol5q+palayp/wkEtqmnzQKzmQxebI0EpVvLw7YbBbaAc542XxJoTftgeH9ch1e3k0tfEGm3F3qUlyTbI6vEZ2WRz/AKpWD4JOAoGOAKinHndOLdr2v80tflr27eYsZQo0ac5U+jfXpeSt62Sf49bLwrzpP77fmaPOk/vt+Zr621r9pbxJH8JPEd3a+PP+Kmg8bGLT3juojdR6aY2YrEPvC3LpH935OAOnFelaH8RvDemfET4gDQ/Evh+0sL7xdBePdad4jttJnEBgTdMJJA0N5BvMm6Ac7tx/iGOaM3JRdt1/8h/8n+D6anl1F7NX9fw5l+n4n5/+dJ/fb8zR50n99vzNdH8TpbGf4j+KZNLube8059TuWt7i1hEUUsZlYqyIOFUjBAHAFczVRlzRUu45R5ZOPYf50n99vzNHnSf32/M0yirIH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAf50n99vzNHnSf32/M0yigB/nSf32/M0edJ/fb8zTKKAH+dJ/fb8zR50n99vzNMooAKKKKQBRRRQBst4w1eTwfH4Xa7zoUd82pLaeWnFw0YjL78bvuqBjOOOmaxqKKOrff/AIb8tA8gooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKYBRWtqXhHXdFtjcahouo2NuCFMtzaSRoCegywAzWTQZU6tOtHmpSUl5O4UUUUjUKKKKACiiprqzuLIxC4glgMsayx+ahXejfdYZ6g9jQLmSdmQ0UUUDCippbOeCCCaSCSOGcExSMhCyAHBKnvggjjvVq68P6lZW4uJrOZYPKjmMgXIRJM+WWI+7uwcA4JHI4IoM3VgrXktSWTxTqknhaHw411nRobx7+O28teJ3RUZ92N3KooxnHHSsqpbW1nvriO3toZLi4kYKkUSlmYnoAByTRdWk9jcyW9zDJb3EbbXilQq6kdiDyDRbr3LdRNqDevbyIqKKKBhRRSsrKFJBAYZGR1HSgBKKKt3ml3Vhb2lxPCUgu0MkEgIZXAJU8juCCCOooJcoxaTer2KlFFFBQUUVsaf4N8QatZx3VloWpXlrJnZPb2cjo2CQcMBg4II/Cnq9jKrWp0VzVZKK83Yx6KdJG8MjRyKyOpKsrDBBHUEU2ka7hRRWy3g3XftF3CmkXk8lnj7SIIWlEORuw5XIU46g8jBB6GmZVK1Ol/Ekl6u39br7zGoorYk8Ha/Dd29rJoepJdXIYwQtaSB5QoyxVcZbA5OKLMJ1adP45Jb7vtv93Ux6K0tQ8M6xpNxbwXulX1nPcHbDHcWzo0pyBhQRzyR09aqNY3K3pszbyi7Enkm3KHzA+cbdvXdnjHXNAQrU6i5oSTXkyCirkGj391qDWENjcy36syNaxxM0oYHBBUDOR3FMttNu7y+Wyt7Wae8Zigt44y0hYdRtAzng0h+0hr7y2v8ALv6FaitGLw5q09hNfRaXeSWUJIluVt3McZHUM2MDHvU9p4P12+s4ruHSL1rKUgLeNAywcttyZCNoGeMk4FOzM5YmhHWU0tbbrft6h4f8Xat4Xt9Yg0y7+yxavZNp16vlo/m27OjlPmB2/NGhyuDx161j1LeWk1hdTW1xG0NxC7RyRuMFWBwQfcGoqW+v9f1qbxkpK6egUUUUDCitfUPB+vaTZtdX2iajZ2q4zPcWkkaDJwPmIxzWRTMqdanWXNSkpLydwooopGoUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABTo/wDWL9RTaKuMuWSl2A9i8eaDYx/Eu7utV8Oavb6XPqTR3OpXMpFqyvlQ6YiXGCQw+cj5cc5pdN8A6BZ3GpafPp02ravpNrbLPb2iyTvLNIzNK4jWWMkRgxp8pAGSSD28copRaVlY+VWTYiNCFGGJlHlSWl+jVnrJ9Lpq9tVtyo9mt/CPheTVNI09NDk2anPfo0t3cSCe3EQO1QEkKZB4yd2QPWuW+KEy3Nj4OuY9Pitrd9IRVlh8wo5V2DRgsxB2cdORv5J4xwVFF9LG+HympRrwrTryny30d+vP3k7aSitvs+enp0OleC/FcMfiCW7j8Pw2qj+09Hh5eRgPlNtns54IP3fpXB+ItSttY1m5u7PT4tLtZGHlWsJJVFAAHJ6njJPck1m0U3K/Q7cJl/1Wo5urKS2im9Ire3m79ZXdklfe5Xpvizwre6td+EbmSyvE0U6RYR3OoxwMYoUwA7F8bRgHPNeZUVPqbYnDVK1SFSnPlcb9L7q3dWf3+h7Trngnw1DqkelDQb3Tbi8nmsrS8uA8ULMUJhdSZ38w7wo3AKpDngECm6T4K8LStqgi0q61uXT7yGwlgslkmchUAkn2iaMrvk3gNllUKPl714xRTur3t/X9f1oeF/YuL9lyfXJ3tvrve9/ivtpv5ne+MILOPSfB8I8yKwVrtB5hBdY/tbjnGRnHpkV11vajVvEHjuz1CPfDN4g0+2ePJXMP2l0CgjkDZgDHbFeKVf1rWrjXriK4ughuEhSF5lBDS7RgM/PLYwM98DPOSVH3UvI3q5TUnGNONTbmd+qbqRqd/Kzd+zPYfBen6Pb65p+p2WjQWcseo6hpwRZpnBSO23q53P8Af6jjAwx4BwRjeH/B+katpOnXD6Kr6deW11PfazHcSqunSKX2xAFyoChU/wBYGLb+DXlFFJXtZ/1p/TM3ktZOUoYmSbsr+83Zc/Xm1+LS+mmqadj1TVtJ8O6WfEOzw7by/wBk6fZyxiS5uP3sk3k7mfEg4G84C4/wuat4P8PT6prGm2ukw2H2GfT/AC7lrqU5Fwy71csxAUB8AgZAXkmvH6K05l2NFlFZWaxMrq3WX9zpzW15Zf8Agflr9Bab4T0rwz4t8OXdroz2c093eWXl3Uc0IbbFlHVWmcknJUEkBgx+QcGuUtvDkOo6fDJLpEuparb6QZbfQpJp8Bvt08bhV3+ZiNVHyKQe5yck+UUUcyta39Wt/wAE56eR4iHvSxTctNdb6Obt8W1pW0d7LRrp7LdeEfDWkz2wbRYrmW71W0spbeW6mIsvMiVpYgUcbmViQCc475xXM+JdPh0/wLf2yglLLxLPb2xc5YR+Xhhn/gMea4CtC+1qe+06wsWWOK1sg3lxxqRuZjlnYknLHCj6KABxUPVf15f5HRSyvEUpwlKu52abvfoul299vRttt79V4VsfD/jLRotFuZLbw/rluzPBqUpIhuUJyyS+jAZ2nuBisvxteaCZbXTvD9tm0sQyNqMgIlvXOMuR2Xj5R2H1rmaKrm0tY9Cnl/s8S6/tZOOrUb6Jvd92uybsruy2sV2Xhj/knPjb62P/AKNauNoqTsxVD6zTUL2tKL/8Bkpfjax7JoPgjwxfyeHbuSzWW38QTW0MFqs8g8lkVhd4+bJBdVAyTjfx2o0vwDpF5caa2raC+h6jJFesuixvK7XflhPKYK8gbJ3PwHXf5eQQK4G18fXtjqWhXdra2dumjc21squYyxJLM2WLEsTzz2GMCuZq+Za6Hy8cqx9SUnLEyimnbVtr4kvtW0jytuzbldpp6npdvpOlWXxc8NW8GnXWlwNNbPJaX0flsJd3A2GSRlUkLwzEjJrT8Bxarq2m6FPB5z3Fr4oe61J1OPJQpETJL6LhZeTx1HevJIZpLeZJYnaOWNgyOhwVIOQQexq1rGqSa3qlxfzRxRTXDb5BCu1S2PmbHYk5JxxknGBxSUrf15p/odlbKatWMYOpdqKXM1fVX6Xu7qXfeK3PTbjwxp7eHRrWn2EdvrjzB4la5ZEhtzOQl+UJyBnamD8oHzYwag8XaLqS+D7DTZ7W6t9XutbffDeyCSS9maNVM0TYX92W46Hlh8xryyipVkrf1/X9dioZTVjOMnW5uWTkrpt+SvzbL09LPU9b0sWa+NiRcwRaN4OsiqXEyt5L3KnAc7QT8077uASQo61oLo9rN4ss/Gz6hay6cmm/bpb5llEBvo8Q4wU3jMpR/uknJwK8Uop839feY1MjlKXNGu03Hkei1i783/b0pPmvt5M9fkeWH4meDdcsNS86DXJbVLme0aREmlSVEnUhgrFSyq2GHO76UfDOfTdP8cTT/wBo20GuXGtJbQwzxSkrAZQZCjKjLvf/AFfJXALc815BRVKVpKVtr/jb/L8Sp5Gp0JYd1XZx5bpK9k20n0atZNWV0ul7Hs3hnS763mubqWWS706O21COz1SKUmyssiTeJY2RTuYnjcR94Ha1ZtzpP9teCxdaro0Nta2Ohxmx1qCdyHkEnyxHnYWJZwV27gc815XUtrMLe5ilaJJ1jcMYpc7Hwc7Tgg4PsRWa2t/XX/MP7HqRn7WNXW6eiael+0kru+unLu+XVnY/EC6js/GGm3ssMd3cmxsbi8guASskvkoWDgY68ZHua2/7J8C/8jb9q/4lnX/hGt37/wC09fK3f88e+/04615zq2qXOuanc395J5tzcSGR26DJ7AdgOgHYCqlWpbux0f2XOdClT9rKDiuV8r0a6ry8pK0ktmWNQulvr64uEgjtVlkZxBCCEjyc7VB7Cq9FFSe/GKilFdD2fx94We++I0ky+ENYvkmvIlkuJZWW0nUqoIBWJSn+95hAxzkcU2bwDpMMmsDSNA/4SKC00+KfT5hPK/29mmCyPiNh93LLsXB+T3rxqtHT9duNN0vVbCJI2h1KOOOVnB3KEkWQbeeDlR1zxV3Xb+rHyP8AY+Lo0adOliH7iire8k0mrt+/2T0TSs2v5XH1KfwHpdvcXx03w5/bl+t3axT6P9ql/wCJejwq7jcjAnDll3sSq7ee9Os9M8P+FPGHgyPTrC31D7Tq0ijUpppd21Lxo0ZQrhcgAckEHaDjGc+NUUKXLJSXQ1/sWvNctXEyatZ/Fr7vLr73R6+f2uZ6nTTX0OhePLi41HQ4pIIrlxNpcwdV2nII+YlgcHIJJwcGuom0rwX4Uhk8QRXcfiCG6U/2Zo83DxsR8xucdkPAA+99K8xoqIPlikd9bLHW5P3so2SjJJ6SS6dWnfqnezavs0p5J4x7UlFFI9sKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKVRuYDIXJxk9BQAlFekr8O7HwPbyav4rngvrJl/4l1nYz5/tFioIcMOVjGRk9c/hnkPBsck/irTEh0pNadpxjT5M7ZvY+gxzk8DHPGavladmeRSzOhiKdStQ96EFfm0UW7NtJu23VvRPS907YtFex/FLwTofhXwrcP4esU1GOS+K3eoGcStp7L0gGOgJJGTntnnGPHKJRcXZhleZUs2w/1mimo3tra+ndJu3z1trs0FFWNN0+41fULWxtImnu7qVYIYl6u7EKqj3JIr66+IfwI0PUNM8N6Baw6HHJ4b8Q6d4f1S/wDDt5ZyXd1b3KQxTT3CxszpIt0kyr5yggSAYOCKh6JPu7fkv1X9I9XmV7Ps3/XrqfHtFfVOj/s1/D/xX4tt9O0658UafYW3ii88NXk95PbyPdeTZzT+fAFiUJh4cNGS/wAsifMpNcZHpOm+BNY+FvjPwBfeI/D8ev31xbGG+vlNyEhuUjLrLCkWY5FfBXbwUcbmFKnJVZqC62/FXX3omtUVGnKfa/4XuvwfkeE0V9TeFJbdf29NchM2qWOo3Hia+gstR0ueBHtJGkkUuyT28ySDaWG3C9c54ryzwb4E0G+8G+NfGviQarqtpo17b2S6bo1xHbTPJO74mmmeKQRxARsvEZ3O6jK95hLmgp9Gr/kv1R0zioznTvrF2/8AStf/ACV/1a/llFfQ/wADfgN4Y+J0NpfavDqOkaZrWvHR9Hb+2GNw2FDsojj02USlFbLSM0CHp8uCQuq6D4D8P/s4ebfeF9Qu9as/FlzpM+pWuqW8UrTJaqd282bMICQSICc5yd/PBOXIm3uraeriv/bl9/bUzj7223/D/wCT+4+d6K9tuHiuP2R7cWF1qlpbr4wjgvLC4nt5raac2bt9oTFuksZ2qq7DK69T1PHWT/s4+D5tc8VeHrdvEllqHhPU9Lsb3Ur6aH7PqK3NwkEhiiEIMBO/zIt0ku5F59Rryu9l/Wiv/wClL+rpTzLkU3/Tu1b8P6Wp8zUV7j8aPhF4O8K+FdZ1fwnLri/2J4sm8LXK6zcQzfaWSFn85BHGnljdG42kvkFTkcivDqzjJSV1/V1f8mU1b+vOwUUUVQgooooAKKKKACiiigAooooAKKKKACiiigAor2r9lmz0e48Q+N7rWrW2uLbTvCV/fRyXOlQal9nkRotsqW85EbuuTgMQDkjIzXQfs/6zpniD9p7S5dP1DU4bi7Dxafq+l6Zp2itbuLZw7NZLDcQEFQy4UgnO4nPFK6Tt5X/P/IOjfb/gf5nzrRXu/wAIfhT4K8WeBdN8QeK28QT3+r+MIfDMEWkXUFvGnmpG/nOZIZCSu5/lGN3AyvJrqvh3+ynoetaidF8RahNZX+parqum6JdwagytciyBV5fsq2UoKq6nO+4hyMgYxllzJXT3X/Af5Nf0mVo9np/w/wDkz5eor6Ml+A/geTwfaxwT+IF8VTeA38aNdSXMBsUKHmARCLe24JJ83mDb8vD81xnxE+H/AIV8Aw6FoHk6xe+JdU0uy1H+3JL+KDS1+0APiOHyGeSNUOwyecuXVztAGDcU5PlW97fO7X6MhSTXNfpf5af/ACSPJqK+xfDPwL+FXgv4y6Z4cfXW1jxNpF9tutJ1KCaeG/RLaWSZnglsY44lBVHVfOnDIeCeCaL+B/A/xc8F6HpfgTQoZ2uPF6C5vNiafcrFPb3VzJbmdopCkdvGiKcI4JiYqrZG6IyUr8r2t+NrP0136WsKUuWSi+v+TbXrp+J8kUV9Vf8ADNfw78jT/EP9p63c+FbjwvqmvGPT7vzJneznjTEctxZW5KOsneEYIyCw64Tfs+eF4NWbWZpL228Cf8Ivp2vzTahq4gmspLtxHHC0sNjOZiXWQDZbrxgkjHzEZKT5ev8Aw/8A8i/6aL32/rb/ADR85UV9ZyfspeB/DfijxPBr+t3n9k6f4gs9KiafWLTSDBbTWy3Ek7S3MRW4eNZFBhjRHON2BuAHMaJ8G/hSfDZ8Va54l1DTfC+pa5dabply1xPvit4dn71/L02USyMHLiJvs/C9Tlihzaf15W+/mVvn2YrrTXf9L/5Pz27o+c6K+zfAf7Ivw08TaLof2nVvE82p31hp9289pPbx2zG7F1t2K8JcKPsjN83OGC8csPL/ABz8Gfh14B8CwpqXi6aPxpcaFbavaov2hobqSYLIsSRfYtnl7CyiYXR+ZOUHKqOSXN5O33q/5f1ca1aXdX+Xrt1PAqK+mPiZ8Cfh14Nh8c/2cPFF3L4Km0pr/wC1ajbIt9Hd53JFttj5TJlMO28H5vkHFct+1lp/g7R/ilqOneGvDl1otwqWUpeO8hNlJG9nEw8q3jt0KElgS3mMGO44G7gUubYV9beVzxCivdf2f/hXd6v428ZeDfEOgNZa5c+GbkWdtrFhtntrgtC0cqpIAVbaSQwwcEnOK9P1H9mLwtpvgnSTq+rW82laRZahrMusWEEltLqVtLPapau8kVvdOsao7OT5cmzJXgEuBySkovtf87r7lfz6bMhy7Lql99rfn/V0fHdFfUWh6T8PtH+FvxZt9MvNV8W+FWvfD7Qx6ZMYLl52FyGh86a1XIVy2H+z/OAo2qWJXw/4xeCbP4c/FDxJ4a0+7kvrLTbxoYZptvmbeCFfbxvXO1sY+ZTwOlOUuWfJ/W0W/u5vnubOOl/6/r+uhxtFFFMgKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigB8k0kqxq8jOsa7UViSFGScD0GST+NLb3EtrMk0EjwzRnckkbFWUjuCOhq5oPh/UPE2opY6bbPdXLAtsXAAUckkngAeppND0afX9YtdMt3hjuLmQRI08gRAT6k/5Panqc861GCnGUl7qu12Tvq12dn9zKi3MywyQiVxDIwZ4wx2sRnBI7kZP5mo66XVPh3ruh6Pd6lqVn9ggt7kWpW4YK8j852D+MDHUevGcHHNUNNbiw+IoYiLnh5KSvq0762XbysT2N9c6XfW97ZXEtpeW8izQ3EDlJInUgq6sOQwIBBHIIrpPA/xI1fwX4utdbS9vblft9ve6harePGNQ8qdZtkrc7suoOWDYPOM1ylegeKvgj4j8K+HfCeryC31JPEm1La004vNcQyvHFLHDKmwYkeOaNlVS2Q3rxRt739anRbm935/d/kdHpv7TXiGP432nxC1afU9ejsbq8uLHSr3VZHFmk6yKI4pGDbAu9fuqM7BwO3Cv8VvG0niRPEL+MdfbX44fs6aq2pzm6WLn5BLu3BeTxnHJpb74UeN9LuNPgvPB3iC0n1EObKKfS50a6CLucxgpl9q/MducDk1c0/4ZXul+NdK0DxzZa94M/tEqImn0dmnO9tiMIpZIdyFuCwbjBwDjFTTitIw9AqSUU5z23Gr8bPiIurPqo8e+Jxqbwi2a9GsXHnGIMWEZffu2hiTtzjJJqnb/FTxrZ+JLrxDb+L9eg1+6iEM+qx6nOt1NGNuEeUNuZflXgnHyj0rsNG+Atxqvxw1nwGLvVJtO0e+uLW91rS9Cn1B4Y4iyiVraDc+GZVXGeN3U4rgtB8Fa74w1i403w3o2peIbyFWkMGm2Uk8vlhgC5RASBkjr0yBRGSlZx6r8DSUXFyT6Oz9f6X5eRpaX8XfHWifbv7O8aeIrD7fcNd3f2XVZ4/tEzY3SybXG9zgZY5PFVNF+I3izw5DqMWk+KNa0uLUiWvUstQmhW6JyCZQrDeTk/ez1NWtL+EnjnXG1Aad4M8Q3506Zre9FrpU8n2WVfvRybUOxh3DYIrdtf2dfiBffDa38b2nhrUrvSZ7hoUit7C4ebyhEJPtOBHt8gg4Em7GQR2qXyqLb2/Rk681uv6mEvxc8cx+Hf7AXxp4hXQfINr/AGWNVnFr5JGDH5W/bsxxtxjFV734l+L9S03S9Pu/FWt3VhpbxyWFrNqMzxWjRjbG0SFsRlRwCoGB0rWvvhfLpPwjtfGd/JqljcXmoi0s7K40W4S2uYDGW89LwjymO5WXyxlvlJ6Csq6+GXjGx0vTdTufCeuW+m6k8cdjeS6bMsN00gzGsTlcOWHICk57Vo9G16ff0+YtGk1t+hm33ijWdTtbm1vNWvru2urs6hPDPcu6S3JBBndScNIQSN555PNZlejeH/2ffHWt+IrHRLrQL7w7fajBcTaeNds57RL1oYjK0UTNHhnKjjoMkZIyKyYfhXrtz4R0DXraJbttev5tP0zS7ZJJb26aIL5kiRqhBQM6p97cWzhcAmkrbL+ugbb/ANdf6+Zx9FdRJ8LPGkXiBtBfwhrya4sQuDpjaZOLkRlgofytu7aWIGcYyQKktvhL45vNfu9Ct/BniGfW7ONZbnTY9Kna5hRsFWeMJuUHIwSOcihNPYZydFeg+B/hDfeJofF1xqses6JaeHbK4lnuI9CubxFu4ulrOYx/o5OGy8mAu05rntH+HvinxFod5rWleGtY1PR7Pd9p1CzsJZreDaoZt8iqVXCkE5PAOaP+H/r+vzBa7ehz9FdJL8M/GEHhs+IZPCmtx+HwiynVW06YWoRsbW83btwdy4Oecj1rm6PIOlwooooEFFFFABRRRQAUUUUAXNN1rUNG+1f2ff3Nj9rga1uPs0zR+dC2N0b7SNyHAyp4OBWj4V8eeJvAstxL4a8Rat4ekuFCzPpV9LbGUDJAYowyBk9fWr3wx+HN58U/F1p4fsNS0rSrm5IVLjWLsQRFiwVUGAXdmZlUKis3OcbQxGN4m0G48K+JNV0S7eOS6027ls5nhJKM8blGKkgEjKnGQPpTejV+obl/UPiN4s1a5+0X3ifWby4+2JqHm3GoSu/2pFCJPktnzFVVUP8AeAUAHAq5pvxe8d6LbXFtp/jXxFY29xO11NDbarPGkszHc0jBXALkgEseSa1vh38E9U+Imm21+mraXodpeapHolhJqhnJvb11DCGNYIpG4BTLOFQb1+bmuL17Q77wxrmoaPqlu1pqVhO9rc27EExyIxVlyCQcEHkHFTotP66f8D8PIN9f66/8H8SyPGfiAbca7qQ22B0sf6XJxZnObbr/AKo5P7v7vJ4qwPiJ4qHhX/hGB4m1geG+n9j/AG+X7H9/f/qd2z7/AM3Trz1rs7H9nXxHqHhdtUivtM/tJdEbxH/wj+6c339nK2DccReSAR8wVpQ5XBCnIB8wt7eW8uIoII2mmlYIkcYJZmJwAB3JNVrJ8nX/AIL/AFv87htFT6f8Bfpb5HVzfGLx7cWdnaS+N/EclrZ4+zQPq1wUgwhjGxd+F+RmXj+FiOhrI0Xxlr/huOOPSdc1LS447lbxFsruSELOqlVlAUjDgMwDdQCRnmu38Y/s+6/4N8M6vrMmoaXqa6HdQ2WtWunvM0ml3EoO2KV3iWJ2DAo3kvIFbAJ5BrzCpTV21v8A0169Ggtok/66P9UdRq3xU8a69LJJqfi/XtRkkgktXe71OeUvDJt8yMlmOUbYmV6HauegpNJ+KHjPQLqO60zxbrum3Mdqlgk1pqU0TrbIcpCCrAiNT0ToPSuYophue4/Df9p/UPB+gXljqx8S39/c6rDqkus6P4lfT725EcIiW3uJGhlMsIUDC/Ljnn05DWPjx4zuPGHiXXdD17UvCI16+kv7mx0G+ltIdzMTyI2XcQDjceTyT1rz2ik0pPmfp+X+SEkoqy/rf/NnS2fxO8Y6f5X2XxZrlt5KRxR+TqUybEj3+Wow3AXzJNoHTe2OppG+JXi9/C//AAjTeKtbbw5tCf2OdRm+x7Q24Dyd2zG7nGOvNc3RTK636mzfeNPEGqf2n9s13Urv+1PK+3+feSP9r8v/AFfm5Pz7MDbuzjtUurePvE+v6LY6NqniPVtS0iw2/ZNPu76WW3t9q7V8uNmKpheBgDA4rBoo22EdC3xE8Vt4gl14+JtYOuTReRJqZv5ftLx7Qmwy7txXaAuCcYGKksfiZ4w0u6025svFeuWlxptubSxmg1GZHtYT1iiIbKIf7q4Fc1RRZf1/Xmw/r+vuX3HYWfxk8f6fql/qdr458SW2pah5f2y8h1e4Sa52AhPMcPl9oJAyTgHiuTuLiW7uJZ55HmnlYvJJIxZnYnJJJ6knvUdFHmO7CiiigQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFKrbWBwDg55GRSUUAd5r3xMhutEkstE0e30CW/UHVJrXjzyONiD+CM9So6kn3zyWgzafb6xZy6rBNdackgaeGB9juvoD/APq+o61QoqnJt3Z52Hy/D4WjKjRTSle7u79vibvotFrokktj0Px58U4fiHo/lahpfkajaz5sJreU7EgP3kcH7x4XkYz7YwfPKKKJScndlYHA4fLqPsMNHlhuldu3pfbv6tl/w/Jp0evaa+sJPJpC3MZvFtQDKYd48wICQN23OMkDOORX0/oP7RGg/E7x8ulXPhWDRTf+MNJ1LRZ9NWYsHiuEhUXCyXDIn+jYX9yoG5RxjGPlGip6q/T/ADT/AER2uKevX+vzvqfcXgX4haP/AMNKL4U03UNc1S8m8Z6trN/qGpQJD9mdLO5gWKBVmkLgAt+8ZkJCRjaMV4NqHxI8HX0/w/0mTVPEtxonhme61CbWLnTYXvbq4mnSUoLf7VtRP3Y+YzMSzu2O1eLUVnTj7JqS3VvwVl+n3a3FUhGqnF7O/wCN7/fd/fpY+gtL+Kvw70/9pqX4lnUPE76YdSk1hbMaJbiYyvI5MJ/0zaFCsP3mck5Gwda53Q/Hfgux8M+N/Bk+o+IYdA1y6tL+DWrTS4Rdl4SxME9qbra8R8xiMTZDRo2DnA8foq4pRjyLb/hn+i+41cm5yqPeX/B/zf3+lvoj4HfGD4Z/CuGya70/UrnUrDxAdR/tP/hHdPu7i9s0VfJiDTyk2bBwWJiLtzw44I5eb4ieD/EXwz1rwrqb6xo5/wCEluNf06bT9OhuUdJIfLEMitPF5eNqncu/gnjgV4/RUyjz3u/6XK//AG1f02KPu7d7/n/8kz1+28Z+BovgC/g5tS8Q/wBvNq669kaNAbXzltmhFv5n2vdsJbPm7Mgf8szXc3X7R3g+38QeKPEVmniO91Hxbqel3uoafqEMPkadHbXCXEiwyiUm4IZBHFuSIKh59K+Z6K15ne/9dP8AJfd6kcqceTp/T/M+gdX/AGmo9+pajpv9qPrZ+If/AAl9lNebdotRG6LC7byQ2CilQCu0YzwBWvqX7S3g6P4y6XqmjaDqFh4D0/SLvSrWyktraW4tWu/Nae4SCTfCzb5iNjHDIoBxkivmeis1FJKPRfrHl/Idt33/AM+Zfie/Q/H/AE7TtR1z/iaahq1lceEL7w/pzW/hqw0T7JLcSB9vk2spXys7mLZ3Zdvl6k8x8L/itDpcGp2Pi7XtSvNEurW3sX0qbRotYhuLeLfsizLdQSW4jLkoYHDAsSCuOfKKKaik+a39Xb/VlSbkrf1sl+iPbPh14++HHhfxH8Qr6UeINF03XtP1DR9N02w0+K9+y21wAEd5ZbqNiyAY2YOf79bHgX43+DvCZ8C6hNN4mm1HwKNQi06xhtoVtdTWWSWSJ5WM2bVmMu2VVWbKooDV890U1pHl9Pwvr+L+/wBLJ681+u/9fJH0FJ+0Vo81va28kOqm1g+HM/hJbYInlJfSFiZFXzMCI/u8t975B8vAr59oopcqTuv61b/NsOlv62S/QKKKKYBRRRQAUUUUAFFFFAHa/BvXtB8J/EjQdf8AEVzqUFjpF5BqCppdlHcyTPFKjiMh5ogoIB+bJI4+U9tfXNY+HfiT41ajrOqXPie48Gand3N9c/ZLO3ttRjeUyOsaK0ssZCuyAsWGRu+UHFeZ0U2728r/AI7/AJL7vUO/me/fCP4/aJ4R+H8XhfVpNX0s2OsNf22qaNZQXF1LaSqguLMO8sZt/MMUeZU3kgspXbkNwfibxh4Y+IGqfELxNr9vq9n4m1e9+26Nb6c0TWcTSTM0q3LOA5AQgKUAyQcgCvPaKUved36fl/kv6bKjLl0W1726bt/q/wCrH05a/tW6bY+D9Ma2j1S01+x8NDQzpdtaQpZ3dysL2sV5PdeZ5kixwOStuYtofJDDcWPi2n6z4X8OaD4a1bSBrJ8e2GpC6uvtYhOmeUj7ovLA/eb8hd27jriuMoo153U+0+vo7/nf8tiWuaPI9v8AgW/rz13ufSXxk/aZ0Pxv4R8WaZokerKPEs9vJ/Zd1aw2tlpCpL9om8ry5XNxLLMdzzOqMQBkcAD5tooqYxUdEAUUUVQBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUqjcwGQuTjJ6CkooA9JX4d2Pge3k1fxXPBfWTL/AMS6zsZ8/wBosVBDhhysYyMnrn8M8h4Njkn8VaYkOlJrTtOMafJnbN7H0GOcngY54zWRJNJKsavIzrGu1FYkhRknA9Bkk/jS29xLazJNBI8M0Z3JJGxVlI7gjoau6urI8elg8QqVVV6vPOat1UVo0rJPTe8mndvZpJJev/FLwTofhXwrcP4esU1GOS+K3eoGcStp7L0gGOgJJGTntnnGPHKkW5mWGSESuIZGDPGGO1iM4JHcjJ/M1HRKSk7pWDK8FWwFB0a9V1JXvzO93tvdvbbSytbS929Dw7Y22peINMs7y4W0s7i6iimuHOBEjOAzk9gASfwr3P4nafNrPx8l+EdnpGh+EtAOu2+jWj2+hW32qOAyKkU7XLJ9olLqVkJMuH3ehFfPldLqHxM8Yat4dh0C+8V65eaDCqJFpdxqMz2sapjYFiLbQFwMYHGOKS5bxcldJ6rvt+VtPXoexr71uv4b/ndX9D6B8F/s8fDvxtp2s615fjDQNL0HUNQsby0vbu2luroW9pJcBoz9nRY3HlFXiIfG9fnHfpfFf7JPw08NahdyNqHit9M06x1W8vALm2aaT7LBaTqsf7kKMrcshz1Khvl+7Xy9q3xY8b69cQ3Gp+MfEGozwwy20ct3qk8rJFKoWWNSzkhXUAMo4YDBzXUeAf2iPFfgzUtZv7rV9Z1i8vdKvLC2nm1aVZLKedET7SjHcd6iJOmCdijcMCsnFtOz+z+Pf5/gNOzTt1f3PZfLv1R2Xib4A+G1+HeseKtDGuxSLoGk6xZaXeTxzyxvdXr27pIUhTzFKoGRlVM7gSDXU6f8LvAPw78ZfGXwvqXh/VtebRPDK3sM1zfW6SxKy2TuEDWreXMGlfEo6JlShJLV882nxQ8ZWHiS78Q23i3XbfX7yPyrnVYdSmW6nT5fleUNuYfInBP8I9BVez+IXinTvETeILTxLrFtrzII21SG/lS6KBQgUyht2NqhcZ6ADtVW0ku6l8r3t934k6pp72t87Wv9+v3nr3gD4S/DXUvAo8aeLtdvtB0PUNbk0yzhF1K8lnHGiuxkkh0+ZZpSsgIQrACEJDcnZQvvh78M/CXw78Ja5rdz4m1SXxE2qRx32kSwRRQC2maKGUW8se6QPmMlDJGQN3zZIA880j4teOfD93qN1pfjPxBpt1qUvn3s1nqk8T3UnPzysrgu3J5bJ5NYV7rupalY2dld6hdXVnZmQ21vNMzxwGRt0mxScLubk46nk0pJyldaK36L9evnr0LTtvq7/wCf/A08vv8AtcfC/wAIa74ZstRsvD2lR6jofw7EupW6WCYna40ozW94eMGVZo5gXxuy8fNcbp/7JPhi8t4bS7ur/TNe0/VtD0/W7KHUzeeUL6REdNxsIY0kUSKw2SzgYIPYn5oh8eeJbeWWWLxDqscktiNLkdL2UF7MAAWxO7mLAA8v7uAOK07j4xePru1tLafxx4kmtrRo2t4ZNWuGSExsrRlAXwpVkQjHQqCOgrVtOrzvZu9vLmbt807f8BEWahyrfX/0mK/T+mfUc37GPgDWrzTrHRNZ8SWtzJJp9xPLqDwzKbWc3YZESOIN5v8AobEdQPMVcNjJ+cvi54c8A6Gukv4J8QSanNIJU1Cxkknn+zMrDYwmlsrTcGBIK+X8pT7x3cc5L8SPFs+zzPFGtSbDCy7tQmO0wszwkfNxsZ3Zf7pZiMEmo/FXj7xP46ktn8S+I9W8QvbBlgbVb6W5MQbG4KZGO3OBnHXArnjGd9X/AFZX/G7NLr8P8/6+XYwaKKK1ICiiigAooooAKKKKACiiigAooooAKKKKAPf/ANljTPCd5ovxJn8YabaXmmR6ba25u7i3SWSw8+6SBriIsMo6CTdlefl/CvaPEXgDw38J/DfiJdY0rS9P1DRvC3h1Jr+DwxZas63L3VzFNKsFzsRmk2gM5IYgA8kAV8SWetahp1ne2lpfXNraXyLHdwQzMiXCqwZVkUHDAMAQDnBANdJY/GTx9pl413Z+OPElpdNBHatPBq1wjmGPPlxlg+di7m2r0G4460mryjJdPx3/AM/n12IjFx5r9X93w/5P+rnd/Gr4c6Pb/HLxzp0ut+HPAdrbXaS21lNFevE0csYkURiC1k2EBlLIwUKW2rkDj0TwFP4I8G/Bz4aax4pi8MHSLyTW11ezutAF1qesIjBYkt7gQFonUsAGaaHbuU5O3A+Vry8uNSvJ7u7nkurq4kaWaeZy7yOxyzMx5JJJJJ65qa51rULzTbLT7i+uZ7CyMhtbWSZmigLkFyiE4XcQCcAZwM1MY2io+Vi5Xk7n2Fqng/QZPg/JLFo/hq7gj+GsGqHSLTTII9YivHnIXUTdGJGeJAuHCzMTjBjw2Th/ELwDpVr/AMJt4P0FbHQrDw14Yi1e1abwtZ3kusW5jhd7g6lIfPSR5JmA8sbFVMDGMV8zR+NPEMUsUqa7qaSQ2R02N1vJAUtCCDbg7uIiGYbB8vzHjmrq/E/xknhn/hG18W64vh7yzF/ZI1Kb7JsJyV8rdsxnnGKVSLkpKL3v9/vWfna63ve1u1iLa5b9P/tfu2e1vzJL7QtJ8MR6XqcPiPw/4tbzo3m0aCLUEIXG4rKzwwjbxtPlybueD3Hr/wAbIo4Pil8MNR8P+CNFu7/U/DGmaifD1jpWLS7upfMYg28O0vk4+XndtAbcMg/PthqF1pV9b3tlczWd5byLNDcW7lJInU5VlYcgggEEcjFdZffGr4hald2N1eePPE13dWMhltJp9YuHe3cqVLRsXypKkjIwcEitr6Lyd/laz/z+XmKz19LHsWqa1oGl/GL4b6TceGvCes+JYY4dM8R/Z9OiXThdS3OMLBBtgeaGNtjNtaMtn5W2A15N8etNtNH+NnjuxsLWGxsrbW7uKC2toxHHEizMFVVAAUAcACoJvjh8RrjULa/l8f8AiiS+tkeOC6fWbkyxK+N6q2/Khtq5A67RnpWD4m8X69421Bb/AMRa3qOvXyxiFbrU7uS5lCAkhQzknALE46cmsVF6N+fpq76eS6eXXQ0TSTXe34XX43MiiiitCAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoopVbawOAcHPIyKAL+g+H9Q8Tailjpts91csC2xcABRySSeAB6mk0PRp9f1i10y3eGO4uZBEjTyBEBPqT/AJPaut174mQ3WiSWWiaPb6BLfqDqk1rx55HGxB/BGepUdST755LQZtPt9Ys5dVgmutOSQNPDA+x3X0B//V9R1q7K6R49KtjatKrVqU+R292OkpXSer15Xd/Cr7atq9lrap8O9d0PR7vUtSs/sEFvci1K3DBXkfnOwfxgY6j14zg45qvQ/HnxTh+Iej+VqGl+RqNrPmwmt5TsSA/eRwfvHheRjPtjB88ola/uhldTHVaDlmEFCpfZbW0tZ3d/w1uraXb4YZLiaOKJGklkYIiKMliTgAD1rufHvwnb4c+faar4q0CXxHbFEuvD9k9zNdW8jAFo3kEH2fcmcMFmOCCOSMVyGiatLoOtWGpwJHJPZ3EdzGsq7kLIwYBh3GRyK9e8QfEzwRL8Wrf4oaS2vHWjrVvrk3hy9sYBbLIJVlmjW9WcsV3BtpNuDgjI4yUkm4puyb1/C363/Q9i/wAWnp+N/wBLepwGofCTxzpF9YWV94M8Q2V5qG/7Hb3GlTxyXOxdz+WpTL7V5OM4HJpJvhL45t9dj0SXwZ4gi1mSH7SmnPpU4uGi3bfMEZTcV3cbsYzxXuvgn9o7wT8NNXsv7Lk8Va7ZSeJLrxFd3mqW0EV1Az2k0EaRqs7iRyZizylkzsGFrE8I/tIaZ4f8CaTp0o1r+37Pw7r+ltqEO3P2m+mWSGQSeYG2rhizYyCeA1Yc0ui/q17ffp+JTstv61tf7tbf5HkEXwv8ZTeJpfDkfhLXZPEMMfnSaSumzG7RMA7jFt3gYZTkjHI9ah0v4d+Ktc8QXmg6d4Z1jUNcs932nTLWwlluYNrBW3xKpZcEgHI4JAr3bR/2kvC8ehR6NdWl9apJ4S0vRJdRk0Wx1Ux3NpcSSH/RblvLlidZF5LKymNSBxXO3Xxp0XxVY+PNC8Taxrcll4gm0+5j8Qabolpb3L/ZU2JBPYxzpF5W08BZflaJGwckDRXu12/HX/LW3XZErVXen/Df56eRzPh79mz4jeJ/Cuu65Y+FdWePSLiO1ksv7OuTczyM7I6xIIzuMbIfMGQVyM1RtvhLdR/CvW/GGqf2vpT2d1Ha2dvLoVy1teEyFJc3ePKiaMgja3JII61qeBfGnhHRvCHxA8Harea1HpGvS2ctnqtnpsMtwv2aV2HmW7XCKN6uc4lO0j+Krvgzxf4B0X4ReMvC19q3iQaj4gntZVkt9Et5IYBbSSsgJN4pbeHXPA2HON/UxJySk15W/wDJb/8At2j+XQdtbf11/wCBqefL8PfFLeFT4mXw1rB8NjrrAsJfsf39n+u27PvfL168datar8LfFvhu1tb3xB4b1jw5pVxOtuNT1bTbiG2ViT1by+cAMcKC2FOAa9Vj+OvhaHTZtYVdfl8TS+C18If2NNFEdNQCJYDMJ/N37Ni+b5Pk/wCtJ+fHNWPiJ+0N4f8AH1x8UopRraWfiptFTT2mhjka0jtCPN3IZcA4LlVU4OeSuSaupeM3GGqv+tvy1+dugtLXf9aL9brzt5nnnxA+DNz4Bj8OhPEej+JLzX7eG7sLHRY71ppYJSyxyYltox8zIV2535I+XHNJ8RvgvrHwv8GeD9Z12G+03Udfa9D6RqNg9rNaiB0UMd5ywcSZHyrjHfNenL8dPAeg/EL4Y+JdLl8SainhfSI9BuobrTLe0doRHOhuoXW6kxIPPBWMgDKffGa4H4rePPCuufD/AMCeFfDDa1cp4da/e4vtZt4oGuWuHifcqRySbQCrjaWPGDuOSAtb6bXf6/pZ/Pydkr2V+y/4P9f0/LKKKKoYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB1HgP4e33j2bUmhu7PSdM0u1N5qGrakzrbWkWQqlvLR3ZmdlVVRWYlumASOm8Zfs9+JvA2j63quoTWLWGmJp8wkjaVTdw3qyGCWJXjVgP3ThhIEYEY21d/Z/+Mln8K5PE9nqcMn2HWrNI47yCwivZbK6ikElvcLBK6JJsbJ2swwdrc7cHu/Fn7Wj3HhvxDYeG9T8UaZqktppGn2GuG68q8uY7Vrl55bmRJNyvK9wTtUuPVu5VTSPu76f+la/O34a69FC7k77f8BW/X/gdeavP2P8AxzaxaZIJ9KnS+1G309WilmxF5ttHcCd8xDESpKAzDJDAjB4Jxtc/Z21LwfHdzeKvFHh7wvbJqNzptrNfNdy/b5LdykzwpBbyP5asMb3VBk4HOcd58bP2tJPG1hpMPhS61jTpHtZrXWn1COIm7WS3s4mwd7nJNu/zfK2GHPzNXUR/tY+Dbr4kaJ4qa68X6E2h6pfzJDplrC41Sxubk3PkTj7VH5ZDswIzKrAKcAjFVLpbq38lZa/f+b001UXeipP4rLTvo7+nT/PXTxE/s/8AiBfFVtoxv9LEFxoH/CTrq/mS/Y10/wAkymVj5fmDG0pjZnfx710c37H/AI2t9W16wkvNGT+x7G2v5Lgzy+XMkzMqrH+63Fw0coYMFAMbcnjNmX9ojSpvgRdeF3069/4TJhJpMOrDZ5a6PJcrctCW3bt28FNuNuxjz2rpI/2uILj4n+KdQvZNYl8G3lpdRaXpqwQ+bBJKIgC/zj5Rsb+Ntu9iBlmzn7zlZaLX/gfg1801tqFe8IS9nq/+G1+bT+TT30PK/wDhROq29745hv8AWtH0y38G30Nhql5cNcPFukmaFXjEcLOyhkOflBwRwelbWkfsy6l4jk8LDRvGHhnVIPEd3dWdlOn26Fc28JlmcrNao5RRhdyKw3ED1x0Hjn9pxvH2k/FnSdU1XxJfaZ4m1K1udDt76bz49OgjumldfLaXbGdhUBUyCVAyAAai0n9oHw9ofx38JeILDTtQtvAfhWyfT9L00RRtcCMwSK0joX8sySTStI53cg98VEXPkV9/+Br+OlvPfQ1qJKpJR21/4H9eXmcTq3wVGhLod5f+NPDtv4f1u0mutO17ZftbTtFN5UkOxbUzK6tz80QXHRj0rV1D9mnWtL1C8W48R+Ho9GsdKttXvddaS5S1tIrjP2eORGgE/mvgERiIthgemcamufGDwX4/1f4Y3/irStSjh0G3a11vS9Kt4Y7K5VHLxm2iV0SLzScSqqoByy5NQ+H/AI9Q6zcfED/hLbrVtNuPFF7aarBrGgIstxpt1bSs0ISN5Y8oEcoMSKU2JjOK11s+93919O2ttem1mlcj1fb7+v3bfO62MHR/ga2r2M+qf8Jv4XsfDy6hHpdtrd617FbXl0yB2jjX7N5oCArveSNEG4fNzU037PWqaLoupal4o8Q6H4PjsNYl0KSHVPtcsjXUcayMFFtbzArtYEMSAfyr0j4pfH74f/GgWen+JJ/FkVlpV7bXVrqcFlbzXd5H9jgguo5Ue5Cxsz26usm+XG4gr6reftT2vijw/wCIopfEni74e6tqniabWRN4VgWZWtmt44Y4JG+1wMSBGCTggkZwM4Ezuk+XX/h4fo5+llp300tHu9/LR6fld97/AC+Y2AViAQwBxuHQ+9JTpG3SO25nySdzdT7n3ptWTLdhRRRQSFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRSqNzAZC5OMnoKAEor0lfh3Y+B7eTV/Fc8F9ZMv/ABLrOxnz/aLFQQ4YcrGMjJ65/DPIeDY5J/FWmJDpSa07TjGnyZ2zex9BjnJ4GOeM1fK07M8ilmdDEU6lah70IK/Noot2baTdtureiel7p2xaK9j+KXgnQ/CvhW4fw9YpqMcl8Vu9QM4lbT2XpAMdASSMnPbPOMeOUSi4uzDK8ypZth/rNFNRvbW19O6TdvnrbXZoKKK+kP2tdS8P+HfG2o+H/Dzw6VdadcWkqafp/hHT7BLf/R0fcmoQv9okO5g21kAyf9kZzvZ2PX8j5vor6Z+JPh3VPjN8TPgppl291reoav4O097qa41DypZFD3LyyPcOkpGFVmLFHPHCscA3/wDhmz4esNJ11dV1qfwreeGdV11lsLnzZmaykUERyz2duSrq38UIwQSGYUpS5U3Lz/C/+TJUk7eaX42/zPleivf2+FHw0s/EWhtqep6roum694ag1fTtO1TUY4ZPtck5j8mW8W0dI4yis6yNCqkEbmQcmbRPgB4d02Pxtqvjhrzwxp2h6ja6cmnSaqZniaaNpA8t3a2FyrDaFCkRKrF/vAgBq62en/D8v5/mr7jurJ99vuv+R89UV9WfBv4R+E9B+IXgbxFpk2t+NrXU/Gv2LQZtLP2WOC3tnjkNxdCSBnc7WDGMCPCxSNv5+X5y+IH/ACPniT/sJXP/AKNapctYrum/TSL/APbvw+60rpvt/m1+aMCiiiqJCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKK6b4d+ILbw34miub2aO2s3jeOaaTQbTWSgIyCttdERk7go3blIBOD2P1Hp/wt8LS/tB32u3mn+GRpjHSzpHhW6vrKwF0bqGM/aJrSZo8BFJkaBEOZHRF3qGNVbVdv6/r/gakt7+Sv+X+Z8bUV9ReGrXQ/Bv7UGveFNYttJfS7/xQY7PSrPw/peswyxvcuiW7TEs9moBRSsSs65PyBlFeB694H1m11bxSLfSJprLQbx4L+40+OSe1s/3rIoaUjhSykKXILY9ayjNSUX3X5Wv+f/DGnK7tdV+t7fl/lfU5mivqm4+G+hx/C3Q9A0K8sLTWbzwZN4svri68M2959pwGaRTqErmS2KCPy1WGMAMMs25zjLvLXQfjF8K5x4Rn0vw1/wAI/pmj2uq2+q+F9Ps0luHkjgeddVUtKC0vzkPsyu7OfmFW9G4rXW34tX9Lq3fukTH3oqXf/JNL7mj5qor7Z1P4L+H7vwX8P9O8L6F4T1waf4yg02XUTrNiZddi8uNpGklhkkcI8juRCu944grFOteY/tH6bod54B0jWvDltYXdjD4g1HTJ9Uj0W30e5jkXYUtXt7eKNJEEYDrM2XJcgpD9ww5KLfk7fhGz/wDJktfTeyHBOX9f4v8A5H+ldnzpRRRViCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAfJNJKsavIzrGu1FYkhRknA9Bkk/jS29xLazJNBI8M0Z3JJGxVlI7gjoauaD4f1DxNqKWOm2z3VywLbFwAFHJJJ4AHqaTQ9Gn1/WLXTLd4Y7i5kESNPIEQE+pP+T2p6nPOtRgpxlJe6rtdk76tdnZ/cyotzMsMkIlcQyMGeMMdrEZwSO5GT+ZqOul1T4d67oej3epalZ/YILe5FqVuGCvI/Odg/jAx1HrxnBxzVDTW4sPiKGIi54eSkr6tO+tl28rBXW6x8XfHXiC2tbfVPGniLUre1mS4t4rzVZ5UhlT7kiBnIVlycMOR2rkq9G+I3wUuvhzrf8AYEviTRtc8TieG3bQtHivpLkNKgZMF7ZI2yGQYVycsAAecI6TL1L40fEHWJbKW/8AHfia+ksZxc2r3OsXEht5gCBJGS52sAzDcMHBPrXSeC/2j/GHhrWtW1fU9c1zxBqd1o15pVneXesTedYPOqDz43bcQy7FOAVJ2jkYFctffCPx1pk9rDeeC/EVpNdRSTQRz6VOjTRxqGkdAU+ZVUgkjgA5NN8F/DXXPGWsaHbQaTq7WGqXJhW+stLmu/kQr57xpGuZTGrbmVeenTNCs9F/V9BSstX/AFbUSz+LHjfTdevtbtPGPiC11q/VUu9Rh1SdLi4VQAokkD7nAAGMk4wKh0f4leL/AA9rF/q2leKtb0zVdQJa8vrPUZop7kltxMjqwZ8nnknnmr+pfC3WZvHWveHfC+m6x4qOl3TweZa6RPHOyiTYryW5UvEScDa3IJx1qrY/Cnxtqmu32iWfg7X7vWbAK13p0GlzvcW4OCDJGF3IDkYyB1FKLTSa7fgOS5W4y76+v9bC6d8WPG+jm/Nh4x8QWRv7j7XefZ9Unj+0zZB82TD/ADvkA7jk8VzNxcS3dxLPPI808rF5JJGLM7E5JJPUk966XR/hV418RQ3UuleD9f1OK1lkguHs9MnmWGRMb0cqp2su5cg8jIz1qXT/AIP+PdW0+C/sfBHiO9sbhPMhurfSbiSKRdu7crBMEbecjtzS03/qw9djkaK30+H/AIok8Kt4mTw3q7+G1ODrC2Mpsx82zmbbs+98vXrx1q9qHwi8daTHZSXvgrxFZx3twtpavcaVOgnnYkLEhKfM5IOFHJxVeQHJUV3/AMVPgX4y+Dl2kfiPRruCzkWHy9SW1mW0d5IhJ5SyOigyKMhl6gow7VwFAuifcKKKKACiiigAooooAKKKKACiiigAooooAKKKKANjwv4y1/wRfyX3h3XNS0C9kjML3Ol3cltIyEglCyEErlQcdMgelVZtd1K41ptYl1C6l1dp/tTX7zsZzNu3eYZCd2/dzuznPNdN8PfhhcfEDT/EWo/23pegaboNvHdXt3qv2gqFeVYlCrBDK5O5h/D3q1r3wP8AF+k+Lo/Dun6XN4qvJ7GPU7WTw7FJepdWbgFLiMKu7Yc4+ZQQeCAaG7NXEmmml/W3+a+9dzK034qeNdHg1KGw8Ya9Yw6nLJcX0dtqc8a3UjjDvKAw3sw6lsk96x7HxFq2l6XqGm2WqXlpp2ohFvbOC4dIboIdyCRAcPtPI3A4PSrN94I8R6WqNe6Bqlor3baepns5EBuVIDQDK/6wEjKdRnpV21+F3jO+t9WntvCOu3EGkO8eoyxabMy2ToMusxC4jKjkhsYHWlpuWr3st/1/pfgV0+IHiiPwq3hlPEmrp4bY5OjrfSizPzb+Yd2z73zdOvPWjWPiB4o8RaHZaLqviTV9T0ax2/ZdPvL6WW3t9qlF8uNmKrhSVGAMA4roJPhvpk3wZfxzY63dzXdtqkOlXmmXGnLFGjyRySBo5hMxcAR9405b25wbn4d+K7PwzD4juPDGsweHptvlatJp8q2j7jhdspXacngYPJpvdxfdff0/PQlO6TXW9vk7P8VqZ0PiHVbfT4bCLU7yKxguftsVqk7iKOfAHmqoOA+ABuHOAOaveKvH3ifx1JbP4l8R6t4he2DLA2q30tyYg2NwUyMducDOOuBWjefB3x7p/wBl+1eCPEdt9rma3t/O0m4TzpVDFo0ynzMAjkqOQFb0NQ6v8KvG3h82o1Twfr+mm6uVs7f7Zpk8XnTsMrEm5Rucjoo5PpRo/wCvl/kGhy1FdbL8I/HUGupokvgvxFHrLwfaV05tKnFw0W7Z5gj2biu4hd2MZ4rc8Gfs7+P/ABvr2t6La+GtSs9S0eze8vLe+sLiN48RmRIiojJEkgB8tSBuPQ0dLj8vT8djzair+uaDqfhfVZ9M1nTrvSdStyBNZ30DQzR5AYbkYAjIIPI6EVQoAKKKKBBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFKrbWBwDg55GRSUUAd5r3xMhutEkstE0e30CW/UHVJrXjzyONiD+CM9So6kn3zyWgzafb6xZy6rBNdackgaeGB9juvoD/8Aq+o61QoqnJt3Z52Hy/D4WjKjRTSle7u79vibvotFrokktj0Px58U4fiHo/lahpfkajaz5sJreU7EgP3kcH7x4XkYz7YwfPKKKJScndlYHA4fLqPsMNHlhuldu3pfbv6thX0n8TP2itH8YfErQ/E9t4s8bXei2es6fqB8J6haotlbJAEDtCReOpc7GIHloP3hyw7/ADZRU9Uzv/r7z6EuP2norQ3GoaempT60vj+bxTA99tKPZPCYjbu28sGZfkKgFdv8XFYPiT4leDNc8f8AhWGyOuaJ8PvDCZ0+BbSK5u2kM5uJWaIzoil3bbkSHCxpwcYHjNFKEVT5XHp+iSX3JaEziqilGW0tH6Xb/V+Z714l+NXhZdc+MN/oFxr8n/CdWjLD9psorVraSS8WaSJylw+6Pywy7hyxYgoBzWN4T+K2j6t4Au/C/jjVvEsL/wBs2mrQ6tpcaXs7rDA0It3Es0e0Ku3YwZtuCNuK8eopx9xJLpb8Hdfcy5vnbb3bb+9JP70v8j6b1H9rDTNW8RaTqb2eq2McHxA/4Sq5trYqVezEUEaJneN822J85AX5zzyQOz8O/tq+EtFurFPsXiJNNtrXTbcWsMUIQeQ960gCecBg/aIMevlnONq5+MaKhwTgodFb8FFL/wBJX49xuTbb7/5t/qz6D179oXTdW+HOm6dp+oXnh/WLfwyvhy6s4/C2m3cd1GoKEDUGdbmJJFwxUK21icZ6034n/tEaN48T4sJHDq7L4oGjrpS3ioRbLaY8wP8AvDsBy23Zu+8c4zXz9RRKKlJyfX/O/wCZOySX9f1Y9N+Nnjbw18StRs/EenXGrQa5JZ2VpeaZdWES20Xk2yRM0dws7M+WjBAMScMeeOfMqKKvuwWiUeyS+SVkFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHpnwl8beG/D/hfx5oHiSbVLSDxHY29rFd6VZR3bQtHcJMS0bzRAghMcN3r0yx/aY8M+VrugGwvtO8Oto2m6NpN/PpFjrFyI7OWRw1za3JELmQzOx2sPLKoAWwTXzPRQ9dwiuW9urv8Al/8AIo+hfDv7SGn2/iTxFeeKm1HxhB/aFrr+jXDafb2Lf2lbRCOEywRSGOKJk2q+wucRJwcnD/B/7R9nY+A9AsrrVL/Q/FWj3t9djVovC+m62129w4kMvmXTpJBJnKkoW3AKeoxXzvRU8qt/Xp6dF5aILL+vn/m/vPXdN8ZeBovgNqfhC51PxAmu3upxawTDotubVJY4ZYxDv+1hirGQHzNgIx9w11uv/HzwtqDeMNb09ddbxH4q0O00OXSLq3iXTrIIsCyOkwmLyACD92piTbvOScc/OtFawly1Od+X3Wtb5rT/AIIkuVJdr/jLm/8AStfw20PuPxx8fvDHwX/aI8ZzTTeINbvbzXbefUg9rEiWcVvbyrGlsTOTI26VRuYRhVBABzXLWn7ZXh6C18DfaLDXNQutEuLBruS4WFvkj0uWzmeIu7hnEkzSqHUBsfMVJNfItFc9OmoU+R67fgrfl/w5UvefN8j6Lh/aM0/Rm1SG21vVtRs38NanpGmJa+GNP0L7DcXTRNuC2kxDKfLyzfeB6KcmqFj8evDq+LvDl5c2uqJpsPgT/hEdRmjgjedZTbyxGaJDIBIoLJgMyEgHpxXgdFVyLr/XxL/25h15vO/zTT/OKL+uQ6Zb6rPHo15d3+mqR5NxfWq2sz8DO6JZJAvORw7ZAB4zgUKKKsAooooEFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUqjcwGQuTjJ6CkooA9JX4d2Pge3k1fxXPBfWTL/xLrOxnz/aLFQQ4YcrGMjJ65/DPIeDY5J/FWmJDpSa07TjGnyZ2zex9BjnJ4GOeM1kSTSSrGryM6xrtRWJIUZJwPQZJP40tvcS2syTQSPDNGdySRsVZSO4I6GrurqyPHpYPEKlVVerzzmrdVFaNKyT03vJp3b2aSSXr/wAUvBOh+FfCtw/h6xTUY5L4rd6gZxK2nsvSAY6AkkZOe2ecY8cqRbmZYZIRK4hkYM8YY7WIzgkdyMn8zUdEpKTulYMrwVbAUHRr1XUle/M73e2929ttLK1tL3bktwGuIwRkFh/Ovrr9oKHwBB4k8TeCJIPDr6vP4jsoNHg8NaGun3GkW+cTrcTiCJZdwcBVzKAecjAr5CBKkEHBFXr/AF/VNU1l9XvdSu7zVpJBM9/cTs87SDGHMhO4twOc54pO0uRPZNt+esX/AO2tej9T1ZxcoSUXZ20+5r9bnvV18HvhpqHxgv8A4f6S3jGK/wBJ1G8juZpJLa6+321rBNLIsKLGhjmZogiA+YDu3HH3Tc+Hfw/8CWnjD4L+Jk0jXJNL8U6wbNNH1HU4JGinhvIUExkFqBPAwcgx+Wh3Kw8yvnv/AISLVjr39uHU7w639o+1/wBpfaH+0+du3eb5md2/dzuznPNXtW+IHijXvEFprup+JNX1HW7PZ9m1K7vpZbmHYxZNkrMWXaxJGDwTkU6L9m4SerVr+fd/P8N1qzSpaV1Faa/d0+78dmfRvgv4gDxv+2Bpayan4yiuo7+ew0+9u9fgvZbCVnlV3jWazaPyipwIdgx13njHE/sq+INV0/4zXmm22qXkGn6hYar9ttYp2SK62WNyyeaikK+1uRkcHpivKPDvxB8U+EdQu7/QvEusaLfXn/Hzc6dfywSz5O752RgW55571o2fxk8f6fql/qdr458SW2pah5f2y8h1e4Sa52AhPMcPl9oJAyTgHiuenT5aXs31i4/erX/UvnfPKXRtNfK/+fyt5s9E+Fvwh8A33w1tfGPj7xJPpdjfau+lxfZZJ4xbCNFd2Yx2VyJJCHBWJjDkITvOTthvvh78M/CXw78Ja5rdz4m1SXxE2qRx32kSwRRQC2maKGUW8se6QPmMlDJGQN3zZIA8/wBN+MHjzRb3ULzT/G3iKxvNRkEt7cW2rTxyXLgYDSMrguQO7ZNc/e67qWpWNnZXeoXV1Z2ZkNtbzTM8cBkbdJsUnC7m5OOp5NXJOUr7L/gL9fz9LRH3Vrq/+H/4Hfb1v9N/8IVocPjVGk8P2P8AZyfCVdWf/QUMQuDp/wDx8kbceZ5v/LTrv75rz/4weC/h58L7y40TTW8Vf8JVBYaff22oSXVu9oZZo45XQxrGjoFV/lkDk7hgrj5q81b4geKG8Kjww3iTVz4aByNGN9L9jHz7/wDU7tn3/m6deetUL7xDquqapHqV7qV5d6jGIwl5PO7zKIwFjw5ORtCqBzwAMdKuXvTck7at/wDk0pfql8u2hmk1o9f87QX3Wi//AAL5nrv7Sms6h4h0j4Tajqt9c6nqFx4Riea7vJmlllb7VcDLOxJJ+prxKuo8TfFTxr4209LHxF4v17XrJJBKttqepz3MauAQGCuxGcEjPua5ep6t92397uaLSMY9kl9yS/G1wooopiCiiigAooooAKKKKACiiigAooooAKKKKAOt+FXgf/hYvjzS9EkuPsVhI7TX9633bW1jUyTyk9tsasee+B3r1Rh4W+MkvxX+JPie31hdP0N7CPTNJ0W5ityYJGa3ghZ5I5NoVI4uQp6N8pyMeLaB4u1fwva6xb6Xd/Y49WtDYXhSNC8kBZWaMOQWUMVXO0jIGDkEiur+G/xo1f4X+D/GOkaHLe6dqXiAWYj1fT797Wa0EEjOwGwZbeGKn5lwPXpUyu7eX67/AILTtqJaXfV/l/wXv6I9N8VfA/4e/Dqx8ZaprjeKNSstJ1yx021tLO6t7acR3Nr9oImZ4XHmRjKnCgMy4wuciPwb8CvAviS58DWgfxRd/wDCdXeoppeoRvBCumwwSNHGZ4fLk89xt3yBZIwqkYJ614LdeJtYvrW8tbnVb64try6+23MMty7JPcc/vnUnDP8AM3zHn5jzzV7R/iF4p8O6HeaLpXiXWNM0e83fadPs7+WG3n3KFbfGrBWyoAORyBijle/p+ST/AB1vv0FFNRs3rrr83bTbZpW20PeLXxhpHgf9lFG8PJ4m0i+1DxDdafc3mmeIUg+1TJZxfNLstgZLfLkiAtkZb94c8cl4suor39lXwk9jc6pBYW/iO5tZNNvJ7eeD7QLaJ3njZLeORAxkI2M7gAdSea8gbWdQfSY9Ka+uW0uOZrlLIzN5KysoVpAmdoYqqgtjJAA7V0E/xc8c3Xh4aDN408Qy6EIVthpkmqztbeUoAWPyi+3aABhcYGBTnFT5293y/wDkvL/k7LpfyRp7t42Wiv8Ajf8AR/1c9q8VaZqfxp8M/s6aTrGvXEl/rZvrF9V1KV7iRQb8opJY5YhcBVz2A4qBfgn8K9e+KHhPwnoXifUnubzWpdM1Sw8yaSeGFV+WUPNYWyxuGVlaPbJjj5utePa18YPHviTTxYav428R6rYh1kFre6tcTRBlOVbazkZBAIPam6p8XPHOuX2nX2peNPEOoXunO0llcXWqzyyWrEAFomZyUJwMlcdBSt/6VJ/e72/NfO+j2ykm4ySdnay8nZ/8D7jp7fwT4P8AiH438OeGvBCa/pl1dXstvqEmuzQXMUUCkH7SrRpHgLGsjujKdu3h2rr5v+EU+M3iT4l+KtYXVV8M+FNLgGiadpE6QMbWOaK2t4i0sb7AVYMx25DMxwfunxfw74x1jwnLqUulXhtZtRs5dPuZfLR3eCXAkUMwJUsBgsuDgkZwTVGz1i/021vbW0vrm1tr6MRXUMMzIlwgYMFkAOGAZQcHPIB7UJOyXZP731+XT1a2NXZy02uvXlvdq/nt8k9z3nwl8J/hVrnhjVfG1/rOtaV4RXVrfSbaDUbhoriFzbiWYyS29jcrJ8xIjBjiDBSSVIxWV8P/AIWeAvFy65punapdeLfFCapLb6PpcGpx6Ib+zG0JOjXNrIjSMWz5LPG4CnAY15b4V8feJ/Aj3L+GvEereHnuQonbSr6W1MoXO0N5bDdjJxnpk1c034r+N9Gs7+10/wAY6/Y2uoSyXF5BbapPGlzJIMSPIqsA7MByTknvQ09bfL8P+Dr2dvMlaL+vP077bXV/I9V8Dfs76X4qj+Hckrax5evaHrOqam1uUxbNaNOse0+WdiFo4lbdnl8AjIqprPiDUNa/ZE8PLq9/e6nBY+MZbW3jnuWcw262MZEUZbIRRk4AGBnpXmOk/FDxloOhjRtM8W67p2jqWI0+01KaK3G7O792rBecnPHOTU0nxc8czeHf7Ak8aeIX0LyBa/2W2qzm18kDAj8rft2AADbjFKonPnt1tb5T5/ytH0V/IrS6fr+Kt/wT1H49af8AD20034cppXh3UdCm1LwzYXP9ox38EkKKZpVkaaJLVDcTAKQZA6Zwo28c4HxU8C6H4St9L8S/D97648OHUHt7XxJ/bkVy0syYdB9nW2gntZVA3ESA5yCjEYZuEtfiR4tstAt9Dt/FOtQaJbyrNDpsWoTLbRyK/mK6xhtoYP8AMCBkNz1qPxV8QfFPjp7V/EniXV/EL2u77O2q38tyYd2N2zex252rnHXA9K00Uv8At6/yvt+i189SI6Kz10t/wf6v2Xc9f+NXjLRYfiX4UtNRTX/EWr+G4fs+r6/eQDR9S1SYOXgZkmjmYGJDGu+ZWdwuCAMGtv4nfDnTta+MHxq17xVqWs69Z+FXhklitXt7e+1B5XSGMl1h8qNVJBZlhPGAFyc14FD488S2/ig+JYvEOqxeIySx1hL2UXZJXYT5wbfkqdvXpxWtJ8aPiDLrMWrv468Svq0ULW0d82r3BnSJiGaMSb9wUkAlc4JArNR+Bvdc1/8At6z09Gvx8kN63/7d+5dPuPe/jR8LdE8ZfFzVF1XWrjwm1lpOjxR2d3NpgmA+wQ5VzeX1mSy4wdiEZznb0qD4VzeF/hX4G+MF9p3/AAkFzq+jQ2Fv/b+j67aWc8kM12gxbyQJcpCeFDlZpg4GPk5x8zaxrmo+Ib43mq6hdaneFFjNxeTNLIVVQqruYk4CgADsABSWutahY6ffWFtfXNvY3wQXdrFMyxXARtyCRQcNtbkZzg8inZ3vfTX8Ry1UV2UV/wCApL9D7L+E/gzwjrWm/DR9XistYtvHLak+opeWEd/q1/cNLKkrvdyJvtY7aNUcyxMrO7EheWZPKfC+tPpHwV8Wa7r2keHLzSXT/hGvDnmeHNPS4nu2Hz3P2hYBMTBCN28t8zyJlsg143pfj3xNoegXuhad4i1bT9Evt32rTbW+ljtp9yhW8yNWCtkAA5ByABWfda5qN9ptjp1zf3Vxp9h5n2S0lmZorfeQz+WhOE3EAnAGSOappXaWz/z/AMrpPdb9EEW1bvp+F/zdm9OnmfVmsfC/R/hz8LfjX4U02HVWu7EaDaX+v6lOgsriZ7mKQ+VEsQMSjfn5pZCVweK8l+JPhPw38M/iUvhHQ/Duta94i0fUoLeWTWLhHtdVcBcollFCsipK5GzE7EoR3bjg9R+JPi7WNDi0W/8AFOtXujRQrbx6dcahNJbpEpUqgjLbQoKIQMYG1fQVYb4teOGs9Lsz4y8QG00t45LC3OqT+XZsi7Y2iXfiMqpIBXGBwKI+7bXW/wB+33ddNtfIhLRp9f6/HTX7j23xBF4TPxB+GPh3xd4f0688XRXX2fxDb+FktdMtonluUNvbzLHA0UjxKXEgRQTuCF8oSOlPi7Q/iB+2hpuja9aeKNZtNP8AE09paWup+IkuLW2lW6ODHCbUBIMRqPIB6Bcucc/NmvfFjxv4qNkda8Y+INXNlMLm1+36pPP5Eo6SJuc7WH94c1jQ+JNWtte/tyHVL2LW/PN1/aSXDi584ksZPMB3bySTuznJpQvGUZPo3+Nv+CKrF1IzS+0rfn/Vvlseg+PvEUHxi+IV3cal4svdFggiZEuvGuqXOqncJCTHG9taEop3EhPLCjDfNyBXTfs6w6NNq3jvw3daN4f8SRDQNVuotams5JpAYbVzGYPOA8td2HDeWsmQMkD5a8Id2kdndizMclmOST610XhX4leLvAsE8HhvxTrXh6G4YPNHpWozWyyMBgFgjDJA7mlGKjBwXZr7+p0VJ81VVEtFJP5J3t89vxPWPBPwb+Hq/C3w94n8deKZ9EfxDLex20sTT7LYQMIwfLjspxO287ihmg+UrgnOR674B+G3gWDw34M0PUl0i70/xF4Tn1CUxaZDNqAuPLmknvZrx0320EHlrHGiMCzghhjcT8qaX8XfHWi/2h/Z3jTxFYf2hM1zefZdVnj+0ysMNJJtcb2I6sck1n2/jzxNa+GJvDcHiLVofDszbpdIjvZVtJGyGy0IbYTkA8jqBUzjKcXG9r/5Nfrf5dHZrONoyT3s/wBb/lpZ/ldPtvil4H8K/DPTdJ0g2ut6n4lvtItNU/tgX0UOnfv1Em2KDyGeVFQ7PM85curfKAMHG034a6XqmraBY2/xA8MyvqdzHDOzNdWy6ejDLyzSXMEUW1ADkK5JOAM5rFHxE8VDwr/wjA8TawPDfT+x/t8v2P7+/wD1O7Z9/wCbp1561z9bXXM3bS/4diWnypJ62/Hv+ttkfZvjr4B+HfHkPwc0nw/b6H4b0i7u9R0+a/stR0+7v72KIx+XIxglP2iZwjnClljaUKdowD4x4D174YaX441Fo9KutFh/su8t9PvPGLprFvBfHAhmmt4rVflCh12mOYB2U4IXNeVr4k1dINMgXVb1YdLkaawjFw+20dmDM0Qz8jFlUkrgkgHtW9P8ZPH91rNrq83jnxJNq1rG8NvfyavcNPCjfeVJC+5QcDIBwcVnaXV9/wAV/XoFtW0u3po/8rfd5n0V4v8Agb4J1bVLvXda1O00+20jwrpV7rC6PbS6XBNe3MrxrL5cdnO1uhiRH2/ZVyXQlY95x4NrfgnwbceNtZstC+IGmWvhyDy3stQ1m3vyZwygtGPKtGYlGypZo4w2AwAzgc7pfxA8UaH4gute03xJq+n65db/ALRqdrfSxXM28hn3yqwZtxAJyeSKztb13UvE2qXGp6xqF1qupXBDTXl9O000hAABZ2JJ4AHJ6AUJO9/X+vkUtFb0/BL89er3PqD9nXwz4fsfCPh99ZtdHuJNa8XSaZp91caPDqMerhYVxbSNPbO9lEZDGFmjzIfOfMWEDrc8B6R4H1uxl8OTW/h3TLbSdD1ZvEumSaHJdapFeRGbFxHqBiYRxJiHafPXJG0oxcZ+ZvDPxG8WeC7W5tfD3ifWdBtro5nh0zUJbdJTjGXVGAbjjmon8deJZPC6eGn8Q6q3hxG3ro7Xsps1bcWyId2wHcSenU5oqRc01fdW/wDJbX+Wrt1drcrV2oWjZtap/q3+Oz+e6sl9RL4N0L/hUjaKNG0VfEA+Hw146c+mxFiDJv8A7QGpeR54mC8/Zs+XyFEmBsqp4p+HGk/C74OfHLw5ptlrUk2lz6HZ3mt6hMn2W9m80O3kxLEDEB5mcGWQlWQ8Z5+bB8RPFQ8K/wDCMDxNrA8N9P7H+3y/Y/v7/wDU7tn3/m6deetS6t8TPGGvaOmk6n4r1zUdKSNYVsbvUZpYAikFVCMxXaCqkDGBtHpSnHmm5J9f1uv8vPySSBXUUn/WiX6X/wCC7nTeEfhDpvir4ieEvDNl430bV11u+S2mm0uC9DWikjJIuLeIMSM7QpbJHOMg1v8AjHSfhz8Pdf0O88L+InmvIL2e31SwvNPOsm2jChVk8m9sbON3yZFMTKdpVSHz08Zt7iW1njngkeGaNg6SRsVZWByCCOhB7119z8aviFealZ6jcePPE0+oWQdbW7k1i4aWAOAHCOXyu4AA4POBmr7W6X/T/g/eJXu77W/z/wCB9x6r8UdS0Twz488EeILWCx0vQ9a8MQSyXaeD7CeW4bdIrztpkwW3idpI8fu3I2AMrtuIPSX2h3En7R15pGjaX4Z0XwldWdrr9/Nd+HtPuPsWmraxySzslxbN9mkZSWMSKFDyADcMMfnq0+KHjPT/ABJd+IbXxbrttr95H5VzqsOpTLdTJ8vyvKG3MPkTgn+EegrP/wCEw17z9Wm/tvUfO1cMuoyfa5N16GbcwmOf3gLcndnnmkly6xWuv5t29L2vttsU7P7kvyu/Wyf379/qr4WXXhPxX/aHiy78OaD4d07xB46h0zTY/wCwba/V4/LDLYtBJC6WqFWXdcQkvuc/u3Cjby3g28m8E3HxI1HX/DXhb/hFPCNxd2EOmXGhWF2bjUZZZEt7UXUsHnyIh3yFt+4JCOgIFeDeFfiF4p8CrdDw34l1jw8Lrb9oGlX8tt523O3fsYbsbmxnpk+tZ769qcmj/wBkvqN22lfaDd/YWnYweeV2mXZnbv28bsZxxUci2T0tb8Ir8LO3a+292m73fe/4t/ql6ddrfTVx8N9Dj+Fuh6BoV5YWms3ngybxZfXF14Zt7z7TgM0inUJXMlsUEflqsMYAYZZtznGx4u8E6NdfDXWvD9rpOh2nifTfDGkXt7Yf2bBEmmiR4jJdpqIt/OnkZTEXhkcKonk2yTbML8up8QPFEfhVvDKeJNXTw2xydHW+lFmfm38w7tn3vm6deetPvfiP4t1Lw1D4du/FGtXXh+EKsekzahM9ogX7oWIttAHbA4rV6ttq93/n+GqVvLS3SY3jby/+1/Ozv69UrP2vSfCPhX4b/tQeDPB+l2OvPrWkeKdNt7nVtSvIhBdYlj3vHarAGjRmO5CZn+TBP3uNuP4A+D/il4qh1GwvdZ0O2uPEOr2l9FqEiTy30drALh5bRYoNyEnchTbOU3KcuRtbwCb4qeNbiw0uxl8Ya9LZaVJFLp9s+pzmOzeMYiaJS2Iyg4UrjHbFM1T4n+Mtc1qw1jUvFuuahq2nnNnf3WpTSz23Of3cjMWTnngilK7UVfVX19eXW232dttfIq61stNPwvpf5776HrGn/CH4ZeKPFwXw94ovtT0XT9Bvda1axsWkmut1uSfJgnntLYMXQq2TD8m187sCvFvElxol1qW/w/p+oaZp+wDyNSv0vJd3c+YkMIx042ceprRvvih4y1TxBZa9eeLddu9csl2Wupz6lM9zAvPCSltyj5m4B/iPrWd4k8Wa34y1L+0fEGsahrmobBH9q1K6e4l2jou9yTgZPGe9Ryu6/rv/AMBW8r7i7/10X63d+tzKoooqxBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRSq21gcA4OeRkUAX9B8P6h4m1FLHTbZ7q5YFti4ACjkkk8AD1NJoejT6/rFrplu8MdxcyCJGnkCICfUn/ACe1dbr3xMhutEkstE0e30CW/UHVJrXjzyONiD+CM9So6kn3zyWgzafb6xZy6rBNdackgaeGB9juvoD/APq+o61dldI8elWxtWlVq1KfI7e7HSUrpPV68ru/hV9tW1ey1tU+Heu6Ho93qWpWf2CC3uRalbhgryPznYP4wMdR68Zwcc1Xofjz4pw/EPR/K1DS/I1G1nzYTW8p2JAfvI4P3jwvIxn2xg+eUStf3QyupjqtByzCChUvstraWs7u/wCGt1bS7dGpkdVHVjivVPiX+zrrfwz0nV7+bW9F1xNG1GPS9Uj0lrkvZTyIXQP50EYZSFI3IWGcCvLIXEcyMeisDX094+/aw8P+MNUu74aJeI9h4vtfEmlRx28Fsl7AiqskF6sbYaQbAUmYSuNxXIBpSV1FJ2d9fS8P0cvu30s/Y63fn+Tt+Nv61XgetfDPxh4buNNg1fwprmlz6m/l2MV7p00LXbkgbYgygucsvC5+8PWpdY+E/jfw9KY9V8HeINMkFvLeFLzS54j5EePMlwyD5E3Dc3QZGTzXvbftQ6DY/EOx1e31PWL3w62q3moXGlx+FdL0u4t2ntpoBOtxby5uJkEx5cJuxkkHpr33jnwV8P8A4V/DSOBteu/CuseHfEmhyX0lrAt9G88sYaYW4l2YEgOE83O053E8VjzS7f8AD2bt+Wuzv5Mbsmkv613+7pv+B8yaZ8OfFmtahaWGneGNZv767tBf29ra6fLJLNbE4EyKqktHkEbxx71JpPwz8Ya/rN/pGl+FNc1LVtPJW8sbTTppZ7Yg7SJI1UsmDxyBzXvp/aR8DQ28+h2Vrq8GkN4X07QotU1DQ9P1KdZbS5ll3PZzuYXjkWQH74KMi43YzXK6L8bNJufF/iq58U6/f63oGs/ZI7mzk8HWJXUo4YjGm+KO7i+yNGDhGgkLdCSMYN6ttev5/wBdLkJvlu1rp+Sv+vXocn4Z/Zx+Ifi7wlrniDTfC+qTwaTcR2r2q6fcNcXEhdkdYUWMhjEyESDIK5Gag0j4My6p8P8AW/FcnirQ9Oj0V1gv9LvI75byCZ2kEURC2xQs5ibGHwON5Wtrw18QvBMOi/EzwzdW+saB4d8S3ltc6a+n28d/NZJBPI6ROsk0W8bJNu7fkFR96meGfF3gTR/gz4w8LT6p4ibV9cuba6jaPRYDbxG2afy1Lm8DESCVdxC/IQcB+plt8smv7tv/ACXm+73vuXo9UlzWf9f1pqZnw8+Bev8Ajrwz4j8Ry2epaX4e0nRrrVItWfTZHtLqSAgfZ1lyqhiS3IJI2ng15tX0gvx78DP4burmWDxH/wAJLP4DXwZHZrBB9ggZU2+cJPN3srlUO3Yu0s5+fIr5vqnfna6L/N6/NWZEdY3/AK2X63CiiimAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAdR4D+Ht949m1Jobuz0nTNLtTeahq2pM621pFkKpby0d2ZnZVVUVmJbpgEjpvGX7PfibwNo+t6rqE1i1hpiafMJI2lU3cN6shgliV41YD904YSBGBGNtXf2f/jJZ/CuTxPZ6nDJ9h1qzSOO8gsIr2WyuopBJb3CwSuiSbGydrMMHa3O3B7vxZ+1o9x4b8Q2HhvU/FGmapLaaRp9hrhuvKvLmO1a5eeW5kSTcryvcE7VLj1buVU0j7u+n/pWvzt+GuvRQu5O+3/AVv1/4HXmrz9j/AMc2sWmSCfSp0vtRt9PVopZsRebbR3AnfMQxEqSgMwyQwIweCcbXP2dtS8Hx3c3irxR4e8L2yajc6bazXzXcv2+S3cpM8KQW8j+WrDG91QZOBznHefGz9rSTxtYaTD4UutY06R7Wa11p9QjiJu1kt7OJsHe5yTbv83ythhz8zV1Ef7WPg26+JGieKmuvF+hNoeqX8yQ6ZawuNUsbm5Nz5E4+1R+WQ7MCMyqwCnAIxVS6W6t/JWWv3/m9NNVF3oqT+Ky076O/p0/z108RP7P/AIgXxVbaMb/SxBcaB/wk66v5kv2NdP8AJMplY+X5gxtKY2Z38e9dHN+x/wCNrfVtesJLzRk/sextr+S4M8vlzJMzKqx/utxcNHKGDBQDG3J4zZl/aI0qb4EXXhd9Ovf+EyYSaTDqw2eWujyXK3LQlt27dvBTbjbsY89q6SP9riC4+J/inUL2TWJfBt5aXUWl6asEPmwSSiIAv84+UbG/jbbvYgZZs5+85WWi1/4H4NfNNbahXvCEvZ6v/htfm0/k099Dyv8A4UTqtve+OYb/AFrR9Mt/Bt9DYapeXDXDxbpJmhV4xHCzsoZDn5QcEcHpW1pH7MupeI5PCw0bxh4Z1SDxHd3VnZTp9uhXNvCZZnKzWqOUUYXcisNxA9cdB45/acbx9pPxZ0nVNV8SX2meJtStbnQ7e+m8+PToI7ppXXy2l2xnYVAVMglQMgAGotJ/aB8PaH8d/CXiCw07ULbwH4Vsn0/S9NEUbXAjMEitI6F/LMkk0rSOd3IPfFRFz5Fff/ga/jpbz30NaiSqSUdtf+B/Xl5nE6t8FRoS6HeX/jTw7b+H9btJrrTte2X7W07RTeVJDsW1Myurc/NEFx0Y9K1dQ/Zp1rS9QvFuPEfh6PRrHSrbV73XWkuUtbSK4z9njkRoBP5r4BEYiLYYHpnGprnxg8F+P9X+GN/4q0rUo4dBt2tdb0vSreGOyuVRy8ZtoldEi80nEqqqAcsuTUPh/wCPUOs3HxA/4S261bTbjxRe2mqwaxoCLLcabdW0rNCEjeWPKBHKDEilNiYzitdbPvd/dfTtrbXptZpXI9X2+/r923zutjB0f4Gtq9jPqn/Cb+F7Hw8uoR6Xba3etexW15dMgdo41+zeaAgK73kjRBuHzc1NN+z1qmi6LqWpeKPEOh+D47DWJdCkh1T7XLI11HGsjBRbW8wK7WBDEgH8q9I+KXx++H/xoFnp/iSfxZFZaVe211a6nBZW813eR/Y4ILqOVHuQsbM9urrJvlxuIK+q3n7U9r4o8P8AiKKXxJ4u+Hurap4mm1kTeFYFmVrZreOGOCRvtcDEgRgk4IJGcDOBM7pPl1/4eH6OfpZad9NLR7vfy0en5Xfe/wAvnSHw3qtxo93q8Gm3lxo9pKsNxqMVu7W8Tt91WkxhS3YEgmvQZv2c/EsPhm/1IXenS6lp2lR63f6BGZze2lnIRslkPleSCVZX8vzfM2tnbwQMDTfEmlW/wz8Q6RPqvidNXvL2Ca3sbadF0mdFPzPcxk7mlH8JGQK9z1z9r3T77w/e3lmmp2/iG/0EaXPpMVnDDp32xo0il1CSYSmSd/LjVUR4wEBKhsZLVfR37r8r/no/01awblzaLv8Anbz6a/jrs/N9Q/Zd8X29tepZTadrWs6bc2Nnqmiae8pudOmuztgSVnjWFiXIQ+XI+1jzgAkOl/Zd8U3FxYJouo6P4lt7jWJdBnvNNknWCyu408yRZWmhjyqxh3Mke9MI3PTPrOoftraZp+sX3iDQrPU2vdSurK4fw/Nbw2un2JSeO4vGWVJHa5lmkjC+a8cbKpHUKqiG3/a+8N+G9asBp1lq2uaC+svdz2F7aQ2MOn6ebaa3SztYY5pFYhbmV2kLIXYDIyzPRrbz/XT8N/8APT3tFbW7/q3+dl/V15I37NviCebQJtP1XSNV8P6zb3l1F4it2uY7CCK1J+0vMZYUkVY+OdhDbgF3Hin3X7NPiCx8q+uNY0eDwrJpK6yviqUXaaf9naTylGDAJvMZyFCeVuOQQCvNen6X+11pOh3Gm6S8eoeJvD7219DqVzqml28PM6RRxRwWCTNEsECW8QEPmhX3ODs72bf9siwSxm8PXM+r6jYGz3R+KNR0y3ub9dQ+0GcXAsmmEKqmQkcfmkJsRh0CCJOd/dWn/Af5O3r83yjtf+u61+69/vstn5TqH7MfibQ9Y1S11zUNL0LTrH7KF1i9F0be7e5G63jgSOBpnd13Hb5QK7G3bTgFdN/Zl8QXXjK/8JX2veHdE8UW+oNpkGk395J597MI/MHlCON9qMpXa8pRWLAA5yB6g/7X2l6xY6noV5Nr2l2MMVnFo3iWG0hvtYiaKN4p528yZBHPMkjnzFdmj3MAWJ3Vgt8dvAmteLvGHjSc+IfDXjPVJlttLvrPToNRTTbFbdIdyB7mAi5ZVIMnIQE7RuIZT3rtdNfntb579PO2msq7tfR6X/G/qttn5X10+cZongleNxtdGKsvoR1plTXi28d5OtpLJParIwhlmjEbumflLIGYKSMZAY46ZPWoa0WxbtfQKKKKCQooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoopVG5gMhcnGT0FACUV6Svw7sfA9vJq/iueC+smX/iXWdjPn+0WKghww5WMZGT1z+GeQ8GxyT+KtMSHSk1p2nGNPkztm9j6DHOTwMc8Zq+Vp2Z5FLM6GIp1K1D3oQV+bRRbs20m7bdW9E9L3Tti0V7H8UvBOh+FfCtw/h6xTUY5L4rd6gZxK2nsvSAY6AkkZOe2ecY8colFxdmGV5lSzbD/WaKaje2tr6d0m7fPW2uzQUVJbgNcRgjILD+dfbXx9+Fuh6wL3R7Cx8O25vPHtpoNhqGgaRDZf2GjxDdDdbYonmLeYGXG9fkP7wH5TMk0otatv8AWK/9uX9WPX6/f+Cb/Q+IaK+nLr9n34Y6x8RdO8I6D4r1L+1oNSvINT0/E1xcG1t4JJWZDLZWyxTEwmPy8ygGRTuYKQYF/Z58J614K0rxFY2fibRTqHhXW9ejsNQvYrh/Ms2jEBDi2i3RyBixwuSCMN3OfOrX8r/LV3/BjaaaT32+d7HzVRX01Y/szeFdN0mPW/EWp6jpum23hPS9bvoLmWSBhc3lxLHjfFZ3DRxKseeYXJLKCwByOU8O/D34Vat408U6Zb+KLjWbdPI/4RyA339lf2gzqWlie6ns2RGQgIpkjiWQkHKZ21d9XFdP87EKScefp/wz9NL6niFFfRnhXwx4L0H4TfF2DxL4K1V9a0DVLG2nA1e1+024NzMgSKb7G4jxtCyMNyy4GAgwK9R8D6T8LINf+FWj3fhyxl16+0GAJY3WnxTJdi8y4nmfYFd4UikGWG4maPH3Ttzc1ey8l98eb+vv6Dk+Vvm0sm38n/X5HxFRX0Br3wb+G3gv4d6VdeIPFN1B4p1Pw9FrtpDG04SeST50t1iFi0e0qCnnG64fJMeBiui8XWfgPTfGnwOOg+F9Q0u/1DT9Gu47tdSgMJzeMH89EtEM03ykGUOn8OV+XB1XxKPnb8/8n/ViZS5U35X+Wn+aPl2ivr3xV8BfB/xV+JWtalpd1r2nb/HOpaTqsc7w3D3JS3mu3a1RUXyyWhkjVXaT7yMTwVPGeH/gL4O8ZaFoHiuzfX9H0K4sNYv7zR7m5hur2ZdPCM32aYQxqRIJAuTEdhR/vdKyjNSjd9rv0tf+uvkatapLrovW9rfh6eZ860V7j+0tDaw6D8IhY6dfaVZN4TWSC11KcTTqjXdwylnEcYbIIYEIoII+teHVp1a7Nr7nYGrKL7pP70n+oUUUUEhRRRQAUUUUAFFFFABRRRQAUUUUAFFewfAXR9Mbw/8AETxHPptvrOteH9KiubCzurVbuOJZJ0inuzbv8k3kxuWCyZTLAsOOPY7HwxoXhm28Y+ItWu9N1O3uPB2la3Y6ivgTSw9ktxdhABp+/wCzl9vys2/OG6naMkvdt5/8H/L0+ehPNd2XdL72l/7cvPy2Pjyivo74QeLLXWtU+J6x6f4f1rT7HwzqGsWFxqXg3SoJUuYxEEfyljkVAMn92HKc5xkmvnjUL2TUr65u5lhSW4kaV1t4UhjDMSSFjQBUXnhVAAHAAFSpXaXkn9//AAxXf1t/X3kFFFFUAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAPkmklWNXkZ1jXaisSQoyTgegySfxpbe4ltZkmgkeGaM7kkjYqykdwR0NXNB8P6h4m1FLHTbZ7q5YFti4ACjkkk8AD1NJoejT6/rFrplu8MdxcyCJGnkCICfUn/ACe1PU551qMFOMpL3VdrsnfVrs7P7mVFuZlhkhEriGRgzxhjtYjOCR3IyfzNR10uqfDvXdD0e71LUrP7BBb3ItStwwV5H5zsH8YGOo9eM4OOaoaa3Fh8RQxEXPDyUlfVp31su3lYUEqQQcEVsXnjTxDqA1UXWvancjVnjk1DzryR/tjoco02W/eFTyC2cdqyI1Mjqo6scV6p8S/2ddb+Gek6vfza3ouuJo2ox6Xqkektcl7KeRC6B/OgjDKQpG5CwzgUpPlSk/61X6uP4HTu7f13/K5y+pfGDx5rM2nzah428R30unyi4s5LnVriRraQDAeMs52NjjIwa6PxP+0L4p8SaL4JX+1dYtvEvhv7b/xUn9qyteXP2hwfv8Om1Bs++cj0HFcnrXwz8YeG7jTYNX8Ka5pc+pv5djFe6dNC125IG2IMoLnLLwufvD1qXWPhP438PSmPVfB3iDTJBby3hS80ueI+RHjzJcMg+RNw3N0GRk80tE7/ANba/gFgj+K/jeHXv7cj8Y+II9b8lrb+0l1ScXPlFy5j8zfu2liWK5xkk9ak0/4wePNJ1TUdTsvG3iKz1HUijXt5b6tOk10UBCGVw+X2gkDcTgHiqWmfDnxZrWoWlhp3hjWb++u7QX9va2unyySzWxOBMiqpLR5BG8ce9SaT8M/GGv6zf6RpfhTXNS1bTyVvLG006aWe2IO0iSNVLJg8cgc0/IOl+n9WIPD/AI/8T+EdSutQ0PxHq2i392CLi60++lglmBO4h3RgWyeeT1qN/G3iKTWrPWH1/VG1ezVUtr9ryQzwKudoSTduUDJxg8ZNdl4Z/Zx+Ifi7wlrniDTfC+qTwaTcR2r2q6fcNcXEhdkdYUWMhjEyESDIK5Ga0vD/AOzL4g8R6Lo1zBrWiW+sazaXl3p/h66e5jvrhbV5EmQZg8lXzE+FaQE4qXypXfT/ACv+WvoG9/P/AIbU4aD4neMbXw3J4dh8Wa5F4fkV0fSY9RmW1ZWJZgYg20gkknjkk021+JHi2y0C30O38U61BolvKs0OmxahMttHIr+YrrGG2hg/zAgZDc9aevwx8Yv4cj8QL4T1xtBk27NUGmzG1bc2xcS7dpyxCjnqcda7XVv2X/HnhnU/CkWuaLqFhpuuizL6kNPnMWnm4m8pYpy6IFmU4zHn+Jeeau2vm3b5icla79f8zz5fG/iNZC41/VA5v/7VLC8kyb0Z/wBJ+9/ruT+8+9z1q7efFDxlqHiKz8QXfi3XbnXrNPLttUm1KZ7qBfm+VJS25R8zcA/xH1q78UvhP4g+FPiO+sNV0vUoNPjvbi1sdUvLCS2iv0icr5sRbhgRtb5WbAYcnrXF1MWpJNFtNaPqaviLxZrni66S513WdQ1q5jDKk2o3T3DqCxcgFySAWZmPuxPesqiimJtvcKKKKBBRRRQAUUUUAFFFFABRRRQAUUUUAaGg+ItV8K6rDqmi6neaPqUG7yrywuHgmjypU7XQgjIJBwehNdBF8ZPH8GtT6xH458SR6vPCtvLqC6vcC4kjU5VGk37ioJJAJwK5O3t5by4iggjaaeVwkcaDLMxOAAO5Jr0DxN8E9cs/iJrPhHwtaaj44vNHCJevo2nyTeXLtUSrtjL/ACpIWj3HGSvQZxTfS/nb9fz19fMWmq/ry/4H/AOUn8aeIbrVNS1KbXtTl1HU4Wt767kvJGmu4mADJK5bLqQq5DEg4HpWNXV6T8JfHOvXF3BpngzxBqM9nM9tcxWmlTytBKmN8bhUJVl3LlTyMjPWtDw98K7jVvhz4p8W339q6dbaT5SWjLolxPa3krSBJI2ulHlwFAVPznksAOaj3UtC7Nu3Vu3zOEorrfCHgL/hJPC/i7xBdXrafpnh+0jkMixCUz3MsgjgtwC643fvGLDO1Y2ODwKq33w38XaX4bh8RXvhbWrTw/MqPFqs+nTJaur/AHCspXaQ2RjB57VTaW4jnKK39T+H3inRfDtpr+oeGtYsNCu9v2fVLqwljtZtwLLslZQrZAJGDyBVjWPhf4z8PXGmW+q+Edd0yfVJPKsIrzTZomu3JA2xBlBc5ZeFz94etHWwHMUV0urfDPxhoN9NZan4U1zTryC0bUJbe706aKSO2U4adlZQRGDwXPA9afpXwt8aa9NHDpvhDXtRlkt47tI7XTJpWeGTd5coCqco21sN0O046UXQbbnL0V6T4S/Z1+IHjTR/E9/pvhrUnPh9hFdWjWFwZ5JvMVGgjRYzmVN4ZkOCFya57R/hX418QNqK6X4Q17Um02VoL5bPTJ5TayLncku1TsYYOQ2DwaNhf52+Zy9Fdd4B8BDxla+Jb251AaTpmg6VJqM900XmBnDKkMABZRukkdVHPGScHGKv+IPg3qnh34W6T47l1XRbzTNQvBY/ZLC88+4t5TEZQsu1SinYASocsu4BgpyA3orvy/F2X4oFrt/Wl/yOCoruNB+Ft3r3w/fxDBLNPfXOrR6PpOj2dqZ59Qm8vzJioDbgI1aLorZMqjjrWh8Q/wBnjx98NfEkejal4b1K6knligtbuysbh7e7leISCKF2jXzHAJBUDIKsO1J6Oz/rRP8AVBfr/Xb9DzeiuquvhR43sdU0zTbnwd4gt9R1QM1hZy6XOs12FGWMSFMuAOTtBwKevwh8dtrkuijwV4iOsRRLPJp40qf7QkbHCuY9m4KTwDjBNAHJUV0+n/C3xnq2vX2h2PhHXrzWrEbrvTbfTJpLm3HHMkYXcvUdQOop+kfCfxv4g/tA6X4O8QakNOma2vfselzy/ZpV+9HJtQ7GHdWwRSurXDrY5Wiug8N/DzxV4xsru80DwzrGuWlpxcXGm2EtxHDxn52RSF4BPPaun1D9nvx7p3w50vxs3hzUZtEvlmm3Q2NwzW8Eaq3nzfu9qROr5V9xBCse1PbcFq0l1/Q84oruvGnwvm8E+BfCut37apa6nrRnaTTdQ0W4tEhjQr5ckdxIAk4dWDfJ93Iz1FZ958J/G+nLpjXfg3xBajVHWOwM2lzp9rZhuVYsp85I5AXPFFw6J99fkcrRXTal8MfGOjappumah4S1yx1LUuLGzudNmjmuuQP3SFQX6j7oPWqHibwhr3gnUFsPEWiajoN80YmW11O0ktpShJAYK4BwSpGenBouHkZFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUqttYHAODnkZFJRQB3mvfEyG60SSy0TR7fQJb9QdUmtePPI42IP4Iz1KjqSffPJaDNp9vrFnLqsE11pySBp4YH2O6+gP8A+r6jrVCiqcm3dnnYfL8PhaMqNFNKV7u7v2+Ju+i0WuiSS2PQ/HnxTh+Iej+VqGl+RqNrPmwmt5TsSA/eRwfvHheRjPtjB88ooolJyd2VgcDh8uo+ww0eWG6V27el9u/q2PhcRzIx6KwNfT3j79rDw/4w1S7vhol4j2Hi+18SaVHHbwWyXsCKqyQXqxthpBsBSZhK43FcgGvl6ijmfu+W33xf/tq/Hud/9fg1+p9St+1DoNj8Q7HV7fU9YvfDrareahcaXH4V0vS7i3ae2mgE63FvLm4mQTHlwm7GSQemvfeOfBXw/wDhX8NI4G1678K6x4d8SaHJfSWsC30bzyxhphbiXZgSA4Tzc7TncTxXyHRWPIvwt8rNfq9d/uVm7t3fr873/r/hz6iP7SPgaG3n0OytdXg0hvC+naFFqmoaHp+pTrLaXMsu57OdzC8ciyA/fBRkXG7Ga5XRfjZpNz4v8VXPinX7/W9A1n7JHc2cng6xK6lHDEY03xR3cX2RowcI0EhboSRjB8Hoq7at9/8AO/8AXQhRSXKv60S3+SPX/DXxC8Ew6L8TPDN1b6xoHh3xLeW1zpr6fbx381kkE8jpE6yTRbxsk27t+QVH3qm1b9oK70z4a+EPC3hKeXT5dLsb6xvdRm021W5kSe6kkAhuPnmiUxuAyq6jOR8w5PjVFJxTjyvbS/nZOOvydjS+t/6XofSGh/HT4deHvhffaLp+jXtnql74Sk0OeGLQrEh75yzPdvqBk+0urNs/dYCqAMA7QK5i++KXhLWW+GOt3UutW2veEbWw0+fT4dPhktbiK3umk8xZzcKysY2+6YsbhjcAc14tRV/b5+t7/n/mzLlXLy+Vvvt/kv6bPZfih8bNO8feEPFumqupy32reN5fEdvNeBSEtGheJI2O8kOAUG0AqAv3uAK8aooqIxUVZeX4K36Gn9fe7hRRRVCCiiigAooooAKKKKACiiigAooooAKKKKAPQfgn4i0TwT4quPFOrzr9s0W0ku9IsWgaUXWofdtwcDaqozeaSxH+rwMk4rU+D/j/AMJeHf8AhKZ/F9nPdaxqSw/YtX/sa01g2xE2+4zbXbrEWkUBfMOSvOBya8qop9b/ANf1372SYraNd/6/r1Z9q+Jvi54U8YeA9V8cTXniPQtAm+ItpexWmnWkL3E7wadCfLceeiRjdGSHG/B2nZ6ePeH/AIp+Cb7S/ilJ4gute0zU/HMrO1vpekwXUFkPtguRh3uomkzjbjauOuT0rwuislBR2/rRL9EFtU+qaf3Ntfc3/mejeMvFOj2fwt8K+DvD94L5DI+ta1ceQ0ZN6+Y44fmAJEMQxkEqWlfBNek6x8d/h6vwp8QeHdC0S50271TRNP0+O0j0GxiSG4hkiknllvlkNxciRkYjcFA4+U5yPnCitO/rf9Py0+SKj7koyS2/zT/NfmtnY9w8dfGDwtrvxe034pWD61c62mp2Ooz+HdSs4haRCEIXijuxOzMu6PauYFwpH93lll8TPBvhn41f8Jvpup+KtWt9RuNQN+t3ZQ2l5aR3UckfmQzLcSiWVBMzAsIwSg6bvl8SooSUUktldfJpJr8PXzKUmtf602+659HeHfjv4I8N+GLLwVGfEN74eTQdY0yXWprCBLtJr542zHa/aCnlp5K8GbLF2Py4AKeN/wBojwveeCfEPh3w1H4gt0u/DGj+HbW4vEijdxaXLvKZfLkOFeNsYGeSVPHJ+cqKmUVLf+t/82ZqKW39ap/mj6E1747eE/FvjT4nS30etafoXjDS7C0S6gs4bi6t5bf7MSzQmdFZWML8+YDyp9RWH8MviN4J8OeH9R8PeK5dS8SeFW1CW6h0KTQIMynaipOt4t4k1rKwQKyp5iAdfMzivF6KbV1b5fjcIrlVl3v+CX5JHo+r+LNI0f4M6Z4V0O7+06hq962q684iZfK8vMdra7yBvCgySNgFd0i4PBxtz+NvArfs7w+Bo9S8QnXU1g675jaPALXzjbCEwbxdltgIJ83Zk/3BXjtFPpJfzW/C1vusvu9Su3l+t7/m/vPRfjF4q0rUj4c8M+G737f4Z8N6ettb3XlNELq5kPm3U+1wGG6VioDD7saV3t58avBlx8d/C3xSD699tgubCbVNH/s+ERxeRbpE5gn+0Zky0YIDInB5PHPz7RTjeLut73/UzlBSjyva1v68z0/4c/FHTdP8fLf+NkvvEXh5XvrmGzukW+jgu50YC5NtK6xytv2Mysw3bRknAr0jxr+0p4a1LwvqulaLHq8Vxc+EIvDi3aaZaaakkovjPKxgtpNkUTxsy7Vz94g5BLH5ooqeVWS7f5Nfk/y7I353zufVu/4qX3XS09e7v9DTfHjw1rPi7Wrq9utStvDuqaXpdhe6TceHrbUkv2trZYmLk3cLw4cFkkikD/NnKkVofCr44fCfwBqZvo/DOoaXJb+J5NVt/L0ex1WZ7BQPs9qtxdPvtirAkvGGY/3wcEfNNFV1utP+HT/T03WzZlZcqj2SX3Ll/L9OyPaPEPxK8HeO/h/p/hzUrnXfDn9j6nqV7Zx6ZpsN1b3aXMgdDKrXMXlyJgpkb/lxjpziSeNvDWvfBPR/CuqXGradrOg3l9d2Zs7CK5t7vz1i2rI7TxtFhoyCQknBBxnivMqKzjBQjyrbT8C27yU3um3997/mz266+JHgaw+G/gTS9Nu9ev8AWfCuqS6qIb7R4IbW7aWSBmiaRbt2RVERG7Y27I+Va7nw/wDtL+CfBvi7U9Y04+J9Wj1/xXbeIdRi1G0gjNlFE8knlwbbhvNkLSbd7eWNqjjnj5Yoq3q7/wBaNP8AOK+4y5FycnTX8eb/AOSl9/kre4aX8d7eHS/B6HVtY0vWtJ1vVtUudZXT4NRfbdpGBiKaVVlZirhw5A+fOWPFcR8XNf8ACHiLXLO48I6U2nRC2/06U2v2NLq5Mjs0iWwnnWFdpRdiPtypKqgIUcNRS5Vpb+rKxs5OTbfn+MnJ/i/u0CiiimQFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABSqNzAZC5OMnoKSigD0lfh3Y+B7eTV/Fc8F9ZMv/ABLrOxnz/aLFQQ4YcrGMjJ65/DPIeDY5J/FWmJDpSa07TjGnyZ2zex9BjnJ4GOeM1kSTSSrGryM6xrtRWJIUZJwPQZJP40tvcS2syTQSPDNGdySRsVZSO4I6GrurqyPHpYPEKlVVerzzmrdVFaNKyT03vJp3b2aSSXr/AMUvBOh+FfCtw/h6xTUY5L4rd6gZxK2nsvSAY6AkkZOe2ecY8cqRbmZYZIRK4hkYM8YY7WIzgkdyMn8zUdEpKTulYMrwVbAUHRr1XUle/M73e2929ttLK1tL3bfA0azRtKjSRBgXRW2llzyAcHB98GvprXvCel/HySxn8B3Oj6N4MbWtO0y601/DVrZ6no7XLmGItcRpm7j4JyZ97H7yDAavma3uJbWeOeCR4Zo2DpJGxVlYHIII6EHvXQ+KPid4x8cW8Fv4j8Wa5r8ED+bFFqmozXKxvjG5Q7EA47ilpeN1ezX5q/ronbt0639fW7a7f1/XXqe9+Cf2c/A/xG1CzNhF4q8P2kfiS68PXVtql1BLcXGyzmnV4yLdBG6tDh4ismA4+b1xvAv7PfhvVvD/AIC1XxBNrlpFreja5q96lq0StssstEYQ8fR1HO4nOeCK8h1X4q+Ndd1PTdR1Lxhr2oahpjF7G7utTnlltGOMmJ2YlCdq8qR0HpTdT+KPjPWrwXeo+Ltdv7pYpYBPdalNI4jlULKm5mJ2uoCsOhAAOaySavr0/G1r/fr5bDfvSXa/4c17fdpfrueh+GfAfw58Xab4m8TWMHitNE8N6PFd3uhtd20l7NcyTmIeXciHaIFBRndoMjkYPBqX4c/C/wACeK/DXinxnrF1f6H4Y0++tbC2s7jUZGljaVHYvNcwadPxlMKPIQEtjcCAH8j8O+KNZ8H6mupaDq99omoqpRbvTrl7eUKeCA6EHB9M1rWPxW8baXrt9rdn4x1+01m/Crd6jBqc6XFwBgASSBtzgYGMk9BV7PT+tb/itPIi0vx/C1vz189j1/xLZ6D8KPhHba74Ei0fxZDqniS+spPEWr6LHfNDbwqhtoPKuoikLOrvI37sM20YOFxT/CfwL8M+KbjwhpupDXBr3jDR7zXF1qyMFvpenbBOVQ24hPmKrQ/PtkiCiRQB6+OaN8UvGnhzUNRv9J8X69pd9qT+bfXVnqc0Mt0+Sd0rKwLnLMctn7x9aZH8TvGMWiXujJ4s1xNIvnkkutPXUphb3DOcu0ke7axY8kkHPes5RfLaO9t/lb89b+W2rLd+Zdlf8Xe/yXu2+fRI9rn+A/gQeFYY4ZfETeJP+EETxrNcPdwCz4Kb7dYxDv8AmHmYcv8AKdvD81H8WvCvgbWrr4T6L4e8PXug6l4i0LTFh1JtRga3Qy3MkbNcRpaoZ5Rg7pA6Zwvy/Lz4Z/wmniD/AKDupf8AHh/ZX/H5J/x5/wDPt1/1X/TP7vtUjePfEzeFR4ZbxFqx8Nqdw0c30v2MHdvz5O7Znd83Trz1qrO93te/4v8ARr7vNk2dt9bW/LX70/v8j2jxz8K/hN4V8XWWh2Wra9rmp2+unSdQ0PTZJZL+aI7kEsXm6fCkcqyBf3OZd+/AkGNx2o/gx4M+Ev7QPw38KatDeeMv7Qv4Wmvo7qCPTbjfe+VEojaCTzEQIyyoWG5iygqFy3iV18afiFfSWT3PjvxNcPZMXtWl1i4YwMUKEoS/ykozLkY4Yjoawv8AhK9b/suw0z+2NQ/s3T5jcWdn9qfybaUnJkjTOEYnnIANXBuLg3rZ3fmu3l369tipbNLtp5f59vx3RufFpdAh8eavb+HtIvtGtre7nhlt729juf3iysCU2QRCNMYAQhiMfeNcdWz4o8aeIfHF7FeeI9d1PxBdxR+VHcapeSXMiJknaGdiQMknHuaxqypxcIKLd2jSclKTkgooorQzCiiigAooooAKKKKACiiigAooooA9F+CPijwl4X8QanL4rtDItzYvbWF+2mQanHp9wzpid7SYhJgFDjBPGcgE4x6jD8BbG+1Lxd4j+IGuaamk6fpumahbT+HbZtMtLqG8yIZtsFhIYFCoQQbUEuwyRncfBPCvjnxJ4GuJ7jw34g1Tw/POgjll0q9ltmkUHIVijAkZ7GrNj8S/F+meI7vxBZ+KtbtNfu1KXGqQajMl1MpxkPKG3MPlXgn+EelEtWrf1v0/X8HpYj7vN5/8D/LbXvprf1iX4a/CjSvDHizxV/afiLxR4dsNftdL059Lnjs3limgaVmcz25O6Pa652KHKjhQ2RH4Fk0d/g98a7fw5d69aWscNrOWupbXy761F6iwJND5DPG6hyxaOYAnjGOvkGreNPEOvpeJqeu6nqKXtwt3dLd3kkonmVSqyvuY7nCkqGPIBxWl4d+LPjjwfpY03QfGXiDRNO3M/wBj07VJ7eHcep2I4GT3OKjlve/b9F+qb+YRvFxaeqd//Jm9PlZeVro9Fg1/U9W/Y/1WzvtRu7y00/xZZRWcFxO0kdshtbhisak4QE84GOa2Nc/Z/wDC1kPGeg2z68viLwzodrq7a1LNE2n3zyiAiFIBEHTd54WNvOcsV+7zgeSQ/F7x3a6CdDh8a+IotEMTQHTU1WcWxjbO5PLD7dpycjGDk1Cfid4ruNHsNFvfEOqan4fsnjeLRL6+mlsQEOVXyS20KOmABweK0fvTbfW35Wv+F7ddmQk4wil9m/4y5vybj5b+R698dvg38OfhV4b1i30/Vru+8VWmpQ2Fqn/CQWVyLhBHuuJ5LSGHzLba4MYilcMC2cttIPC/C74O6p4i+LHhvw34h0250K0uduo3barG9oBp6KZZZtzgYQxo+H+7nHPeux+K37VE3xG8KeJtFi03WY4/EF7BdSx61r51G109YnZxHYw+RGLcEsB95/kXb715DdePvE99dPc3PiPVri5exOmNNLfSs7WhGDbklsmLH8H3faopuUXeW/8AwP8APf52toVKKsorbX13/wAtPu8z3/4n+A/BGp+NvCfifxA2k+DvDOvaXcrc2/hi6gmtItRt9yiIS2cdxHGHDW7MyxuRubK5rEj+CPhbQ7Lx/rXijS9esNM0LT9O1DTtP03X7K9e8S6kMSObxIDGUZsMGVMqMjDGvH/DnxI8W+D7dYNA8Ua1okKyNKsem6hNbqHZQrMAjDkhVBPUhQO1df4T/aE8U+FdJ8c7NW1ibxL4nSzQ+I11WVLy38iQNnzOXfcg8v7wwPUcVPK1ZR21/H/K/W+iWhTb1+X4W/T53620Po+1+BHgrTfBl94Ri06OXVL7xGh0bUNTt431COQafa3gspnVV4ZWniK42l2U7Qa5Txx8DfhtpviXxRr/AIu1c+GdGvPFuo6XZw6d50ENjDC6/dSGwuFdvnJWItCNqcMckp8y/wDCb+I/MV/7f1Tet+dVVvtkmReHGbkHd/rTgfvPvcda0dJ+LnjrQbjUbjTPGniHTp9RmNxey2mqzxNdSnq8pVwXbk8tk81Uk5Nvy/SC33+y9fPvcE2opea/9u/WSdvI9Ul0/wCHdp+zDbalJ4a1DUNRTxRPp7ara6lBDLJILRGV9zWbOID94QHkHJ388Vfjxcp8O77S/Bfh/RtBt/D02hWM8eqNo1tcXWo+fCsklyLuWNpRmRnUeWyqoTaAMGvKNA+IPinwpaX1roniXWNHtb7/AI+4dPv5YEuOCP3iowD8EjnPU1LbfEvxfZ+GH8N2/irW4PDro0baRHqMy2hViSymENswSSSMck00lzOUldPl072jZr57/pohp2enn+LTT+S0/U9t1r9nrwjDeeNNFtD4is9T8HX2m2l5qWoTQ/ZtSFxOkLmKEQhoCS/mR5kl3IvPqIZPgt8ONe+OC/DHQ7jxRp+p22uy2Fxf6hLBcw3FrCkjSsiRxK8cuY9qriQNnPB+WvFtQ+JHi3V9K03TL/xRrV7pumtG9jZ3GoTSQ2rIu1DEhbCFV4G0DA4FZkmv6nNrh1qTUbt9YNx9rOoNOxuDNu3eb5md2/dzuznPNJp6a/8AB2/yem2pnZ+957eW9/XdO/kd58UvCPgiyuNCh+H+s3GuX928lvd6WrXF08MoZRFskksrUuX3EbBGSpTqdwA7T4A+D30mH4pQa/Z6R4f1zStJtzFP4y0cXEWnStdwqWeGSCUqSrlc+WcbsnA5Hkev/Erxd4rvrC91vxTrWsXmntvs7jUNRmnktmyDmNnYlDlVPGOQPSqt5408Qalc6rc3eu6ldXGrKqajNNeSO94oIYCYk5kAKqRuzyo9Kcbr8f8AgFy1kn0TT+53f4aefU+nfH/wR8F3HxD+JuteIFHhLQvD8+nWQ0+xLWkUk08IJug1va3ghgcozIojwfMUFkI2nB8K/s8+BNX1nQPst54i8Z6J4p8TyaLpF1ojLZm1tYgjSXFx5tu7OwWTOwJGNsLsWAOF8O0v4peM9DvlvNN8Xa9p94trHYrcWupzRSC3T7kIZWB8tccL0HYVu/Dv47+L/APjG01pfEGt3tqdUi1TUtPGqzRpqbq6swmOSHLhcFmDfjVwS5kntovxX52e217LZMmV7f12f5O3rbV6s9R8N/sx6FrviL4eWIn1p7bX7jXkv5IXjJhjsZHSJkPlkLnCbi2RluNuRWNrHwa+HnhP4aaRea/4rmsfFeseHhrdkubhonkcsYoBCtiyMpChDJ9qXaxJKYXDecSfGTxja3Gppo3ifXNC0u9vZb06bY6pNHCru+4narBSenzY5wKzrP4l+L9N8MyeHLTxVrdr4ekR430mHUZktGVyS6mINsIYk5GOcnNctONT2aUnrZX+53/G3fbzNHb2jktr6ffp+F9NN/I9D8QfDjwXF8O7TxN4YTUfE9nZLZHXb1Ndgt3tJZAgkhayktBImXZkSVHmj4ySxBUdt480XwEnxc+D+naT4SuLBtRtvDs8wnvLeW0nhlEe9ZYVtU8yVs/PKXwxDZQZ48G174leL/FWj2+k614q1vV9KtyrQ2N/qM08EZVSqlUZiowCQMDgHFIfiT4ubSNO0o+KdaOl6bKk9jY/2hN5FrIhJR4k3bUZSSQVAIycV0df+3k/lZq34/hbq2Z62t3jb5/1/wABbHolj8NdJ8ZftBeOtHnjubTRdKuNXvzY6NEgnlhtmkcW8CkbVJChR8pC/wB04xXV+Hv2efCPiiHw7r8M2saToupeHdT1l9I1LUraOfzLWbyo1N+8KQxRSl0IlkiwCpXnII8c1L4xePdau7C61Dxv4jv7rT5fPs5rnVriR7aTGN8bM5KNjjIwa6b4d/tA634V8Zap4i8QXeteJ9Qv9Kl0r+0TrMkOpWquVIkgunWUxsu0gfKeGYcZrNRlGKSeyfzdnb73b0tfqxS5uZvu18ldXX3Xd99bdD0SP4E/DXUr7xHcaTqN7fWWhaVpsk9pJ4p0+CJ7+5f97CNTeAW2IVDcKG8wg7WGCoXwDpvhDQfih8VdD8C6vrj2EPhzU4rPWor61mS5gjtt00ciPZ4dZHXAaMoQB8rNndVeT9sWW5m1BJNK8QW0c+mWWmRavYeJjDroW3kkkLS35t28zzGlbcPLUYVB/DzwXjX9pLxp4g8da14h0HXNY8HR6m0XmWmk6rPGXEUSxI0zqy+bJtUbpCBkknAzim05Xj0tL8dvu6eWjbNItxkpJ7OL+6za/NX07o7f4X/AfwP4w8K/DtNTn8QJ4k8azanbwTWlzAlnZG1DbZGRomeTJMYKBl43HcOBRoHwT+G+m/CzS/EnivWL1b/UNEudVSKHXLSxk89ZWit7ZLN4JJ5FkKsfPUbAATjAJrxR/iJ4rk1C0vm8T6y17ZzTXFtctfymSGSY5mdG3ZVnPLEct3zXsPhP9rGTwn4Q0PSbfRdTEuk6TcaWtjBrpj0S9MomHn3Vh5J81/32T+9AYqDwOKq3utvfy7We3ztr38romK/eK791f5r9L/8AD6nrPjvQfhkmtfFjR9L0PTU8RWnhq432q6Yix6e9om7z4jt2h5RLCMphgYZCfvDd5f428Op8RvD37Pui2Gp6lY6VrTXGnWltq0lvdf2aGvVhZleKCAyAkb8Pk9gR1rwtvGGvvqWoai2t6k2oajE8F7dm7k825jcAOkj5y6sAAQxIOOa19a+MHj3xJp4sNX8beI9VsQ6yC1vdWuJogynKttZyMggEHtWcYWcZTd9r+dua9u1+a/4bPRW0aW+tn91vyPqHS/g9oHi34Y2Hg7T7LxFoWhjx/fLLcalLHc3V4tpp8zSNAFhiVGbyCgU79r5yzYxXL+JdYm8KeFP2c73wtFr3hGOa41DyVudQL3RhkvYskzRxQ7kdSSMIAVYDnqfBdR+LnjrWLu1ur/xp4ivbq0mW4t5rjVZ5HhlUEK6MXyrAMwBHIyfWlb4v+PJNYg1ZvG3iJtVgDrFfHVZzPGHADhX37huCrnB52jPSrppwqRm3e1r+bSt+Pbp8zOtD2lOVNaXv8rt/l+Pke3a58LvD/jf4yfHTX/FGpyafo3h3V5HdIpZYS7zXbopaSO1uWRFAbJ8lskqMqDmqmj/s0+EPiJpmu3fgnxfPdwWWqi0gu7qJvKkSW3Q20RV44n3tcsYPMwAeGEY6V443xg8etry643jfxGdbW3NoupHVrj7SIS24xCTfu2Z525xnmq0vxN8YTXF7PJ4r1ySa9uIbq6kbUZi080RBikc7vmdCq7WPK4GMYqIwcYKDeyS09V+n9NHRUk51HUXV3t+n3/0nY+jtC/ZQ8IzeOLnRdRutRXTptej8PaffDVCk89ytvG9yFgi0+cOI3ZzueSFQAFLDDNXn2sfDH4feAfAfhfUfFTeJbrU9bl1W2efR7i3ENo9pO0KOIZI8yqzbMr5kZADENyAPOtL+LvjrRPt39neNPEVh9vuGu7v7Lqs8f2iZsbpZNrje5wMscnisLUvEWq6za21tqGp3l9b2zSPBDc3DyJE0jbpCoJIUs3zMR1PJo5ZtrXpr9y/W7+aXS4o2irb66X+f/A+7zse2+JPgz8OvBvw20251vxXcWvi7VPDkeuWUY88xzSyZeO3EIsihUqNhl+1DD5JQAYrwKuktviX4vs/DD+G7fxVrcHh10aNtIj1GZbQqxJZTCG2YJJJGOSa5utPtN9P6/QX2Uv6/r8gooopiCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiilVtrA4Bwc8jIoAv6D4f1DxNqKWOm2z3VywLbFwAFHJJJ4AHqaTQ9Gn1/WLXTLd4Y7i5kESNPIEQE+pP8Ak9q63XviZDdaJJZaJo9voEt+oOqTWvHnkcbEH8EZ6lR1JPvnktBm0+31izl1WCa605JA08MD7HdfQH/9X1HWrsrpHj0q2Nq0qtWpT5Hb3Y6SldJ6vXld38Kvtq2r2Wtqnw713Q9Hu9S1Kz+wQW9yLUrcMFeR+c7B/GBjqPXjODjmq9D8efFOH4h6P5WoaX5Go2s+bCa3lOxID95HB+8eF5GM+2MHzyiVr+6GV1MdVoOWYQUKl9ltbS1nd3/DW6tpdvghkuZo4YkaSWRgiIoyWJOAB716D40+CmoeDdcHh7+2tN1zxeLhLSXw3o8F7NeRSsuduTbrE5HAPlyNknjI5rz+3WJp4xO7xwlgHeNA7KueSFJGTjtkfUV7J4++K+geIPhrNoE+ra9491sTwHT9a8SaVBaXOlwIXMkSTrcTyzI+8Dy2ZUTGQM1nJ2Sf9br7rat/htr7C3a8v6/q/wB5gfEL9nfx/wDDfxNFouo+G9SupbiWK3tLqxsLh7e8mkjEgihZo18xwCQVAyCrDtTPCf7PXj/xV8QNP8Hf8Izqmj6zeJ5+3VrC4gWGHdt8+QeWWWLd8u/bjJArttY+Kvw18TfGbQ/iDrVjrOqxSfZTq/h2402A26NFaLFujk+0fv1EkaN5bogZchj2Oxqf7R/ha08VfB/UNMs76+h8G3NxJfynRrLSftKyyq5MNvbOY0IG/gnk4JbLEh7NJ99f69f+B1MpSlyNxWtrr17HiHiD4Z+LvCcl8ms+GNY0v7DHHNcteafNCIY3cpHI25RtV3BVScAkEDmn6b8LfGms6xd6Rp/hDXr7VbNElubG20yaSeFGAKs8YUsoIYEEjkEetegeF/G/w80DTfHnhmfUPE114e8UW9m39pR6Rbx3dvNBded5fkG6ZWRl43+aCD/Aa6bUPj74S8QfE7xnqt7JqkHg7X1sEm0G60G21H7YsFsIj5j/AGqF4HVtxSSFw3zZO3GCo3tqbVNJS5NrnmOjfBvULnw7c67r+s6V4J0yK+fTI31/7SJZ7lBmWNIYIZZf3eV3MyBQWAznisSH4beKNQ0a/wBb03QNV1fw7ZNIJdbsdPneyCp95jIUAUYwfmwQCMgV6FqnxE8A+M/BaeFdQg1vwppmj61eX+hy6XaRai32S5IJt51knhO9Cke2QO2QSCOA1dJ4X+PHg3w/N4O1uQ+JJ9b8IaPd6PY6WttCLC98zzxHNI/nboSwnPmIqSZ2KA1RKTUeZb22+V/z0t59bC6pet/v0+9a38rdbHnvw8+Bev8Ajrwz4j8Ry2epaX4e0nRrrVItWfTZHtLqSAgfZ1lyqhiS3IJI2ng1yuqfD/xRonh+z17UfDer2Gh3m37Nqd1Yyx20+4Fl2SsoVsgEjB5Ar3GP4+eBm8O3NzLb+Iv+Elm8Br4Njslgg+wQMqbfOEnm72VyqHbsXaWc/PkVR+Nn7Qmm/EjR9bOj6he6UdcWzN9oT+F9NjQtCEO06lG4uJVRlym6MHGAcU53jJpbbfi9fmrPy6hHVXf9aL8nf1Pn2iiirAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAN7wf4Vj8WahcW8+u6T4dt7e3a5lvdYmdIgqkDaqxo8kjkkYREY9TjAJHbXv7O+t6PrniO01bWtE0vTNBitZrnXZpZ5LOQXQVrYRCKF5XMisWAEfAVi23FYPwi1DwRpPi0Xvjy11K+0q3gaS3tdPt0nWW5BHlidGli3Q9Syq6s2AMjJNetaD+0XpOl3fjaC78Qa9fv4hkttRtvE7eH7Vb3Tb2LfGfJtftZRR5MhRHWUGLC7FGAQ7ar+uv+V/8Ag3CPW/8AX/A/zv015b/hlPxZZeILvR9a1DSPDtwmsRaFZyag9w66jdyIJESAQwyNgo8bFpFQL5ihiDkDybXNFvfDetahpGpQG11HT7iS1uYGYMY5UYq65BIOGBHBxxX1Rdftg6B4k+0Wt/Hrug21nqUMmnahp9tBd6hNp628MM1q8ryx+Q832aNmlTecO6YK53fM3jzxQ3jjxx4i8Rvbi0fWNRuNQNur7xEZZWk2bsDON2M4GcVPb+ui/wCD/WrOn9f1/W/RYVFFFMAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoopVG5gMhcnGT0FACUV6Svw7sfA9vJq/iueC+smX/AIl1nYz5/tFioIcMOVjGRk9c/hnkPBsck/irTEh0pNadpxjT5M7ZvY+gxzk8DHPGavladmeRSzOhiKdStQ96EFfm0UW7NtJu23VvRPS907YtFex/FLwTofhXwrcP4esU1GOS+K3eoGcStp7L0gGOgJJGTntnnGPHKJRcXZhleZUs2w/1mimo3tra+ndJu3z1trs0FFbHgyGG48YaFFcJHJbvfwLIkoBRlMiggg8EY9a+hfGPgfQ9NX9ov7Xo9rpVrY+I7C00+6XT1/0GN72QusAAG0eUAdqkZUDtiok+Xlv1/wA4r/25Hq8y97+7b8eb8uU+YqK+kbH9nfwr428e+FrTwncXzeCNUv7m1PiT+14r57kQwtOYhai1hntpiiN8siPkspXeoBerpHwj+E3ibxtY2WkeJdUvtNj0bU9Q1a1sJXlmtntomkjCTXFlbBw6jlfKG0qfm5GJ5lqu17+VlfUuz087fe3ZI+eKK+iP2e7jwZqXx68JaToGiSXWhatE0eq6b4vsrHVCsyJMwEMxgHyYEZyEjbOQcgCsv4aeEdN8Xac3xB8RWd7qt5L4lsdEs9F8LQ22nD7RIu8SMqQMiphNoSOMF2J5HJOkI80lH5fe7IyqT5E3u7X/AAb/ACT/AOH0PC6K9J/aU/5OC+Iv/YevP/RrV5tWUJc8VLudNWHs6kodm0FFFFWZBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFek/s631na/GbwpbX+haVr9tqOo29g8GsW5uIo1lmRGcRlgjNtLAbwyjdnG4KRg/Fizt9N+KnjK0tII7W1t9avIoYIUCJGizuFVVHAAAAAHTFOS5eXzv+Fv80C1v5W/G/wDkcpRRRSAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigB8k0kqxq8jOsa7UViSFGScD0GST+NLb3EtrMk0EjwzRnckkbFWUjuCOhq5oPh/UPE2opY6bbPdXLAtsXAAUckkngAeppND0afX9YtdMt3hjuLmQRI08gRAT6k/5Panqc861GCnGUl7qu12Tvq12dn9zKi3MywyQiVxDIwZ4wx2sRnBI7kZP5mo66XVPh3ruh6Pd6lqVn9ggt7kWpW4YK8j852D+MDHUevGcHHNUNNbiw+IoYiLnh5KSvq0762XbysFdNqvxO8Y67b6bBqXizXNQg02RZbGO61KaVbV1GFaIMx2EADBXGKxNJ02XWtWstPgZFmu50gRpCQoZmCgnAPGTXaat8Fdc0eL4gvNdWDjwTeQ2WoiOSQmV5J2hUw5QbhuUk7tpxjjtSfRPr+lv80dGjb8v1v8AnZ/cY2ufE/xl4m1DTr/WPFuuarfaa/m2N1falNNLavlTuiZmJQ5VTlccqPSnat8VPGuvXkd5qfjDXtRu44JLVLi71OeWRYZBiSMMzEhGHDL0I603XPhf4y8M3GnQax4S13Sp9Sk8mxivtNmha6fIG2IMoLnLLwuT8w9adefCzxpp+uxaJdeENettZlhNzHp02mTpcPEM5kEZXcVG0/NjHB9KWj09f+D/AMErbX+vL8Sp4V8eeJvAstxL4a8Rat4ekuFCzPpV9LbGUDJAYowyBk9fWrdv8VPGtrqGq38HjDXob/VlVNQuo9TnWW8VRtUTMGzIACQN2eDXUaR+zb461LQvF2o3OkyaHP4ZtIr660zWYZbS8nhcSHdDG6fNhYZWOSOEOMniqGqfAXxvaeIptF0zQb7xReQWdpfTHw/Zz3axR3EKyxb9seVO1scjGQcE4zTej13/AMwS7ev3W/zX3nD6lqV5rOoXF/qF1PfX1zIZZ7m5kMkkrk5LMxJLEnuarV1ul/CHx3rdu0+neCvEV/AspgMlrpU8iiQOUKEqh+YMCuOuQR1qtB8NPF91pep6nD4V1uXTdLkkhv7yPTpmhtHjGZElcLiNlBGQxBGeaSta62DdnN0UUUxBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAa/hjxhr3gnUHvvDut6loN88Zha50u7ktpGQkEqWQgkZAOOnApviTxZrfjLUv7R8QaxqGuahsEf2rUrp7iXaOi73JOBk8Z710/ww+DOvfFuz8TT6FLZh9BsDqE0FzI6yTqDgRwgKQzk8AEjJwM1u2n7OWsNp76hqHiHQdG02PQLPxFLeXjXTrHbXMnlxKVigdzJuxkBSBnqaTtdX/rf/JiUl072+en+a+88morsfFXwzuPDPhvSdfi1nS9a0jVLy5srW408zjc0AjLsVlijZVPmrjIzweBxntbn9me40+HxW974/wDCNofC0qQ6urf2jIbZnl8qPlLNg+5uPkJIz82OcPon3/4H+aK6c3T/AILX5pnjNFeqW/7O2uXGlW0iazoZ1260ltctvDRmm/tCezALeYo8rysmNTKIzIJCgztzxW3qf7IXjbSvFT6DJd6PJcjRl1tJ4ZpWhkiMqRmNT5W7zQ0i5UgDB68jK5knZ/1a9/us/uaCXurme3/Df5r7zxCivbrr9kXxpY3GtRzXujINL1ez0ZpPPl23Ety0KpJF+65jH2iIsTggNwCRisaH4AT33xFj8Faf408NajrCveJdtCt+kVkbWN5JfMZ7VS3EbgeWHyV7Ag0KSauu1/la9/uCzvb+v60PKqK9Tg+AN3dat4Xgh8W+HZNL8TM8Ola2pvDaz3KyrE1sV+zedHIGdT+8jVcMDuxUWm/AXU9a+Kt34E07xBod5eWQmN7qge5jsbUxErIHaSBX4YBcqhBLLgnrTvrb1/DclySV29DzGiu4j+F0/wDwj/jaee88jXvCdzHHe6O0OSYTKYJJVkDf8s5TGpXb0kBzwRUngj4Wy+K/BfivxLdSapp+naNbGSC5t9EuLy2ubgEZgeeMbIDhgdznHI9anmXK59Er/Lf5/LrpuU9Hbzt8/wCvw121ODorai8E+Ip73TbOPQNUkvNTg+1WNutnIZLuHDHzIl25dMKx3LkfKfSrN58NvF2n+GY/Ed14W1q28PSKjpq02nTJaMrEBSJSuwgkgDnnNUI5yiul8QfDPxh4T0uPUtc8Ka5o2nSSeSl5qGnTQQs/Pyh3UAn5TxnPB9KwLKyuNSvILS0gluru4kWKGCFC8kjscKqqOSSSAAOuaPIOlyGium1T4YeMtD1qw0fUvCWuafq2oHFnYXWmzRT3POP3cbKGfnjgGlf4W+M4/EyeHG8I68viF4/OXSW0yYXbR4J3iLbvK4B5xjii6YbbnMUV6l40/Z38W+H/ABxdeGNE0XWvFV7Z2NneXa6fpMzSWxngSXZJGm8qVLFcnGSp4HQUrf4KazfeALbXLOC+vNcm8QzeHx4dgsHe5EkcCyscA7iwyVKbMjaTntSbSTb6f5qP5tIfbzV/wv8AlqedUV01n8MfGOoafqd/a+E9cubHS5JIr+5h02Z4rR4xmRZWC4QqOSGxjvVL/hC/EAuo7b+wtS+0yWf9opD9jk3ta7C/ngbcmPaC2/7uBnOKf9fr+QWZjUUUUCCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKv/YI/VvzFH2CP1b8xTsBQoq/9gj9W/MUfYI/VvzFFgKFFX/sEfq35ij7BH6t+YosBQoq/9gj9W/MUfYI/VvzFFgKFFX/sEfq35ij7BH6t+YosBQoq/wDYI/VvzFH2CP1b8xRYChRV/wCwR+rfmKPsEfq35iiwFCir/wBgj9W/MUfYI/VvzFFgKFFX/sEfq35ij7BH6t+YosBQoq/9gj9W/MUfYI/VvzFFgKFKrbWBwDg55GRV77BH6t+Yo+wR+rfmKLAdbr3xMhutEkstE0e30CW/UHVJrXjzyONiD+CM9So6kn3zyWgzafb6xZy6rBNdackgaeGB9juvoD/+r6jrR9gj9W/MUfYI/VvzFU227s87D5fh8LRlRoppSvd3d+3xN30Wi10SSWx2njz4pw/EPR/K1DS/I1G1nzYTW8p2JAfvI4P3jwvIxn2xg+eVf+wR+rfmKPsEfq35iiTcndlYHA4fLqPsMNHlhuldu3pfbv6tiaHqh0TWtP1FYxK1pcR3AjJwG2MGxntnFe6+MPjf4OuIvHE/hyTxFDqPjbWrPU75r2yt1TS0hmadhDtmb7Q3mNxuEQwoz1NeF/YI/VvzFH2CP1b8xUNc1vL/ADT/AER28qd/Pf8AG33Xf3+h9A2Px+8C6D8RfC3jCPS77XvEUN/cz61r39k2+lS3MUsLRgi0See3eZTI0m8LGGKqGDFmeq9l+0Rp+h+JrK6g1vVNS02x0bVrGwitfC+n6E1jcXcJRWRLSYqw37WZiQRjIBJrwb7BH6t+Yo+wR+rfmKXJv53Xyat6LfpY0vqn2s/ud0etfCX9oi7+Gvg/WLKafUdQ1I3WmPpkcj+ZbRW9vLM89u25sojrMw2qpB3tnGefQNQ/aJ+FuoeONe1lNB1G1Ez6SmnXl7oNhqlxHa2sAjlgEc8vlws5VcTLvIH8IwK+ZfsEfq35ij7BH6t+Yqre859W0/uSX6fi+5Nlr5q3y/r9OqVvrmP9tHwtb6hcyQWniKC0muNXmMMccSg/atStrmPIE2MiKGVG93wMgkjm/Fn7VGja/Ztc6Pd6h4X1e1m1b7KP+EU0vURPHdXE0qH7RNIJrZmWYpIE3g9R3B+avsEfq35ij7BH6t+YqHTTioPZK35/5tFcz53U6t3/AK/4BQoq/wDYI/VvzFH2CP1b8xV2JKFFX/sEfq35ij7BH6t+YosBQoq/9gj9W/MUfYI/VvzFFgKFFX/sEfq35ij7BH6t+YosBQoq/wDYI/VvzFH2CP1b8xRYChRV/wCwR+rfmKPsEfq35iiwFCir/wBgj9W/MUfYI/VvzFFgKFFX/sEfq35ij7BH6t+YosBQoq/9gj9W/MUfYI/VvzFFgPQfg38YB8J9F8YfZvtUet6jDZ/2bPAqmOOWC7jnJkywO0qhHAOc4IxXsetftUeDtQ13XZtDm8WeB7a+8MWOi2l5o9tE1zYyw3LTOEC3MX7vadgIcHHVR0r5b+wR+rfmKPsEfq35ihrmtfp+uhCile3Vp/NWt/6SvxPo3wb+0x4Z8N+GrzSdbk8S+NZ7zVLqO51TVI0WaXS7uG3S4yDcSHz8242qWK9946DifEHxq0fWofjaFtb5H8b30Fzp25ExEkd6ZyJsN8p2YHy7ueM45ryj7BH6t+Yo+wR+rfmKTje1+n+SX6fmauTceTp/wW/1Z7na/Hbwnb61p3jzyNaPj2x8OLoy6d9mhOnSXS2xtFumn83ft8khvJEQ+cY345r0PQf2zPCMHizxZearpOtXWnXYs/7HMcEJntgIrVLyN8yjCO1pEyhWPK5IGePkn7BH6t+Yo+wR+rfmKJR5ua/2lZ+jbf5t/lsZuKajf7O33W/JWPe/D/7Uit4g8QT+I7nV9Q0yXUrS60mCOGJmt4Y9VjvXV/nX5iibQct91FyFUYtS/tDaFJ8aLbxZf+L/ABz4l0Jm1XGnarZR50xLqCWNFtlN66sB5igj93xGMZ6D56+wR+rfmKPsEfq35ipjTUYqHSzXyas/m+5cfdnKa3f+Vkez6V8U/Amk3nw60eCbxEvhrwjqD62+oPpsD3l/dvLCzRiD7SEhj2whQ3myHPOOcB918ZPA+g3fxMvtJ0a58V3fjC8R0i8RWZs4ra2ad7iaMm2u/MLeYIMFWUEIScfdPiv2CP1b8xR9gj9W/MVXK73vr/nb/JL00FH3bJdP+C/zbfqexSfGzQb348J4xNnNbaL4hs0tPFGn+QFQ+fCIr7yQHdmUtmVCxDbsZ6ZNT4b+JPh/4Bj+IWn6jr+uXq61Y3Gh2l1pOixyxG3M0UiXJ865hfJ8ojyygxkHd2ryj7BH6t+Yo+wR+rfmKOVWaS0aa+T6fLW3q/K1czvfzT+a6/PS/eyPXPDPxy0vw78MZNJ+z31x4p0qHUNN8P6kI1jSC0vSnnM5Em5JFHn7AuQDcNzxz00nxy+G1l8LNY0HSdDvLK/1HwzBo/2ddB09VW7VkkluJb8P9omDugIUhVXA+UkDb8+/YI/VvzFH2CP1b8xUyhzJpvf/ACf/AMk36u/YUfdakumv4p/ol6aHuXxP/aI0bx4nxYSOHV2XxQNHXSlvFQi2W0x5gf8AeHYDltuzd945xmvPbPXvC3hbxh4N1jwlqfiPRpbGG3uNRv7q1trqWC/UkyNbRb0WSLIG1ZGBIyGrj/sEfq35ij7BH6t+Yq4R5Ph73E1dNPtY940v43fDvw18R9G13TfD9wwbTL2x1rVIdJtrV55Z4zEJ4tPeae2VlUnKArG+9hsQdRvjx4fvtJ8ReGdU1rWJ9C1TR4dPttT0vwpp2l3Fhsu/tDQra29wsbwyZfcTIpy33Tznwf7BH6t+Yo+wR+rfmKXLt5f8Hpt1fy02H1b72fzVtfwXkfRs/wAevhhqnizxFqdzomqQG5tdItNOvb3RNP1ee3htYFjuI/KuGEStJsXEwDEAfcHIOrqf7WXg/UrfxjpX9k61b6N4q1+8vbyW1SKC8t7Se2ij3Quso/eiWPLRn93IhZWPzcfLv2CP1b8xR9gj9W/MUpQ5rqXX/OL/APbVt5vdtjva3Lpa34Ky+5HuvgX43+DvCZ8C6hNN4mm1HwKNQi06xhtoVtdTWWSWSJ5WM2bVmMu2VVWbKooDViQ/Hawj+Ecmlmyu/wDhOP7Ol8Nx6kMfZ10mScTlMl928EvEF24Eb9eMV5L9gj9W/MUfYI/VvzFVJc9+br+u/wB939+gut/T8Nvu/wCHKFFX/sEfq35ij7BH6t+YosIoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/ANgj9W/MUfYI/VvzFFgKFFX/ALBH6t+Yo+wR+rfmKLAUKKv/AGCP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/ANgj9W/MUfYI/VvzFFgKFFX/ALBH6t+Yo+wR+rfmKLAUKKv/AGCP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/ANgj9W/MUfYI/VvzFFgKFFX/ALBH6t+Yo+wR+rfmKLAUKKv/AGCP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/2CP1b8xR9gj9W/MUWAoUVf+wR+rfmKPsEfq35iiwFCir/ANgj9W/MUfYI/VvzFFgKFFX/ALBH6t+Yo+wR+rfmKLAUKKv/AGCP1b8xR9gj9W/MUWA//9lQSwcI1yZ4V/nhAAAAAAAA+eEAAAAAAABQSwMELQAIAAAAAoOQVAAAAAAAAAAAAAAAABkAAABmb3JtYXRzL2xpdmluZy9saXZpbmcubXA0AAAAGGZ0eXBtcDQyAAAAAG1wNDFpc29tAAAAKHV1aWRcpwj7Mo5CBahhZQ7KCpWWAAAADDEwLjAuMTkwNDIuMAAHoE5tZGF0AAAAAAAAABAAAAACCRAAAAAWBgAHgHsOAHsOQAEHAAADAAADAAAEgAAA6D8liIBPxxH+MI4OgPIQAAhZy3/wAGMMGIR4kuqSGNFrFRwA4sBADoHpCZKXoCacGYAAIA4AAhAjBJMgA7AAMhwAah1xmhZQxeTsQKgBDjgA9DWMRz2Mn0GuSswACALDv/3kATZmkzfdIyPAMJOv+uRGojsqMLA//ADDFSudPNsUCHxaVlHgBhXUUAgGGM88FJ7pxJjVgAWAIOW86wEWH3WQT/SVzwFATwTzJpgS7ZJ7hDV8gAaADqAedGftDtsZwiGP4AycQXWg170tpX/RaeQAJgBhQgoZ1pnPJam/v9bIkxlVhMSnfIYBCyV5AaCpYzhZaHfpBAottgU6vScscCNx4wBh7LSA7TGikgYorQhQABAh4AAgTAcAA9gAO6VptHYqNNEN7mR/Zn6yQA20YCVEu/++oJRKmyY2q/667nT1E//3kFmJHVI/79w8AJ5EcC3Em++0NinTywmbd//xEIjiJgF8O/AguQG+ZcCcocR76nLr+BACNljwAugLzFFwX2Z/rkAGAY5Qj6gExxPr7oNDuAGADy0dINcPPi9mPbid//cCgABaHRClRF2nWKFIheAYCt4WIqVN1nXCPJQi8CA5IKFpcn0xc/qcvWtYOIAAIBSoDAAGagcDGAW61lAF1M0//BUXCYkSt08HB4ADtCkBEVX/aDgFtSj3KPdkRqIuo2g5l8AB8YIsAWFCRlmzh5HtMnNACQBQzinW/GdrmHvbAQAAIA7hgcuDkym3aP0X1mLwAZAEHwLqWNqHAct3EdzwDoXaGesZItAeIJdefCyAAHJVg0Ml51R/4k48wABACAIYMPgQ/KY60wt2Ro3iABlBRQ4JvOaXGQ02vKT/rdrQAAgbN0QBAABAf8BOGFbTUfRCxspSKB1B8AQAOEQmqEKDic8djPFSh8DALVi2ASJkx0oOyBfaESEIowwAt4UetZfviJTh3VwBMxzl0vMvkwPhEzM0k9NX/+gAUuOmWa5yMRtE+f9b0BqLiOm8hORL//4KHEmplAVCsJViOIrByZpf8AbAegDphVBwlqreVPXhDJQGhM2aEErnoztWqvyARwMecFZaXVLupmnhmmjAAMcDhClB0l1H9FQ6/vuDDhOXIZH08Cr5etq9pJBAACDQKLIVdAOpVh5d4AMDFFAMPg1WpkY/i9Y3UeMAAQBAOVlFgCSoRJ9/ZUEM34AQDr8YMDLPSnWa6z12MIYwBhuABQWwhYiURMTu1vdfVrWoDZNHwR0RHv/1iILETbJv///wyMjh3QwnX2/63QAiyZ+/sV+sNjUtVV9s/fojURnALKjfAAcDBDDS2012ABSwMmJx/ueAsBAZnv+CKmdptfiAAEALqADgWs4Ws2OWDNHduAgMmxYwwcyTWM7IoP8YkNEwx/TAEff1nbzIhuAww/imRxe6XseBAFPUDBUm+etZSuFj972AAyABAPqd8IPfBLnlo0j2AAIAVBxAmofRp5ajFQgy8wABAECFgf9zpsI35GNXZEDLA1GcTMTeI6s9iO+jTSPdIEjsAAQB0wRHVlEg4SRBp7/7p3dqzsVGcXMprf74Q7G2ALlkTh1zJL/9EcRdXAy0b+gGBDjxLaXrAtQdnJ9/AFYgVIAhMKsMmMUTbJ2/IThAkMkSZxO78tV0yeAEILY3JbVUcC+crKrmAAagQHpk0SFkdsz/+8MH0Agarg2j70H8GewadACAMDXRdteiOGQnze4v14KMYIoAAQIpJatIBktmHV/cAAQFQABAeuZAAh8OAnGSd4R4TLZJ8Bnh7xgACAIocQItFUy/nQ7TLJeQAIgcPmo2+J67EOzz//BlGwOAASgfKj2SWHE/fOJMhoqI90o0BCTK8TKP/XMgZtKUTLqP3zvM0TR7peS5rZP/95IFSjzFT2v9fmBwQ2+gfm84f+RHEagL0Zj/wZqAkPRINdEHS12w//eMDIOYsACFF+IEQEy7pf8AgMsGjJ+obRLUgoz85HcASgg140qYTJsk0yBBwDF0kDTrjp5cDSP5S4//eAAgBhKxZsIy/6LBk9wsOLwISPAWeYt6oMNXta0g8AGA4bdQsFvXVyIxC2prmewADAq5HUK7J7PD1omb/DgAlhGJVCPpeY4pd/OAAGEMHBRGVQJ5bz8oos/+8AIBVpOBQDSWqrv8TothcA5mBgACnA9EYrMq3bdrTIc8SpHuRSCMuYKmk0v57QCgSptCanKvnqcdeq9/eYsq9yvvSB8N7QnIb+/pAaFtNdGy/q6I4ilhJWBw+GAAgIRKyw1aSHOgQyCNlI3YiOMJCzLD//uACMB+hkBCApG/JaAj/EzkMZkw0tKjENX1gIAAQARdS4K4kFeqByKF3gGIiXMAMA7trwY7+YKOKBgB9ABiilCw6cJH9dwBKAKfcCBr7djfV5ptCAjIggOXE2ViY3LTheFAABAKHIQ0uBLV2Y71gAkAAEBrN32gAboDcux8ELCAwQEw416m0mf/5/NTD8Q0K/ySAeJM2uah+63QOizExZgu0J+dmtffV3J6FbD1vPJAFhYhm1KH5awoRJ0oNMR/96I1EfR//zMEaAaEHjbNrNqEN0pOAAjAKVslFErMASiIQf/2D+CAhbeANWBiNA2Q9q4v94AEEDWTPVar+le012fAOgYSNELBgua4lB6kNP/AEzgAU0o6BJmocvtE0YFUOBgABAToAAgRAYAAtwAO4loaLke6ByEc30NCPe6+CaZGUy+sHgGSOtzi/Nt++8fgI99H3/8DpHc04jUR23DxPAkh0jjEbdd707YEQRWeeW0UqIwEXww0+AAgYEJNDtPoCDId1uaD1LncbtkvGj4QADRAOOBeHFgfiG+zGb+sEONTICHzV4K/7oer3gBAO5Ikw+97rSrPn2O7YAB29IDs8B/eBAUkwO28gI4pt2ZBc13L1b63+n710v+oPzIhlAYcI2QVkDN8xZ+CDm0COtMZFBbL91K2YIAcBvC2YAOMsA8Nkbpyw81LAxNWi//IJjiQgBotJ79Z8WMQCYynl6AC0CWhGk1F/vrCKmth6STf7AvKtbQFDZxnt/TVsgBgaKf9ciIxEf/8AQTkVRQABAVzLNKAJk1FeAoBx/JuSAhadiV6ebAEBgM1BwNAbQ41a8CX1cSfGKA0BgPxU9xCVlsrwjDXDDAAQUFIkeQEILYSFqQMGoIfgJyqwAAgFgAgWiolRE6tqTT/f1/X/Dhh7CCAjFZGQNSBm1AwAAgIqAAIDwgABoAHTfbv/SCEMlse+Wa4kq5h068AGspv34MAQ6r4/7EMVylheeIqAjVvFB/4ZRjwomfbWQG0jOGAyDwAEYAAgChRWGEwcbVu35GU/gw4zwABAcAAEAkD6P6RDxeudtrwICSwUKJmsSCW83XE8IY2p0oG8UAAQDooGI+fuYBsBCAACCaN8DhON+fzADgACAcrimoAFEf6XF30mvoxfGCkvf0kgh5Inu4EMAgKFYBhrNkG1sKzb///uHCLdWi8TP1ZIgTaQxCf///thM7rHRRcj/X9xi8lZVn///7IZPM/2F3Vt4/b3Vba//tGNMm7LRJmn6IiIjgMQn/wZSgLAUbGoGChm/CXx/4wAAQdQABA9AEPy2AEVoAEDETFrKSST1g3AY4YwRbDIhSmg9XvCXFcJqP+Tf8ue7YAAg52ywAAQOwBEA73qBgEkFkhSDuNG3IrnJgAAg6AACB6AJblvM+Y1WRN4mD4CBk6eHPGbW8VQnf/eDcY1hw4r9DggzfJWYkAAgCQA57PIPJVdmb///t3THr8SP6qGTwKBHX/7/YTHBzMX3lrIcbf8s1/VUR8KnVPrvMAHXsWG9KzFIb4cv9ERiL7WuA/AEGB04aBZsvzCjBNQsv62Qk7lVhMSnvwIwBjTHlg8z1ARWwBBsBobUaZgACAAAp6N0kBRKFzf7/DAEsoAAgBDuwl7gM/xInB/4CDsUSKRWQyJUa0I1XIAPgACAH4Hz185AA1bmCDesgAZUUwAxYwVpUKUHMAA1QEACPDkTTQJbFYi8B4hAoAJwADy2W9JvfrbkuZMwuzv2psViox3yGWg9OX1Q8bf8+xLzRajMv97rmXkcQedsqJoMoiJ1vzQT/G3QEvK7X0RxGgiArcPoHwALIIFrqDkeKKprW9aMAIQQtASsgZ5CCRHkIeY/SlcOs0AAQRCaL+RDQAB4cCawVsPIUAYTo77gSjFjGDLn2RBOoT+vYAAgIibjQDGimAlSE9Wpx8HUIA/bDywABAiAIuJlqrzMQARGQmTQMAUjsJVHh5Th3igaKKxtWv00et4gAQA5b6iAAKB4OatGNF0BgAEMCwgQLQwMANc2tTZ8CcqsogXWM6/71mEPfKNS3o3QMANhonfevAoOSBQykIQ9ttEGNFV6R3OTjRRHEdnGokcf/BjaHD0POVyMQ79fHQ/FhroblFfO+oKhcwW/fuATqUAOFhEQwbdOE+Tgjf/7xaaCrBLI2iEgACAvoAAIAZICgDnGs6BIc5vUduCACA4i1FWoZOMcGpAbXACA4Sd/Yq/ocXqAm+I29gAagAHGoaOjBmmUMUWW3AIAcVj7oWRICxeL8UJB/4IVDDJglUf6SJ+3weAaMvRw6Vx9fgIYJ3+oC/e7t+lhiKvizwPQVLp4wRiJRb+A0ika7wG6My/9EcR1F6i+HfEDAagNIL4RASlhpT9fuYABpQADyh1wBUyQA9Z//uAQWTxdWBzMQQYsS7G+tAACAfTkAAEAYHGKgDtKo9/PeDgKBZ17Njw06exphLJ4AMOHGWKCSmlo0SD5D2bwBuMDCcNhLrwi3/tEMTwGA43/DASxZQICULYWmYIAAQCoDAA0TA0O965A/zN3vgJNTwefZGVM2//8DShUJiKA1RVf74GlmJUCxERWd6I4jiLxhh39mDtmXhoEHzG1KbkhgAAgAgACAwAAIFraZ4BhCgdWcQ4k8IE7HkI5HgA2LUBgB13Kkg+GNBJjgA6DheInHAAHcVqgDeHgzqwKYDBJGiiEXCUx69ABAOCIZJei+qMk2Dm/3kRicBRRzFcja9wsXhKTCAqVMC0pebNBelqB4NysDVkJ7v4PBmP7xtcX+A5VkHD5RFX/ojARwGLkKfABYVAKLcsQuCh6biI9Xv4ADNkJO5VYTkp7wBlAcFo6e46rXBwS+deQBAKQBSDAW6qJk1rAZzeGAIAx54otcqofPhRA53gwA0iBVVtN/4mdiG511+GNeA88mBqdBjOZIYSXkBAAoXCFiVwkmhtF+RwABnMQACAOfQYmBNpe7QuQOgACAMAj8ccAAvlLdLR/wQIWHCFEAC9iKkrsk+r6cPV520WA22WMMyrh/9pJ5JDQElda//gAHoyfxG9On+/o7YYRTqjrVeNf9Z6xs48EXj79EXiIWANm/0AAIAGXQJZGe1Hr+sSIj4BIAKAFUBQKpYlCNI9rUhRhgAOwABANIgIeBAQRHdqlqtCC9pEOowM5WeQc0YUDCkAHBKCitMuFuq4E17pMvAAZsTJylUgnJWjmZgBXFvPCYl4XSJfuNgACAAAonFbojiKCdXD+3AAZsIhiMRn94JAAEBFyAYAAQCiCwgYM+9IwvVI7CMV6jHMWdjODBs4395TAnq85tGX77j0y+BwmYLdGLUqkaK5y1XEEUCVy3f2HAOZEEXcyn5EViOCoF4R/0wAMiAwoPUnudTGFFtoQdQAFkABAQLSLISIyhIvrSQADFClTnACot+Wkl8vaIAMCAk4SR+DthPcQYLwgVvBUnqjMLKdqyuRgSA2B2AKGrU3zBZkK1H+/gDgIOo+A8MKVSPAoUd9+YAFQESGrHi5ANp2JI0vwAEQGUIV6kH6byX3+hEAAQHCEQABAZs02Q0lVEn1fBygU9oDR/NvgLCxVq8onkfv/OKZP5N6cHjEtiIDzEd98BLwUJGYxdhHv/RHEcVC6i8O+tgBsY9AEUAAICYuqKyb/95ABIA6wRALfun6Y6LiMm4IHSgEQeGZ1k69pMr/vASgorTLhbquBNe6SLfaBYAAQGmiBWegh2k8F+nwQBveYQkBU4AjqUNnW3iAAEAYorgLQHHcZL8coGb/1IgAgABAEAI0KxG86XXBoIAAIAYBkBgAD1AfA4HGnQAZNSkg/AaLvJcERFa78wTkt+4C/CCf7AaGzVcoLs7xf1EcR3Mnerwh4AKwS4VLiGluPV7QQGWJGRrJv/4zBIzi5gAkIhQc3cKTuc6sKywNvYAGI1QHhBROhUnAj7YK3AANwDisCUtKNyiVzuiJ4JYAc8N0Pu4kBKqHzQneE4AMIJP7DaT1RMK0Oxo8QMBCigCxxRNC8QDPNHoeABRQApOxvDXBC/V9SGAAVoNAwAAgCQALABG3/K8B1ie5mtl+2DQuZTB0TNv+0AEF5K3pAG8jhOqvNd/sIa4POPI3KK/3RHEcFiJm/wQKgZUC3gXh3Ntr4CTJhRjAXpstI7yYiv3oR+IAGxABZOkG2dmWPZPeRggQntODR8YcJ+FYHrxAACAOWgDKAUyawGXxukex7AAAgA0AQ4BIspKkooULV/3AEAo0RvmT7zNkqYLOXTeVgACAQYPpTQA0AkrxwzHnggBzkHjwsqyhKmozzSUXjCKABw/KgUXNRV6mwa3/8EIAAgBcAAQAwMAAdQAAQBOUYEqRceopOHpgIrX6gA8XGpQGmZWqwC1Mau/c9BotbkiofB9I2fawBJreZQRUdKDbGK310RxHFQwXDvgBBUGj0WzOAWQph1s8fuOAAEAIgABUBUmQBQXzqGSB+8QBOYBVEEhl3VnSn3dICUAUFa6WngJnxrC/7wM8MAAICoFI2pItkAAQAMZOuMYpqfFxWKRVicKdwMB7nWAOKEBR6NY0tT/7zPABd1UAQgQemUIMCAACAEAdBQABAF4BsFAsvwA8fG/kDwFkrsscdlYHg/E3ACTkKowPDnplSsEfhEcR4Ujw78QcBbYnAoYEu2HiIo3eMGAoErEFCw1woGV5za4fgIFNFEtuJHUSTJ8ayY+OAgEE0qcfKH4kyRWugAaAQD8AS5qyTDSlxU7gEBA6wGZ4mREskaPEIdXMAAQERXgwYm2su3Vh3Hee8GGaw8LaCDfZHMIsybdCFEwN3gKyABqJUzhhFTPSASk1fWV+uvBKCSWhR9Zzr+AgyeF2skv/vcRxHF4K5HDvwEADNX5QsBbFUUwvpGRloDGf46xALh2h0J18sfnkDKIYAdg2+4FzsRKFmV4AwEvnhrg5bFdk9tdkAA4ACEAnjUGrmgfdESKs69gAJAAgI/Q78uFRzSUv2TzAAEAgDBSgkqM3OTOhr5WU8AACAEHDzQukeW5qUD3JN6EEkEtLBYiPI8AAi5r/XwQhuh4WAN0R/+8wP9vQADaWXfCAFl5gC2d8IRHEdXcFekO9AAEwAFIEe08D7x9JCfPgBAYxbhE5J8Col65CAhJnkAQYo4KNOmaBHtXXg68Axzh7CDjr6zBQ+NdsdYBIPgxQUDmInVPSp+wAsBNiAWQCxNSjCeQgKA9YAAH4AA0hA+ujZkUjf9cDCKEDqx1QhTZCfpoocBgACNCAcAA9AHw8AFix4A1X3+CxUy2ubXfv6YG+CWiSC9ShPPgPFekAfnf90iOI4PFXdI/gOAAIA4AAhAjAAMJnxiAiFp4OUND0ixs0eGBCIrAeA2j/Xkpoj2AH3oDFJxgcFX6I0gEfrxD8GEskCB9cRR6rRgz+L23QAAQBKCSvg4ufwOMSoVACiKIGps0G3qIpSBw6IH/eCAZxIIILMoEZTHXaaDgIHCEhNtc+tRXC+gjVOOxACdAB5IAwpRUxDg8HQkQdUWhno7//4EGrBaXW1Ex+fADcLFLKflwOh0aywAa3/9+ghwBxJxJyb///xEcRFQDYAH4DgACB2AAICYAAgIAAUTAAnIAFHRQBRJoWkVuV2+DAEZ+kAE2OlnQCcmRR/2hkKDW0KDdp9jNHL+/eMOiStMmOOGRUeaBLwDFwXVBoI7plSwreQ7+MEGoejwxVMhYnc2S4AqYcH1gt669zu5//cMbmW4BDjwFUEjcn/eDAVrQsiOW40yuEih8w8OiN0AgWYoEbA1V3X3hB7iBggp0AMVhkSKurYIgwl1stjLv99tze+JbGsGwyuqQV0V/74AH5gVozX9H+r2B8wWohl3heflCYWjcOXkn/WgjDVcSn+a2+f/oiIiIni+LfA0AAQCJ4AAIAsAeIRj+DASN8CgLx7gABAJABFgbgP/9PgaAAIBE8AAEAWAPEIx/BgJG+AlQAxMgJSernku3IgABAFigCtIwJaETNAABAJlgAAgAQB0D0AH4oGC4B8rCSCASnOo5NUqUiAAEAWKAK0jHRJmgAAgEywAAQAIA6B6AD8UDBcMakf2hFECElkv/wSAEQAAQAxAAC4ABlYkDGutXGXf/52CIMyy4tsn72B0wtXVhcoyz++0bCOlsUDpiMf/1h8w9QqdwnP/mB8wtRCp2ic/mCQMEuqBEazlb60UDBLiIBEazlZ/RGAjxw8fwFUAPqBxAeyksNbS80/3q9kny3pGAACAwQAAQjQABBeTPEHgXXL4cNCnXFwEOR4KCkSPICEFsJC1IGDXwECmiiW3Ejq5Jk+NZL+szgwMGELLcZcO7PYB+CgpEjyAhBfCQtSBg1DA+YApcSelpbAAgsxG/ngYA2hJb/9Imsuo+hDlQFFUnWpeCffXV/73iNRF1UCcgX8ABMABjjEDhEcYYkLUhU6hZxgMRKg87kSI5ObOEn/fNgCbcHCfuHvZfq8BCczErA3hEiuCOpwNvEAHqHAYMuoo6pnddcnAAAgIhhL78hfDVQ4rmOLHmACHNBRUkQDOb9MRiTR48IYohgUU6ZoM1+25IvAfAoKUrChKhOhCDIX7GkgAGAD1FAeba8xsABM31ABwU4yv7yGAGQEYGP7VCLCoZYZQbAoZAYAEQAeCYWEfF8jiwmnoVdZUvYIgDs0OMmZR7/WZsU+Bvikf58AB6YZtYXogXfynGeoBIK3Zo2AJjxGPn9BX9mgAHqyg+J5v90RqI6gr5p/zABqBBR4uMIN3JGRqYw04Mo0hZWoxSQ070KEXYzgACCAOSInyIcbYqU7lulCLwyrHAAEAQAseiimkJbbZvDABeJD06CPmZIyliKMuIAIDuDTRx1cXUK/IBBuBGCYKIdE43Mm9KRB5vf2txgBEEJwFomg4U6E1RhuDUCUcUILtsqhGlQu/3IAAQBI4YGkhane6h+o0//4GAAK0ACAYAA0QAAQBXASHhF6HYS00Rn0Sc9/+sUA7NCiJlX/+5YL76/t5f/3WEZi1i+YLf5tysx9CZ3NHgsfNM7+hX/qGJyIusKL//uIiMRGospi4/0DUOCy5ulElDKRoiwCAjAYoYFUmzF21Pd5gUfhYnYAOBYvDTPoU8NpvGQABChdM8nckOQvT048JgReMlYBiYKzKKyhtoJMOJuz/6NywAkSe/7wEJ0vRwEq9LyLvJ48mAlAMA0STXa5mxr58HHAJIGGf+s8XMlHBAu//eRAACAQYDTxYAlUiCcciAy8EQUH720/8rFDCh4pIE4RnqcO6WqsFbBBg4Pqm4SPqq+fR8ULd46bIHBaZ0t9/9iGwe0zjtpPt7FckYdNi339dRJvmNF/1iyYAuJN1lf/+MBmoN3VE3aFbRE3EThBNv+YHqCvA1GZLwnEubbjAEGKBQ3shtmLz+R0Lu+GAbgzbLl7jRuxhd4ue+chSlKgquS5vgwIUeGBjl4h9VqWqozKNIMAKYSDcyUeFfRBCziAYEO4BI15cQbCWxBif9oBgU4LYWJHHrIZru+MAAECEAAQNgABAlAJJngkUOfMhqbLfHWtLeDCONFspFiSDon+mSfhQKgAcIBUEMsKlN5Ed8v+/G/7GezECWwvHXcQk+1eOyxxLuDTBoEFmPYi8Lr5Q6hoxY5B2WA2JsAxEbnfUhQpYTIA3/eRHEcR1esOwAlgAPoAC7YCbgWiUDyvW/eAQWgkivc+K1ERr0MEzp7AC3AFs7gZInkqcoV8IItwtZQqQ26eJnCpPyBAARwCdXIYMgODOtFYMWsAGAAIAYGQo5s5ECB7aDDPJgIDiRDD1dftcRiRhk4MADZwABAEBRqY96P6Gt+fwSAAIE2AAEAkIQABABQBvg4BakoBaiTd74DQbEviUApMW/34OHgDQGiNmLAGiX5EwbIiO/IjiOkPwWwBAYLDPeka1xIS9VYWDJB2BhmySGUHrWm2X3BhQC4UJAB4GxlYw7Dz3vwgqmQUpv3e999999999999999999999999999998RxBKkUOjf/6DXwQ9E6cTwpF4zd4yS8M9E169MccKmo8sGGD9QNM48VkLjpnLwfw+QrU9OxUB/IoZF8i+RfIoZFDIoYY///CZ/peEz/X//FfYLeCAACAPQABACAFj1OAHYbmXBVPUi+QgJClxL+WKj8ACnxEBFeoIaIyGRQyLDCgAIyIzIzIjIjMvDD/wAKAXQCy+B02YsPwDQEf+CJpfz/+AGtHEZH9oQoaVBdQAEHSFhAVMohBhqTIeGH4ADnjD6ppPK04wWiHgAOAJwfpXygqJWsisOnJAMc67oew+shIs/+bQAzNOu/75/gAP5D01VNlS8tkUF16IK66NkH+tD/gh6J04nhSLxmrxlzxjpOV+Iggq2GODDwwAGH0MIs1tqGJMqpfvTIakfILy0IDOQMGUBeMclmWa+BjFpgLZE+zJtFh7wW0pm0n4CiWjLYlRX4YoaVf//8CQQYUMP8MP/AAfiN3kTSPDX//+wMML4MhClIUpCFIQpSBh/h/4AFAB4K7kEuceKkZXDQkkf/BE0v5//AAdsR02V2RikVqH8P/BAwy3T4ALYQpRY3BYgZdIG7XoQAmMf/hxp/+ABXRiURCa5Z4zAWwCzfcKy+6MDTyMOeDLSFJkCMOeAA+0Yl5Cox2KYafSZCkyAYEoSEIAAgAjV/mn+v/nTd2dv//7gsYXGl+DY0x8y+AAgDDs47MpbcH2NvFvaRhqDoVSWhx/BZCASEL/w0isv+AD0gzKJydNFf+t//+CHRhcR/jC42o8ARMAAQB2UAAwAkaNqYBWELJCBsMRKIqOoxkEAuRv9ugvbt/5AAIILlgC2hHWVmXW/vv/h1rGVA2uf4ODF/8XpKZ8vyG5DEcVvqKU1qvxjIcy8g6FLz0Z5DchiOK31FKa9SEQGo3+qKUMPwF4jxOfJRFPXZRwDrLAQXFfv/r1rL9D+KZ5dQAxf8YyHMvIOhS81HOAAQ5454uu8/MAfRqtpTW/fMgCHF3hQk0RbaSj/kqBAy+8v8PI7DP4j3QDNY7iR13z8F1sEUiAbU4Laq2btBh4Yf0DGQI+n5I2JXp8BFTDHYcqEj2XFvjiHwhAulJlHyTfBhKQ8JcJT3jpVCAAoHZB/CO4bU+n/gQ2hX4vbo+tuxdDxnT/95j/n+Nh0BAYJu6CKE32ONn13fwcP+NkDaoKhS49XfhighNhIHDAhGIjyFZ9P/3gfDg2zXk1//7wPslqMti6KGRQ//19DYZcTPLSZBD+AGIAAQCbLAABACAHjx+8CIyDKNpbi3ON2kICQpf8Im5/4AFNoSCem+UaKuGRQABkXyKGRQyKGRQyL5FDIvk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OThjAS+6PfKzuSs7n/AWw4hHueaHEaiFh/w1AQmgxBa/NEnDQqUS8EHGrKnOdcogK3bx70mgxBa/NEnDQqUS44NAH0R84dPp5++4BRQVZbGBSxFA2rT/9pgDMGDcFIbvugm03/2mCdaFBqaZPMAxm+4GsENQQAbxFOQ1Mef/wQAqdQgACgAAgDmAFhXHs7P/6gXu+pfP+/9DOcJQQje5WHNE3ASOqBidUsg2xhbj/7/5g4cMOg1AUJlFWAmzPmrD29MXvYNg7BiD8kL8bKTd4hUuAxgzbRLb28//8wAAiUFPTPDAncJmIT33Ftm6CqTOLrr5+72gdDO8SzBJ7XV8IEMDjmEAARBCTAcqm6v9B2SipvwObAAf1ECt03D34BXzIIqKAQizwWd8OE6yw/Q2BmgBiJBpCbNR1IbX/AbkiCHfrgqr9F/7wnaeV2mHrNnwZMGZJwH1p8qyL/QgLgCcbiB+8w+IwqlAN/g7bG8YYDwNkEAAdABRp0i5j6WRtXN/BBhNqLbi7CDpj0uEFnYblLS99JNDD+G3h4LJcTIAPGYmRTnUgnLWgAGPQQzT2ygYo2up5iIFE/VeQReE0FvkICwgADgClF4CR6Ebm+/fhgoPjZPuWk4T+e/dUK5H/oNdYAeA2gZd30lV0pb8AoYO5qpKGYJ2/u6H9Y4gABAFBhMnlQewiPdf+BGYANhDjh7RbkvHyvkABijkIYio27OwvI41gB4DaB2XfSVVShv3hZQA4NzBDXQhLn1hng4gABAFBhMnlQewigesIJoDgACAjQAKDmibfFb7sC9rNdX7m/wOMrASHIbx1E6AYAAYcNEG74iXvDhxDAcw479oNvSDsYbz3O/YVZhqQSkrR4ITqUQxnNLQrhKfSdlhsceVMXrBgdNnqDpR0CVjljEEXwtFwk2RcPV7SQyPEVXxUJ8G1AAgAVoHBVbTUq+peR6AJBwWoIAA4HI8kxQM0TI1dY/576Gb/qC2ABDo6htznGc0DQAAQA9XGd+jM8frvx9a1/0GyxAMOhsEABgNBFi0qLuTTvvAADHOhkHSecopNm+PAAXBwSmEUVPYAAgAMFG2YRz5J64v2Z+8gOgBHh6ml5Was/gIc5ycAnaLVWvt77xDVIC2HJOLhGrlLFQfhIHwoQAgqzxwA3D3SLdsEFbbNbpn5x8eXgRhEhDMpKtVoECtf1snRGtzSf/gTBO4hrgGAcNdMBFBwdpTLN0VVrABUAAg4OeIU+rsgTkwYAAVAZQ1MMAAJgZg9M0BDNJNHtUkyaI+Y78AqEcNbuPeI3n+EPEAAGwwJTEAEcyXwTIszvEAkQQAB4ABRwqLXljoUCNynudb+QGANIQTwS1tu0BJsBrUIxozWJBjp/xEQAeGAaDXyAHaBCg5VGWuEd3a8AGHIwiTqgpPklgBoYwBC7YJzZY1AezXP/+6QjcxhdZFD/vzQAAlAUJwcbKL11eI9vgBsZlAHCCjWWY7H6SDxjY4i/IJQo1hJBHjA2dAlhqligSq5zgA4DShAAEwAOWBY3DCysfgtDP8JKiX3f4EdnoCM4AQe1yluBgyMasrf4xMTwYdRIEThsXHeEBCirzQoiupO7Ln/+8gBqgG0ZRuqk2Zw1jEDpxAeK062zy+/5gABKBQ1M8uA5JCnACJo3xmmOjxslsVqnn/vW6ZsE0Xs5jTmJXJ2K54BRlDtKZ3pw084kJ/5/v/t8ZZwUCpIIAQB2hYLRc5sv/+7fGA/DP7Pvof9wBGkqgJsN9QUxWyAQkTyxFqYT2BgbIQ3SpSPtv/M1wKQ/xsBcANgmoMejAx8iPki5Xieb7l/5mnuctXYCQPMBHppokL6e3AY8AYsAwhJno+lPr/gGKr6/rvDd77WaoNndIOC/xKQQCADpB5gfvc66C+j9Mv8BQM5GBzJ87nBLmGMAGFI7BXrRi1cjsH/wH+GgWfAcAA7AABAgHpnIggACgKYb7X/kAACAuACCrn6IIhEMQ/wxUGec5Yhdds689/+sGhGAQ9Z0AAmIPG+e+MADmXeHDWkWU9FQCG5iRHg99Ph/KAoB4Uw5AuuooMnLmXIAnAo9JRa32IiKGjeAm4Clk2MJFcm1BfS3g6cAxLA/+zDiDSpZ4DH1w5Zz+EHT5VJtbBYY7DlNHruJO34bUFhMgAACFnD4GKEEAASAAEAtYACQbp3sK2v34WOqv3xuccrhl1DAkmAgXifq71ck8g/8AoDG1enCNwevdYpQBUIQRSkrTUvSr8g6swStTQf6IgGCCkWqsxZrby94FOlUc8OxCC9vEADQNXmAKWw/UKV03YawFBXs2UV7+cZAWmqgUHVi5Um4QEMioVxIBztnwL7XnBC2mCMVYTHD28CCCS84awLc2dtHvvhgbk8ho8qSv//t/gDDkIduamiGGiCv/+G6DKjB5IIAI5bBnb4JX+vwG0b3ADvv/7Zq9bZPvMLqTCIRGEB+EvRdwsAyOsJw2PJoQBUbu18Uz/OpxbW05RgiKoAfw18wABAFwKZjjSDBYlPu1ywYAAgAxACGUYSeAHwBJ/770BFOCtIAOEYaYYINb3gZCAEBdrUEKMMMd28XAAoQC77gFJlmjHzZVyYRZDiFDkM8LAC7QCtAPJZyQROxFU8/tAwkxxJMA4JT3LYwIR8oRAAYByAWHclq/Vf2U//Byec/g/5D1CwQguREfKT0ANPx2K9HHPULf/B/Fmq1v+GvODADGfFkYAebj9//+04gABADO1RACHSPz/fYzFX81zPQIk3u8CC8KsoySh0y6mpKPmQCBExEjCaqkHNkdOIAAQAztUQAh0j8/33kGOuBpN2vi4pzhPZ4EF4VZRklDpl1NSURHAIAAsAAdAPBf7WE0l19AXNt2hS2v///wjAAEAwBo+aGw1DW+1g3cG1tgTpmfNP///qkAaEMPDXzIBAiYiRhNVSDmyPsBq4PjMHk0GGLKlPIMdcDSbtfFxTnCewb5ZTPMgCEdWgsmEIZY1P38ADkeC2Q3DniH6rPscMABDCkYVoiNIr2LHrAbIIAAQAgDlFx4HwVc/vpIpVhrQW+7X/gbwAvJawWsRhn/84FBrPQTu6JwpMx4cBjFQDw47/QADRJQckUdXUePE9ADKNydBBIVc4Y2zv7gTgsFC0c9ebEEurT//egG5FHsHRIHRW7Pu/hgjDWNaQRwF6u5f///wAuIeKHb8q7UL6VNa4AxvCEMznEu5BV3rxg8gNNMD/aMxrfIfjCJgrVGakjidNIjK4QJ6FCAALKOFOtyA6f52DX6Ehw+x/T4AIClUR8TbPpPGaQADIREAj9COy1F/wYFS75q01MDm7f36IgRlXBAvuZPa/fuQUD/wyv2ML3KvNbEb0gL5BNOnf8MEaJoDzsKecM/9oBRE4Pc5loBWBdyRAWHAsKXf33t/X9AUhw+NH1pe5J/7tBnKh/eSYIyP/2CBjTN/7uBy0EAASAAKMEQsc/CNUvrgt0eGw+n6aDVdy4fK1LhIAAgDCWHiVg0R89jf9z5BfWoMLP4TMzMzMzMzM2oOh+4bXzGV7lDw//6Etv4AQpxKNjeKUMPEdQYB8eOgJpmAQOJp3BAofC1HhFfBgsQ8Qw+UM8M4/dMwCBxNO4IFD4Ws4GQjgphiWjIs6Z13gIpXgBzBTWnUkct+/oABAoOgQp9XdhGJt4QWhakqPlsCaieDyfyHB8YsTDaRhg3/Qfg1GN5TC1g9thdwYTwwThAEAAQARQdAMTu2n/vwPfcFef/mfSZv3AN7YcAJKwu6BP+8BIAZQyqNGaThBYlF/vBbAHsISxFvQcq+r4BgGg14AgURLGJ/T5+f0PXMA0AiQMm3H0E2VMbweDBMqW03pMZrw/p4YAEMPhG/vH1mAvJnvIaAKwWpr7Wj3UxXjwAg6/QUAzdkRajOpWr4JlLoL1hLWWEu9fjM20wYDChAACYqBZSLv0/q/3BgbMpAP/5wJ8YEgCBu0s9EHrozpYBWA+flAC9Id1gh2AxoxtNTyD+w10NjQCCFUK1YXShf/gFwA2Cagx6MDHyI+SO2YGcJcnkHlFf+7fu51y5Xieb7l/4BjwBiwDCEmej6U+v+wEgeYCPTRRIX49u0Y3q2RA2FFD/2CGOCAAJAAOUB6C8OrCN2Ppf6AF2bhl/IWljMQBTDCL0XvB2MHD3Jhhjn8Ciq+v53h//ycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJwh//+AEIbLWz/d7/5GEcO4ACET0KuMdHh3B9aQACRTYW0BqGZ6F62T7QFx7oa7JkGuXTqaP79R4BQIX4nhW6sOOsjrrwA+AzG78pQQea4ZS3+A7IIAAsADHg/AEf1Nn/HWa2M3mAA4ADEIpW0HpzgS0YhwMaJkt1QwTGMHP+qsHw7wACwtlC5vaQu/W4CQY+Q4fmCkRXhBN1vgA4SQF5KLNoM9//gIx8+IUFGm+GU+/vg8whAAFgc87AZF/sn1P+ACHX8aUKjdZpZ4RD//0YId8ACrACJKcBzQgxh8yQAAINgOAMJKERiB6ryMzM9A28EOSccY8JZTSENuU+XgAwCsAfoXEUTDtWLS7V7UOIgGABC8p4cyrkmChx/4RQiWsAcdEzzwHmQaLunq6c/f8AEF5KZ6QBMgz7vuQfY1/+/4CUHcGHfpMhs5zdxmPWrwHQQXBYiTipA4KEKOnwMKH9EsovPqQ643Ls9V4It9YFYAAIAQGI47CdE8GMwsWnV4hxsvr72vCFYULXKGyKZAyPCpfQvICABMPzGDBDyrioEImjS4QGFoQAkMXA3eAK1GD7cd+/g9GlRzTBX3XYKTA5u4apj//bBCCp0vMPNCP/W/46cWHZgAAgKAACBUAAIFHUwAJEUAQ0CgK7pqqSsUVyOLj1yRBjh1ApGS2mvf7zOSGqIQbqwp3ghmkC2BlOgt7ZHw1zrzgBCnPEIusIOrrAAEBXgAsEXoHQJSABxv8FJmFH2wRrVswPUL/94FjnGiJf/z//fgah5fqwnfQV/eBBTHmgRmUr/17/qEwVDQd2ABgDcWsCS3ni+3r4BMjGofur1hRmxLxoARgeLUEvjxRK/E9PwAAwAEUF0RAZGdyApcGP3Z9+QEDIAFuWYaKvDRXcN9ngxm2C/j9U3GkrbqRn4wG4O6Z1QaCTzGdeH/0XCX9eDgsxnbtgPQgWZwjncDVDCdMR5M7H/oEDEufwLniNtV8EfA3W4ao7/30DVBtIobPnb1/3QwqIMO/CWAc0DAiUvOU0RsuOYfAAMAKM8YE0qRNoiNOihcm8Pdh+S54LC215GpSpIXTWeCGaQLYGU6C3tkfDXOvWABgDcWsCS3ni+3r7AAAQEYAPBE2AiBKIAKbnsNgSgBB1wCYWwY0ZEf9+CWkJawJHX3sjgVSth/+A54les8JF/vYGijSRQ13VL7gWxXZCwsb/63/AwT2C2Ai4yAG6VSAED7kK03d528A3Bx+7Ja7kAHLukSge6DcPm4wPHDaphC5f/BEjMBuBLcBWxB7ist78F2HJVGi5X/2vJxHQCScnJxHAWk//97jDuAA4IygQBAfVFlo/urOXSIF8YCKKcLWNubWGUy5ak8CBOaYDwbUwYyzCXPUk+YE4AxoMAvfxpqZiqm+jJ4anHSUIe3vJYwJeKDAABAGBgABBJ+mFRVgAdvnaBCzHP/wHFfarFslGAGL3gzT//fg8GL9o/a/+8/8ICAiw78IK8Qwgi+vkgJcb5oPS0PFUldhi9KD8HxS95zPeAAIJiDRDAAJ+EHaQEKLkS/SBoodIq+DGcWJV0895kyqs8r4AQHIDSuLuQCASIWFVp+eCBmN8BIPu1kSgn4CVZ/wSSMLuwNZQFfShcmY/fAbhJ7yKF6MmsDbHNEYaq6t/BMb6sT2L/3v+6gNRFh34RhSizgeI4V3tjB/3p4THGWaNe9vpk8M/LPMJXGJYLSDg1x1rjstyCMswYAAQUaZSEdWcGITAUVF4bICh4Wt3l4SHGSaJe1vJcwJ/KukAAQDMAA8AXMTD+DOhICt84AQpjxH32EHUGGqxLVwNKhZmZKi6jr8CTzmA8CZ87/vhGAA64LE0n/aA8yXXBPfdTv+/9xUTIGHfggjzBaw2lRX9sBA85WDgBhRTKNjbh8kNIj5KP//3gAQAgmEzgDbiWFYnerAmnaQBgYAk/A0NIlmCxb5PBBZB59B8kiKGUjEW9dHjAAEAcopnBIbb/FR1DAny8AAEBIIFTn2Y5EvnQZGy8b+AAQClAsn65hQ8ZCn5i8xCJNhJI0UDQ6THXiJi3V9+A5TAegePvc+wMcEq5DRZHagW3iXgSu7ffO/4ORrIWHfgxmFiV/EnuMnWSBJnwIwcUmsIrdM8WhoV9pvAICFUcAaBEntaEJWd+C2JyBOAI92F6AAIMo5GuT394SHGWWJc1vJk0K/KvBBHmC1htKiv7YCB5ysGDhn2THAAEIvuDH/7zwgihRYOGKqdqnGK/t4SAiRm4DuByfQNO5lSBQrphXdb/78wMSFZ+PWXEvAxAGW/C7Uf/v/WiqDEw78MphyF+Qaog9jyGepkZAACBa7dSAACB8AAID9wGvBAU+mvH/ExeRk2VYn4PDAO4tAwEnzygXQXOtyk+QNWCaag/SmhRnBDzExTlADsdyyQBAM2E3ADA73ELPLoBW2xj1z/3gGbAOA4mALz3RrBOnoWk3iFoq4EmTDTeIJmZqX+BHECETWS9df//+9gSIqnneCR01L9wmwP6WhEVNb/wASBSGHfAiCkPEF0u/EoYE8P6AEQnmS1jQ7K7wNy6AFsJeeAH5aFGaPwNRSdzlJMAOlqk1QQMYsMWGbipGqcozdoEIMQssZkq8XceN2vABkBKANBI1VKnZ+cRo053wB0O80DwSSkNL1UcdOP/+UXAlsCi2KVC7CICRF55uXidtMf/3k7Fqz2r/+QLOG/Riqhffef+AiCiLDsCMcIAAQC1zUOAAKAO1jK8wAGxQASh1RmZZMzfSs/EDIYFtniRHGnbwGkOyQiMQADomQABBEMH/OkAAEAg1AAEB0E7AjCcCSqwEjKMW68Lc75yP32IrBcS4ANK6ACzl/+8rD1fHYDdlWF0OWlZL/7QO6v6W+sHgy5rLHf/7wfZZMci357/4ZuLDvwAEgAEYgANIvItyFsPv3oFIARIKR4SXEqrZyN0UsnXAMj2NQC4AIOR+AyaXNsBgQ8HbkSElrEfvm88CcgBA0Xuh9CjtLIs3wmCAdW0FQcojZQPIP+AADIFBYWN9pCcU6etnk04S0IF1ghiipeGLye8/gFzQGR+0GTE9uBJKqItw/fGU8BswEXEqqCbcH/3/VYrCw7+ckAYUVXOibRHxLw8I/QwyLyVNCYmKwgGbwB0DhqIqZfs0KdsbXOIfMBh06rEhKopp9UDS74GcIaVsoPIKXGowPw1AR4qVIbDbuSepM+DCFExFLwQJ9ojgBYi2d+Aur4jDaIcwQPkl6Jvf//vGdcmyqvE5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OT1Pn/hX4RTDPyeNUSqb6QcPcSZGRkB/v+/8ABCJ6FXGOjw7g+tIN/fqPAKBC/E8K3Vhx1kddeogBCr8E3/DRzbolfyvf2rtOZNrmkYZWGVST2lEaoNbGG5pOucXL/Vfhu4LDOquK/IJIiIog/79//4ABYWyhc3tIXfrcBIMfIcPzBSIrwgm6CdjCAAEAQgGA74E35wHf1Zq5NTcH3wChBGtSxwsxkPTc4f0Q78DCNWcaQNQvpdZD+oF6ExhlRDlKqKv994wBjhM0GJ4D5oycS6oBhcPAAQbAcAYSUIjED1XkZmZ6Bt4Ick44x4SymkIbcp8kW/Bfv/x1VX9B5OuGy5v7pw8Mnly4sv70F63sEXb7/nU5L4Dg/8wBlgAFNAKiBN02rOA2m+fczEudgABAApfcAAIJfgw+QGQMECwisSrNxW/Qd/tIAygAKAgF5YqS80aK9sD/9JkNnObuMx61eA6CC4LEScVIHBQhR0/gxmFi06vEONl9fe14QrCha5Q2RTIGR4VL6EEWgYQAsUGpKS2zGv62dV687FQmmjmCmrOQr36j7xROfVrzrp18rqfy6//P6Ic8MU8YyfQHdfH/AEQ7ChKyJJ/jJx0mSd8YZRSWgGKq5RbA8FFWYGH4anHSUIe3vJY0JeKPAD4FE9+WRb+3MYaRIgw8wAAQFAABAqAAECjqYAEiKAIaBQFd01VJWKK5HFx+ZyQ1RCDdWFO8EM0gWwMp0FvbI+GudeCIBOcIQABADCFQq9fo6lei/c3//vK64VKyPret3+pqe984mORdDsVDtdOjsVGC3ooPEFtn97iT8izhP+S47j6hgq/YAK8AMkx4GRNKkjXyl/IElYMZhRu0H/oKYMmHnQUbWPrxBkMOoFJJ4+wFDLIkDD7AAwBuLWBJbzxfb18AmRjUP3V6wozYl+QEDIAFuWYaKvDRXcN9ngxG2C/j9U3GkrbqRmKdj7v9/37r/O4dWeP/z6Fbl+/XBgsU+IduWYKqUq//IxRS3/f9+VnLv/z95ZoSnYqAv+DFGZ31Nzrm+imfjTjA3KCjeHW7qjenS3gQVhAtpAwR42LdIFAYfAwrzRa6RUn9sRQKEvIABbAASv4BkhCi3GYMP4E8AdoHNiJF6mlwRDvgAwCkUKPwIcNB5AhFTl8CGaQLYRLkOtiSBKnoAAYAN+KAWe/O2k+CQ6wMW3xl11KVolVTawOsm15Yrf/vIGLjLjfdG+71ioji78/reAn9uRlbx76OCynP+/7t/iOOP+gALYAE0rwOka2QLZIeBBGcYY4RqVPJatQMPARcZADdKpAEDbveYABAoscjR4duFpMtKROyfiBgMWCUvkI7FCLUlCGZwGAc9yQJBO2xkVVKZyj4IitEqrW/O6fVHGZ/dl6B7xSeOv/3lo1R38/6DZnt0lv6ALkDtkJZdX8F3AAQiuxMAEtPooEmJmf/5hZQ41g8tJMdTtF3AEQHGfWcJpL/OHRpH8FjjaFkBaSuUnbkzbgjHGLIUJY2mQRYZKnAzHV6rWgiD3Xf/7zS/HdQC5iuX47FR/9RxGHf4wBsUAmL8F2IYSXuh4MACMJFrjqh/YE//AnYDJ+CHeUKWRJkftHnCpPXgxmFiV7EnuMnepEvrgSJS3SEx7ZH8EG9LbX/7zA0aNfoWm3Xv+Hc2k0e6f/r7Bb/BEFIeIKl0u/EnRWndeExxmli3vb6ZPDPy5dqZ0+t+MV+W2615OTk5Pr/+lf0AAIA8wAAgBkOFB2B+i2862ghBgA+ZjK4AAgGLXqXgAHACVeEPgAIAAIBYALIOODki7H2boZ8Xc4fjDB4D+5EYOFUSeBoqDEFCH8DF7uv++DImEvy1G/AxnZaMxta4//z283rVyFLo16z0Hx/HSvwAwg0u55lgo648bFeFdgAEAGaUWBhpt4kqQvhtT/iAARDAAiT3gdg4mRM/I+cY8iky4RLUJDB8ABGFQExOLB7okRUNSNt4QAG3IKAAamD8ptoO6dNy/AQRPrKZ5KjgmbZR4MBhAPDT39o0p+Le+f9b4LnMk9rypZ2fTXrJoqUO6owUpb/v8SKE/x//feb06aNXXN/r6/IAAQBWIAAV5B4Bthn/xFvx4QAqnAN55QO1PfOPtOhpcbY8I2EFGyQRmyrzaTWa+Gpx0lCHt7yWNCnyYaUg3gAIAgChNPnCYaOLC1C1dvQ68AQqE8AJDsBRSIZEuNc5YYACQ3MIj3lpcI4mn4DeGphSlVI0qxSiSSfWB0Z8TEqjc/987dW3oo3DT370aTy09vrSBxxLlMd7/uzcvJW9IqO4e6/G/AOApcpBlUdo6CTzBV4ARgGBCUGYLPJQOjMC0bZDsZBnIChOs4NkT/9/vhARTgVXlxSpVXp1PpquN86/wgIMqJHRrKY37E5yweNuANAohWGXlZnAP4CaX//BgENaCASjulcqLZA84s6dHe/dEEUInItsTeU/wdcHZzNr/vKLES2tf//W9NkGlnaSWvwe+q//DW3mJxLIaSxpu1oAAIAdAAKsokA2Izv8mx+X/6AAEAeYAAQAyHCg7A/RcfdbcAdDk/oMV2rwJElzT+BDDQiiVaP97/9bNSQd1+1tcd/PZp7871v/rCY/+g18AYkhoi24MIH5QuSJ4X/mQAcAAoL0RpgGMwfbIUwFD0Agm/O2AOYAeLqypb++vQAAgGS2AACAMAEQCQ/f4hIQhZtwgdtFyDb4xvSg1Ks6j/YQSGhYaVXSNsSNlR3+/wuvhndzwAFhfrgGnYHbEABsYAOHisyuEhMf/P6ECIYM8RhJd//1v/4jIgwCjROuSkjWu2fB84+hT4tLXKTMyFsGH/iEkRa86qcpSrFUokn3+u2nu3+J41OxUf1XV//hrwAzAprA7QUivFEyAqQf/cAMwKawO0FIrRRMhKkH/wYfgM4Us9Ydsr1+40QRsuBGEIIiKMYRkRX//DDBqYLWn3LpuchJJENP/DbX/Q30/U8f/w18A8ClwDEA5PbSOKkRih+QPDEljlTqB/hxRiAYfoAOYAV+iT8CpHPWc8HIKP0I4wWkN2jGwGGEwbAbi2Ynxp2585IUiSne//8xGVw7pxMdWXnZX/vy/+g18Pik+QKaz25I0LdKpYAAgXW2gACCEAAIEkaFwf+REQkyJtttAw6z8XPc/9fX9/9+++/3tuo7cmxqbb/JycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycMf4AQhstbP93v/6/R8iWOf+hsASKbC2gNQzPQvWyfMABH3WdwEOvwimGfk8aolU30gMAfAZjd+UoIPNcMpb/O4kyMjID/f9hvgbIIAAqAKaGgQP6kd6TPzlf8A6BSbEeWxX16HUeMTwRPPvm4ySAw7A5f/wV98AHCSAvJRZtBnv/8BGPnxCgo03wyn384LDOquK/IJIiIog/796EAERjH70Sq2//BOEQ2HNqWAugqlDD7UYHP4a4ADowGEMp5v1nQwn74GEes40gWhfS6yH9eADAKwB+hcRRMO1YtLtXtQ4iAYAELynhzKuSYKHH/uCYwyohylRMxP7zAGOEzQYjYPmjBxHr9BCwQw8ShAwxgAz+WnoysHxZqCYjLS6/wAMtOfOWXGIhl9VSd/cGHKlwJf+GvgYUP6JZRefUh1xuXZ6rwRb6wKwAAQAgMRx2E6J5gDLAAKaAVECbptWcBtN8+5mJc7AACABS+4AAQS/eQEACYfmMGCHlXFQIRNGl+QGQMECwisSrNxW/Qd/tIAygAKAgF5YqS80aK9sCABFSSISCwSBb+ZLbU37faG/99SMWw5/2NgKaYJ13nt9YaING9aqSz+v/QBi6/8NfXJEGOHUCkZLaa9/gBEOwoSsiSf4ycdJknfGGUUloBiquUWwPBRVmOAEKc8Qi6wg6usAAQFeACwRegdAlIAHG/3hqcdJQh7e8ljQl4o8APgUT35ZFv7cxhpEiCR9woJiSFjnvLxWz6wVoWNiW/kf/vP9wAUEuaKEHYqMB2BImeVkZnv7/zcUZx/0GvjQAjA8WoJfHiiV+J6fgABgAIoLoiAyM7kBS4Mfuz79gArwAyTHgZE0qSNfKX8gSVgxmFG7XjAbg7pnVBoJPMZ14f8TAeH0UcFCzmFj2AtegpgyYedBRtY+vEGQw6gUknj7AUMsiQIPbhDHYBOYvtwWIiPfUmADZIB00mPft/2MTtpRqmd/2/TgLzBFVke33/MICCv/w18Pdh+SxoLC215GnSokT7WeYG5QUbw63dUb06W6eCCsIFtKmCPGxZGrUI8AABARgA8ETYCIEogApqew2BKAEHXAJhbBjSkB/37wA+BRPflkW/tzGmkSL0AC2ACLcSBUjC7DyLQRigMzwK0fLnmo3p9/aQsv06uW1X/v+AYFYS1UdSxPc8WJKT+v+SO7MJ/8NfADDhba2tDX1oJEmFLhpfgguGp1BgaWAWojZJe/QALYANpSQOka2QLZIeCGcYcjmDPLJa97nAEAfEt3w4HMEsano2eAAIA53SAIFb8yQp4taIhP4NRSfCCQlXbOROipk84wEsBhaRO1I3Yx3/+CmIoTBtTgHaDx8yvflhoCbmmXNbvm/6WBWyhuvl/9WiDwuZEoLjI5/7/iOI//DXxIAQAIkEhpapUK8WYohqdqIbHAAEJFqnJUbs8EOwoSsiSf4ycdJkn4AAD9AApQDRFAm+R1NAAAfoAFcA0R4+4R1N4AwABAKfYoL3uvY6xcopVTLHfX3/2/9eAAIFX96gACB0AAIDUwFiIQkNiKAkvCXl5//daZQXRLnv++/+w+epguTFT6tGRucf60/+/8XECcf+GvAhpPkQkdWEC+AhMDP+MAAOAACEa1SZoAVAISgSYiQJoJNpIwAA0AGAgtLMAAGQAgNACALcCAONxwwIAJdSJ2QqAzfIDdJ/AaAAoADFmDRpclRLPUV+8EFYQLaRMEeNi3qNR6E7wiiWHEJEeDxkz8sDcbLliMyu9fv/Vsar1bjReP/6iJvB12qe97/gKr//BX8wjugVgakCQvxzrj8oyCMswYAAQUaZSEdWeBAAXlAJ20uO3N6PtfFfhACqcA3nlA7U964QacIAbyAAQloJE7X/q/8uHZAsRN9df8nJycn8ZAf/HYwvAAQY7SRbIwnQ29sz4aZ8A2wAA5jDbtOkWGGUiz+Ur0HkDjGzy8kxxW1XKeCGGXbcfZYZTLPZUhlkPAhEcANR50FULUL+YJBrrHQq8v37/ARC5qZfxXtqUX/bf+TqAOX//D0Gi7USc0XFKKHgAAgJQEsGuqipbaJFLFFr2OwgZQ8xIn6qaNxjpgOAMM8pCQHGX0yzJA7aE9myIARIKR4SVEqrZyNwUsnlmwMofbFoqqo33DYMCpEPPPrv6NOIf/4ZYD+jBjwYRQlXQIpH1gtzn+7uxNUzGV1r/9/6DNxK34dl3sP1EjxMMieo9v/mRTf/jvAAgBXAamUVNPLQFanbT/vGBgFHK0sIFxQMKWZAgR+ICMBg94ZounzVSUV7xgKijjBAcoxnwXRW662QGgCCzOjho6+Q/14NwwTZO5aWEgrNFtl5IQSBLBG/rukiCa1hMYZUsUq70/9bAx/gSFwcRugHRpqcVBBG/+zlhVd7jkWa+HYBVD/nqyP/zKa6MJUXe/v+IKX/8N+AGADIAYCEd5PP0qL1Qo6f/vGwEAroqhvVZxkTf4A4CkvAjvd/kGCahh7RESFpJFVS/+hlSNs4QmZhUloJiLt+WLHr3/sY1k9ybX///H/JycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycIf+AEIbLWz/d7//IwjU+euAAhE9CrjHR4dwfWkAAkU2FtAahmehetk+0Bce6GuyZBrl06mj+/UeAUCF+J4VurDjrI668APgMxu/KUEHmuGUt/vCKYZ+TxqiVTfSDh7iTIyMgP9/38DYggAC4AKaBYAj+ps/46zWxm8/AAcABiEUraD05wJaMQ4GNEyW6oYJjGDnRK/le/tXacybVVYPcv4b4ABYWyhc3tIXfrcBIMfIcPzBSIrwgm63wAcJIC8lFm0Ge//wEY+fEKCjTfDKffzgsM6q4r8gkiIiiD/v3/4VJBAAFwFNeAyL/ZPqf/gAh1/GlCo3WaWeEQ+rNXJqbg/u/DV+OwAGZhETnF9RCGvVsCFLEJV0ymlvTngZABFgUDjXJfXKLW20jLHFjwA4BpfGeWBNrd7vAEMNLMzzh5lVFB23GcAAQHQABAqsAAQFQGN1eAPg5qyQxFvrMRJdF95oxoMQd24OcKLOAoYRRIIGrQAKdaaZha898MLC47S/b4MHZsUJ2k/74AE80Qa7GOAujePodRvd29tf9DfS4EIAwK+2D8KOAAEC3ouAAEEAAAQF4AcvwAshHKBBhfVsiS94nX+G8wAAgVdoct8BozVI3IP/GBKcMtgawAU15g6UaeGohPRdrZ2Ym88QiiNKOHoZ6YKiX6X4BgcTOntAifYTSu6vMJXGJYLSDgnx1rjgl6x8INBBfpJMMuV6E/94CApgo2z4yK6K2vSBTtuwMM+AMMJdawYw4ikSCCBZD4wBFFCFWCZhfB0wJP7i5QFBkaEzAnbFLBpJ2Kp4DdxeCh12Q6Ci9fo9bkbWPFkf54BsJZKD4ZUbewN4HPzY1P/99Zxnejv//eUJl5Zf/n0I7jddz32CHHpCGF5ChVMEN8AILBxVW3TVk6jLB6qYWIAAQAyAeRh4AOy0I6zfz3zkgii7tFEGrI8ACOAcHJXO6XJpfDR7UVe4AAQAmAAEA7QBY/Xyb3LKy6XzMhkdTHAAEBFr0LAAEEQpxwi2fAACACAAIHtIRND/7wdFLswwdPszBI48Q4AZQU0tIZcn98YdRLP/gw/AbgovuvIIq9WWcQW5D4gecHZ4t8STzCMGGItDUA1B0OQSavu8LjpAQbGVknr0X5z//94/HvX7/CYL1h01Ur68D0qYMSISt/NzV76d0a5cvqgxiAE479/hnIKUlLD0FFuLcz2kx8AAQC+RXpAAYAZmGHoGHgRKWTJtQO9onLvgCQAUABj4B2LapxUWiKse3gcCH2KdNyQmLLnauHwYzCxad3iHGy+vva8DKokCc9LYFPIE2jTwIwGELMsG4a6AmklGb35AEiAJDqCqOUYekoYAAICAAAgKAAYCEsH+BUMIiZSH48oTP5M/+Bw4RyMHUAeWNrqF27z+8CG0Iqzoyf9yfi3v3/W0+/ANmBrV8Ezqnf8BoV69JNqt/3riSokq//ebjUqVRcSRxIFXUN/kAAIAQoICVPtNyUa8EFNxnLwYEeaHYd4IMB3S4/de7RgAZLBwQD4S+ZmyPYPYDA5bpTpAAKAJ0RfkjjwhFuLKAeqxtMsB4f1dHIAAQAbgAEBMAjC0hIjOCL7wQM4QcBg94Qt7xSr892XzGiYK24AA0PzyzpCjwYBXlgaxosE727TLRRhxgAHwAFIcEBuB+20sXTcGHwDCk74Fb3n9AQcaZXgBhB5lqTdCD7VjIvIrDDAUgSWBod81XgE64M9/gNsCFi/eVkzZ84REkaQ7FQxIi6Gp4Gile3ACszJffgmYtmL0vvnSLP31t0qf+be9PoKUJXXHvsEOZ0y+EqlJt4BQA7ABqN8CYlsEjtyjgIyitYFBZ0LZ1rDbv7yABgFLkg1MBwMIoVCo88GM4sSrt57zJniL3A/MCJQAwWAIo6o4wpY6xF6eZ8zM6ScS8EDuKD6tZP+L9OClKrwDAENLApBh4UrTPkWDqAMP1ohoRnzmDHcYGHCTYYCkEwE9kD5sqq8Mw1Sbf1TCY4tp3e8x+r/uBexT1GFutfwEFFRfvLZ79L14d5YMDEcAUAUnJycnJyf7z11X8ABARgqACOmSalQK0EIzuDp4E4yX3gwNsCGRw0K/7gAAogASxKYtAG9DDk0cXmFgNgcAvNOjhPR3VUBk8wIBRME6vBtIOdsOqqS/CcgnjzAvTZOSkxsxIvgDcCjUSWhzvXc4soJJIfjAPwAoxAWbxLzrSgqg8Gx3TAAM670IBQ88JBtgb4XWELYwAOzJcxs7ZX/+Bwcn6VA2Yv79qJsqpR388AD5qd4AMGmq/vA8lYN7bI4bJpNH/+ft5/t/vfVwjF+Yb9AADFspbz3CRYSwZjt/3/8FQBAQ0ivkgyuu2/GzlAACDneAAIGoBwCxtTAANNxUhhMUj40dNXYblr2ABALQYHzXtP1GNm+6i3IAFypCOjJrbgYBhTgLmJ7b5ylSjqOddYIgxTqwpzuw//f6WPfgLQQY84btDa7zn0vF1MFymBxYwTYJ4SaOLcSnvDol3I+eyfv/52DB+6kkq94FRLYqOzXf/+4I/iob1VdT/4BVgKcAoMriSwX41Xjn9egYNvAPHYSzERxbcjh28AQBWJFiy1Rh7F2j0KbPGAAIBqqAAIDpJAAlwyBKym8XUPAYAAgAiSRYUTnjCl+If6HFOXMAAQAOoDB4F0cct8Qxxzv//gAMBD13QEghwgqT0PfXgQxisBDSRBkAIyFmhIGXhACqcA3nlA7U964+048CAcoUKzWWEOjXDTa7AbZFLPo0YOkQyvZN8QRVzcQUwBgUeTm7oIIq6IbZDAyjQQG1LrAabhX+vgQYuNq6cYnHf74IkUVHeUTgqL03SAlDrFq4LFTSXgJEatLeLFTC34EcY5blnv/7xvjm1io+v8A3hgAIAYBCEDT5Qx9FxYimZIeAgRGkCgDOlNeNovRKrd4AYCvQeHuu+8wkv5xbyAgKo4Emz41MMbBHqZiJ4AAIAQC0SNykCFkfkRbSYlQfofYIIXNs3UHEzVisBC8GM8sUugTIfaPuFCbktpkwAiEMlvAIY4cwm++8swXEX/7HkYUgfIRaBrl9iXVf8BraoZRhE6XiN37udZVbWmt/+tjs5q0ecMIogwt1/3aab6fX7P/8+DsB+GHf4eUBQQF2LWxc9EzpztzeAYAAgE+EFDSwpbEyLUhOa/7wBAAwZfDWCoX0wn74wxGWODAtljelSZAcqZpE1Xgw86/Of9cAkfUKJTLqzRFf06f/AmBr+CCsIFtLmCPGxZCtUIQwThTQYQA4+AlADYFql4ojthYGDDPJBRzY/ndO+f/aQG5hclmULdI/3gK7/hDXMkAfQMnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnDH//gBCGy1s/3e+v9H/CRLHNfAAQiehVxjo8O4PrSDf36jwCgQvxPCt1YcdZHXXgBIpsLaA1DM9C9bJ8wAEfdZ3AQ6/CKYZ+TxqiVTfSAwB8BmN35Sgg81wylv87iTIyMgP9/2AwQgACgIaBoJv+GjmwED+pHekz85XNIwysMqkntKI1Qa2MNzSdc44B0Ck2I8tivr0Oo8YngieffNxkkdV9gcvhv4ABYWyhc3tIXfrcBIMfIcPzBSIrwgm63wAcJIC8lFm0Ge//wEY+fEKCjTfDKffzgsM6q4r8gkiIiiD/v3ixhABFNwCb84DvfvRKrb++AUII1qWOFmMh8E4RDYc2pYC6CqUP+78NX/AAZmEROcX1EIa9X4GQARYFA41yX1yi1ttIyxxY8AOAaXxnlgTa3e7YEKWISrplNLenP+AIYaWZnnDzKqKDtuM4AAgOgACBVYAAgKgMbq8AfBzVkhiLfWYiS6L7zRjQYg7twc4UWcAySAgcADHVt6JN60mWO/JJWqdZMjIfq9jKK6XnIFl/78ACC9Vvozc8rad3wX40Ylbn1NJpCGiFK3dxwcquSC7/CjgABAt6LgABBAAAEBeAHL8AIdCH0IImZoSFGxGpj+gxmEiVSD3GTsSE/34ASIKUWcDz6G0RYwJfUHGDgAAgTZ4HFkQFjdM3Lwz3tTF0B1AAHAclpqYtNZ0INBBfpJINOl6E/94LjGeC0AnTdOc+IiPzyBAxQM9qHQQ9N8eg56+GloCeoNClADXJOnXpNghjBrp3w2vdrV5u15AACAGxAAHeUeAbYX9+Ta+BhiwfC9qGv2HfXaNLAWCxc6u6i63SgA3hNifhabIpQ/+c6Sp8dv4sNYCTHGdFR/fnQwiiRFrrr1kSqIur/wmOM00W97fTJwZ+XeQE5AUYKrep9XRsK9qt+Gcw5CfINUQex5CvBDNIFsDKdBb2yPhrnXpBGWYMAAIKNMpCOrOMAgFBYSGKxo/xbWlNlZ+8IAVTAH88oHaHvXH2nHANwryWjukduzPCCL//ceAAIBICgSBaDFrQYGlzqJ1gACArwAWCL0DoEpAA43+sYYpRQzJYgYccN2vAD4FE7+WRb+3EYaRJABQa3O2XX++nI2TTv+6aJk2sQnRE01BLR6+G70//rykvo9t/f8vp5HlN9dBoqBbmb13UPF9fo9395wDEYuohBf4DBTBJCy2TaBZAyeRJyABCyAD+oAvAfGFVsARhzASo8Jo5ZlWRQSv/vBH46gDQmyh74SMkwIPF/2vjQ6yQyOQA4iEQAeJT/neEYwQhGMMYQUhjlcAYcn/BkVdp6ChRU2lErGwYwBOFameAiAwxBd0qosgfPjqVn5DYhyOM/llNe5oIBwroAGyH83/2qHASbizNVu1aZgHvkHROf/tWFwWom6L6Ge/bPArml3+/6Kw7/uTTV//W1JlPTv//0kzWr+ue9eo5CCk/4MQmAoqLw2QFDwtbvLwkOMk0S9reS5gT+VfOOEAAIBa5qHAAFAHaxlaEAKIZmwRMXLFc7e/7nAABAQAOJHwW4NX5B1aQAAgBsD2Oi8ADc9EPJVesEMUG3Gbiu29zabteMCooow8NTZ03LIq8fEDIYFtniRHGnbwGlOyQiMQAAQKwAXGLg0f87gBmBTWB2gtFeKpUJUg/+4AxBZv1ClicuijS9V/BDFie/TzSPdJzn9n84GlBJiZkyumGU45Ici/2+jg/LL7ylraTpm/0gG0HiD4m39eWf3++3f7gO+wO8b8DYAAxZNABXAJyKyGcLHmAEMAOLaiqbGa4FzaGuLP9CUY0PMpQLcFzT47Kgw+GBuBM4JfDFsMhFSrjAADAAQDC0tgABUAENKCRZYrQJkKK/cQBUQXP+3C0WNAB8Ff/g/GQYqO1TEoc16lhjsEjgcmsZI/4qX3mr6DSBL2IlWdNP/0C+30//jopzhLLP/T5L5/2shxyLy/t+9siURJXf//9ExQBk5OTk5OT/1CUwu34ACAMAFFnGhxiZNLyM3IWdoJvwAYCitTHSHR9+7U0ZkjiwYo1U+icHUa0LnC+6AACACDlApkd2dk87MuLGRAWRgCACgoJwTY7kXFlPeBNgAEBWvDmGFFSbpGtwGOPEGOcOL8wEW9QmCwhHGKQKYeUYv3tTAQGEFofX8U8r8Q8LNgAof+zM9sH/3DHDEXs4tJiOAlkHCeWs8sf/2jDZatqBaRSH/8C5mJJXVJ/+/8InD0VlS//uAmMVfWR0lz/9xCqxJHrrb/HUZKACo/AUAqABApGwzAKZ0hJbZ4/f2iAGOAFwft4CUCsWy7G+4AgdECzYjTsrTCTRrpba3gQInVmAACAinvGtgHyLKTwTEgRijBy0mkEEFPAIEjKskQZiE8rh1OFXwDoOJvokp9H5QUdfLO37kboSuEMUQlLZWCK0rtd/cGAW3glrgR7TQuHAKfX3gGAYskCvNOCVKR0m2bRXoAAxLYAIBEDA/DQCIgCuWAZHO18XzwdElG8nGt4dhy6k7wp/ajMJVTSOq69//BsOAQ+TltMDkDrkJ5cvV5CrY3IK9/SAKH3pBoc/zXXq6G5sQm/9CAG0wLE5CBCMaNGBk4cGA6/DC48YLDu1q5Jw4egRABA1wid4LtefTY+/oBQQIRpwNzNEi2CIh3DZ94MOsM4pGGlBUSR8CfP+wBKAieJACwqIeF2Q4YvDEaScF2FfLdieqxvR4QiMIIcY6lGHGMXgACA5RghfWAHZDYuWv9XkQQR3YUKqBdFd0xj4K0wCHAr0dDCRcqRPYMvHeEJnZCfDCxVSAghA0JdPEFqYZcR/+lcnLGvuT2tAuBnXnRdRdy/YcY9Edxd1f76zMBaTixU2/vUNCiOq1k3GB8FTdSqmVle/pImrskcRulz4CFyYBN/8MP5LRPzLpIIWrYCpt4ECuIJCAZgoX4HohwrgkfgAGAwiKqeLr1IAtcYm5l4YoSqZJHdWCCZwetxTM8MdpIlkYT/38sz4aZ171IiJCbMRGZPCEYQYQwU1xQos00t4GgKFy45ybtYGDEXPQASABgxOnJ2dFZacKPEPVzO2rK+K1ghh0DyXh6KBdBfcEMKqqsymsmi81tCBoBoC9aX0eTIa9bQvblWZPerdHcQdcv//llwJvDG2Sfv2LaTNQPcm9NDXF1/3/q9NjyaVDPqJHqH3t9/d4jq7MLoBK/8ACDjSQfM18LZaNFnXvxPABAGckUIDnJRn267D6yxvwcAKDBwjEOqtPX+PXB6SPAYC+KOBZeTTYpxqp77hu4EAdRIB7YMrkn4TT4qTy9g4EbuAqSg6jPX/f/iQiMAUaJ0TTEK9yzX+AuGFXMqBGnSc1RLCFFwwABAJAdeFAPNUNAFO2wQZbxgAID9BbASGqESlRkzwAAAMBAf+DU5RXjvt1ZucORICmEf6DhyfOZLV/3kyMZE5PfSsHSShGM+ZS7SgEHqi5iYv5m3zzfvwSMBXXweYj/90QqXfC2TUXD+tGjPFzZN//m6jqIg67g/5AAQgjwfO5yVe2eXuM///wAAICxjg7gAXoXidIQQ0Ki0+AFgQSoqBY3ThN1jzuMDcICB4UAAIDMSrBQ6A+oZR7gAjAGIcoI4ARoqsaYgKnhD7IV7/R++6NE/R3eGpwvkCnM9uUNCnSzzgahhoeW6QTQjDxakcNgEAdXIWLkgi1n//vDFS01oBCre1WwNBFVavDGWScF2FfLdieqxrVeg3wEJCh+DQlAXAQSnEybtMVP/+2BqwYJFYTs70e2EHCy9RF9df/thKgLMX43eZf+8BA4Z7p9vf///AZiB2VSJZ4/ciIkmo8l/EbhphWWwTLn/+FnAekkz4z5mZ0k4g/7BSiKRIiD7BSiKRIiD9J/uQYw7vnf7vdUpSPm55OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OThD//8AIQ2Wtn+73/yMI4+G/AAQiehVxjo8O4PrSAASKbC2gNQzPQvWyfaAuPdDXZMg1y6dTR/fqPAKBC/E8K3Vhx1kddeAHwGY3flKCDzXDKW/wHZBAAFgAY8H/gCP6mz/jrNbGbwMMABwAGIRStoPTnAloxDgY0TJbqhgmMYOf9VYPgt4ABYWyhc3tIXfrcBIMfIcPzBSIrwgm63wAcJIC8lFm0Ge//wEY+fEKCjTfDKffxhCAALA553wGRf7J9Tw/ABDr+NKFRus0s8Ih//73hyCh4ACYsBMBAC80qGUQvdFWGDwAG4FTQJMnS0SzIurp78TCE8LNC89E5OTHDcm8IhhiFcQYog5jiGAIl/8AKhmyyTu93/AAtDmvyoWW9+/4Qg5A/xv+qgbX/ICYgIM2caJAAm6t1+Bx5A1YMMZOs1SGlDNaoBD8AAgFKBZP1zChYVJPzFZz4MZhYlfxJ7jJ1l4kz4RhSCzgabU2iJFxH2g8AgYjBAVEaLL5f0tbqOdLzCVxiWC0g0Lcda41J4ShcDd7v4QG8mO6DOnZ/fwHcDkWQEm8qP3gEI2DCxUW9gOkFfx4q6n1/wiK7vDBC9lJcTPsEOPUEMLyFCmYIb4ASGW4S0Lq/q+XBwL9KxYgABADIB5GHgA7LQjrN/PeAAYAAgHSJnUiCRSvUsCE23T2MQ7Tk8PWbWUvgBIxxiyACWWNpkANBLZavCNQGHnnMdPiRXqJdGnwAAgAy8cCgHyaTIk9doB50Ige0Mw6XBKUrNO4TpqZ0xcNGIgv72Jf7hcGBpoQyvGC7kX++BCNANfRO6J/z7/q9UhhCXkyX6fwxmFZEkoZExM/vBhHFjVxlAiYmS8+FLmJ3jBDyBwRXwOqws0SLyPE8ADBgFTqgnEHMx5w4a94t+NhBOqrDMWCU7aOUMHhAJiHCCrp/gabGZlwHi8h/6IAEKbc/wWQe4rZOzcv7EBMJcEYaWI9AWTk5OTk5OT//1y8sIODENrt8ABAIBleIGBfqny69tZ7a1rgIYoNLDN0JWQFzl813gGHUCMHxHCRrKb10Di54AAIAwomRvCoWZQ2pPRK+nDwBAICDxoZkfOsr1X/Jrd4MAAQAwSz3ADHNDEobHNk5WDMwyn/wA++5PfHvgWB1vaUvr354YCb3X/YBBJmrIhR8z//c/5gFMHjDAypw+C8AABANgCvF/ZIB6x66g9/gBAMDcVYsI1rc1Rs59Lws8AGAApCgUkPX8XraWf9jDwCAFccHnCBAVxzZGwkUrngIM3jxCTvJ1QX5eofmMd5++PdUMEV3TxjwSCkeEkRKq2cjeFLJ0BwzhHNZrg0wCg/DfKVSC+/wCZZUhFFqK97ZjwVEjzpstE8/gMtzMzgUtR7/xrc1eNcuoOWEyNs8ABAABACHUCx2mYsKMt8FpKehF4wAXgYBoF19cWfhqyXb8AAMTQSWkZWH5EuC78q+9AAIOaSBTA0kVBfEYLURO8EwxgoYOUj5mNd7DdmiJ4BEIOoHh9TNnFMdr9M/A3Ao2hEYZ62pZDYiuh4BAAGOJJQBCgK2Lak4yfgW8rD0YBbB8dNaZEO//qA0NULujBsiUXtYdG4GBqo+Gr8OAQKRrSl9n3vf+IgKbyzQF/GH+AgUEnNrKhpJvv0xFr6KHjB1gDkpsAmYBLpKU5q+AwABAHB6JABbdAtFnpLoW+nvAYAOHemMLIpaHqwtOVyjwABhBGfEwBugtkKExqlSm3gQZvHiEneTqgvy9fAABAJAB2gQL5IXB6nEaFSVJWXyTADVM4BVGAupFpQISJiASj34EmPiPu54LWjCT/4HgAFEUbYg26f6+QfZ4GoL7RuGfM3v9oAZ1XW6hImbf/4jDQGiMMAkAkmGTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5PU+f+FfhFMM/J41RKpvpBw9xJkZGQH+/7/wAEInoVcY6PDuD60g39+o8AoEL8TwrdWHHWR116iAEKvwTf8NHNuiV/K9/au05k2uaRhlYZVJPaURqg1sYbmk65xcv9V+G7gsM6q4r8gkiIiiD/v3//gAFhbKFze0hd+twEgx8hw/MFIivCCboJ2MIAAQBCAYDvgTfnAd/Vmrk1NwffAKEEa1LHCzGQ/q//FBz4NjumAAZ13oUCh58TaABUAbTPAiJbZIxkog+8ABMWAmAgBeaVDGIXuiqDBowABARA4omOld8bIkrnq9/5bbVLR//nwXTW+rV7oSyeaf/98gd/OST//6gHwwHAOYAAYACAQWlvBAZxQMyR6LXLMWZDa1we3mIolkPexpu14MI0kU2oZIdaF0SxSi8PAQtDx1JXYY3XeBiEHmkBrLSCpAcLeYOwYwzB1Hw1fktvvgFgbABdAqx8W3WKRA3yP/gseCgqutrv/75Ditdnriv3aj6S/U+jg9e+Ox2i7nNfUsdkR0l996eltZGaT0q/7yXdvHr/jAqKKMEBqbGfRdNPf4wyiktAMVVyi2B4KKrcGH4RBHEIxxiiCkMcjgGCk0WBydc7sGmWnEGH+AYDswQKq01yQs+QdDzz4CQOIzwb1qzp8EDvVYOxBiFljMl3i7jxu0AKCKISwA1VTKLQHgpqtwGAJ2CBLSRT7fm+6O323o90322syob+dNprR7p3RVy0vr6qRaJf/vOJP0WOMVabtldPT6uO/1DAF2ABADeUkCC33im3r7xoMXOcrk4wY9prw/EQRmvpCN1e8MP+gA/gBhCJURjTMOkaXpwItENvrNqbAERBSHiNF0u/EteE+sAIhKGS1zQ7K5Ip+ve2/9egzv/7ef/SvHCq5/69nrKcm75XgqUqv++bGptm8ux2KWx77qYLuAAgxEJawR3mO8ZY6z/4CnzD4FNC89UhMrZN+ChxpC1BaCuEnRpm3rjhKe6DKJWgcAAEAG4ABDAC4iiFN/62v4j0tyDGVnq/++fbFy0e6Cq2k5/3//8V9gt4PAAEAwAaQCzpcHZSIUVWAEZwhpWyg9xS6tELtVrjhU/xuRK+5+XPJycnJycnJ/un+tcARhXmi1xpKjx7YiB4yr0vJjwiCEEIxhjCCkKYjwxE64lhaJxrkbA0pGvezAAcRABCAIA3pw3cmIvq7hSfwAxWKErtohi937jCRJvCGW4S0Lq/q+XBwL9awMsVwxHd9f8/b47axUD1Jt+ArMTt7ukk3n/XTviokdioAHcEmvOckz/3okNl26L54//4BuvguAfgAAQAJAAEg2ACICkX6mD94gyGHZhRaHiLaSsXUAMV2aizJKWtSP3gGgKXAOQDk9tI2rRGKHlTBZQfzAAbFABKHVGZlkzF9KzsBgjLPFqOUuva+8FgAMAG9QCz34w1G2AEYzixKt3nvMmdfe0EDjsEcS0+43NyfV9r+t/eOTFKsp2KidDLer+tsul419N6r1p1v0iItzezN0oHLGknN0+Z5P7j1/ECghga4IwXU5qLI//9wwigwIKD0V9ejayuvFlANs+DCvNFrjSVHf2xEDxlYPAjBDCshBxBSqpFF5MF+n8IVhQtcobIpkC48LF38YAAICgAAgVAACBR1MezgBJSijhFjhBaQFwh4pzyZiQck79we4VWcBlMMKvbzctydZJJI90ksC+p87X+8dLQi9j//PfKp6PdG+/vulLQAeUNKob/86l001zT6j4F7hgv8GMvyjyBeoy+tysvQCmAyeeEQaT17+hpSWEHrRDQAbvr1AODkz73ttszbH1VRhkGP+Goj+wA/e+Y4AoEcNe8AYcUTesQyXae4JkFLMi/4jGYleHclEbDLAAYARzxImoQcf88XwGAIsBcEeBhlkeR/3/mP1f9ze/D/56JTh3R6Yu5rtwMDPy/IBM9fI9bC7+AACAEAHCyRppFs2TNNeRb8DTW014GjGYWJXJPcZOxJfvwCgjBxCLGCqyaIhjol6CFICUBS0l/SNN2gWAAIAIAAgJEioPAnATofyl+Ameu0aQX/ChbEeuY4lT47fwHeCsc5H8X//1+wW8CSgpR54I/E2UXYt7vXGJu7O3/Tk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OThj/ACENlrZ/u9//X6PkSxz/0NgCRTYW0BqGZ6F62T5gAI+6zuAh1+EUwz8njVEqm+kBgD4DMbvylBB5rhlLf53EmRkZAf7/sN8DZBAAFQBTQ0CB/UjvSZ+cr/gHQKTYjy2K+vQ6jxieCJ5983GSQGHYHL/+CvvgA4SQF5KLNoM9//gIx8+IUFGm+GU+/nBYZ1VxX5BJERFEH/fvQgAiMY/eiVW3/4JwiGw5tSwF0FUoYf+r/6DnxMITws0Lz0Tk5McNyjwhlOENLGnsMCyRYoTeDY7pgAGdd6FAoefE3sAF+AG85oGTNIlj3SwYwp0AmDqa6Mm/X5+CEajjEeS+7/8kd2cy//4AzgqQ5DDllwAYZ3T/nvoGJSf4gLNA9NS0XvbAAIAM0o0DDTbxZN6+8EYQgqq4RxLVsWtzAgA901ihgKTk9U+H//yzOPoaKe7pRHYHhoUD8KeGJMeZekF2vByCjxBjjBaQlwg47nYIeDENr4aYaEJBtwBrK1A836X/tTiJCErvqGt/2TAp9Q2RPP6piTCyt2WR/H/AQK4r/8Y/gI4IMTvra4bHc2lWaKXgh2FCVkyT/GTjpMk74GcOFr+W8ddN3c5+PgGO8eXQcPPhVckQOns2SAYCcwKAKTME4kf36hmnA0CrceAU7icgcfaIP/AhB8ZZwgAXF8IAAgI4iyugNh7i//jgaFpD+o/b9/8MxL4CEiqTpT5YHRtlLvuLnZ/wJ3QHX//hqBHnVlrA1Gm9AkKPgCBAVxBbWwBwnk0LRn5gBK4BhfjZypIZ26W8eYASuAIL8bOVJC/HyvjwblAojtnVDQAE/JMOP/BuKWuu5o8LUVXRLfBA7ig+rWRG5PasbUquAAsYBuDkHOJGBpgo4DDIJ5fQDSjhg1YGAwlsgLMSHxvGO3lwRZA8VX5/z/p4Ct4NNTy/fp5aHtv33/ERjUv/6AYBhYUJcrtQU18MzOut4BoUQkDwUVleBXw+bJpeCEIgLbF4LICla9bsb0HkDjGTy8kxxa3XK/EDIYFtniRHGnbwGkOyQiMQADomQABBEHD/ncAMwOawO0FJLRVKgKkH/3DAwLphwpFVFJ5rSkNrjLOMMjXwrTADYdNyINlRKnyUKpD0Wvvf+yCLvVL/V93zffz95//EVf/9eFxpiAAECEANpAAo7++GSPgxWvE7JfK5f6MEE7LwRhjCsjjiClViKwZwYg9VzpkSdpCmX9z/0JAOWCtJ3/feaGvk5OTk5OTk/nJ1/1xrwAGmKeo8AgbunrtGiJsgeIAMcMeXmcMxLD8lf1XhAg+Lo0K3D5ji5UGWqLPhEEIIRjjGEFIY7uANQUt6wrL/XRJlEk/+jKjG1IyzkEB0SCRy9/4Icy6NI0nf9/grAd1ohZVw//0RQdb1z1Vr///7g6sQ/9foIcB6jJ35gbTWfrsCDULUAHywAOnlURlBJ999ZoAggqk5EmiDDnGAAIANAAKQQEB+AhZcbKru4Jy0BARXolxVESatf7mCIoAQPAO76Wghb9Tji/7wYzyxCen3vsGVnH2vWiGgnfXqKO4gaUiOpxlQMMyLgEgcGviYx0LnF7ET+/UY/frb//+6/+lBG9Eu+jPh/9gUNszYybc///8IAKKfw43xnzMzknEv+D4OQUf0RxgtIdeWObwQ7ChKyJJ/jJx0mSdcAEAd4A8TqDjMg6uAgWHE4BQVVsR/UjRkm8MpSg6QhV+ra40yn28gLcIKUIS3RJz00xtQJlHCRdhUQBoWJttKR30YMWG2JfCKlv97/sDwGieoyrh+79QLg8VRd7O+33/IAcOH+GvmAw6dViQlUU0+qBpf0HwIWEWncPr47tCr77AY48QY58OX5gIomKeBMGEaJsCt2VhKoaM03gFAYdC1NSAma3UWLw74CBV+UOXnYAkKoMPnb//vADFGl1cs/bdVTKid6fgAAQAJAAGkmQCoC0P6OH0EAAXDnlg7dIQs1E0JvSEcto1id98w3Sh/+/5BMeym8R/XmYK5oO33/v/P1P/hr6gQig8ibn6A6JXDCNvCARSgAx6Bx0ADOGGl8v/cQ2Icgz+WVFOj9AAAfoAFJAaI+o/UdTYOGfZMcAAQi+4c//ebcamYAAgTAACDHkAPG/33oAAQB5AABADIcKDsD9Bx51pyCwzgtw7FDK5hKf//A45hGK0SxVY4yci6epoAFZQJGXXp9/2bj/EUlv/79CGD1UqF2vf39z/jf//BXMmIAAQD5b8HRS7KMHT7MwSMPEgUIkRBAu7z57rd/u//AfJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnCH/gBCGy1s/3e//yMI1PnrgAIRPQq4x0eHcH1pAAJFNhbQGoZnoXrZPtAXHuhrsmQa5dOpo/v1HgFAhfieFbqw46yOuvAD4DMbvylBB5rhlLf7wimGfk8aolU30g4e4kyMjID/f9/A2IIAAuACmgWAI/qbP+Os1sZvPwAHAAYhFK2g9OcCWjEOBjRMluqGCYxg50Sv5Xv7V2nMm1VWD3L+G+AAWFsoXN7SF363ASDHyHD8wUiK8IJut8AHCSAvJRZtBnv/8BGPnxCgo03wyn384LDOquK/IJIiIog/79/+FSQQABcBTXgMi/2T6n/4AIdfxpQqN1mlnhEPqzVyam4P7remy/gAZG7ZLxojSnwwbM8gAAvhXJgPhPNThI0AYUaemrwmiPGuR1H9/eYACVwMBgOoooa2JK+ZmmgHBWCCTj4LIp+V6DtBD43/v+1YEBhBaCK/inlf+MJeQ7C5NejtoEIY4QBg1BTQwARG7DGqZLAQgQSJyR8OS//+eAp+7nWPa3mzsVAV3ABxhqqAi21jP8YMDLsvV4LuAIQAMS0AYKnW+l0sAyjWZ4C+RxAACAKWpDAAEAE55AAP4AG6lgJme9nG8AGBwuaVYMAYn8TBxbghlkAFMKVeA8lZESgT8DGYWJXXJPcZOlhFFwgAJhABOurHhdIgtRj/XAACAFwCzaBzU/RAB9+YEZQADgACAFkARQdXBDMIEMdLPcYEtfU3AwjzRTPy5L7Qnv+nDD4EFYQLaSMEeNiyJQo4GEeaKZ+XJfaE9/04YYQDC4QJBBEBkL4CPqK//sBI58ki8aYkl89rebOxUPkVG0e6ALEOzzC8q4TGAse30ztYl8+KiR2KhetR9Ii2G/cd/jpgACBmC4Q4GZZADHAowcCKAIaBQFd01VJWKK5HPjSZkABDoAoQKZb4wGP7jYAAgOAACD+PTPM6INczBKziCPA6FNkIICkZkTkjR8egOBlSW0z4kEZr+QjK5evjDKKS0AxVXKLYHgoq1Aw/D4pPkCms9uUOC3SyWAAIF1toAAghAACBJFguD8JDU4QLFQCeC3tlPrwdgtM8ABAB4lCNvQ3235fWf478//zwQS466JS4Cf/eClKoAChHf/LeqktL0/N/0d5RgxiAE479/e3/K+e0mPgACAPyK9IABABuYYcgx2DKSVbEFOZBXj/cASACgAOfAOxbVOKi0QVjy8DgQ+xTpuSExZc7Vw+DGYWLTu8Q42X197XgZVEgTnpbAp5Am0aeBGAwhZlg3DXQE0koze/MErhsMQdpTAg1ggYAAICAAAgLAAcCEsH+BUMIiZSH48oTP5M/QA4cINRQcYAXJAp5aPczPWNoRVnRk/7lXt5t//62n34C1gd5ptF9wBoV69JNqt/3nwUpH/+fuNSpVF4XUSN8u/wQGccCLtpiTEJZe2zuWvBgR5odh3ggwHdLj91lTw8IT9X6GejP3vAsHEZnvXldu6ixHwsKRrgF/x2rgGBvPwe4HRhOeW34VTa2JvBFGMJ1HmgCQI04aBBB8BinhrfFPG3StnnJIeEbCCDZIIzZV6tJrNfB0UmyjB0+zMEjTxAMPgbhwlNBZAu6Vc9mn/3jCc4i+JI9h7CCSAwykNQ4LxvaABMmJdvQEhQ989xqkjOskkke6Rk3WWwOBZdAAVUx+94EDwa47nv6E7vy5+vKNf58OrP4+hD4P+w39laIOkIYPg1QIUSSJQYcwAAQCgABAKADgtLAA5EEIIRjjFEFIUxWGechncAEDTM0O+f+72+t+BQ1QAAgBgC1ENPzR/vr+eTk5OTk5OT+w4y4Q8ABIxmMyjlpcI0mn7oEcAAQARM2gpxNnfU5RPeYZAABAFTChId3spv4DgkeeQ8wAAgDt3KIAAcAZtF3qICMmEMUUK0osABvwhUMNlXjRHGPbgGkSAoACIAyaGu5G+y+3z+z/9GmQ/EwhPCzQvPZWTkxwtIIYZFwMXgATEpzMr7/9gItASXX9l9/QSyc06/75Wnuu/84AGp4kL7ET/9cBPGYO538vR//AjRjS1lS3/94ne3zUABQMXbj+2Ac4DEh8HmiLR/62AHyOIAAQBy1IYAAwAnI1hsABFAMckAA8BWyCdE/72gDA4XNKsGAMT/KA4QbegA/gBCmjzsyhZRt9KwYzixKrz3mTLx/+/3xBQCYEe08DnT8s8G8bDQAAgBOAqeUBSkQAIg7f97yAJGAb0LDqPf8hv3CAEIwo4OQheySlr8GHoGM1ZT0PZ/Wi//54IdhQla5J/jJzaJL/hhjOEmzBGJAkxB83Ef/3ATCzpdj7RO//oFn7/R63f1ye0v/3gEB8LN7uCoclbOJ+YVbF6J/aSQpYktb3x12k2j3S4oQ+3DeAKAATDAC8CNixqkSLikYuXjpgACBmC4Q4GZZADHAowePIIRkngDAy+NrY2YJ+CahpT/iigd3N6UbwSCuFjBunIMZlZ96FJc8BgqFOFqpIEBbS7AibGAACBCAAIGgAAgSjKYH4MI80UzguS+0J2YJ7PEE2MYg3RHI6oDD8GFeaLXGkqO/tiIHjLe4O0Ucye/Ho4tdrl4MMRaCyQEmvN7ZQC3knP/4CQfK1kQAvTNlPziZ0ajsVFYyVJL/vANRBxNQbkz+74CRZoltwNM21/5o953lCfHeCPEBIBfF9/gahTfHFD2QkxfOigahG72/5XwE9WAGNlsBIPQZwglo972kx8AAQB+RXpAAIANzDDA6YDCTf9Cyhmrnv3AMgCgA5kARYOpEwLV/Vny7wYtkSa3wjwgkhQdMP+vAAEC7+9QABBAAAECKaXhscV3HMKW4gOPcLBhmAACAkAAICgAHApLeimEBPh+6Cwz6QP+sMLpiI0DT4wAEAGq98cBoHEIspcmj/yXZkTL3/W31/2wN3esDdEd/AaXOlmES2IdenVufv+tulEZoz//PhIdhAsC3gZC3C3h1EpnJ/fANt/yvnIAiCAd1gITIDtcjGqv/aIABAAONkwNQtNI/QtUn3MGAMEw82BdKtb02Dw7e8BIHEZ4N61Z0+CB3qsGBhHJg4Qy3EYPjO94COCDE762uGx3NpVmid+ClEQzpkHb4AgCCliGSPi8gR1k8JZxlSMMg/AyhwtXy3jrpu7nP///DBKqCw+kLzEkP/+0BqxQSLQ5H1v/1pGQTyFR9bH5ctr+eBoW5dIrHlJ+4EY0LYcHNdU7/sCRjYytH/ftVmsmv/75XMwdRXcd9iDELLGZLvF3HjdoAYjEVgABANWzUuAAOAEaxt4GHeJLrMHjIfeMEDAv08AIBkEgAzABfi5E+XHqoYIfiGURjPLelQrX1de5GNQBe6vWA4NzPtAGo2ATUCUomz7ZGewvAgOIwaGaY5JcBdvIux/D4PBUmDQwnwkkEXS1Q/6DHYABAAhpQSLLFaBUh+vvEGQw7NKLQ8RnqW9mAYgUMC3A1MC0TKePcf/gNDwkVNynciP9gQGBH2dw6utgIZA36N0aVwETBvoQlWb8l/9dOsUsd5cRC6YBgG/wDIBAlFZ0mowiePDaOHwDIBAlFaxNRhE9nxPcAiUpGLSJpeAIYWSXv/jja6KzuFNAAHiAAH8OfC7VsRAid9D/wCQ8BDFS8xwYCUSiTQFMAANABwMMpnkQiEALYG6tgK01tZ/C4hGqeR7NOFkUGwYg/BjtJFsoFyPWxP5Mn+9B5A4xs8vJMcVtVysMZZBIoCMDwECxMgrMZe94DZKuQAAgHmvBL/6vK9eh+mKKFajdINg6cu9v3gO+7YALwu76jD16Ovhvu9YqLqIuYgb4lv5A8AAIEEgDczQArMgP7giWEcYk0VsqQMtEDdrBmI7Mc4AgAAgj8ZGX/7z14DyNwI8Q/88/YBkMAAIF669AABBAAAEBuICTwxGvKewa51J9Jx1LQAAQGGoMAwC8cUSwPlGI4/77xKADQ2gBYIBtCNkNILBHBpARjwt1WZf//gGYHHqQISYXUkLEUTIYUl9M/otAAkWdADAyhTLzZjvWUBX/7RaQA9Cc2ByM2iYQJMzf8CMwkPiFKJGv/WdVRaq/fOu0jaPdAMZkhKpCgtVL/4EDiWEqFi3/8/Efv0etl8pVsOA0w7/MAAQFjgAHKBEj2SwZEXSBpJ3MYgXA8fF9o/kjxie///gCA8AWFfyaLB0XHxMdd5kIpCkjcgGUYAkdYQTqEi5IHFreZEYYBAaJ1SUkRUesyoxM2meEXCA2sCKIfJabIgu+e4Y8HHBE93YeIKJaCGMDSwzDdCUkBc3fWD/xBkMOxJRaHiEVUv+GOt4lvxt/bIvx4r2BiGeEB5nOIGg6ca07lFKk/98FRHHdQWT366oGPZmbN90pRfr37tAts0IW39Klb4KAY7hKqEerGBBVc6O8orAIuJeW/w3MOqYh4AaDcMcA2EAPwA2MHKBNlviKlTliL9qsAAQfqABJAAEDCYAATMRSAECRWuagkaEbVpw4AAQAB3gcAynbs384uxH73VGAAIGQAAgSBSHVjXgmSKfGAACBmDgACBwMpng3HHp+W8bbM3c5+AMGNKJDABx0OE7UWWZbZ84tbyligVzG2HCSRCuNdwEsK+zuzf+8N1DDdM2AAwFrXrsA3jOpGC/397vj1f0oOMBizGOJb/ABKAAQPrqwEFyxwWXO36TwwDNNEB87Z2rvwgT+ftC0E2PwIB4ZarO4Tv294AAIAIB3gWCP9etEDB5kRC2T4AgEIWOPALrNa9UJ20Q1/IAAgDgYcNkWZJEN5Fxt1ImAxJctRZYgtRVp/u9qAMBSf/KBD1+MUvtAYz1lPQ9n9qI///EAyCHiumncLjG/qrcMZX8FBCIHkBGCyAhaEDH//r9vZtthjDB0GMbA0eVV0KJV7X94FhtwZFb89n/fAjrk9pf/vAwWzEi8SPiv32wSoA12Ogn3H+9B3jX0DrIMRV9e/yASkBRgul2nzaHQh3oXmZDI6mOAAICLXoWAAIIwAl4gGA6ie80eN4XdWgo2eZgE7uoBlhM/32E4/BDNIFsDKdBb2yPhrnXtAGAIt4FgQT1kiWtrfhe6wABAV4ALBF6B0CUgAcb/eCHeUISRff+wYWffY8Abg5pKwzJH78BZtIo8BlBRv8c8mr9RZ5BgEIbU+AHwKet4ci39uY00iSeQACYgAJY+oxMsnakMrMMaXyELZhRBdxcZK2/OBBz+8ixEdf8ECqUq//eScoSSSVsCHkZCn9Tf/QOpENv+rcr62spSM0fv+t6s9xG+6bwFgABAAAKEBMvRp0EIsdbvd27gEI4G2fog/oDVEIWyngABgCDKj1l3KnyoT3+Shhx4zj+B4Id6oQl8T2gAwoASrMXkTccgolLRc4BNAABAJLA+rxUlMgLjXFkAABAkAAEDKAABAQAAEAE4YAAVAAEBQAAQPTqYaylsACoBCUCzBAmgo2hfvovAhCDDFYQKQUU1xDXMShBaxWmOokPazxboGUAMKGDyKzxpRX9PAac6aVLLgf7+qs1prf/rbfd6xUAaGLsbNVS5h338CyuWxC2Ab/5z6/Z//n3mu16HsCwEG8N/mDEQAevMQiTezgqqM0MPQmo0pSmgBK4JtSN/wAgCAM5IoQHOSjPt12H1lYAAEAYGZxoW013qiCvW1PABAAGJD0GADbP5oI512XOJHgDAdvCRNSnus44Q6Juy+mMVSSKlT//7xlRqp/GJziL4khLj2EEsMAAEAwAAQDAA4KSw2vgcWYURGAw3XKPbBv4HijyAQPEce+BmM7f03vgNj8LCLKG9gPCrRwFDIxye+3GqpVGxK9K976IsTqFx3ff4QrSDCGi2+qElG29+DGcWJVu895kzz72vIBhVuHb+2eShUexZ+wRqAMFgHVcUMIQsO5tj+AACAEOsWL1akhh0tgS9lJl4AKBfCA+IYWCYm+LuS3o8QADAMHkdZMXVGOncxC84ABhw1EZzUERAKNF5O5S/3sAFeAGSY8DImlSRr5L1ohoJ316ijuKBiGGeF4QAcgAvkcAz0gI+nhucdpQp7++ljgt4uLKZGlwpwZyMoY3Sb70BIAOU6+1QNFU5/6fjve7+tx/fSOvgEpujyNki7/AgAubcgepmU+VYopVf8/oqLZRG1/3mpjxV/38GITAUVF4bICh4Wt5rwkOMk0S9reS5gT+VaYAAgGEAAEAeuAeJgrlROFLbeFthwAEBAiNIFAGdKacbReiVW7yAAEA0d4PC8ipVCWSCGkn/vARQhyzxBXqWy5RxdDw1OOkoQ9veSxgS8VA2NKAaD5EFawcHb3Ia1rvgMlItnrS2v58FRJHugYLzBWYRaY/33gKHUVI9yT1NLTb7oHghA5Kb494ADgAGHw4CFC4avR0uQnTQif7xDcwivJJ9hzCSWeDIDAOoCQsyqmLdo/ydMHQCAH4Bw8znQOoldQj+N5iYpygCudyywFBe51wwABAJAUcOI0hZMeo3byW33DAgRwCPR7JRFQ+RAAEBn+8AwAUlAGhZuuf5Ob0fW/3FBBjzhu0NsvOfU9YbCksHn0O8H15/+/0GPr8hsQ5Azn8socS89Qcgo8RxgtIWP/v9L6Z3XA7MNbAQZN62aVqvwGtho3SCLjL/vrrtKIhW1Pbd2gMC5eiFpFLSP/wE2L+eft+j/80b60qedTvtzqwFb3Xfv4ABgGE4CLWUijMYu9k3zyAnICjBVb1Pq6NhXtVvAwAOBJq4bSy5u/N7Uh8XeDGG1bHhToh97utBsOSt4ZzDkJ8g1RB7HkKD8wgoPouOy1qb2jepx14Rk5BgABAb1WubgLlFY28IghBCMcYwgpCnI4BuFeS0I6Ry7M8IJP/8GNMWMMUooZksQMOEDdoPZTBYoXsD8H/3EVtxH4S05m5VP1//Np+//nYCYkBQk+B/rLf/wINZv/LJv96fBUkj3QEfDVjMO+sACggZ8wUCS4UdXrz0svAAGEEZ8TAG6C2QoTGqVKccAACAbmAB2hermkwQYr1FjwAAQCQAdoEC+SFwepxGhUlSVj8AEfgBwWegOPlXupOVvZ+CKgAoGBsvmROXzko/s/vCB+QDRJCynJOBHNzNsXwAAqA6hIbJZ3jITyZPbDC0ZGyc1zT/9etENABu+vUA4NTPODJanBCEQFri8FkBSlWt0t9ZoAggqU5EmiDTQ2uNrhh5GGo2BIQsd0J0+ciYfwCh4WfZCWFH9EVn20/Uj/9vRVotFp/+BAGJWxObB23///QIQLb8423d7QFAr9Sfv/58N2duV1DiBvqW/gAAQAwL3gBgv0ZZHsaO5HJvABeMQAAQDQBOAlyf097LlXgAwA1sAVf5UFEr4znji78AgJSQdNlwGlxYbYwdUeEMtwloXV/V8uDgX61j3oyNicAB0JzwABBMAEvEAYAdGuaaEnRT5F2Ca97aNZhKcKutEo+EbCCjZIIzZV5tJrs/DU46ShD295LGBLxQGHwDoV/6Cl8roDzrJR/eDoUflBJRdlfTCUkBvlxMBTIzhoAHaSSlBlZ18gTl1iD101Z+fBUSR7pWKlKv++AaCTaW3At5//oyDLW/+eaWm33Tfj+//37gQiWeP4YACRmIjKK3UEIa1HqtIAAQc9b6AAIHIBkwGPDOB11D4IeADCm1gDaDzExTlABWO5ZIAgGbCjgB0XpAEB1tZAjepG+n+4AMgCgDCIARuTVpghU5bzS3gOnxAAKgBJixgqQCmb0GD0ZGyc1zT/9SCHegABAKlsAAEAgAIgEh+8TERQFEn72qOqWa9TouGBJw02AwDpsWtc8BoeMXJZZs9/p611nZo953lAHbNOEwu4j+8BoKq+1b39PzeNp2toDrBzEGdtz36VgBAACAOAF6HhXFz2MXzvgBAgGV4gYF+qfLs21ntrVvAEAAgLLrLfDypIVH3W1FmAhigs0JwXEZIYNZWvuEAAIEIEOIDROO5zB2RvhJ//eIM4QpgAFrt9WKH/Og94AAIACAYOCXOKAmRJep7W8/jCAOP7CTgMXIVut0EPg6KTZRg6fZmCRx4h4MOSaLdHFv9/bMRN2NUGGBljwiCEEIxxjCCkKcjhhlcMOaL/PrnIHWcGDGC1CUILH4s4ZV3Kt8BI1YOu7Rdf8a/9er85v//eUujzj//1sFFFQgr4uF/gQElDKytxqb///7A1PumO8qFUkn76rkEbKu77/ABhBlIk+9BvcVRe9bVg8gUYzgACCSYAHzAomc9InOgIGCKrHESYNFku5eHN7wDAAVPAFyZoBfQawaChXk+BmBWpABAVVI1zA1K4pG/EABQA48VTaKEyl0fvRB/+0Bh160EjNtnMrnmp7wSgDF9KCQF7+TrIennt19//TmNQw8EmO0VEY27WoluuDH4YjSTguwr5bsS1XNaPBGGKIyOMcQiK6AwUDAMcJjgFAQsxNT2ja3pOOBYojKhFWTGf/7+untX/7xxZ26O38AgGy+WBoms/zgeDAm/EFVD/rpYKQcqlUj1uMFmE31Lf4AAIAQ6gWO0zFhRlvgtJT2zxgAvAwDQLr64s/DVku34AAYmgktIysPyJcF35V96AAQc0kCmBpIqC+IwWoid4AwGEIXBw32Ikoj8pO2SfvDAAUcwcBdzTk5TwpZyA29AACAsGAQJZyvaLxwSYlCTH8AnABg5Q2VQAt5gmV9l8PkCghQa4IwXU5qLII/DU46ShD295LGBLxQGH4ZSlDtHffq30QbTqOAUUGCGDVsz4QpV8NqAwxRsNuC2D46a0yId//UBoDJ3nhjRVbZvNy3Luiri0vg8MDVR8NX4cASAKkVPEBfu8Wnyqej3R/vvR7pxnKr49/ghmkC2BlOgt7ZHw1zr3hjsJEMqlnxMKueDS5s3WAAICvABYIvQOgSkADjf4wAAQIQABA2AAECWKZwCBiWewG4wsGjiAp//3ggrzBTCZcn9oSQJ0+/jCMcBGQAoELQu9yv77T8ABALkYAwqVSA1PMhuLZfAD4FPW8O+79uIw2iSewAF+ACPELjEKz9U23UDTIEfiDIYdnlFoeIv1K/mCVww3Z1iqQ3r2t1BiBDCANGkIUcC2mPsK5FHq3wCm8zp6Y4dN0uT5Qqkl/W9xW1I/b8B98SMJX4n74CYoaSdxGdXP/6tF5z//vkNk2tF9aOO+ePf4wEQU8WkacwuMoVCpDwOwIOZEdYcHypyxVPEQCANILMCfP3KM3E1Mo+ZAAE4CfgP0wAHb7KlrL2FlDjVjy0kx1a2XLQQPKYagvxa/IAJv/svvBDuKEqdef8yYXfeX5ALsDBbRWOprluO//4GIP0HkDjGTy8kxxW3XKRHIjLNgsFC96BOL+bXETuVCAX3cqVr8x+p/n3RK/lbeBLKAm8UVvVEP/6R8/59/XT2r/94v31/PEcBqTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OGP//ACENlrZ/u99f6P+EiWOa+AAhE9CrjHR4dwfWkG/v1HgFAhfieFbqw46yOuvACRTYW0BqGZ6F62T5gAI+6zuAh1+EUwz8njVEqm+kBgD4DMbvylBB5rhlLf53EmRkZAf7/sBghAAFAQ0DQTf8NHNgIH9SO9Jn5yuaRhlYZVJPaURqg1sYbmk65xwDoFJsR5bFfXodR4xPBE8++bjJI6r7A5fDfwACwtlC5vaQu/W4CQY+Q4fmCkRXhBN1vgA4SQF5KLNoM9//gIx8+IUFGm+GU+/nBYZ1VxX5BJERFEH/fvFjCACKbgE35wHe/eiVW398AoQRrUscLMZD4JwiGw5tSwF0FUof9z6RD+ABkbtkvMn4wAoJJQABthPFs9CG3+FTAGLrZSPSEt8123f6HBD43/vwAYABFoCMDP3ts0ZH0ai7wAQE7WBywxjeDqfaqx1vgVowxQ4lHw0mZLEzw8KTg549TtB5g+XMA0BToO1j6EjucoiDCbEw+Uf/vYOfCcxawpyyQI7WQH+2//tGpILCHqZVlv+/gc0CxwF64TYR7/PPASZXcEJ+AhaHgABAN1E/wAAgAACso48CFJOMOaFtoqHFGyan7kY1KzZzgh/FcYABMUACwNmOTMYmD2P//+QABQCgGRAMmRVk+CNXh2Z/gDHeYQSkF4AYsdTC5Aj+NAbgg0OLdoKIBZwuRPIASMAw1Y6Wo8Nply1F4EMSKJ9V60IIcdpATucqzxI7ofPAMEDUVTBIDzNpEmJERvB4EQCCGHSh+3LgLuNBmhgxBrC09jX4HZyu0bawMJNRVPle3/+5r2KLIoacmX/6OLKc/7/VK3Hd/RBzqrJNvXyhaDiMdvf/vP65Ori9/5gAExQALA2Y5MxiYPY2HkBOQFGCq3qfV0bCvarfhnMOQnyDVEHseQrxBFEJYAaqplFoDwU1W7SZQM4adEpMoKX+4wCAUFhIYrGj/FtaU2Vn7wBDiii9CGHWl9CxJQ24BuFeS0I6Ry7U8eIf/7zCCg+jI3PSrtZNamnXkAAICgLgMDtq7eSAJlHxMv8GceCDBUNwJEjTRKlgACBdbaAAIIQAAgSRAkXACh91dqzusDjazWX3mkYqsrGJtY1mHKipCqt/33CVP7Rtq8Wj0cv+8yAyXULdzv2sZG2hrbp/vrgGICLqIQf+AwU4a9x5E2kUcE3XK1wAIUAH9QBM+NEHVgKABuowCgZLN9MnLG5Xh3gBgBHoEbFv1dkRP0aj7d4CDWNmhyh1oYK4nJEDWyQyOQA4iEQAeJz/neJBGb/kIyudS8AYcn9Bk1dp6ChRU2kBFSscD8AmAg7i7ZVBjgivcpWPgh3FCVOvP+ZMLvvLgCCC/OgAbIe+7fmgUHdNRMJ+YQ/9pbAG0bD31XD6ANB5k1EOcPmWmyH/zs0nmsp//61HI2aXLfXY0T6aL3v/dV8Zl7Df8OmF4KKm94sPEDlyg8MphyF+QbwAAggr8RSAAa0gABACYLZchYAE56oeDq95hooxZI5GAANp+kaBhyIoQEmhO2bHUg4s97gCoCCEijDui7YpUvr8NGOsl7EhVyP54YhZ7AKrgaslX/faQkaWNW1f14DyYD9geY1u+bsRyUnJycnJycn/qEphdvwAEAYAKLONDjEyaXkZuQs7wSfgAwFFaqOkOT792pozJHFgxRq59E4Op1oXOF90AAEAEHKBTI7s7J52ZcWMiAsjAEAFBQTgmx3IuLKe8CbAAICteHMMKKk3SFfgMceIMc4cX5gIt6dMFhCOMUgUw8oxfvamAgMILQ+ugU8miIeBCwUP/Zme2D/7hjhiL2cWkxHASyDhPLWeWP/7RhstW1AtIpD/+BczEkrqk//f+ETh6Kypf/3ATGKvrI6S5/+4hVYkj11t/jqMlABUfgKAVAAgUjYZgFMyQkttEfv7RADHAC4P28BKBWLZdjfYAgdECzYjTsrTCTRrpba3gQInVmAACAinvGtgHyLKTwTEgRijBy1GkEEFPAIEjKskQZiE8rh1OFXwDoOJvokp9H5QUcfLu37kboSuEMUQlLZWCK0rtd/cGAW3glrgR7TQuHAKfX3gGAYskCvNOCVKR0m2bRXoAAxLYAIBEDA/DQCIMD8sAyOdr4vnoYko3k41vDsOXUneFP7UZhKqaR1XXv/6aHAIfJy2mpQOuQnly9XkKtjcgr39IAofekGhz/NderobmxCb/0IAbTAsTkIEIxo0YGThwYDr8MLjxgsO7WrknDh6BEAEDXCJ3gu159Nj7+gFBAhGnA3M0SLYIiHcNn3gw6wzikYaUFRJHwJ8/7AEoCJ4kALCoh4XZDhi8MRpJwXYV8t2J6rG9HhCIwghxjqUYcYxeAAIDlGCF9YAdkNi5a/1eRBBHdhQqoF0V3TGPgrTAIcCvR0MJFypE9gy8d4QmdkJ8MLFVIFTCBoT6eILUwRcZ/+lcnLGnuntWBcDOvOiou//1+HGPRHcqqP++kTAWk59b/+tDQoh1WttxgfBU3UqxlZ3v6SJq+SOZulz4CFyYBN/4YfyWifmXSQQtWwFTbwIFcQSEAzBQtyPRDhWhG/AAMBhEVU8XXqQBa4xNzLwxQlUySO6sEEzg9bimZ4Y7SRLIwn/v5Znw0zr3qRESE0QiMzeEIwgwhgprihRZppbgNAULpxzk3ayNGGv/96ACQAMGJ05OzorLThR4h6uZ21ZXxWoEMOgeS8PRLoL7cEMKqqsymsmm81tCA3AwLJWl9DqdFXraF7c6zJ71jo7iB2u/+7LgTeGJsk/fsW0mZED3NvRQ1xR/77V6bHmaVDPqJHqH1t9/d4jq7MLoBK/4AEHGkg+Zr4Wy0aLOvfieACAM5IoQHOSjPt12H1ljfg4AUGDhKIdVaev8euD0keAwF8UcCy8mmxTjVT43DhwIA6iQD2wZXJPwmnxUnl7BwI3cBUlB1Gev+//EhEYAo0TommIV7tmv8BKGFXMqBGnKc1RLCFFwwABAJAdeFAPOUMAFu2wQZbxgAID9BbASGqESlRkzwAAAEB/4NTlHaO+3Vm5w5EgDeIc0HDk+cTJhf95MjGROnvpWDpJQjnfM27QgEHqi5iT/Nv3zjfv7hgK6+CxH//+dEKl3wutqLp/YjRni6EyJ/e6jqIg67g/5AAhBHg+czkq1s+vbZ///gAAQFjHB3AAvQvE6QghoVFp8ALAglRUCxunCbrHncYG4QEDwoAAQGYlWCh0B9Qyj3ABGAMQ5QRwAjRVY0xAVPCH2Qr3+j990aJ+ju8Pik+UKcz25Q0KdLvOBqGGh5bpBNCMPFqRw2AQB1chYuSCLWf/+8MVLTWgEKt7VbA0EVVq8MZZJwXYV8t2J6rGtV6DfAQkKH4NC4C4CCU4mTd7FT//t4LBgkVhezvV7YQcLL1ESi6//bCVAWYvx/cy/95gOGe6fJ7P/rHEDsqmSz/v+oiJJqOX8Rb/tNMKy2DZc2//vDrByIDd/6BnERTT36UKx/aXI+hgCgV+egnLQyl/fgDABRZxocYmTTEjNyFneCTgAYCiNDpDc+7fqbMyhp74A8ASoH0SXoQoYXkAQaAAOyt2IFr6reZGMwPIXyuj86lY+0YHgIcET3V4gQSU5gACACDlApkd2dk87MuLGV4BZABgQhoeSSbVpFzX/iTAEAFBQTgmx3IuLKeshDMEYs8s0spfAQ4SkdlmKXV55/+90GgjbybtXXGP/7DIdtgLVROXYAbsWvSN5NdTjU8inu/yARWRH1Ma2toky6oAiWV//YAVIurPZyv9u64rq5Arv/gxB1jwKF6ZChtGK3V4GbwAAQD1OAAIBRJ5ZANOgkxRFrgq/hAAbcgoABqYPym2g7p03LwIMEC6GyowU9FlWegnm+AACAOAEEixFJWjWVJzHdg3PODgyh0iheo2jm+fp/vAGoKa14d93rNRh1Cq4EQQgiIo5hGRFf//gAAQElELF/GTOU26yImD/ugArzIAdpQY3hezjHTAUAYX5SEgOMvpngzDllD5CO1+RDJMzkBzxW8JDN9VfaX/ewQnYtkTr9/94RFjRVRfV/KATEuLXST+flplDcRA1sIssjeyff2CjJ0Tilf/WBlU3vEuc7/8/xHVyAQg6v/AwAzXkAEg6x3UWjpb4/0TwAAQAA/hJ/DYKFnielGTl+X4AKBfCA+IYWCYm+LuS3q8AwBfBxYQcvtO3Ze5bKu+AAwBwWXbTKxIggZJlg7t7wgKELk/XLc+Emz35mSeCCsIFtTMEeNi1NaivgVoQe4I6Q4P1jhiscAAw4aiM5qCIgFWi8ncJv7gMAAthBQzgEGaFTA1LIbw3OO0oU5/fSxwY+VcDsFPHEU5JtninVgZQeaMiDd2xLP/3zLIB77hIq/790Mz/LM85lR/+oD4uL2HRP/63wx6slWyWf+ShAvlx/L/v+gDnRaTIuV/sgaGlUw+Jf77+r6iN1AXF/oAAIAIFKCCYT2T3r/k5g+9gBICDKiR0axl9+xOcrnTi5fwADAlDhvmoy/5NBDVj9LHgIAQJhwqH0LHTo8Cmz5J3gTGAEDpIBzhuZqcHkFnADABkAMBCO8nn6VF6oUdP/3hGMMQriDFEHMcQrgDgKS0CO/3+QWJKGXvIA4cAQpJ4HtxcSVHZ/AABAVIBjAAdaypPz4AzjZU+8wAlcAw3x01UkM7fK9DIiElgtAxWASgN0G2aTdVHv/4DDMFtVYpc1f/tCFq5+0XnXcP7GFtNOp96f+tlKfTkf7//8wPSDXo29m/WMCkjTlvf//ts3+6U393vv+V/sN/U6oNiHhTEXn97BAiDFOrCnO7D/9/vngRUaa5/0+PPU3P5v7wp5HI0ZBjBBiOgOk5OTk5OI4C0nJxHAWiOgLJycR0AknJycnJycnJycnJycnJycnJycnJycnJycnJycnJwh//+AEIbLWz/d7/5GEcfDfgAIRPQq4x0eHcH1pAAJFNhbQGoZnoXrZPtAXHuhrsmQa5dOpo/v1HgFAhfieFbqw46yOuvAD4DMbvylBB5rhlLf4DsggACwAMeD/wBH9TZ/x1mtjN4GGAA4ADEIpW0HpzgS0YhwMaJkt1QwTGMHP+qsHwW8AAsLZQub2kLv1uAkGPkOH5gpEV4QTdb4AOEkBeSizaDPf/4CMfPiFBRpvhlPv4whAAFgc874DIv9k+p4fgAh1/GlCo3WaWeEQ//7nGEIyoLlPAAyN2yXmSH4wAoJJQABthPFs9CG3+FTAMXWykekJb5rtO/3gAwACLQEYGfvbZoyPo1F3gAgJ2sDlhjG8HU+1VjrYQANEgo/4AIjdhjVMlgGgjRrpACqi0++/Cu4AQMrvJgE3b/158PMmAXBj4zxljAQtDwAAgG6if4AAQAABWUceBCknGHNC20VDijZNTyAAKAUAyIBkyKsnwRq8OzP8AYrymFrD+AKbEkwgwVvcjGpWbOcEP4rjAAJigAWBsxyZjEwex///wIYkUT6rtoQQ47RAnb5VniR3Q+CBVi5eQC8uAL6MPXhqXEZO/ABkkILcRT7Z/RgYniqF28WP2FBWWqOiovf9/+K3Fh35gAExQALA2Y5MxiYPY2HkBOQFGCq3qfV0bCvaraTKBnDTolJlBS/3gxhtWx4U6Ife7rQbDkweGcw5CfINUQex5CvEEUQlgBqqmUWgPBTVbvMIOD6Ljc9au1g3qbeeQAAgKAuAwO2rt5IAmUfEy+CWBiZg/djdwZiLdh4EaE3vtSrf7Rjd9kC1WD32RYwIzEp8y35v27/gAi4TYd+AwU4a9x5E2kUcE3XK1wAIUAH9QBM+NEHV4CDWNmhyh1oYK4nJEDWyQyOQA4iEQAeJz/nACDBnkCqm4fUF1W5NWU+A8OMWY+LcVvdJ1gjz+AzHgZKDxCoARW5ec9eAAMKCdm11WNyBJRhwlnECdBCiGHu8FUiJGAAIANmb/bgNDhEiJzhFRX/50fSB39ZJz+v4El3LOhnB0zEvv/URcBdh34fMPgUTF56pCZwTt3FgQU5YSgiqKEODQ3a0AwDCwoS5Xagpr4ZmdbbwDQohIHgorK8CvggbJpQIAeAAECCQBuZoAVmQCGcQniYYnBZwWnIT4nJzZrhgzEdmOcAQAAQR+MjL/95LBoACgB0IMATXEFQEIsXhYGl4LXX6FXGfvgxAzIAClf+u4Pw7BL7mdZr4SKooHij+uf9TNwAhYd+CDeUHkj7axwEsh9J4ZfBCvMOMaEu/WNLOkVvAGcDhcZaDC68E2uJ121fsA6Al2FzAPGU9EqlbgMZxYlWLz3mTLz///6AMDVgwzp1mqQ1hqtw8xACNnZQKxQArqnATxNAhDtwC1BgN5cKVlY2CISlAbgeevhCj/FXsCDWtDM7yZdg6maMBJrP+fgsktZ+Lit//dP+/9gt82AlAHFybBgJ+KI4aMYPwEYFGI57xQcBLRqW/98NAbgUdLABASYnD86sAAQAQHsZvMnJycnJyf/+8PlhBwYgYm8ABwABAdAKGMCn5sQVk5i/IcwVPADBOGoyOgpVl9tNzR9wMAZNhRMDv8+cA1vyoH/cCIAIQBAG9OG7kxF9XcKTwhlOENdNPWABFxrusBt4UMNAWUF4KoCd4WOXwOcEJr/ADwBNLfGd/8+Bqo09gBS2/33hgAsEPSLm1oiI8/A4cIqUApGT//c/4A4e8ZYGVOHwX4CAHRo+5iqWXpEFaPwAAH4BgAZECsJ2KEO2+s0AQQVSciTRBpou0AEAMAUlQ0+VKoIOLOoFHgweFI8dc1waYwPqWP5ALcV/fF+/zpAHkhWKEmYb82kBGGA6kwyYYjDAJAJEYYBKTDJhkwyfk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5PU+f+FfhFMM/J41RKpvpBw9xJkZGQH+/7/wAEInoVcY6PDuD60g39+o8AoEL8TwrdWHHWR116iAEKvwTf8NHNuiV/K9/au05k2uaRhlYZVJPaURqg1sYbmk65xcv9V+G7gsM6q4r8gkiIiiD/v3//gAFhbKFze0hd+twEgx8hw/MFIivCCboJ2MIAAQBCAYDvgTfnAd/Vmrk1NwffAKEEa1LHCzGQ9MP+5rgh8b/3+BWjDFDiUfDSZksTPDwpODnj1O0HmD5cwGVBcpwAMjdsl5k/jACgklAAG2E8Wz0Ibf4VMAxdbKR6Qlvmu07/BjBNAp+7nWUZjt9W/7+8B2sfQkdzlEQYTYmHyj/979BCagBYsIeplWW/7+KvoIeeA/xoDcEGhxbtBRALOFyJ5ACRgGGrHS1HhtMuWohnjLHAGCBqKZYkBxm0iTEiI1//9ghig0sM3FZAXOQG5u0H+AhaHgABAN1E/wAAgAACso48CFJOMOaFtoqHFGyan7kY1KzZzgh/FcYABMUACwNmOTMYmD2P//ge0GJm5pNE17/rdUneR7X90dMKyZzlx3rdaLzn//rZYNEcWU5/3+grY7vC/oSAA/HAAPvQ+s4B+fz77gBFAwZ9R0gm184IvUHBjreJbXNv7ZGU69WGHwaHHQEGxKqugiJTdlH3/xcH/xgAExQALA2Y5MxiYP4+ICcgKMFVvU+ro2Fe34MdTxDapp/TAukXquEEUQlgBaqmUWgPBXVC4KhhOScYO6e1s2z//PVtB3Q42mtHuifYd1HicsoqfHethmLR6NL/vLrunj3FfiQRm6qQjO5VfgDDk/oMirtPAUKKmkGHyADmAFMkHwKxJGokvvReDC1i8uJplEEOhh/gMFOGvccRNpFHBN5ytcACFAB/UATPjJB1YChi6CXhfqE0z6QjLS4+8NFBwQG2jWRQ1GV6fn2wGqmnzbuvrZj7qPd/9XQANkP9v/tWOBB5qJd9d//5Z1VLS79+jxeWi+uem9S/F8JJtM0jv/jzf1Xf/BYYzAkiJzXSELMhZtfQeQOMbPLyTHFrVctDD0gsEcGkBGPC3VZl//+AZgcepAhJhdSQsRRMvD+6CAAQDgNQh8DyK89irAgpyQnyKooQ3NDdrAgB4AAQIJAG5mgBWZAf3BA8TDE4LNC05CfE5KcNcAkAbCAwAF3eSXZeQ9nVUWqv3zvGvkW1Z8GTX/vnNFKh25xH79Hrc8bXYPP0AlqZPmuP+p//QAFsAG0pIGSNbIGMkOAABAAkAAaSZAKgLQ9o4ewYfgh2FCVtkn+MnEUSSPhYw2BbAvNVITpmDdMGH+CDeUHlD7ax4Esh9J4Ze013rvYJMGEAQ2rCEBsEgWfzejr4vD1f49XveiP3vBoqUO6r+untX/7wNBdynf97D///BX8AJQGBGfLrbey8ZE9lIYcB0ALY/rV//Pt0r7X/JycnJycn15/41/AnCHLJME/S6+QMLkI0o9B5A4xs8vJMcVuVyv2Yp6jwCBmyeu0aI2yAW6Ax8ABIxmMyjlpcI0mn7+YZAABAFTChId3spv4DgkeEY4xZABLLG0yAGglttQ5RiAQj3fX/n9ERfk/92gGdW3ok3as0yZaf62tQdzqd9ucABkfkrelZjiN0q3z/95df9QxGP/WaAIIKpORJogw16AAEAeYAAQAyHDA7A/SbfdbDDIIX6AB3ABkGvA2JpQkb+U9JkNjnN3GYStn6A7AIIdKvxYEFztLb4AmOPIBYfbZq+ciJEGxCD3EkFGf5nt6ffWfL+/9bBc1dty3Xn2VqX7/+/DTr7/vgQPMsx6JV79/f/v1Yd9Yer47ACLgA1xRBIAPEy0pmoFxo/CGW4S0Lq/q+XBwL9ax85IAwoqs5E2iLDRU4WBUuSf5/3QBmV0enqwJZFN02V7/+MfuzfdP/15w7/CGW4S0Lq/q+XBwL9ax4ZzDkL8g1RB7HkK/U0aAAEC126kAAED4AAQH7gNeCHeYcIRKv/YEOkKfheeXfVbDuzVo90wZBdqa/98GQXlO/++BdwAGAAdgGgKi3FqBMlEn//AxmFiV8EnuMneoEnAAD0AAocOMXpch1PDwAD0AAocOMXpch1MJRYeJKmnp8AKYcrctHetlbtR38/OJOzumAw+/n/W//x1Fh3gIAAEAHoAAkguQTjaRkxvFNIAAIBgA0gFnS4OykQoqtgCwBsUAmL8F2IaQVv73IxqAP3V6wHBuYgXD80xVT//PBhuLf18wXyXA+azf3wZhWcrv5/8OqMO8MABgyAACAYCEaUdRAOmMcnAOvgAAQCwAUGFghMox9msE/d3K28YYPAf3IjBwqiTwNFSVYXYcIQtzieDCGMxFZ/XmBuUFbClJZf3g9+WT98//4jDv2kABLgAoeEHUK81JvgChgC+0GbHdcjQaZIidScAAAgEGAAEB0E7AnGcCYywAsADIKCrF9itCq4gMa4CoqwNODZNy+LicsGPfXf8/wYAAH+YS4i/3wRH5T7/92F3AAQYVCSKGTRwhJ1ybv/wAR5KfF5JbAKfMPgUSF56pCZ2VN/mFlDjUDy0kx1CoXcCYcxruPc9o5FZcqKszM6n/f4D8dT1Lnmv4a6gHFc/pukF3AAQAAuA46UDUZvygbNRN//yPoYAoOEr46iMrPmXBGOMWQwSxtMgmwz8wAHuABLB1h2JhSWiCNzkY1zNnOrMVPKZky5zYGIaW/o9gU656fT9Fuh/8//4BubDv8Q3MIrySfYcwklnmJinKAK53LLAUF7nX4QZ4oK5OduK4HmE5zV4bBCWiz7BbBlQa3RwJVhRaJnymxkVw0Rd0wKyrcl2/CI6zRzXL/8OLDv4EUAQ0CgK7pqqSsUVyOLjzOSGqIQbqwp34giiEsANVUyi0B4Kard5gA2KAIoNRP2KLDhXjCVGHB6rMupqQHei48uv32BonW3Mzt698C7OyOa1Xf/EcbDv9iyhdrjKJTvdvkDVgwxk6zVIaUM1sH4MIwkW2kYIcbF/0yhCfmWKnBmFTOSn++a93aWFHk31NuAZOTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OThj/ACENlrZ/u9//X6PkSxz/0NgCRTYW0BqGZ6F62T5gAI+6zuAh1+EUwz8njVEqm+kBgD4DMbvylBB5rhlLf53EmRkZAf7/sN8DZBAAFQBTQ0CB/UjvSZ+cr/gHQKTYjy2K+vQ6jxieCJ5983GSQGHYHL/+CvvgA4SQF5KLNoM9//gIx8+IUFGm+GU+/nBYZ1VxX5BJERFEH/fvQgAiMY/eiVW3/4JwiGw5tSwF0FUoYf0sH/Q7Dgh8b/34AMAAi0BGBn722aMj6NRdwAQyoFEHih/4EhfQ8Sv/7gVowxQ4lHw0mZLEzw8KTg549TtB5g+XMBlQXKcIObHEHPhOYtYU5ZIEdrID/bf/2v8c0CxwF64TYR7/P5MruCF4eN+QABQCgGRAMmRVk+CNXh2Z/gDHeYQSkF4AYsdTC5Aj+NAbgg0OLdoKIBZwuRPIASMAw1Y6Wo8Nply1F4EMSKJ9V60IIcdpATucqzxI7ofPAMEDUVTBIDzNpEmJERvB4EQCCGHSh+3LgLuNBmhjPGWMIBFasIObSACEmoqnr1/+517FFkUNeTL/9/0Qc6qyTb18oWg4jFb3/7z/ydXv/4a6TKBnDTolJlJK/3GAQCgsJDFW0f4tzSlytPeAIcUUXoQw60voWJKG3ANwry1hHSOXaiDBF//vMIKD6Mjc9Ku1k1qadeQAAgKAuAwO2rt5IAmUfEzHwZx4IMFQ3AkSNNEqWAAIF1toAAghAACBJECRcAEDjnpGKrKxibXNZhyoqR+t/33/5AZLqFm527WMjbQ1t2/31/xF1B3D/hr4CDWNmhyh1oYK4nJEDGyQyOQA4iEQAeJz/neJBGb/kIyudS8AYcn/Bk1dp6ChRU2vAg6NeITSwdN9/gCa3giCOsA8IlKepTulLA5//3gAlAMDMtrGdksi6ZgpSDagHGAqS0tgDaNgt9Vw+oOhE32GMcpf3z/o5Gzi5b66hY0+ee1fv3/KZXN//+AwCmqgAw+PCCY16f/3rF4AYDkvAJHd7oATyLMFAxdyHxA80N0yc1kW207gCAQVJo0SX4T6PbI4bBmI7Mc4AgAAgj8ZGX/7yWDQAFADoQYAmuJpBYZwaQEY8LdVmX//4BiHj1IEJMLqSFiCBsX6A/BRtfEpA4jdBua6hJRLt+9QxLqRAlzF3//sQly5D64u79IFHwtkxGvZ//xR2//jfgG4OP3ZLXcgA5dwgUDvQah+3GB44bVMI3b/70AC2ADaV4HSNbIFsveCGVxRjhGpU8lq1A4wSjS4eEJmYVJUgdt4fb+Tf3/YQrhshe/f+Tk5OTk5OT7SjX/X9lQAcTa/i3lJXgI3eAAEQAnwNb6P8l9K6/v/95IgEZMYMowdpJQADPggZwg4DB7whb3ilX57oIPwDgd86BH8/SCxNky/oLz1TOiLXUOm8eI90mgn39v9Vb3/8H+MLCxPb/Zd3/9jFNJERo3/1/wIUQCAP8NfMaJgrbgACwRnlpTE3gzgFNCtWOHqgCjPZPyS4DHLGOHA+JvXD4opbXcYAz4ACmgFATdNqzgNpvv+4hlPGGA8OMm1dzYW+MAAEAsAAQDQA0JpnArQg9wR0hwfrnDFSrX58zsGL4YoPpGw4ngCw2Zl/XEUHRfjbbv/GoVucGlFx/e0K8e7uHJOiIf///aUQUv+GvGMAx56rvwpSdXbf3HgEQWqAogi7swINXAgAhwcaItNpBnGpEU0/A/hWgECgkRuEikxOTtfVdwAMB5nwaViPi2LNk86n+8DFJLE5KbK9fqMPoWHjYYOk4Y0+q/YsxPAZMFCBV1sgGPtVN9kU+/WM0yaESzbvv/BsQ2TmTt3vzAJCD1GUbXyT9/f8auTK//DXlgACAHAAtR4WhFSwAPXfMCBAACAGAAzoB1RurgDUFNe0M+71uYo2Uf/7wjGEKRzjkFFMIczWyDAIABQ0qdP5C3oE/zmAGoCdwDT4FHM3z7oR3nAbgg8EF+0FEYy9WJXhjLeIK4Gfq+Cm7JvYASEAAuP+hTqktdB5lphgieyAvP207/v/Bnx00G1x/9Yh2pBIyuj/vv/AVi5f8NecAAIAXALNoHNTQiAD47/d0QdPmkXkJ94IKwgW0mYI8bFv0aj3wIC4gkEmArbZixbSX54eIVpiaGqMrJX7wIUoQvXmXR9fXt4CaB4CHKEM2IafSZ4KEVTTwdDhO1FlmW2fOLW4IFhCEZfTazMErVF/vWcCW7Cdl09+/6NEsRHlXc2FA9JRduLs/f+KrWP/DXCRCSRgABARfQAAgeDD/95hcaYgABAhADaQAKP/vuADQDjZFtBSXWcTSoSl///BitaJ6S+Vy/0WfTstBDjUOzEP2RHE0I/deBAKIwaGaY4p8BdtIux/sAAEAAAMAawyYUbSvCqOG+8QZDDs0otDxGepZBBQSz24Ch1e/bB93Inzrm//3P/ScA9YIW7YnXuEiJmnku/w7NIIh/w14xjMjvsPRILYRn//uGYGQLDXOOKSQKS+8AwA1hRKYT53SJSl7YQoAGXUyNsAA4x2ki2RhOht7Znw0z4PIDRAUIdEN4sXStmsTkQWVYWULcLzInv/FhShZi5fkM//a/8A1gSJmlTc7/fQMFY07o6s/7SjV/+GuiAAEAsESjVAhwuzom8/+AAAEJH7BuA7Q0iiuRZY6SYKBgcVguJcAGldABZ2//eGAAFQABAUAAED8kmACDOFLPWHbK9fuNEEbLxABEMAIJYKnMFBFUyTqAhhoFOdDGZfDGJp6/07NPCef3zv/YKtJqUtnf/0hhFgfI/nZ/ygeJf/AUCpAABAWWFIAxh4G9rNbPL0B0HJBS4aLlTPBq7P5fUkSQmOFRnGk+QSBHBrwjHlbmswgh8AXOEEhctT8PA3saZE2n4AhRBBW/Othcf0alpmt+AiggpFJVxVREoRMuE+BlDha/luHXTd3Of//4NjPwcYZwhMfCAIJx2hsekXVYLN2//U/AXsBImP91f/AIVWNid7HVNKwkIC3kQG0nOf+8H8BIpuP/HcKiSEAAICYAAgN0gCd/33gDAAEAp9igve69jrFyilVNPAZQ4arxbxl839xD///768AAQLv7QABBCAAECiAEP/vIAIIs8V7QflGUWGQasnwAAwAEUFyRAZGdyApbmH7X++wAvwBDWDzkyhlRp9K/kJKwQ7CDdoELRRhBbGCARUtsPcnzQj2L/WAlEXFQXPVf/e/+MoDJ5xTT5qZ0GUl/WBMi7pB/YXHcf/+YYB5FRk6bDBAhvcKPPIgJgTsEa4p5TTAAAhk+wF1AQtA0pNwv5J33kNiHIGc/llDCHnNLMlGYAAgRW4AAQfSfq+8EEmJOAAESMd4Mw5ZQ2h9j6Q7RYvo8EFYQLamYI8bFqa1FIY2vligx+ECVyhBRCUY2alK+VVcrQNY7E//Wf9msCsQIqqj/vpBsAUgJSVv9Wf+wu4M/+s2AAIDgAAg/i0zVkzCMFBQrmy+v73jDKKS0AxVXKLYHgoq0vDU46ShD295LGhLxRsgGAnMgIAKUMkokf+3hqBHnVlrA/dN6Dgq4HgrWHgFO2nIHn2n3/vQC2Aw9IRQRdEKBQzQBjajL9AYuFJEEg+fCh3a52W7f/wiAA7EoC1c3O9/4BwCfOWdtR+2wbYAkqwG1kM/vv+QOIgX/jfgmCGA7mgk+mNDGvcGsf0AzAYkEF8RHmpzSbDLbwFaED/DukOBjt492eBYIZw8wI0YTPyIyYx+AACAKAAIBaB+cmAyWMlKwnL9gvD4YIZAcIFEEWKY2XTwAxlSNKcITD4QAEI4iy4cnK86/3/RmGV1rNL+/q/8Zglxc0FWnKB/4HhZqSSu7/9//k5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OEP/ACENlrZ/u9//kYRqfPXAAQiehVxjo8O4PrSAASKbC2gNQzPQvWyfaAuPdDXZMg1y6dTR/fqPAKBC/E8K3Vhx1kddeAHwGY3flKCDzXDKW/3hFMM/J41RKpvpBw9xJkZGQH+/7+BsQQABcAFNAsAR/U2f8dZrYzefgAOAAxCKVtB6c4EtGIcDGiZLdUMExjBzolfyvf2rtOZNqqsHuX8N8AAsLZQub2kLv1uAkGPkOH5gpEV4QTdb4AOEkBeSizaDPf/4CMfPiFBRpvhlPv5wWGdVcV+QSRERRB/37/8KkggAC4CmvAZF/sn1P/wAQ6/jShUbrNLPCIfVmrk1Nwfg4qfg/4ADMwmTlF9RXNeqH4CAMq3AMArctpoErHgWl7wDAdqDwJNmeaaaIpFHdAADIAoBmwhrNP9U4keLwBgHtVD91dHw8245qKboACMTnEXxJHsPYQSyDEYAAIBgAAgGABwYlvEIgjJmSEMuZmcZUiiCUAAedsmrTc+BGUJnY7z1TH/PWus7Y5mWTL/+AAi3fdc4ED9erCFW5f/AqNp2toXLa/n3E4gFXwffRRgACBb0WAACB8AAIDIHN28AIdCH0IImZoSFGxGpj4wcAAECbPA4siAscpm5eGetSSAMAAQPgAEY6dEDfz1AxjRj53w0werXd88AWExQohQupZESQqE6PhARRDbbQjLNVGVv/94ZjikPUeYCBn3LZst1j4QaCC3SSYadL0J/7zEriAvgTulsN9OCPQMGP62hOJV0Q8lj/AQFMFGWUConkpY+IkvgY3wlsxChs9gFWF26zP+AjAeliAn3EL/nyqej3Spk2n//z8ERADkjg1Tc+3wIsBeKUOxEa9/U+5u+T6qzWTX/98hcVi4Lu2/xgIgp4uBpzC4zDIqh8yIwwCA0TqkpIio9ZlXgICmCjKqhER0Uq0CpC/8sAJAABAFmAXUdOY9JAk9WEUQssZkq8XcIG7QAkY4xZABLLG0yAGglstXkYSD5pSRJrn9iqrwAAgARfOBQD5NJkSeu0A86DDGg8FaKTbkuiaPbKL+xhilFDMlnjTjxu1wDBSaLA5Oud2DTLTiyIAbEcQSCgkPphL2K/zwCtYBaInHn7mHw9x3v12+29HugE7E2949REQ/AamgH56ZG39/dW66dbu6KuWl9EQiEXXcd/AAbAkKCfBGciYfH7nz94AQBte0BAH9+6uE4b7s2jywYAQQXI2SXESRGfU0eGcQsx6xTukC6jqyWgYApLpAsK1yJirRPr7/wBYCIKeLWNOYXGUKpUlYAAPAA4AcAA74Jr26vISEAF2SHAHGe4qAF//CMYYruYcoohSlK4wNwYLBJvxBRKMuliFBgn4gCIIMfYEUVHj9Q0XqPQeQOMZPLyTHFbVcrBjLdAOwYXLoEyIvYL89v/uBopQLc75Urnvf5/i3s//z7f546s6/+fga0BnrUDVXzv4BuPhIpS7RGJ8dZJJI90pUiyi//vmpk66rm+/wEYOIRYEUu2eLAwEuVQsCCnLCUEVxQjwaG7XIJ+ACEs43QABBlCUapL//8HDPsmOAAIRfc5/+8AgDwAAgQSANzNACsyARzCIsQYhZYzJV4u4QN2sGYjsxzgCAACCPxkZf/vPWJBcsjwNBaq2cW4+IAAQD4AAeDpALkN7eQ/Z70AAIAswAAgBkOFB2B+i4862BSymNILBHBpARjwt1WZf/9jDFKKHbLECzjxu0WkwGBawpowNCWh5i4Kjcz+8CT9DIGqLm+hSlfI0q2ZLSS/7wFugKSDzW/+7AS6J4JwW8n38zT353lDYbzvKMTcQMVHvvAGIxFYAAQDVs1LgADgBGsaeB8IfgwyduhQcIDFbB4AQBEEgAzABfi5EQLjtYLkPwdAU4B2yoVYTiyxEz8b3jGQVgwmfRxwccE6+HxAgZAA1ZAwsXKHgfSDPB4RgAM4CfUfKhp2ztqEnK/YAAQIQABA0uYAAECEFw4PDpMGhhLhJEJOlqd/3gBCDjCnW02nlGTovmtL9BhjyIRCAFDRWqaglbkrVvYCBH0eKUdpZel8DF8RTB4AoNeyuiHvb4FCfhhFYe9VlxpeUPScnH/+eAqhu1pOJKYmqBrzU1Hme/r5fvx9NLRfNdufTAvj/Yb+DRA4SmK1pOMUS5HigD9wVA0t6RhwP3imj3D8EO4oSow8/5kwaFPlQYz4QmGUKiIDf1xGDSYL9fmP1f93gbKd7i8F9/ft76b6p95OTk5OTk/m+Puv4ADgDDjkAkRviDc5JyFviDTfBA9n60YKzV0pSRJVT4EExpAPBdPFfDMI9dSf4Qy3CWhdX9Xy4OBfrWPABHxggB5vBgqGYltGDTgAIBZNAUB1hClhSvUARLD4wyiktAMVV2i2B4KKbZD+s0AQQVSsiTRBprgDUFLe0K2/10SZRJP/gxhcCeGjoAB7ErIurkLJ/+AKZU4mzS6r5iID2d/Po49mZ+1bAAeh5eyo6Wb++BJobI5dLv9APbrp1ufGqR7pUMRcHbIP+wD3AJD5D5PSYdmt55HEAAIApakMAAYATka4J6A/g070JvDq0+4i/2gDA4XNSsGAMToEgcINuMAGjgDMDVRGRN0+Ldf//4AmOPIBYfbZq+ciJEGxC8IRjjCGDGtKFFmmlDAABALAAEA0ANCaZ4ZhSSMEWW6howJTKMCGRhRxQ7EUGuP//9jDJbTHArQg9wR0hwfrnDFcrX58zsXaYUwF4wgavwZCGiak+div34LJGiBydHt+nmO29bf6+r7X6l/3gGD4Ld7AymJSq+A0aFJIvCjKyv7+kkKWJLW983BvVe99j1FADV9/gh2ECVShF9UgbGigVuxgAAgKAACBUAAIFHUwPACSlFHCLHCC0gLhDxTnzkgDCiqzkTaItNOACAO8AeJ1BxmQdXACcD8KvEkHWKcb4IaD//AIaIMBRJ3csjKdetT+CHYUJWTJP8ZOOkSToJgheGVzgVIQq/VtcaZT7exDQSggDrfIEIsXEgYg9A6hhpSQAD0CP+uAShw6vqRrLH/6MGXq6Vzq4Xa1/6FabMAAQDKBX/fAGtABbagtxFfur/dze/vKLcx554P+1FsmUgqm/wjHGLIAJZY2mQA0Etlq8FBSLNNCJdmZJG3iHmAAIBIwLeFzhdlmSXG8R8m2QARSlA4j3sMwnf/gwAWwAJigDiTAlMnZqHAIAAnABzQswFpnpK0auE28AGARoGu90SMEMRIsfJ8GICX16grNUyyDCOmGruMAAQEgKCNa+j04g+sACzCDD5gA8AChCgw/iamXnxBptAAyADydgBvAmq+mYSoPwhgfAyKggM5CZ/hajv/9cFuEexNuv/fLKhyFkqz/jKUqO8oA0CQp7Go01f+/AODJrnvVJMrqUalps//e/1WSLITHcIPAEqDG6NTBVlC72FMtKI3BiEwFFReGyAoeFrd5eMAMoANwA4CXZGsR1FqMxb8QHgMNCBCsa+DfFt9VP//4THGaaLe9vpc4L/LL0AQABAHbJAADACtosN2uYzAFAocZkkbf9KJfSfeBClCF68y6Pr69vATRPAxGtYSw8pJAJWSRvxIsDcFmpF/TV/Bh+DopNlGDp9mYJGniXgqIRYaYGZbIykkNG5EGGBhQxsgaILMKrXVMWm+A885El7Rr/8dp01HYqI+/+X1tA0Emb213EVj4PIJFUtQ/ZkuPrvYW0ml3voGAgAk77jvAEQFcUnxwKNVogntvr3I4AwCgx+uTaB15oK02HGw2CcAaR1wXGcORtf/vvPAAEA8OjrcALCHzbL8r//eYAYXWkyB51wFkuEowk+YmKcoAKx3LJAEAvYUcwBikKXyhAAKSW0zurwDNgHAcTAF57o1glT0LSb+AAKQAGJKFjEC5CgVc/PYAL8AY0gJEIUyvpEh6DD9AFsASCqBECEnikHL0AAIBUtgAAgEABUAgPwfhHFxAEog8CjNwBaTWL94FaBMrWh33///xwRlkeU73/Pxb37/rYIHkf1Bl1Fb34Lh8ebELRhr/nIpKHdVKRFEir/vl1Q3cLjgH/QEDOADWBGPD/4mRTFaPwYzbBaI/ZNxpK26kZ8AYHnTCyQQLujiugjBP/fRcJfx4OCzGdu2A54AAEBcA4K0aRCDycpekO0HzgwBPsMJgb3jxmF+mRN/7wA2CCS+MlxD6NdDPDoiEStrPczEHsfidjN8v38QZDDqBSSePsBIyyIgw7CEIgLF4LICmFub+9+g8gcYyeXkmOK2q5X4YY42AEEB2Ez0AsZBH/5ASb2L8PhDJXL9nxkey9H04JQrUbpAaWfkShKm5/eA1EJCWmDlzG/fOtEUR//ntve+6aiAKDK+yb/BDNIFsDKdBb2yPhrnXvYB5QGh8h8npMPxYwAAEBGADwRNgIgSiACmp7DYEoAQdcAiFcGNEQH/fvPI4gABAFLUhgADAH5GsADgBCEizJAkgq2hftAGBwuaVYMAYn+UBwg28ChSgMAii0zxw8oEl+3gB8CnreHIt/bmMNIkniACYgBtV4IsQ2gplIMPxAEJDCjgxCFcKKWv4GI1ZC+Wr8nJjQwwiYuE41BR4SvULjF//3AFzCy+Yx10ZZJURVUub7vWKgDWKxEXceMd+ASUculijLq1P/bq+Oc3PnxUSOxUQl1i+5bwBGM4sSrt57zJnyL3g/MCJQAQLAEUNUcYUsdQj8vEAY5RCCR6+WCiC6rEABxGAGKAwC/CJ6UlIrr3hMeTZEADBQq9aHSRskS8ADRTDgYNkkcmHZL4RkXrRDQjPnMCGcRwZBSXDYH0u+G4olv//DD9zMgAgQItOhwkcJEPAzhwtfy3D75vLnPwDDDdghhht1Jo/OAs6jQQuTFvXj9T999T/Zt7afAaUj5+ll+//AXDTLuigUV///39+ke6S7ZC6SP+t1xV1VV3XfgBqACEiSbB3II1jTE93wAiCPMFrDaVFf6wEDzlYPAABAFBRvh/rzzJYFUmRZoTvAAgBBMJnAG3EsKxO9WBNO4M4hJUzB7CLi4//9ZAAEC/2AACCIAAIDMAObp4MwFNAoKsYFno+5SM32d4AGDAKnVBOIOZjzhw18Rd4BhyyQ1LBQbrZvqGkP/94BwFLlIMujtHgQeXKgw9AArQBtMSDi2yRy7z/eBA6MCfBDOtafXDiSn0PDDXQQgIB1w1zL9/Z//vAKPGExN5Z95U+5hE2bH/+fgzadGh+OQGghELqJibrJ/7gQsAdngJFTXr/cWe7zsr0URUisl/NEQioiwfvAEDcCBPEC7aLHCQQMe4KBjGjHzvhpg9Wu75++22Snk/3CAiiG22hGWaqMrf/4AcxFIAQJFa5qCRoRtYvCY4zSxb3t9LnBfxZ4IFBVEwgQ4YSAjr4Yn1H8NIAjwLDisl8JamD7qn2ABAoNq+4yJJgom5PFQo/W0IolXRDSWPDD8LGGwLZF5qpCdSxbp/EAyCHilzTuFxhKvVJQwwOIYUSt8YKC5SE/wDVwGmjuZMn/y5GkhXK7u7+jjr4bAW9WHDLaR8CHAR6pGFiE7+2Ip7WRtYgbO8a+mo3Hvm+/whluEtC6v6vdwcC/WseCBXlBEnbmfkMCDudd4ABgACAdImdSIJFK9SwITbdD5AI4EeHEszVwDMpyfBP7gABACYAAQDtAFj9fJvcqrLoeQABgavDw0/RiabKTee73HCLZ8AAIAIAAge0hE0O/jAABAfAAECoAAQB10zxhlFJaAUqrlFsDQUVWrwiCEEIxxjCCkKcgMPUPiB5wdli3vJPLn//7ABfgBvOWBkzSJY90h4ZxGMEAULi2Xm6f/7gXg7HDBEUfXrrSSke6POJUhvoCw+kJJSz/+7AJcyVowAO2Z/RTs2bN901dHscX29+pCERB8U3+GcHkN7s7FwQjSwumHkDVgwxk6zVIaUM1qgNgAA8ADgBwADvgmwbq8YCIKeLUNOYXGUKxUl4MQmAoqLw2QFDwtbvLyEhABdkhwBxnuKgBf/wQAR5wsLonSWcEtDDF1/TAACAEHMSwAoBMQCBawr9NwTpFzVJh+g8gcY2eXkmOK3K5Xx4AIHACqAP+aiPKgVZ6B+DDCWxjBgajgaXDYfdJ9/A/gHUoNcRf+vXRS1//z/GoApbSjLu//sDWWBT8XyIhX7wIsFZVFqJp3/2ZOjTvn6l4OMdp5/XoXHcRHUd/gxnFiVePPeZMrvPL+CGaQLYNlyHWxIkNU5J7ABEAuAECEROtK/M7SBJwAA2AUYC5UQRs41hHmMkh4Fwp2C3DFUaCq10oW+BgAzEifhlA/0CFD6cJR08AAEAAyhVwg4ZIYF0SG5RTAABAgAAEGcBcEzkAYOFClwSU6jnTFOohTvugwAFqAABAViR/EBqFsBdwYfAYwKF1SxgzXxMUyYJEL/GAACAQAAIBAAYFJYPCOQwKYFABC4TVbir3/3oCYbeL0IQD9UP/98FTjgmu6v+8YEMUJ6f27PgIYu25QKOrK//fYKAdtUL8TMaixN/n//9EQLBwfMd/h0gtDHTs8SGlztbV4MZhYtODxDjZeMno/0U4yYEuQVngQwhYh6SmhDD+BiAzzcDsCDuiOsOD7btjs9yMaxmzndmfmAAIBkADg/h6AQBLNpzkLB3AGYQhwAUKRFMp/+/J4v/94CDHDHpt3LLPZNi86uxBGABSADcAz4iJfDdoP/ADEJwAiljZUSJ3v3Izk+E48DY0ACkhER5hPOmyAwwLWI6B4pZ+on1wDQFClbqKruvvvp+//g9oeolbEw5EQh/4CUzdqS9NgNA+hvJiwkF+/rxqqV/+8dANpaVzV5dzKEWXvv8BYAgTYq+C+Vj2tOqDqr4QCIJDsk2+YD7MjLxMfvAAnAMg0IZNitbx3YQFX/kQQR3YUKcACaK7rT/wwSmEnAANplYVPRdJTx2DMAAEDIAKAAIFqaYAP7CoAAgBgAMpmoAmnDhGDCEDjCExPXxds3eIAAQBSCAL0gkGaHe3iLDoMP/rwABAu/vUAAQQAABAiml4bHFdxzCluIDj3CwYYQAuUoE2BIdxKrkYHVlc/AbEqgYMFWlWuP8Xto90l2ZEy9/1sHgXPaziq1v78Cd+8wMtX9++90v3/Orc/f9b0QnuA+G8ABDDKeP+N7JmZN6IHdnEjiAG4Bhy2yageEFKdWQv9wAYwOgon8FIQ8+aN+g4+5wB8BpPQAAIDA5HVCvt/eQjghYJL+mOUuTJwVqvBDsIEqlCL6pA2NFArT/AghYon1XrQghx2iBO3h2ZhABGfpABQKWE194gAEQwAIlLwOwcTVZ+r4fu2JjmasMaJ0rwcgo/YjjBaQ68sdQYYQD34QBcxwdY14I1dZnueBGrqMgCgV/6ro2u//vl6/u3//vAUVpDDZd3/54HluxMHg6/ebo/O7593VXLS+8VWoLuO8wAAQFAABAqAAECj6YADwE5AUYKrep9XRsK9qt+DGG1bHhToh97utBsOTB6AA7gAyhKIvGq0VNcVHDMI7alI0Vqv2mBgAOkCRfOIzcNNxpPf/3AMoAAgRcWo0CdPBnpPlC8EOwoSsmSf4ycdJkneAbjknpCESOXejCzD//Bh+BoFPQgV7SOFDQpcq8AYYWTe4ooWbecKHlCgYYSNThEgsBvLrGLN00AgLsyLx7tGe96I9/o0kExrR3UDiszgAKICG/wGgaWrVQzKy31PPrfW/vFUl53TxmIgTjgG/wAEoAoEWqXtkrbIQL5iD3IxqC91esIM2IeA6DC1ZQoFV4mSpu9Cn8AAGAAiguiIDIzuKW5h92ff/eBwIfYp03JCYsudq4fBjMLFp3eIcbL6+9rx4YstkuzADmYzNBbwIwGELMsG4a6AmklGb37AArwATxGxaFZaoYVpr+QkrDCKJG7Qf+ATAQI4i62gxwmfG+14zw4UyDDBeAIgwTPiS7yJ33DKCswRFXPq++///1ufvveDwKkPE9LI3J1/gFF6901Rn668FUpV/+8fGq9tdSHz/v8OmFoIIj9NkhU8SqYvCQ4ySxLmt5LmhX5RoBgGFhQlyu1BTXwzM6c3gGhRCQPBRWV4FfD5smjDln34gUEEFyAzBhbWsiw19B5A4xk8vJMcVtVys9Uwt0L7Ryp6BpWC1W+rrjv33zglCtRul8iCfoxfHX3r23vfdPJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJwx//4AQhstbP93vr/R/wkSxzXwAEInoVcY6PDuD60g39+o8AoEL8TwrdWHHWR114ASKbC2gNQzPQvWyfMABH3WdwEOvwimGfk8aolU30gMAfAZjd+UoIPNcMpb/O4kyMjID/f9gMEIAAoCGgaCb/ho5sBA/qR3pM/OVzSMMrDKpJ7SiNUGtjDc0nXOOAdApNiPLYr69DqPGJ4Inn3zcZJHVfYHL4b+AAWFsoXN7SF363ASDHyHD8wUiK8IJut8AHCSAvJRZtBnv/8BGPnxCgo03wyn384LDOquK/IJIiIog/794sYQARTcAm/OA7370Sq2/vgFCCNaljhZjIfBOEQ2HNqWAugqlD/uMNVB/bgAMzCZOUX2Fc17PwEAZVuAYBW5bTQJWPAtL3gMAOW7TQDQVpmWGk38tkOAAjE5xF8SR7D2EEs0AAMgCgGbCGs0/1TiR4vAAMezj1i0mYiA1mQyBTMAAEAwAAQDAA4MS1hMYZUsUq9s/9bAwbFYAzKW3ok3qTIbQs7XK/9PWq93+7QWE+bu4fmVz/+AovVb6IFoMk35vv8DHybr6TpHvZNnf7zgODjVyQX/IAAIBBqAAIDoJ2D8JwJqrACwAGQ4AIgE/F6FmREZ3xfgxmFiV/EnuMnWyBJvwQR5wDVhtcgvgZUH45KWIrBcS4ANK6ACzl/+88AAgFKBZP1zCnmAp+YhTE8BnClnrDulev3GiKNl4QIwgIbcNmOEBdc6VrvAIDFYKCYhU7PT6jrO5Zx+3AgRFvAYnwcp1KRnbzEcSyHksebteDMOWUPkI7X5EM0zOYMfQGDD3s2+r/75xR+kzvNEgJvctmV9//48tsTG9r718XxT1/+7oncWY8237ArOmtp7L/f3ig4OiPUvc/nFYvf+DYIS0WfYLYMqDXKODwFg4qrbpqydRlg9WMNC8BYOKq26asnUZYPVTDxBFEJYAaqplFoDwU1W70AQJab0Fn6JYgNoQFvzkgii7dFEGtK8EFYQLamYI8bFq61FPAGUFNNSGZJ/fGHUSr/7zaGZ+QuMFUlSvIAAQFAXAYHbV28kATKPiZf8BuCjd4976u0mHvMSwABAuttAAEEIAAQJIgSLtHCpk6y9r+YoK9ZpbV/66m5gkLfb/pn3RtHXqWqz2lvms3T8IhMb/dtMuOHbbLncBxALrFxf+AA0AkkBoc0J5SZQdtmfvgBAG17QEAf37q4ThvuzaPoGAKS6QLCtciYq0T6+/8AWAiCni1jTmFxlCqVJfAgQXHnvKBPFub4pWaHwziFmPWKd0gXUdWS8RCMT9TMQqld/OA3BAsEm/EFEoy5WITAAB4AHADgAHfBNe3V5CQgAuyQ4A4z3FQAv/4gCIIMfYPksOD6poxUeg8gcY2eXkmOK265WB6MJlhZGSYtsRrzPAsiZ9WqEJWkH2InfX8BlgNk3hl9TP77Q4Y915LtVf6tGbSs//gdCbE6RHzG37ATD/ELTfxqdvXqNSJ1d+Pw+YfAomLz1TEzgnbuPDOYchflG8AAIILPkUgAGP4Qy3CWhdX9Xy4OBfrWPDOI8hOuNUQWhbkaQAAgBMFsuQsACc9UPBfe4w2UwckKRABlPwj8af9wQLiCx5ITxqzTsNL///wBUBBShRh3RdsUqX2+8QAEB4CQgNV7VtoWNKTWt8QnAF4sCZE4Dy2h9x/cAagpb1hW3+uiTKJJ/99ZoAhhEpyINEGGg1GAz5L2JHXI/no5d8bb8PYCsqoCIjv/ymK0l+8/vfwNLGrZ/f/XHtWv/3/RQH7A8zF7t6Dx+fp/pCPQCScnJycnJyf+r2m4Cv4ACAAwB0MAwEEajKlqnHNDS8fANaABCzQurR/YXtFmD/+8GIOseBQvTIUNoxW6vAzdBAyFgPfsaGKmLGRF/8gCDUDn+JFEaWlbUXMPsuAGAOPKtzFFW7g2+6ZHv7wAAQBwAgkWIpK0aypOY7sG554gGQQ8UqadwuMJ16pT4B8FNa8ORb63cYcQqBZBhwHj9ER+f/iPs3+6zX/2Bbya5fn/mAuo8zNX+xP/+HvbUm/+ohKxd2VZ/+/AS07vTL/1awhLvs6Zj+/+o6ZOoSvIv+AACAepwABAKJPLIBp0EmKItcFXhAAbcgoABqYPym2g7p03L/BDW/ynJPIFO3XINB8HBlDpFC9RtHN8/T/cAACAoGsGuqnwvaIky9Ju5LwRhCCIijGEVEVHGOmAoAwvykJAcafTPjI1GL8it+H72zbG/Uqu6hhPYIVYSnEyJlMxH//vemu1z/fYI5vN0Pbv/92c5tveuaRImavn/Wm0fg+wMTYqrTCbifv+PvXF/1COgOk5OTk5OI4BIBIjgEgEk4joCycnJycnEdAWTk8nJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnCH//4AQhstbP93v/kYRx8N+AAhE9CrjHR4dwfWkAAkU2FtAahmehetk+0Bce6GuyZBrl06mj+/UeAUCF+J4VurDjrI668APgMxu/KUEHmuGUt/gOyCAALAAx4P/AEf1Nn/HWa2M3gYYADgAMQilbQenOBLRiHAxomS3VDBMYwc/6qwfBbwACwtlC5vaQu/W4CQY+Q4fmCkRXhBN1vgA4SQF5KLNoM9//gIx8+IUFGm+GU+/jCEAAWBzzvgMi/2T6nh+ACHX8aUKjdZpZ4RD//n4/BitwAEQ2MKryCRZpbqIuq/xfJLNovgYfyXifmXSQSvWljb/+4FRChr4jCtgcsX4WFj2AQcRLtVYUWdqs12BoAOz64EPyeX16CAGGoQAUF3/ADFzBS0UcCKwXuID3T///H+ADe3Ags1Bg8CGOMpxkTEGL7/uYsDweNrjSn8ZX90MAAIF669AABBAAAEBsBB//ACIV5hxjQl36xpZ0itoAAIDDUGAYBeOKJYHyjEcf994CF8PwIV2kpomSw2T2cDGYWJXJPcZOxkSj+8YTFDnB59LCIsRNf9vUCEUHvm5+gOilywjf4ZjikPUeYHC/uWzpWJaJy3AZSQ/nNc+futA5h2WGCPuIv/+FwgeAzVGVHr/9cA4gt7QpJFVMf8L9leCYeNr6M/jARBTxcDTmFxmWJVH4CGw9DQAC9I8gCg3ototeAgKYKMqqERHRSrQKkL8uIPATkVwABALANF4qZkTlE2ceQAlQB+AXss/rwPDdDJnkZQ6wahLRtc9hX2AwLUghscezBomWsydhCLGgQhI/8GDTcsrr9vgNHuNE7paPlP37/keFcq3P26BBdAswV6IhX/z/jD7GxOoGGcMt05gAAgHAACBQAAIGCSZhwiQ+EAlI2rxtggQMe49jR4MZAAQx1yjEYYBKTk5OTk5OTk//9P4J4KHwAEAAEAsAFkHHByRdj/N0M+Lubowv4wweA/uRGDhVEngaKgxtiEANNAwrT/ADYMKiWivGDBjDkgo7/AEqp8E4PD5YlwRhgCpOTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OTk5OT1Pn/hX4RTDPyeNUSqb6QcPcSZGRkB/v+/8ABCJ6FXGOjw7g+tIN/fqPAKBC/E8K3Vhx1kddeogBCr8E3/DRzbolfyvf2rtOZNrmkYZWGVST2lEaoNbGG5pOucXL/Vfhu4LDOquK/IJIiIog/79//4ABYWyhc3tIXfrcBIMfIcPzBSIrwgm6CdjCAAEAQgGA74E35wHf1Zq5NTcH3wChBGtSxwsxkPDV/86CEBQYKTRoCGZ3zIPNMOrQAqAQlAkxEgTQSbQQf8ABENjCq8gkWaW6iLqvgYfyXifmXSQSvWljb/+4FRChr4jCtgcsX4VFjwiQhhWngrbKiyr/94AMI6KZmOwzuyLdS8Hf8296fAA49CzlrEOUujRBxWORfh7ng//RaABIs6ADA6hTwZhyyg2gztfkV0VOaC2mRlT5DYhyQZ/LKinR4CBTBRPaaZ1Qmy6XTdP9MBj+6GAAEC9degAAggAACAyAg//gBCFeYcY0Jb+saWdIrfgYzCxK5J7jJ2MCUf3jBMUOIKn0sIixE190CiqhxcddpG0e6SSFal/rbR0wrIdnas7FQ3noa+lHGcjuv+f1U3knf/fHSXNx2KgL/gYMAfsZ5pi2J3PImkwmYgAEHFywAnMxlcAAy16l4AMAUrw+GgxeClBaamYm+UNuQeQPgFYZknoEhRIDD+GBGOBRcDjVkxeWBJoAigQGoEWh/7JryCFyf/2AoEMcOYRadeDJalC/srcpkZAG7dSAYLuEHmKEDCmGROfv/82BkGhd3sS5kLJctcbzetXbdcP/nwjmZLM09AIC4jWxM3n1v/DUEP+ICbBhCj1pz81ycQw/4BinDVuGU3VlmgkZ5xeIxmJSw7kozYd4AAcABDCwkXWKkClCgvwAsBEFPFoGnMLjKFQqQnjBMd/d9NNBTLpz09/wJNOJvv++DBq+OzK5c6brv+8J7VjtzI8nJycnJycnJ8cP+9cABBjtJFsjCdDb2zPhpnwQ/QeQOMbPLyTHFbVcpDGWfAAQEYKgAjpkmpUCtBCM7g6fAABRAAliUxaAN6GHJo4uBEAEIAgDenDluYi+ruFIKQHtDEfun/W+iV/K28HDsZn9mOOgBnNLL1uf9dPPfX88B6Cxzmy9+gZYBbXqPVRUn/w7gw7+BAWDw8KQ30vDjgRqfTcfntjwS99BD8ABntoAEAA2jah4FRrARi9gDoAwpzBnYKwnZwInmCZaHAzhb+csTd2As1o16y37g0gDnGjJi/8jGWnIfd/813dB3gDAACA2ApBw4uDBNIX0k8p+KPQAGAQEnB13rxY/aK/JVX4Ei8AIJJj+FRfQ5UiBg8BDMCHrF9sDJyoV10rEQSHBYYz5ilTu5u3gkgB/YNex/63gaTHM8tfZf9+DcDUdftevBdwAGFY4F4RaN2b2Yv//Bi4CiK6R1cXKJcYSTgBBzgUT7BtsGTS1vk07BDDUgbW/MHYhJ3zzAKY5YbMxUQREnqZO+HYloA+D3ArBZytePgNSDPYMhsXUn7C8O2MqOO6AfNissnfu9hdwAWAGDaAHUXWqC5tIb33/6BGAfQcDLRT75iOK3F//ALAACAcIUMeUECVP5wmSCX4gABAI4FKBLx8ZReeqFAs0wADBHjAWMFEiWpsjGaAREtYHfluNEv/7A1Jje0jOmX+9gs2WyzW7f3YG6XLcH8xf/Q/Yd4GQhy7UPtIsVtYt7+A0JAABAG2ZAMNoV4AsLvewBEO8oUsiTI/aPOFSbnEAAIABxwJBtgxrObS7gSFzCWhFDgSHiIrOzvrq/ASJ3u3JjlkI/sLACfSFxOiv9AUNmyz13JJL/++KsO/zAAJigA+BORqZfY2JaW2Axi5GOieD5onS2N9YAwE5AUZY61dUatuW12IMQksZsuQLuPG7RU4Vu1fN5+MjO6r628KabP/8+L7fdP/1+HeBGOEAAIBa5qHAAFAHaxleGcQkj9YaogtC2dhgAIId5QhL77/2DDD77C4Rt99POHhEHutf/7yjvoLuACwDFKLYI6lxlhk/9bf/wwiHHbpRSHicZS4gasGGEjrNUhp2VLfmFlDjcHlpJjuOy7jIjDAI4C9UyEu0DMqKsAEZU3Iub8D0hyprK3SwFHSbkX1gorn9N0gvgAIABgoptTrfFWlOtN8a//gzmHKJAIYZBUzQikjE7iIxFZDmUo3uX8DHcWcWA5x0+AUTiUhOfGYikAIDBWtscEhOfLDC4OR95Lvfdgh2ABJaBY+kf59g8RhKumEvl779GgAPgkSdio/+o+w77AAMAMUSPFVSb5P79fACMZhYlexJ7jJ36BLv4QCLcD6q4Gq19aJTQg8Bghgsnp1M4oTYPDea5cGEuLf18BbEWWVpZv7zCuzVfNgXGKS1ZLv7xPJycnJycnJycnJycnJycnJycnJycnJycnJycnJycnJyf/x/gggOkNJb++++++++++F/8AIQ2Wtn+73/9fo+RLHMf6DUASKbC2gNQzPQvWyfMABH3WdwEOvwimGfk8aolU30gMAfAZjd+UoIPNcMpb/O4kyMjID/f9gbIIAAqAKaGgQP6kd6TPzlf8A6BSbEeWxX16HUeMTwRPPvm4ySAw7A5f4BwV98AHCSAvJRZtBnv/8BGPnxCgo03wyn384LDOquK/IJIiIog/796EAERjH70Sq2//BOEQ2HNqWAugqlDD+Grh/Qa/4vklm0XDwCDiJdqrCiztVmuwNAB2fXAh+Ty/PQCgwUmjQEMzvmQeaYdWgBUAhKBJiJAmgk2ggg1qEmzCXsmQ0f1e0QTHqPQ+Lzdff4TLg0KYpvV7DB0kcyGoSEe/v+LC8If8NdAABAYagwDALxxRLA+UYjj/vvAQ+hPBCnEpNulsPnGv6LQAJFnQAYHUKeDMOWUG0Gdr8iuipzR6gQig8ibn6A6J3LCNvhmOKQ9R5gcL+5bOlfkNiHJBn8sqKdHgIFMFE9ppnVCbLpdN0JD5QiJGstQYWPuIv//9bEmFPyhlxH/+//sOqyWLJJ9Y9BraYOVN3/ff92AAEFD/DXwEBTBRlVQiI4IVaBUpc8BOMDN1ihZ0ULY0SD//X1p9FjvMhlIAgo5q+BpU0WKMHiPAAFwBE7Ctjpd7AKcAEBgG9yncufie3S2+D45fjiwhTfO+eFzB5wyDoiwCv4koBB8k6/8EFmYIAAiKS3EEezYCoVdqvWAuJMV31NT/59/4Z7mHiyfVYAcLYLr8uc/n/AA//w1zqjHnAMkDA8//eeAUBh0LU1ICZrdVgvDnwEEMFOTzUoo5f6df+AGKNLq5X+26qmXEb0/gAgDkWcBhvtgDSiW+K+/xEAgDSCzQnz9yjNRVTKPhAIpgOvnY1Uutx1rx8EO4oSp95/zJhlt5kMW4QWZrpooGQF20/99xgaDXl1Cpydzw80E9hMERDP30kEtX/VXvef8P4BgGyPvvvvvvv5SOph/hr1gCgGQLgA7if0eYTPoAjcOEpoLJF3SsHlK98wIBxME6vBtIOdsGurSfChhoCygvBZATvCxu84YB+AFGICzeJieaUFX//9mKeo8AgbunrtGiJsgBGiEWwop09N1q1i8tG2f3b3+D4fjDurY/fYYhYq8UJxKUD///4hC5f8NfJEUAAgBgdQuWFnRc+64wboAaK4ACbBeaVWo//3gMGLElsN+PJlkj4vcvtgACABeAAg0JQtFrtaf+to+AW2bVuD8CMEMKyEHEFMrEV4OhwnaiyzLbPnFreEEUN81sE/Pbwe5r3/6BmZnGPP/lMElRYGnai1QSExmmD+ZNX/w18NQwfmMenJLCUUukHgCCGmBacyQx7q3ih4o4QEYDAkgNyYV3rpqrdwwRQICCg5Bffc0qtr3gJTOFbhgBQE8DmNVBTxh+QpRQ0Tz/T1Tf/vADQDjZFsBSXWcTSoSlA8AaA5uOCiFe3CDBQ28G4GXUDBNifOnpZd9QUs6il9DN/Xf9LAN/Dj7f7+8o4uURjXfvf8gdcA/4a8AACAeGBdSM7shZVL0KNjn/GAACACAChaqZgTGGZFOUzKl/+88AAbABwLxxxiheBo0cJPeDHeWJTHvf7904mfrrN6kiSE2YiMyGAAQIENS3gUDHUPJiMmURC5J2LkIC2GCeHokKGxNe+oV+sKm0gcg+Nl79/2PGXynYTSN90hHamlSun3/wWwF/w18YAhBZWt7C0XdOHNFWSnRiJ29/ywY45sQxvIF71gvvvMADHJLAkIGOM+ZOfESVBvt/K+f7yAZg5AB4c+JXN+hW/LNfvNgEFGVnMo+Vcd8IRSCCGHOxBRDlICAojBAwXtbButuRptX/YEje9Suro/79/6QIEiKvWfsXJCAF2UREQf91/9Fpcf+GvgAIANYBAj1sp89Yfo4ji7qAAMwJW2C2iLVWTH/72AAIAd4AByCBgbhdpvEX3HrGHREpEZwnbUJ2gE6DoFlMoqOuGAACBKAAIOoOeTNABhzgHshUkkIkeOVvVGUSliCEDXtEgGqD5O/au7QOoG65paBNpQf/3/ZYw16rZzOe+sTDXK3G243f/+jOYgpf8NdIYAbMhbDr9ImG7xAQKCCTulDBQIvYsMFtgIEfR4pR+ll6X2gqcwGOCt1SIJW0/vBh5ENDhG+INxGipPejP0AAEAMAckkBozLNSHNOmzyPfvBjraNyS2ZuR2LPJV3Fi4ECnn6laiW2sHBAczBCZnlAEGi5ut7O/fsAfONcXJnVLP3f9gN+3ZMb1x/9QUQ8sHhL//vP+IKRIo/8NfEDIYFtniRHGnbwGkOyQiMQAAQLQAbGLwQP+dwAzAprA7QUivFUqArQP/cMDAumHCkVUUnmtKQAwAAgBXgACADoSgC0hSlXL0CLgBA7rec+jPFC7By0//cAACATIAAIBJRg4FYCVQiVfIHArQg/wjpDg/8RMegULECBd3lCqQ9Fr70DMOr8sxvK//f7ffz954ExlER7By1H9/ybEa/8NfAMAAQBylgICdnpJI3nG73/v8AAIAU5AAgVvzJCvi1ogE/vBDsKErfJP8ZOOlSTvArQg9AR0hwf9ImPTxIAQAIkEhxapUK8WYqhqvhFwgNrAiiHyWmyILqXgh2FCVvkn+MnHSpJ3wZxSRtySJPL6Y82l6CEx0GCRWBlMU/FI+Jvd7QSNIqY2ntX/gSo7Nhl9Gd/fUYz/bBaiPf2v+AuoED/8NfMBpwMl7A06I1+Jz9v4ENDAUGBjH/38SWu7dlnwMcsSzZDT6bPnCWnuDQ6mKAAIAH1YoFnyJF/3igQiP/UASznPQgXeACAAEBECDKKqnxJgtNrkrCrwMGJNDqM2EMU1CdfMn8gBIwBBbBsxQgLqGCtQGBSAQNe2AEolzKNRNZ/n/QzY6eDiUZQzB/f+gaKLFRLSXzdv//VskvAhETHP///kLiTS/4auAAGQAgNAg/QBjYQdXOAAEALgFm0DmpoRAB8d/tAAFAAYs4aNQLkqRd2gXggrCBbSZgjxsW9SqO/DKACjinOKgPuCfXOw/m8sACAY7ZIJHhnmau+zwYzyxS6RMh9o+0SJteCGYgophzsQQQxSgg5sEOfYG42XLEZld6/WwIJOVGVF4/r/oibwddqnvexGUW5iOvoj/9/x7hjRoxoZ1umNGNN1u/777777777777777777777777777777778AAAAAgkwAAAADQYBBwAAAwIAAAMABIAAAAowIZoCPXDAd0ApRAev2tcOaFr+j+euiov569Uf8J9gH0XrL4X9gJgWzf9KgH5aLvhboD7OuwWi/L7Beev9hrhr0DXYD+uvyuWwVl89WAv/hn2BL0fYXi6AO6H/NsaAXw16JexWArLwx7Fb16L/Dmnr/ZLl2X4c9Nf7A/DlBdUD/+I6+/h7sA9gH2AVf/4I+wU4K4V6C712TA0ewF4MPQWirQH/560CS/4Yt7Oj10D7AUEPJXieev6A5eL5aevhv0CXQLoOubi/zcXpgh+8IQjsdj0PY7G0J7lY9cX79fPX8fJWkAhfBj1AW+I0P0AdYZhW3QNjYB6+y/ug+uSgX82weuGrXX2D/iOg84lQH4e91/Vf7Xnqg/9hjnr9l+GdgLWgPQJLXEV/QC89Wv/hr2JaP/xHsDQv70P90PrvYX4jkd5D/uvgu5vERg+XoC3hiWwD1zWuM5fV8vX5dgf569L/DHsOy12PoB/Dleul8GHEa9l3iIb7ANf2HXDnar+39XHhrYeuz/4ar17P/PXotHXUwpuev2At99j1iYckYkYr9gLXDV+q/wYcmIjB/EUBLfslwzoC1sH++GvYa+gPrk0rH4ZsFsa0C/8M360P/3YFyk/xPEaH6BZP/EybH+6APrEc3/+Kw74AF9iyvoPIxYnew9YKZuU2pgYw/4KKVHvhU45wrx+DLk8RGD4f6Atey1v2feIuwD/egD+GutfQLrk9AHwv0BUfX+14MNAHQXXsHocRz1oD/8mv5dAH8R7A0AfMJNpIe77wAEcwABABACAHibXBgQiJ0416K40vP+AEABAzNmLEQjlx3Rjt/9iw7YhBaJFKa2ufend54awCzDsZSCY8WltOvzn/XeQA8gBWjVTMiLZ0b1W9h4II0WEkcsO2i4IF+DgCrIgAhAGgLUL5Su2pA3x/Z3R+AC2xESlLZb+P+DLmxEYP4ugJb9leIvsA/foA+H/dgP9AFWv/nqwF/99L4R9AHoDoA/iuwd+I4vQH2/w3XrQL9c3RsLw12Cr+gv8K9AfQBr0F/u/BhzeIjB8vQFvES2Af5tD/PX9Avnr2v89KP7BRSE8lD8nghhD/xfSQB6ByeGYQ+CPoPFBpxGvZd4iG+wDX9h1wzR9bXY0Xw50dfoHi+/Y/DVguva6Xiux9gH4a6HVegF6hjDnX3oewfz1/QKDHkxEYP4igJb9kueshP+T/ExER6BbGgD560X8n+EeTQL8M76+wfk/iRHPW1+I4alD3X7L8J7A+h/nrR/+GbAWgNfoBfhro6oBf/PX2C4MeTxEYPh/oC17LW/Z94i7AP8noPwTdHofF8F+311/oH5PQB8M2C6sH0VAJAxPE6H2P8M+6+l/BfysaPY8kv8JaPoBfhmwO9fQ6XwrR9D6sBMuwdInDnoa3/89ft/haZ3oFqwHsC2vghsC/VwX2v0NdpH2D8M9h10C0H+G/QlsBoF9cPShh+ykA/d6X+ai/q48RY/2B+G9B6/t/D3SQB6AkDY9bA2Av+C/QHsF1/teIsFZaTA2Yd5sRGD+LoCW/ZXiL7APz17H/hrp1INf/hjsD2C16P/DXoCX6H+X2MTy6A/z1oF+uHOjr0aBfz1/QC+GugDXYP/nqv0Kuev2F+euwTL7xEM9lX9hwWc3iIwfL0BbxEtgH+bX8OU+uyT2D+HPYJaH9gfrF8OegEvQC8ShPDVD6/2KTwQwh8N7PXQL4NuI17LvEQ32Aa/sP4c9V/v4c6dbAf/ks/4ao+ugv+X2C8VoH7B/PVAuwFz8N+hr9GzyfhD9c3sB+GO7Hsddr/l6HXL0P5uwXxfd9A74b7Kv9ggVcmIjB/EUBLfsnz1+x/vsD+S35P/ESaAWJ4Z9gS/X92NBfnr9AL9+hLvQB13Qv5POAGsISWB/w1YC6pdr1hiev0uT/Ewxgq5PERg+H+gLXstb9n3iLsA/w37a9gL/e/4IOgWwX0JdgP/iNlQ9H8N+mqF+wfvp/fYBiOFvQGh0Ov9AvJYB/nr0D/zUC/hrrVf/hfYtAHr2L/Duh++uvOk/w16BL2v8J9GrF/DPQBrsF/w5QutAX/iPRsf82Sn5aAP8J7B9AL8VQF6AP5LAegPw7OEf6ANBa0C6AWCTmxEYP4ugJb9leIvsA/PWUt/4b0Hr7P+HNgtfoP8IeyoaAdHoF4Z7HVB6LxPPWgWgX89aF0Cwa83iIwfL0BbxEtgH0JiYc9Al7X+evYD/wxYL0BU2P9kLQngvzsTsdDX+0DfiNey7xEN9gGv7D+ev9B+ev9l4MJ6fY6+wF/N7AIpYKQBQ4IKBeAIQSOHOwt+ABfjBrggYIzwAAAwEE+HyGQpnK/AZHvpc//+4B3TmWjRMAAQTXEwABAUoUOBGWopTWFryn//iE0AfHEADGbmW/UcAHyb+iPF56/sv64b7Kv7At4F4WHMAOiJjnG5deAAWAAIAwA4DiIdjM2mkC80QTqlIpErAAEE1v4CUm8AfJnCP+Z4A9aXn/e2BfC+GIGCtsHuIgO8M9/A3QWk4IFVD98AAAIJ88AAQT4G7VtGALhCSX63h4VUJeB4Zj3gY5mWzQJKT+V+b9ZOGln8AHMEljhTsJH3B235eAC68dlTjJaX7uRgBCIHHfrnC3+/8vbQKYzo3h7uZyDjQABxQcoW6cZ+NsHvH3uECVGXYOsCVudnsJf+iJLs+ev6Bf8X2BevhzzUXYL94NgsHIAMaq3yzwSgpZwcZBcfBUABecHW1IAHt3/gAAAwIJ8qMOPl2DWTJrnCOz5N/rU/YLYFSn8jF3Xx7bmfSBd+J9npFuAFcp+/gr5MRGD+IoCW/ZPnqky/9+l77KKME13Ef6DUKhqTeL7z94RW9bWfzgaL/QTvB/DLOiEAIHkj6CnAbJmTd1YDY0blohKd+77wxWkmkgENt9VJgaCK38EBdALQ+B//qjf7n/g+yOMjJ9vf9+AaYdc9aD/mCC4H/w1AARgCEFla3sLRd04c0VZKdGInb3/LBjjmxDG8gXvWC++8wAMcksCQgY4z5k58RJUFI7U2izr2D9D2CimTS8kRpW3WK5EocjCkzNBAdBA3NAAdYN1tyNNq/6yW/NmjP/y/wALgQJEVes/YuSfKkknp7/mwcbj/oNcCezCNLIdTiMAMeAGmOUAxoUbi4ZIAV6eEQqAoXv/g8AAQJQABB1BxJM4AHA4gZzelEhJvT5Gi4yhNLCEkcQPraXJt77AOoG7ZhqBNIf/v+BD+I3X0rFMNd2423/++H9gK7hX4AMDSEIsoBBPEj6dymLTxAg4Y2txkUQr5JnMDGhCEYcgZCCkHdLw1OOmMha01yIRwBAOlYb1ziVDBoVzP//gw4i0ccGorVCSb7m+Jt57/iRKQv0XWBg1KSX7f/k9W8CBCuAKNrmT34GNENWAAECuPjwABBPguFekCSNWItXBLA/KDBcg/eBWmcYC13/NBy8eAcFfyoanij/HCICORDeD/+E+4f4AApKoP+CGAAAAAIJMAAAAAwGAQcAAAQAAAMABIAAABBnIZoEP8NB/oS0//DfGHlEuRQgNtJgvloC/gg8YBz7FePWbFJPT0AvDvoNALY9BteM5zllsC8ObAVAOOLAfSZfG+cMB2qHB7AWGUWYX+wvG9AIoX2th9heX8n+CDyGaALAPmRq3YeQaRtDfieWdAG8NMXm1v5ex/DvYH6Bs5BDW0gWy/D/RM+/QDVDQfYCpeHPVfaYKcIPh/oVgXMIDQqzroXp/DXQHXQVgKwGgGn4IOYS5AALAPQS7C/4c5lTA/ky+w2BsFofhjQOwGwPr+MD3gXhjkD/MF2Br+wSAfh/oVgVgrDRUuoEgEwGQe7Xgg9l2AqBvVC8seP4f5gNce1Y+qBzlbAWheGOhsBUO0YXYf/DGQQrTKFegCuwEgHmki8P9ql96lOey/wxQBtpWKmugJj5ifhix2C0DZ12Bf8MWBDoEB+cAddD/4crYaJcoMMF/8ObCMHfCYQPx4PPAvje/Q10A8fGhoBWcMvC/xvOG084bwKg6CoMogK0SC6Eg/hjKB9HyA8xP/BB0PQ2BD8eg0AZrZ7/xvp5M87kAiO0k4aKgWdR4MOYyg7PcNliQheGCjYC/hX0Czq67BNNShAzBPwxQkbGjnVsLXsv+WwXBBw1fr50nE8vIJKXhzsBOugvKV8M66kSWC5sGwalzdfhzoFXsB+ueAd6F94RhvsdcfJXlC/1SpcvYF8OdAGvQC7A/DHQEQg9ANf5BrwtnY9HXzA+iReXXDfbr+wHBjz1+h/hW0xtI6BsSAlbOEAf/CvSMuwWgKvomvwroBWAUD60L/yZBDQC8K0DIID11Y+gL+FegSdi1Rt/ZeGo0G/60v/hWcQWC0DYev0/wrlEmvYKYQqi/+HvNzpO3HhYG9Q4+gHS89Th9gtC/nr6ovwrsNgMwQpYAlX7h5r8M0D2CYMB//Ct9AWgFVgff+FemwE3IICwEpAgLA9gP+FbcggPoDX5x78R0RgtokF4V2PyB6v3/dj/hWj42BgGgGAde4+CaL+ToP4a9gadWtgLgw4b7A2Br0Auh+WVhNgL4Y9FtV7AXQD8MWuQF9dlyhL4b9kvPLVC8MbB/Q1/a+GLX7BL2P/LhDwfy8RwxnrLlB69D2L56/oXw5YBa179A/DHdgKw6DXYP0BeGNAdgXQDXoP/DnMEq9rRteeucxRZk2XhjoGgC8iFAEqdr/hjYU4IBQvTD/Xw3rr/QYLuFd++ugfQvibA/lYT89fHyVFoC8bYD7GwH7XIC66CQVVhs/DVF3EgZ20bD+HbfGGh4l+wasmiKf/BBOMH+lyGVQcwTx8tP4c5Z1YtkwM0C+XqcS8FHoXQDKL5ewNgy8N+gNZX8g1+evYLjgcvw7YTHsvsHcpegHZ+GcgAEy+vsH1w1jGnX0C/hnkEtfoX560F/4jQPdgf4ZsBdaC/BdwrYG9e6+g/7sBWB/BLsFtUTAZBfCvYD7GwGpT7AQ6Am/wrsvRV9D/iO3xhoeJeGrB7DqwNF/4V6AWckxwa/T/CuATQBmQGRMfWwWw0f4V6B+gJUCIMH/3ejQRe87NfEUA/Q7fvoBffQPYji/Gx0cAkq9bd50GDPh/sDYHfvr9DQvhaVhNgKwPr72D+GdFZL/Q/D1gPkEkAX2C1OHtgTBbB+HvOZ7BsBIWvsBZBrxmRH8ogKAuYQ/4239hsPY81O5LH0EwJLwtjIydsYiP2hMJgjC2TjQjjfQD7KwDmb5BbBfa8K9g6G6HVjZdAvwQWD1jA+u0hnWy8g18K7BUByJKr6DQFyevjofgAWTgfsJUDmyexJU1fyg5j9XiucACAwj0PIpLr3bj//tdhVPfowrXw0CD4PCl8x5iG8KbIqNw8LET2q369/72nu2S/FDOgAPJNLX9jzd7/gDPSsndXv+DPhiwN691INfQfwtysJsBWB19h/wt6Ky3drhE4bnR+H+wGQYLX0Jk/UvYOgvDHoWxMNSjFgJh+wF4IOdFZof2DtQVgaFr8b2AWuUIA84gUDov3YewX4Y9iWel9gfsDSEcMbA6OhfTy/+N5Rj0jCV9joDkCCtgpVegF8N0B5IH1Qf5gx+HKBoJmQLqwF7o/hvQIgO1+wX43sDYFvsB+2gGqDQIod9i+evsD4MeG+wNga9ALofllYTYC+HNjGAMdf9rw57Aa79gmPwxt9j12BJXafwxSodLr/UVwvKv0bOzXQfb+L2AbD5hD4b0BIDdf7+sUGnCu/fXQPoXxNgfysJ+ev2A6fhaa/rVgyY1AHhKxau/BBQv0BbOvYNgf+Ebf0ZxLIWIZ8N+ga7SB/56/sojgw2A5WdmjegJgJg/+F5wQB/ZI4tgOl2vC/KzyghqwFYaA/8bZedxV/OZHZe8IsNz841QD8MecS3nv7BfPX9goMuFbA3r3X0H/dgKwP4a9gl+w/wroCkKWBoZwQrRf/PVANlo/4V9AK7Cr7CQP8K0BKUEDoGUBJuDysBewL8M9irS/EcNWD6/Rfh7QH9hyr6/R/hWRjQXYJDVgv/hWw8usDQH1Yf/wrS7DxkHh1KMPt/hnnCNfQLgy4f7A2B376/Q0L4WlYTYCsD6+9g/gv9qy1Yv/jdAzV0L2PofFQmL/wX6F33CEg5xoiTYLw7ykHyiAoyU12A6B/wv6o0D19khWC8N6Frt/EcO7HoF6HrSKV+vh2QI2Alo+j+rzjH/D8+2FSZ9h7FhMKmgJr8F+zMV6BasBpewvhWgORigGgJA60OwHYCGSV+FbOkg2OrCy0WwGcZteHc5nXnUIA7DYDIGf8bsP0PQC7D10uwvhfYFoC7+1/hzzrrYf/h3YEcjC5F6Ba/a/DdgSB6pbD0vhWPsYA/KCA/ZDk6RL+N6A9m8jHIC+raAuPCZ2J/G3+YjYLKuwXrQDSkBFAKwXh2219B2LUoIsBMFQNgSAfxuH0Pla9gPjYUfj4av2H5KWC8oKYXhaQR0AoAuvYLa/G7AvKGAsDQGU/0+7R2kaKgPw1R50TLaD+wvG+lQY0PgwDoD3Aj7jYCboJAL4+YIWcjumpHAwXgC/w77A2Gj2A+r0mPaQD8PaAkBuwPZ0PWOlx7HS+N2+wPOJkEtAXX9tDS8K2BoAuGkTB4BmJa/pQ9wxYG9e6kGvoP4W5WE2ArA6+w/4IOQIAnJdkQMB4mAVeg3QrfwYegNgP76EgPkED8McghYGm++wNgqEg/wt7OUAAOvYFtfDdhMCHbEGpC36DieHfYtkcTnENH08vsD+F+kYSY6A5AgrYKVX/hugPJA+pwQH6BWH8MegEgaC2sBaBME/4b0A0AruUt6NrxvsC32A/bQDXQEgv8MZDPQ9ix+wPZeH/YaBMZ18cGOA6CYEvQWl8M+xrYC2WwXhfsXJSugSJAOUx+G4+O/6oB0LmGoLeG+wNga9ALofllYTYC+HJAgCehAwHXlSf4Y0B2FnMcPkDH/hz3XYDYfMO+CjZygABYB0bBET4bx8E3Xof+GKBDwJjBO+zph2AvQxHDUq/X+gH4boaPXMMPY4NuFd++ugfQvibA/lYT8PbLiYB8gQBPRd/Q/L6A/BBJT+1vVuxUDgdB+Hrx7P9GsoQFP2mfgg0Avh2Jg+gCqNJLYX4ZwM9NSjBKECwHt/z1YL+fggoAoP7HoFwlDew0GQa/DNPrnGkL0BeGOgD0aa6D7BfDHR87Bzy5wy3pfDHkQZECDXS7C+G+x1/ofhzsOuZF/w32OvQHtMF5eQMFfDHXmBAa/jhWfhvh9D5ddBdBGDPhz0Nf7AXhv2lyy9AgV8K2BvXuvoP+7AVgfwr7IgYDxMArQf/hqwH1+g/wrOFcghp9ZgQPYP8K5QAA6AJx7WBdr+FaAtA0F2A1YkBbGv4Z8YA7X34jnqQJvGPY/wrQzgawmHjQHBXMCv/Cspnzgj6wPoaBfhWnoH0GqATf/hXtTA+gKkp5eU9+FfQNDYNAKtj/8K7APrX7Af8NX6+/8K5gTsLqh//DVAY2MTCWhegP8K9hv+gJWuk8z+FdiokLr8fBh/hqgfVj9XBXw/2BsDv31+hoXwtKwmwFYH197B/BfQH4aQ+Xkb+gF8bkGCwHsdBMqD6WtgR0lsSA/xtgmBdjOKdge5T1ZKZVoL+HpRZAdjzhAsGgCgDrYdeh+FbBkEtAeQIV+kwfw70F5dS6+yYKUj77Ap+HvYDQDR1MAAfWimKf432BsBczoGVfjQHB67B9ANgvBfKCHSpNaoP3/D9jQFPVgP7D+2CkDP+HtgGwc5mwEwLrQNgqB/w7YmEQLaOcMBYIoAHqcIUA/oBeN7aC7bBMPQCQB12EyYEgHKED4d2Ngzh6cFrnE75ewSH/gg7TA0+vZzokmj1/GyH9N0MxnST6AereYYeg/D0PQuVHANBd4RuCKOpxAcBMB9g/BBHbH9ALT61oHlDfxvszDbANB6PQB67CIGA/4e9AM4R9h9cgn/xsYBI9ANAH2PKW7KfyCBfw/Ta6LoFv/sLw/oAsHJFrsBa7BtWGcar8LzHSC8oEQL1ZqgIfJSB6Lxvs9gEogK9AL1sF0SB0vC0o9eJ6AOqVAfKEDBJwxYG9e6kGvoP4W5WE2ArA6+w/4IOgND4aQ+WUNdbGgPQmB/BB0DkQ6ALbdgl/oBfD/sGcQGhdgTmEOpQ3QOgmA7AvD/MhQHsecIFg7qwVkw6dl43obB6PkAAb0Q4Amtgx0Ep4IMw2g8Tw97LYrAaBFH9bBbBWC+H+w7H96sKy2CwbcN9gbA16AXQ/LKwmwF8OaGgOuwGljwQJ+G6Ah4EyHs5iCVP/DFgf5A4uh8oY/XUVw352V/QEkDfhXfvroH0L4mwP5WE/C9F+hrYF9DYF58H/ReHtHyEH0OtiyDX+GbH142DBKE7AUUT/wrBhrgBBztT99rud+AE4xzUA46g0aEVua67//qgpIhsz1tgQ/x+OXhjw0LJ2Al6DRf/DHZdFXMEA+g/DHYvOCAV0C/4Y7BMUIHCeABeOiNbjcQV/oOT/aAQwRDEAelubqWevoLz7caeP8H5y5Njhv/GBnabLwAgMQ/2mcHA/CS9Jgok6gPm6gAOh+oyvsv2bbAD0lP2n/z/h/xvQAo6RgbuzcjdOYTSzv9fQVAFcMog/sF567EwX+L7A345NeG/arkHveT/AEHhkLIMYAOYZEiOrtfAAKsEpCuQA4raFSC//X9//97A4C8tIVH5AsDJXeJQMD9CKnD1v4v8N/2Ndi+CzhWwN6919B/3YCsD+GqA6Ktgev8M0Pq0Y5sB/wrYdALkpVB//DNlev6eKeF4VlM2C/GEoqFoWYQ8XZS1QA2BqWRav93AsM4soLzq514Q/VeSKlRTj8PcN/3/wrGhA4dBdf9Av4ZzK0Ba0f/ucQGgXwrMXgB4gkjA3WeB9ycZNk7pewMjLIh7Lk8XAFYCfCvALGQpS12dcAyHXUHRFURIY/u8MN/GjRA4ARmHJEJ+feRWKsOPrAEoDC31J4P4AytX7v9B/8KwJZDO3zFQgqF/3hq8tmzQIB7I7CAg/UYM1YK//wrQNg5g9Yrr9gX8RYI4h2Hx8tvDO/WQ3/MV1xj/hrzx4qqfkBfPGOf8HwIYgQpSHklOEMuf//XBf2oYrwf3oShhhEA6AWnN6onr+mu/CDj59/32GcEQQwAAAACCTAAAAAMBgEHAAAGAAADAASAAAAYLCGaBj/DQIemthccBq/jegXou3Z60gxD8qAtpAmfhicQFFHxGsbQAHXMrJLBJ4+ylZC8b7WYA2A9tAZxAWBsnuh9hPUQdJAbA6GZL43sbFkKTfnK9xvocoYDOEsV+lYX4IPS2AZBAegnsXZMDpeN7BIWwNBMbHsNnOPMtM2tCIbQpOfG+wWQrjYGBu+gPMO+mPgvuDP4IOwkc4hQe9hWEA9UrAZwgtFtg/hb0b8oDMMKGBEqdRG+OhYfzZ/CRtjxPmY1F78byCA8gQyDLOdjsDQNUSTBaJAvjePC6h6AkB+tnOHnIwCRQKWAp5WvBB2JAbF6BbsMgbYKINT+bBQH43p9ugDQB8dAYKrYDa4tLxvMJHNbA8lMoZ0A2BVQfnKkE/wQemYSYG7Aihz0DXb5VLDq8P8wW0Q0U9GgGgZBTCgF+Yl8MaTMx5AZgQYFSXIG+zJHwx2DQJDoSAyp7BaBIXh7p+wkAihewax8WaB02el4f7AJAk0K+wzomFNjyjyBSAgWFAPwxYKoIG1VSH9hqxWCQ4LHAd/DGNAiGOhwmNA0DXR/QF4YsFL0ZQAkSQdNf7LwxGQfNIlSoHqwS5JIv8McgLOIWTexLh9dJ/8MUNAfkDCcYV6B6AS+HLGQIDrjxI+gfhiwKEDF3+WBnIA67BsPoH4YkggNAFAbATEmgPDlr5RrxvUpHY33MAmAmAYdgQY5wiy/xvKII+W20Qb2NgKdiwFUgQGgqA2ApwswKBeH+wWg7BM+dxyGSglcGD/wQdjIIDYygOANgLHULWUpZf432Lj1jSQJBuAvhXEe0aYLYaBeH/jgdiAnmDASiRK9lBIBY+hVQCPLxvQF2WFzBPqcYsGJAQFwgsBEBWvhiQhZobNkwNgKVPYJF2BfDfDlyGu38EHCspn16sv/EcOeGLULxglf5ewycEAXzda4Y4R8PgP1XTQC/wtHhiX+YQqMkrRp3HoaEuHOG0Oodf4aks+HOiph5wR+mGeevYL/Lx0IfsI8EnMkYJMvDnJRgEyeMiJ/wxw2gZPkYXrGSy7fhjzmdh16ucXiL/hzpGHl9r/DfZ1oocdjGCV9cN9FXYXHzxgx56/r+FZC8GQvTmkP0hKyQtAaP8K9g86JAeoyPr40EGXDa/wryO6KtgP/4a6JBr8hB/CtLQDPAZxA86WDOG8m/w93BcwBQDMAAWs9gXfsfQ6LwrQHVmDFgdgJ+1nWgH/CucRyAAHdbXYP8K9WvQJTrfQF+HtAWOBq9Cj7t3L9HQVn4VodA7BXrQLYD/nnF9jZfhXoBMJuNA9bYzgxgW2l+FfNz0QHeAA2HkBH+FaoDY8JDDG8NW/BBo53f8K3hAHKIDQ5RAV084bj/DVyMWBr17f8K+MgAJ2gJe5t/hWpXP87l51NDMqZ/uV3+Hoyb4mIc4IZhdAcoa4o61oWV2cjR+FY5CPrYHVBDQJvsL8K6GgMONzsFoDVNEwYugPgv4c9Jf6+GNgY2P5WO9Aih/RJVtP1vDEN2CUgwddn0Ca8Me3YSBkAq5BiUO7A/hiOj07YD2CrokX+GPQFnENf0AvhjCRgHP9Bsa/mI/DFA8fG30CYEvfQDXw3aoBV/RRHDHjgEzNgKHKij16D8MUP5Amg14fi1PQfhjWhDgQJvHK9BEd2AvDcbAi3BAFAa9FmDxB3wxlAkbAwxsCLlewL/DHQB0B9c4IClsJLwxHhroBWgV9BjZ0uGley40DH4Y2AXAgLBs2MPlF0DYH5xj4YxgEY4lRcsK/h6bX4Y3OJQegOvYC7AQLuN88n+wPQIofShhm/p4dRDy8leFrRRAvYJV0Och6L4MMOJ4/7CW1RBvsVY6Enw7t4wWtC+Oj01KIvGLggGMwYKP+GsYaOrR0mOTn/G4AkWYY/wkYBz9D1RJcYLQwpF4II+BF/MaYPs1OGCwaQFXU3DSTh4f0H5HewH1haLoJB+CjlSERbyi+CT2ZhfDfGBw1L+MErLwtxfYGvBI8u/ZEn4dovPT0bAbC8M6BQ0k4NKSX4Z0PuKmDTA/xfC1gf1qjsCoBf56tceEWv+FaLxoGzqYl7Bf3XhYav4a0PWEuJx5QX+Fex8lFdav/wrobAtFyIi9A08FvDWlr9fwrGx/G7FnHeik60H/7xEEMgwdoogR0+CXYD0DIBWDcfOL4V2wHtsFGC1oSsCYPQyGP4V0BZxDjDQqAXtfhX4AkSDQjDHTiYaQfWwf4V48MT4+LNALUea0vgL8K+tmMANIdGo/E/QbA/wrekoHx4aEHUwIALKMewf4VrS2GBBqHB8erBdhIv3lCOM0Bl4V84YDsOuAPYv4iOAWfQDOJMX4VoF2+qGwP/wzsbGQHgOphj/sKcXwO3KgPIXYYMuGvSX6/jdgY2P5WO9Aih/Rc8n1+pwgP4WsEpBg7RRAtfGCV/w96BWA5l19ZBSmwMoIGwfjbCwegShLyWJMBaNgIHxhCZMBsMgxQLKCB8bGzQvBs6OgPY6BZw/nQQ9zMER8Gqi4+Inw7ZUBcwRQMwDYevYRBiEnC6YTAQB8EEqJAJoqKRvQG1FpwlCXCb/h2OC6+wLnBLAfiP7GxCOHtrMO2AyAVA/Olk5xqGQjpeFbAXsZhgseoyIFCoC2CDHY/D2xpbAKN0A31SDSXOUT6Js5D43QOwNAe8gL6D2GwO0wJANeSuZp6SEcX3gA4DA61FhbbfEmuK2cQD4wAnA4DBZL3o2NfU5plg4BNaTz66gEAQduIohXFhKHiGxhVeQTzTnkkP155Bkvphy0X/8BhgDZC/RVTuQikj79SNfD8MAGpGUAA8Thshdaj4orA7ToThGAMvvu/7fnOUsGXDmlr/XxvsD0CKHxsfxuxZx3opOuwci5xj/C3YJSDB2iiBLsDkDv8EHsB0C5l13GREmGOxvU/G9hegWhIdAaZxAZl42So8TFww+H+UWeCdj6h26AsBsOAVgQBi/hijGwucB8bCB7Acz4AmA6SH8P8cCBPOzcwICchg6Dns0SCIDqBM2C8b0AWB6/bfyUmMlDewHSxHBB1MIDGhiabAGzaKH1CYCKEA+HGp/jewjgnOLGMz6HQqFlQaBIQyGB7NLxvoWzKJDwEDQVoGwE0YRwCKga1M9AkC0MoL8EHoWgRBDOCyEniKsHQF/43x0XXqxqAQSr8wurQR2GaUAyDhQWhkV43oDKCDrsLmVITgUrAmCXgiNDRKAb/z12UPJLPwYcOekv9fDGwMbH8rHegRQ/okq2n6+G7BKQYOuz6BfDmQSmxf6XhjJTSa18eB3yDj0J4IJ1869BkVsdA2CAoegJKHRNaRgQ+G8wkx65JexiuGM7tmjQYwaro/RfDFgZx/QDDqLkdBa/w6h134Y0TAyDBs0Cr2A8cCD1eGKBI0PQB457BbNEDTjfPJ/sD0CKH0oYZv6eHUQ8vJXha0UQL2CVdDnIdF8Oda/OVsLxuefJTypPIAlOIOlqRfjdaPRsLyVYB0aNSBnSyhAfw/YTAPs+G4augtdgkpBYIOWfcPwx0SXOEVzEThnOk+G+YzXQ+PBbxHG7C0Av7WjZvQQ+SgyhK//ggzsegP2cGHTwDOkhFycvDu6PHwIv5ALU4gwSAr0lAfoXh+gJH9gWSiA4/GgiexIC+GOkgLWSp0FyjXw3ygSv6BQY8NaWv1/CsbH8bsWcd6KTrQf/vEQQyDB2iiBAOsn/hmTzBgPhXpY8BsMl5qxMug+T/CPCvY9AurNFnBbAvwrQGgJgivcRnIQr9aBfhWcQFaMT3AgMGxVJD6COn+GdOOlxyJtcXEcNWusC7nEfwrYjC8wINj1j1XYKgf4V9AFpcpRYCQH/4VkBB3CyA2BvQBXKF//Ctg3jYatiyA10A//DPQVfYLgx4a9Jfr+N2BjY/lY70CKH9FzyfX6nCA/hawSkGDtFEC18YJX/BBZaHYD5p6WgHj5KoU4T8bYEkgNLnEDofY89NK9IQaQDsU/G09AdCJXr2BaawJgnpOg2BsD8b2A+YIoGNRND8APXHylkmEnC6dgIA+NhuLU/QB3sC2aA9iPFpwRi8I4K0C8N6euQJ/EcbkEswAAaAeP3/oA62hsYfGwSUCYNeNkEmpegJn1aS0B9feICZI0Kfh+jTQ3YMwh2C72+w8PpOHjfYcMWvbjrsPrHjPAHKCDX+HtA9bAKSAdh6uCCtEUEbB/h6jsHI4YnX2BIC6oEYg0WZfJvjeUlnUegXQB8wINMI6nj4Tf42oYtR4AbHoPGNHu7tgNr2/jaBdi6AXHbkXT2CGySVhiqgF+C+wCcObAXX9gL8bRWAR0QQ4YFjgCbZPEvOHtWqLSYP42vh+xcwgJDmgfdaHI1OATASBgnfVpdC8boHQ2abFw0h8vgPr9qxfG2BziBHRdSI3EHGDd9H1QUfJXzkfGyAABsGYiwNj0RAOwzkEvXaYGwMg/oF4VmAAcLszgtbEgVkwyKfxtngNmSh3Y4OiUCRaDXFV19gmBx8RPh+dU+VOB+wD9ZAQFAnhdsaEVg0oJXggtSAAFAbA0A+GRFvGnKAPSq6XjdgkB2aBGAA+j24y0pIbYNg1AaL+NwxahAvD8IPoHYHoBj5E70XQCQI8vxtgKRtBAFrNgJgI7EBeg3BzYUHbnDBQDZfh7GwvIcA4Ah0o2eYD9UBsYS5wLyQhYkLw90TAyDBQGUQ1w5RL8WCQVTZgQLAaZwgH43QugOzZcsvXHAgWhDINXLXh6USsIMwAzCDIA/qV7AehMcJc4MO8OaWv9fG+wPQIofGx/G7FnHeik67ByLnGP8LdglIMHaKIEuwOQO/wQew+wGyq0vYEg2A2xId/D/sDsFIJWEiuKAfoFDrUeN9+jMEA2wyCCcIqBEbgQK8wvKFWDVA/xvYRL7CodB6BsHQH740E5wbEl8LdAMhnQGxqz/4ngg5AKwXZoaTF7BMBFCAcNT18AXw95wTnFjGUOhULPQaBIQyGByjSXjfQtmUSHgIGgrQNgJowjgEVA1s+wWwP4316FoFnBbP7YJGwSP+N8dF10TTGweKi1kJ9gnBA3vwplAX8b5QQddhMeZUhOBUVjGypWlZ0MpL8P+NskX7Hq8gzIUwzEwf+N7IcBb6A2GcBQZAABgEwaSnGnNCoNzUaoC8PeQ7okE+ga+PAgiJ2GgXjeZT2dB1D03iA0uvQQ+CZCQTfwt0A4fS3v1MVvCB5AnBZw56S/18MbAxsfysd6BFD+iSrafr4bsEpBg6VbPoF8OdlXQYyLPZfDGwOg9gNhP1wLP/wxuYIB6NIYEQvQF/hiwiXQ6DYIqVDgBOn0fQvDGMiwsDjoB0BL10Egfhj1oGjroC5EhiHw3w0pXX88J+HNrSrs+heGLGz2C68cOD1O8G3G+eT/YHoEUPpQwzf08Ooh5eSvC1oogXsEq6HOQ6L4V2A9WvD+EGKiA0k8+Hcglwv2BqwayKf+NsNr0BfQPUoCXINSJGBIQQMMU8bVixhrQF9+YACzXYU4gfiIDfCtkUAeg/DaajApa84j4VsBIF2WrGgEdVtEGL+epBr0XPwQRsif5BLMAAGZPKwwI508mjHw/KCJkXw9ajutPjMEBjrHNwp4Y9AtmcEV/QL4b7NSi8wQHHzJgU8OewEuPkryggH4Y6GYznBAKa/18MewFoDrsCYswIH4b5hKvOCAOkgXhjkH36AK/nGJTfhjlAACwPhjc1zjSeyReGPkpoKunx4bP4c6NjXtbBkDPhjpI8wYNcgZDE/5oIw4CrhrS1+v4VjY/jdizjvRSdaD/94iCGQYO0UQI6fCvsBsqtLZa1M/8K7BSCVhIqt/HxQ/wrYCdhzhHmBApxYLr97x/hW7B6exoHWYf4v8K9J6AlYRE0F/rDEM0FMuGIvxVgLoPiOGtAVgFaAX/hWxtHHgDgCxoFavAP/4VoB/ZDwAI1SYLUw1+FaHYKwfWgvQf4VyDBIHbRGSonF1oNAL/4VxU9KjjA4NRwNV//CumrA84YCzUcKr9gL8K2PqZRqi8ZJ//CvRNnDKXqvQH/hWjsdgcGgxwUKx0GryBAH8K2AfoYeQfy9Erper+FeOhN8fIKUi2X/hXoDRsD6rx4OwzzW0MHBVw16S/X8bsDGx/Kx3oEUP6Lnk+v1OEB/C1glIMHaKIFr4wSv+FdhbAzgygM7yHkT57BhmJ8gCyg/w9R8JH3PoDyqfrPoB4fxsJXecfodg6A+wtyiY/QvjbEwOhkcQ/lAAKXjZE6saArHZV8PWmH2BhuDXYAbAPhSlBWdv425QczQHzKLEwfQBQHqgkaARBpEMFB/C04veFcXOX6ufhXDKB91wV9nvKkysXR+NsCyiAhu9h9JwM4aiWvBlX8gmgXgg2JTEoC9nqwIwh0ND/D9DHAGC0K7bQH0AuPYCL9HQGH0nDw7QCHAgTegIfGp4bGgr0+tgMo5nBLEqLT8bHhg0A9mPgRMA0qXQD1oR0noGheHsASGhZxszCOLCINo/rMUPGEwyrID/Duh84YMvsCIk1OPc6laBjgRPjfYugOcazgAB9OdgRwgO9T8boEjMEAWMwSYCDsArwIftaoLlBpRpAJv4Vwkfc2B0B+qoxsPBoKiaSYXw/r0HhH3NJ7nICA+VlAfjbCR0Y+BBWBAjQAD2fATetm2hsX8b6AyGLJjZPQH5CPXIE2VM5X8bR6CnowOqZBm/HtVwaB9KWEiYD6DYF42xIGgCgXIN5gwPXc7NhWX4eskOpg0AbHnLf/LqVtBeN39BvZaAupBYfEaBvUsBPZeNsNqMAl+gY7lD4YgkH1YSGAaNJ6Q0WLa8LQlcddeATAZE1ZE61XjXwR8OaWv9fG+wPQIofGx/G7FnHeik67ByLnGP8LdglIMHaKIEuwOQO/wr4/NdAzghch92P2A/wQdLIA7JcE8FQCwJUCIF7SBTGvjfazhVHzgYoVUCIicCBU4PYCoDYCGgSaJggxeN7ALA8jiH6SHssoABKE3UVAkBjAlMDB0MhPxvM9j2d4L62NRobPfSGw4P3eJ4X9kwjgIbAEUAqo4LLjRY7RxfD/HAW6A4NGh9a0qJApBiYEBoCBrw56S/18MbAxsfysd6BFD+iSrafr4bsEpBg67PoF8MY8F/QLO84oxxhdiayhD8MUej5jyD86D6C+GIwDm8Y84LYrEuNNHjwa3Dfn69l8Vz1zgrlF2gb8b55P9gegRQ+lDDN/Tw6iHl5K8LWiiBewSroc5DovggsCgP48F/zvXBK2u/YChtfUalD8EFH8cGJ6TBkLYMg18gUZeN2fQB9mnnG6oks+APsSdAiGfD8gQ/nCPHSoXjxKQC0BkDIon/h2NzhgOw/YeADsjsTkVx9BFXM+bsd+Mqegvk/wThnDECkzvLtvv4DBDANLFQ12vNNUdY/oOPz2w0BN1KjGMDjSA3ACnDpDSnM6WADh2oyzLbXReGO2G4PL0CKMroXITYF4Y44Bf8wgK7BIPYJF4Y9uEYXUwADpgKlcj0VmIUX//b93+/bS7EGU/loIdEJ4YqEIBQSxFFxI4H4Ah2YL3VV4F4pY/ebu79tivTTW0zvezDVTnUovpX5UUdC46eFLwMCbWM+vjeEO2sI+vDnwPJ2YeRCCj/m8D8G4wv1KXX5amfJqhnMsBVPd6QgK8JvgLw35xiugGgW2PkrwxxsZp0HXQX94AnMJhjq8AGrQUp3MR74AC8AIACthwKLgQXx3BmRr2kIMYyBRzxY5AlF/+AOYeAB4eCXk4Xac9F9wAemfYpJ9z6wBUQSwx9gvTlCBXX/+i8NwxA+eEhroB/BXw1pa/X8KxsfxuxZx3opOtB//wQyDB2iiBAOvhXoFnFIAWBIGv2CX8K6PkXgaOoxuD9EMCc/hWgF0fIKwv/wrtjQxMaLWj6/ReKeIDAj0fADwE7TEzlHhxqcxh6FfjYGJgWJlKnol5fhTqDeNU9aJgACAOAFAfuHQOk45YWkYEoB2D8B0ggdAqZowZ1xu///wR47arvIj9/en5/+FfGAQXjx11ZIC6TAf4V0HyiXGA1KguZFQf4VoA/CQUgmy0O3YGAujOIZpwzS3P/9mSl/ln9+XX0Evn/Cv8AQurTAi88PcC16XQf/hX7EK8Ruyvqw5Zl4vQS0s6Rke+8H/2IwgJ0rx1UfcMTDBuF/CswIDVQHlqgKV96f+FdLJQbFlALQlkBv9+Fc3sB+AACACADkFcBJcCe+qAmK5VQ4D8AwABAIEvgelipCyu3SYUaTC/ASJCbIRGbKwQGg3Ty9QV8Vf932weUzrCJn7+z9+ev/j/hnjQJ6EqX8EMAAAAAgkwAAAADAYBBwAACAAAAwAEgAAAC8Qhmgg/w0CHsS2//G8wAH2BdCvllDa9Afm3/BB0BehPeVLBIFoF/C3dtgLsp//BP7B9gNKPjey73fQCf1oH7Ey8FGhd/w8E/QDeSXl8Le9hMA1/QfzeR3l6D+CigC/ulyh4d7BPsAv3cWH/4IO27f7lWPt/hnsVOGxf8MeyygAa/YC/BB7Fd/SXQX/F7At/4vYN7oFQLwx2mAX3Sr+wH4LuxUHtP8FfYL0AqAbzF8Md79UA9f8Md0AmBPSX+g/F++7+CjjgZb3lT5tCt+G79ej/w5frsf/DHIE6Bdf7AXhjdAn2J11/4U7933MKsNgrzDw/5S2w+w69g9h/DPQBnD+gX8FnfegmH8Ph72+7AXy/oC+e9Pjpcf+G7APX+x+L3fsOCHgivwHUZzd64c912F/wzd890XsBrnr/LLzdgGTqlXqAK+eugvQXnrsJL/UBF8N96coBzy+uXnD0GPPX7H+I3vYBQvhntV+n+GucPVsX/hrsEwEv0AvxFg9BUF+E+gKUAD/Ct/ew1+gX4Ivc6fff4IvTd8K3+8gvsX886Ovf+FdBoBoXd+w/+S/8Rd3nDz/hrfX7C/DV919BfxHst2AfDN719euHtg/vQHqgXmBA/hq96p+3+CXd/c6QX83sH4Y3kKoC9eh/4bsnQBpVoH/wx6FQDSr2B/4KKV+ylT5fQLze/hil+UACvQ9Ciea7D/DF/2Al/sC8N7+v9H5ffw57r2H/hy/MQEf2/gjsAsFmF8N7Ba9H/l0F+XfBdwV7/fQFf4W0BeydfYC/gu0/oBl58F9tAP0q9hWD/PO30F/BhsC+8DD+j+CCi/td1+gvwYbAX2FDf7AvBJ3lT5vfy+gZe9g/wR95hfBDv6cPC1/vVg7Ds/56dfQX4ItAHTj7of8Nb6/YH+CXffgOvghoBMFnSC3k2D/fv4IaAOgI6fBFS50+Fb9lbQDWwP/wzoFqgf/37AvEb+g/iO97v5LvQB8Et7B9g5xIPu9Ewi89aFoB/yUF0sIQnu/srCHDHLQwIcoQGuOmn8GXJ7B+Hd5CqAvvr9j/E2ToA6AvwYegJ+voBZQQPh2gHfvsPgZ/0C8Pd95gLfXoB9n4Z7AN/2X4J9B7C7HwU0Aey9heKIN2c4UzYfgAIIAYMTKJmwy1pnzMVQ81bEMhhUMJQ0hDlqcaRkLy+AiALowAAgLAAFhrWVeavism/8D6MIVpi0C1ItqKQ/70BUgQ3IqnMEeQnH//QPLtrhoqa/vAxDRbS/FTi5I+QsfGPDAkLhLGoANlbE9unmAmOZGpl8NzS3V64uU+wAA84/WQDEiLwvYvo3df/5+H4ItgF8ik8Pb9gTvf0Un9gLCMK6V3AAQAAQAwGSIMWRAvrQ7lOrg8KOx5bEHdDwoi4Jc4wAq3c8p/X46IfyeIE46Jh/97fs9mZmw802tc/7eBohivpcufiF418A3dt7H//eGDAXAdjR7cOh+8GXNsH+O99AXv4nsnQB0BeGNAXvY+wX+CvoB97sV4Ph/3u/ezoP/ntYWxf4KPfe48b77+hP1ovxHBB339t4v6Bf/h/oB37oB04nD9Afw/6cbAovFQ9//1rgv99A6nFuwF/G9++gH6frD6/1PQYc3sH4Y3kKoC9eh/4bsnQBoAugf1z1/ofhiwFd75hM/6fnr/cVzbyseCi/QWgDr4KNgHvoCPgj39QacFe/30BX+FtAXsnX2Av4c71/trgq33/chfPX9Jg/L7B+euvxHDOgH/p2B/8Effl8M3fXQf/DHsF3cbX/F9g+8GXJsH+/f3QB0BLhXsH0Ap0/YF+Fd9FyC/Yf4VvsCvr6C/iN+7fwQ34DoDojhqgfX0P+FbaAMgevp19g/yX/iKAu7/iLT0H3Blyewfh3eQqgL76/Y/xNk6AOgL8Ne/UL/4foAsG+/fODpf8Mb9gvL+gF8GHYVAuugHsvwQe9AHd93sX+XYsRwW0BegLyKzxugfffv18wIH+Fr3dropEF/8N7/ehaC+FffYNBLY//BV2u+izt8FGgLoF4fG35QxvsBZw9/ixf+uT1wVdgqJ0HlAA/nwtfziA4vx6D2C+Fb3sXf+gH8GF+/VP/4L/OBUuUDh0Av8EtAv3lf8M9J0Xn0AvwtvsBfJwsFoL+Cygffv/Dwpsn2Ae/QLRaeC33v6+Ht+w2HYC7noL/Cugbug0A3u3ofYD8K7AO+9/kFv8K6fe6/sf16HebYP8d76AvfxPZOgDoC8L+gFuga7DsX8FfvQB9gqdeHffvdAKv7P4f6Ae170odf8vuJ4X9AF7eLoF0D+CS6AdOO+Cv042BReKh7p/gw995xfYH/NfYF4IO+gG/Tlulr+LnD3v+H+gKgJ2CYBaYN7DsCsP8L9gV+v0P8EHfuwC/X2A/4bj9/6o7B/BZzewfhjeQqgL16H/huydAGugf/PMJVsC/4b3sBP0A/+GN+7B16D/wR0A9o6fDfevY9MwIHxfvv8vQU/PXoD/w3d9dB9Dg24K9/voCv8LaAvZOvsBfw1dA/BQ/RMfl9/DHpb1+w/w/dv390r2/+FaBewF99hQL8M2H1oH+I4XoC+gKvsP+HO9UDsLoCrl9/N7D8N96/2PxfsPf6pV5eUABfw37pV2F/nrsL/m7v4Y99jr2LwVcmwf79/BDQB0BHT4a7oGdPsf8K6APsFX7/vdAL4JbtWK+nXgl7BvugGQX3YDyIhHDWisCWgP/wroAugkH1oH/4a7BTp9j/nrT/8R2T7BfCu9g3sBVYND/8K937r9H+Fb9+cX1/hXoVg+rH/8K372Aq2L/yXQ/wrsB7F1MCB/+Fe7v1oD/BVyewfh3eQqgL76/Y/xNk6AOgL8K6Ae+6+gTBfhW/R2FX0L+C/fv9v/4e3v2CoC0gug79j8K0D9B66H/w/2Fa99bA0D+I4a99f7A/DegHxFpIC/KC/hfbffVh9V/D96LfoP7+wfw7Qe8wAF++ti0aAf4VoXfrYD+wH4MN07AXML6ArAXwtvoA9fY/4Ivd/h/vYJAfQPVP6C+FdG7C76dMHoB/4f37AWwJ9fygtgvD1AN77BUBIWtA0F/w73kDzoFfim/YX4evsB70BdFI3/8F1uQPb7vgl3QPv98Pb+wE5gAPsdgX/C1AJA7oN8Vj9AP8E3sKgLAdQR82wf4730Be/ieydAHQF4Iu9OPgs7B+QPU5QAJwF54V9A+6LH9AP8P+9+wX3QLqgF4K/fu/wieK9ASAaAmvgou79/Qa83sH4Y3kKoC9eh/4bsnQBoAugf1y3v8t+L56/s4N+Cvf76Ar/C2gL2Tr7AX8NaWKb+wSAvBff7+cKAX/hXfoFrQv/BJ6BkaKJ/4mHMAML1ff+/369v5P8E58MQpIdMKZpZ8rNPe2OqMu0CSKccggldFC7S5/9v6BhOpwAdVj7GhSnPxo0fhj0LQBr/YfqlXhj0KAESvRiqv0AA4AEDnCU8pX20lrOCP+DXQDAGbd++//uEeHLbwzDHcQEAVpesyPiBbGWvMvCDOeADOIxdi3Cam6X4XyopP8jw/wTvr9w4LwfYF/v7ilxottsb/vr+/dH1+G/YBMJh0L/l97wXHDHcABBYO6wWcCWU+4xR25kYwB1td1MFUihnCc/tNElRrrPGWXQ0/8Xq8PP0v7/DfuuhfBXybB/v390AdAXgi9JOPhW/3qcW6Ab/iKD7/3oTxTw4YR74+XClQ3BsJrDvwFT3hkYJpaU1X/8AsX0s35wHAUXK16aVtOEIf/A8PlZF1l4VJIKzcQzLEP5v+Dbk1j/AL+etB/rhrcPjAEImyxJ+feAIGYFGpQrRRVBDbPl6yAyxN17pbYf847/0aHffwr/AA/WjJMjKBv/16HSdc6dqf/hmAoAAgDAHZ8IHtRtli7BP94CMV1HNUlSkMY0sMNQAju//19/w9Fwn/EaB+gT+T07wcMPfgCQBAkuB0cYc0mnCQK5yEPxjwUKIjSGL08cmpcT4P3LkqH813w5Zc9+PpF9I4SbNAArZRrGjkjsGHABT13PX5v+uCH0AwHUEMAAAAACCTAAAAAMBgEHAAAKAAADAASAAAAI3CGaCj/DQIe2tBf+Cj075QKHm3/BR6b3jvfDPdCZYX/wT+12ElXhToA97voN88x8FGn3/DwRdBPl8Le9APX9gVcvYC+Cjf3YPlDw7ygAX793FAX/gs6E6F+5Vnwz26cNAP/nr9gf4R9u7+wfi9gt/4vae6AvwUdA77pR8F3b9A3+Cj0HQTy3wx3v1Qtj/wx3Qd7Br/YF4v33fwUdgF95U+bToXlv/Nf+ev9H4Y3vtuux/8Kd+770Ar5h56/oC+pwIfBb33sB4fD3oXdh/L+g/nr7Av56/38Xu/QCgh5L8Zzd64c912/+GbvnL/Yj9UqXPXT9P1ARVw33p6F/Bnz1+/4je+n8M9A6/YWuT2H7tbAa4Jb+9AJ/gi9zp99/gi9id8Et/vOn1OiD4V2AkEn3foC/5L/xF3ff8Nb6/b/DV919P+Tv93vXH7X3v+Gr3qwvQX4Jd39zpBfze14b316/4I6ALoCpV4v06C/BHYO8qVze/huwfX9gOJ5roBfhi/7DX+w/De/r/OLeX383v4cvy39BfUqXy74LuCbf7v8N9AF18wh/gk9BF58F9CQXsHXt/6nB8EnvCPggnD36B91+n+C7Yf0A4fwSd5U+b38vpF72vwR95U+CHf04eFr/eugKQW66p17v/Jv+I33/ghoNlnSC3k2v37+CGgLnT6nT4Vv9CQS2f74jf2AviO97v5Lv+CG/Ojr3fQDLz1sB6F/JYD6eGo/d5/P+gRQAGy8vLQqgGXJ7Xhbfvr9/3QBdAXzX/gpoK/fQC4fw933769C/1SvwT7AWgH2PgmoF6AfiiOFfYFvX2X8EWwJ8x8FW/u9/Xw9sHcAHuxDH/XDmTAFGmvz2cEqQLBv/4FFoaFNXI7nAIhQOFsBDyKEY60TUVX2DFFNnE+iytqsV33wrRhM6AClni0/xH3fgAmrb0rMv2GOG6Z54UADNI0aHlRy58Nfp/4Muba/E+/fxPQBdAX8EnenDwV9Bd7t3g+H/e797OwL/q3wUe+9x4U99/TfwRHBZ339Ccwvgr6Cv3QViicPBX7FuwaAW/OVwl76XxvfvoL2KQX2P+p6DDm9rw3vr1/y0AXQFfBRYd3vlRQ89f6GK5t/wR32A6+Lzh7v+CPf1BpwTb/d/hvoAuvmEP8Od6/0EuCrff9z31Sry+1567H8RwQ6C5/gj78vu7/gk9yrHi+13gy5Nr9+/ugLrhntTp+w/wzvnT9AX4Vv76+n/Eb9/3fiOGqXX1/gloTLvpx8l/4iwD3f8RQN7AXcGXJ7Xhbfvr9/3QBdAXwRe5G+Cvaffvnvgo37Ly+GegHfoX/BP7u+75dvEcEVF858Zpd9+/8LXu6B9in/8N78H9P4j37Afgl6B95wfBHmAA+HwU3++w+OPXJ64KuwKwC7AWQPfnwQ37Pglve33Pgwv36sL/55QOHZ/4Iu8ofwz2DdfoF+CbfYfMBfgspd+/8PBX336Atz4Lfe/r4e36ASAVh9z0/8K93YCvfQ6/4Jc4e33sPCuxd7r+/16Heba/E+/fxPQBdAX8L+g90l0BUA/4IfdOvHe/e6D+CvoLQP3pQ8vuJ4JL0KYXwSXQVijvgr9i3YNALdP8F3vvy+a/8EHfQT9ijt+x/m3/DG7KgbT0i7D/wv0Ab9fr+Ee/e/8NyB7qwOgF8FnN7XhvfXr/loAugL6lRV4I97Df4vfu18EdBaBnT4b71/YXxfvvE8N3fX9YNuCbf7v8N9AF18wh/hq6Xh/v5ffwx7B71+gL8P3+/ulDQX/DWw/v0/wzQC60B/iOF5gAP0VfQF/Dneu30HXL7+b0AvDfev9/F+gFv9Uq8vYE/hv3Srt/567f/N3fxfvvBVybX79/BDQFzp8EXdI6fPX6H+90H8Et0Dt3068EvafdBHT7sLie+/zzp9/562F/79/Cu+9h1Gw0Z/+Fe791+wf4Jb9+dPhXp2ur//Ct+9h1oB/+S7/vYX4V7u/WwF+Crk9rwtv31+/7oAugL4JdBb7ufCt+9AOvsB/wW7984vgw3vMAB06Q2BUPv7pfw/0A6B++tAL8Rw176/2D9YPhfQn31QF2Nj/BXf37AX3w7YC3331oB9C/DV+ti+xeC7disPlT73/BF7v8P99+lqwvp/BLu6AfeJ14K9+w9k+/wYUE9zAAU9dP/h3vuwDfwft/h6+wt6BdUF/8F1C993wS7+/3wrv7DdjsP/hag0rsBPr9C/E+gHMABwR821+J9+/iegC6Av4Iu9z4J+1sWcHxHpd/C3vfX9jKIfBX793+ETzUFQP4KLu/f0GvN7XhvfXr/loAugKuW9/lvxfPX9A4N+Cbf7v8N9AF18wh/hrYPSh/Qfgtv9/OHhnfWwH/6nBFc9egvrBDDHoWAA4DYfOABAHyK6teauH5h/uAI0AAaBZG4gYlNduzD/4BEw8ACZAdn9NE2/AAuZXIapfol1Srw5AAwj0ptqamo+Ixdy94ABgHC1i+msHMYLKUOhcNdCDcy4Zh7d4RhyAnd7fkd7A1R/r/wxpSf5ngr7IoXD1rk8D7/EdDMT18ff376pV5fe7NDEACD91+nQfGDOfsEO/zVCikf+8AMOU9AoaY+2IDhaIOpNxsYMqcAie5Iz3QsAb+tn/j/m7/DfuuwH8FfJtfv390BfwRewadeIv9/iLAXf+9N4riPfoObGFy/0GuYkAEoZmiOrteUQdrbR917DX4pXwbqXBLK/7wPgUF9aceJlX0ij2EgmcASmn3absJ/Crte/567Av+uGvmxAVF3gS+L+wZmZGHwQyGCK5y5hKqL7f/+Gh4iYSGpIab8F38N/BL4ALlUv5s79oAYrjJi533APzp8M/AQB4TQKdP4n02YmkEfGGQpNnVoMk5poYYDpEBO7cp/wQvHdZ/xGl6J/J7FJ4IiCGPj434AMAfGgKSECxKMWm5sQI84PwDgAoE+h+FiMyVtHJ28shk4UETKn/7MGKL2Y5qVrmx00sUwYfZCcqO/PvabNt+B/FDAdBXRsWZqhPN1fBERkg+pa7+b/rv0ECGAAAAAIJMAAAAAwGAQcAAAwAAAMABIAAAAh3IZoMP8NAh6EtP/wUexXygUPNv+Cj2J7x3vhnumy3/8E/oH0A0q8KdAu932Anzy/BRsXf8PBF2A3y+Fvegtf2HXL2H8FG/u1yh4d9+/dxQf/gs6bp/uVZ8M9Cpw0L64R9Cu/teL2W/8XoG9/4KOlfdKvBd0L0n+Cj2ArAby3wx3v1YD3/wx3YCvaX+w/F++7+Cj33lT5tip+W/81/56/2D8Mb30J13/4U7933oO+Yeev6D+pwP8FvfewsPh70+6AXy/sC+evsP+ev9D8Xu/QcEPJfjObvXDnuugv+Gbvnv9AM/VKlz12F7CfDfensB/wZ89fof4je+xfDPSr9vXJ6AXugewlwS396Df4Ivc6fff4Ivbd8Et/vOn1OjrwrsNgNi7v0H/yX/iLu+/4a31+gvw1fdfYX8nf7veuP0D+9/w1e9W/T/BLu/udIL+b0D8N769j/wR0CfSrxfsVgP8Edq8qVze/hu11/Yonmug/wxf9AJf6AvBHv6+X383v4cvy39P6lS+XfBdwTb/d/l6BP4JPYDLz4L6bAftV6C/1OD4JPeEfDHpd1+wvwXaAX0FD+CTvKnze/l9gy96B/gj7yp8EO/pw8LX+9dB/XVOvd/5N/xG+/8ENgLnSC3k0D/fv6nT6nT4i/02A3xG/sP4jve7+S7/ghvzo6930EXnrYtgP+SwunhCE935ixAFYnwZcnoH4W376/Q/3QJ/zX/gpsB376D4fw933769gP/VKHgn2HoLsfBHoLxRHBF3ufBF3zHwVb+739ZPxXUPbVwAcAQyWC79GdOcVDFFdkHowABAItgUAKAGQFcKIo90a94Mra7uf9+AHIZSDD1uXw4fHdl/jPCASFIFNOACo5uK4Rud2ldxqACs/xOLUNH/vAHYvhu2N0lNfp79fsL/BlzaB/iffv76BP4JO9OHgr7Afe6FeD4f97v3s7D/6t8FHvvceFPff2J/BEcFnff03i+CvsB37sB8Th4K/b3aQe/PXCXvsH8b377Aft++/9T0GHN6B+G99ex/5aBPvgooBXe+VFDz1/qK5t/wR32FXzb/gj39QacE2/3f5egT+HO9f6a4Kt9/3PfVKvL6B+eu/xHBDsB8/wR9+X3d/wSe5VjxfQPvBlyaB/v3fDPQOdP0BfhnfOn6D/Ct/fX2F/Eb9/3fiOGrB9fY/4Jafvp15L/yXf8RSew+4MuT0D8Lb99fof7oE/4Ivfvgr0Dffvnvgj38vhnoK/YD/4J/d33fLoWI4IrAPznxmwfffv/C17ul2LC/+G9+D+wviPfsLwS9LvOD64fBTf76AXHHrk9cFXQB3YeYAD+fBDfs+CW96F3Pgwv36t//PKBw6A/8EXeUP4Ie06QfBNvoBcoF+Cywffv/DwV99+i3Pgt97+vh7foNB0Au57C/wr3dh3vrY/8EV97Dwrt97r+h/Xod5tA/xPv399An8L+wFuwa6DoX8EPunXjvfvdgL4K+wHpe9KHl9xPBJeni+CS7AfHfBX7e7SD3T/Bd778vmv/BB32A37cdv3/Nv+GN9JA3p10Bf4cv1+x/hHv3vwW83oH4b317H/loE/6lRV4I96AT/F790D+COwHpHT4b71/b+L994nhu76/scG3BNv93+XoE/hq7B+H+h+X38Me1vX6D/D9/v7pQ0/+GtAL79hfhmg+swIH8Rw52Aa+g/4c710F2BVy+/m9B+G+9f6H4v0Hv9Uq8vZP4b90q6C/z10F/zd38X77wVcmgf79/U6fBF3YM6fPX6/vdgL4JbpUK+nXgl6BvuwGdPugHxPff550+h/z1t/+/fwrvvQCrY//Ed37+CW/fnT4V7FQPqh//Ct+9AKtC/8l3/egH+I7u/BVyegfhbfvr9D/dAn/BLsB77ufCt+9BV9i/gt3750+Gd7p0rDr0P3YP+EOgqXviOGvfX+z9YPhfTffVB93/BXf37D++HbD3331oXYD/DV+tAP6Afgu3boBcqfe/4Ivd/h/vv2D1b+wvgl3dBd4nXgr36AXff4MLAb3sWuwv+He++/g/QX4evoB7zAAeqf/wXU/fd8Eu/v98K7+gE7HQF/wtYCYO7DfX7Af79BAj5tA/xPv399An8EXe58E/QPbzg+I9g+/hb3vr+/wV+/d/hE81gOl8FF3fv6DXm9A/De+vY/8tAn1y3v8t+BC4Jt/u/y9An8NbWlD+wLwW3+/nDwzvrYv/U4Irnr0/rDMMZ6eYIQAEAYAdFYdrwAqoKl+PgkmlRVwBK19P+81BN96S6pVeIhjwAFoa2MZCi2xyQBkO9WDgXb6lfeeMfyu77Ii5kBAFeCXwh436T/4gOYIXh/k6BFT7L8n+I4K+QPQK4J2bHZL9//D9++qVeGPfgAIEK9zg8YKK65BmxlJeeUy4AyfvX8/4Qcq3YKhOGPxAwAO9cqAsTYkHQiQFqG6YE7/NvXBET2vr//3/wA4Z2QnuR3k7/+/zd/hv3XYvgr5NA/37rgi9pOvEX+/xFh9/72J4rv3mxwcv9BrmJMHxAYAEXwdizOi87tgAB0MsuINdG/bwAYoWK95baLVaWz7ybRU2u1d619hVnKPv56+w/6eSFfpBXWArhrkVyTeh+MMkGakyTyUkJ/RpjAkEKy6dU7cP/PlQav08wixILFA1ZfLidbj5YV+AA6LSif5ZvQBg71OAyGA+dP+AL+GYCgGDEQbpJ3JlpQQI//7tCJhcm3LIasGGoAZ2q7/fzf8AL1e6n7pf/xGwf3k/Bw8CJC8ACoBgASuALAGzV/+C6qVSFX///kIhhEc4pRByiDHcAVoBRQthR/ZWm0vs9k1tE/KoME2iHHNVJ7vikA/UCRIQyWoZLLX9+AHPqebai6jEP/37Enwj/bngToN7AYNIBx+d/kN3137AYIYAAAAAIJMAAAAAwGAQcAAA4AAAMABIAAAAfuIZoOP8NAh6a2F/4KPbvlAoebf8FHtveO98EPdiZ8E/pdBJV4LO932G+eX4KNvv+Hgi7CfL4W97Aev6Aq5egF8FG/ugfKHh33793FgX/gs7E7F+5Vnwz06cNgP64R9O7+gfmv/F6T3/go7B33SrwXdP2Df4KPYdhPLfDHe/Vi0P/DHdh3oGv9AXi/fd/BR77yp823YvLf+a/XDG99N10P/hTv3fewFfMPPX9gX1OB/gt770A8Ph72Lug/l/Yfz19AX89f6+L3fsBQQ8l+M5u9cOe66f/DN3z3+hH6pUueu37b4b709i/gz56/X8Rvfb++wdcnoP3S0A1wS397AT/BF7nT77/BF6E74Jb/edPqdHXhXQCYTfd+wL/kv/EXd9/w1vr9P8NX3X2/5O/3e9cfpfe/4aveqC9hfgl3f3OkF/N6XhvfXv/gj30q8X7dhfgjoHeVK5vfw3QPr+gHE812Avwxf9Br/Qfgj39fL7+b38OX5b+wvqVL5d8F3BNv93+X38EnsIvPgvsTC9A69P/U4Pgk94R8Mewfdft/gu0H9gOH8EneVPm9/L7Re9L8EfeVPgh39OHha/3rsC+uqde7/yb/iN9/4IbD50gt5NL9+/qdPqdPiL/YmE+I39AL4jve7+S7/ghvzo6932Ay89aAexfyUA+lhi93gz5PS8Lb99fr+9/zX/gpsK/fYC4fw933769i/1Sh4J9ALYD7HwR7AfiiOCLvc+CLvmPgq393v63hiHsABAAQAcuQgcYt6qlqNUgGTPxtivsFKNDCfvwI95z4APANCAWSLH0Zq0Sm0+nfpwH4S2ywCEFDRSGnhlbvj9vWbaB5EwFKJvSeev6/wZc2l+J9+/v38EnenDwV9hd7p3g+H/e797OgL/q3wUe+9x4U99/bfwRHBZ339ieL4K+wr92FxOHgr9C3QNgLfnrhL32vje/fYXoXvof9T0GHN6XhvfXv/l33wUUHd75UUPPX+xiubf8Ed9AOvm3/BHv6g04Jt/u/y+/hzvX+wlwVb7/ue+qVeX0vPXQ/iOCHYXP8Effl93f8EnuVY8X0u8GXJpfv3fDPSnT9B/hnfOn7Avwrf319v+I37/u/EcNWuvv/BLYvfTryX/ku/4iwb0Au4MuT0vC2/fX6/vf8EXv3wV6T79898Ee/l8M9gO/Yv+Cf3d93y6eI4IrAvnPjNrvv3/ha93YPsW//hvfg/t/Ee/QD8EvYPvOD64fBTf76D449cnrgn3QCzh78+CG/Z8Et70+58GF+/VBf/UoHDwRd5Q/gh6BunXgm30HygX4LLXfv/DwTd99z4Lfe/r4e37ATAVB9z2/8K93QCvfY7/4Ir72HhXQu91/X69DvNpfiffv79/C/sPdpdgVgP+CH3Trx3v3uw/gr7C2D96UPL7ieCS9ixfBJdhcd8FfoW6BsBbp/gu99+XzX/gg77CfoUdv0P82/4Y32DSenXQf+HL9fv+Ee/e/Bbzel4b317/5d/1KirwR70G/xe/dL4I7C2DOnw33r+gvi/feJ4bu+v7wbcE2/3f5ffw1drw/18vv4Y9A96/YF+H7/f3ShsL/hrQf37f7sBcRw52BV9gX8Od66fYdcvv5vYC8N96/18X7AW/1Sry+/hv3Srp/566f/N3fxfvvBVyaX79/U6fBF3aOnz1+x/vdh/BLdg6d9OvBL0n3YR0+6C4nvv886fX+etBf+/fwrvvQdb/+I7v38Et+/Onwr26XVf/hW/eg62A//Jd/3oL8R3d+Crk9Lwtv31+v73/BLsLfdz4Vv3sB19AP+C3fvnT4Z3unTGgKx9fdr+EOwHYP3xHBF76+sHwvsT76sC6Gh/grv79AL74doBb7762A+xfhq/WhfQvBduhUHyp97/gi93+H++/a1QX2/gl3dgPvE68Fe/Qfff4MLCe9vXb/4d777+D9P8K30FvVhf/BdYvfd8Eu/v98K7+g3Y6D/4WsNq6AT6/Yv37AYI+bS/E+/f37+CLvc+CfpaFnB8R7Xfwt731/Q/gr9+7/CJ5rC/gou79/Qa83peG99e/+XfXLe/y34ELgm3+7/L7+GtA9KH9h+C2/384eGd9aAf/qcEVz17C+8EMEmBF+A3oXaTEqfDf4AMIAgAtxD0RVpoytKDE9DAFcACTmka2TRh4AdUja0+P9f6pVeIhjwAPGA7oLAoSLyOxkJFE4Eec8AFZmqSzesD8qMOAGfW+h+4FgAwf+V8+T/4Qyf4Q4KITu73R/v31Sq+Gwx4AC024hbv0RfTDIOQlR7CAtwg/9+HQACPmAAEAKAD34AiUeFTL/xfArpC0lb9e9+w/m7/DfuugH8FfJpfv3XBF6Bp14i/3+IoBd/723iu/fBDBF8EjYH2IdPhnwBCHjkZoeAGjxzsSg1F/4P/gn5hq51KVwwltgBqNIzG7l9XuAXwMRVILMaMy/6eSFcBDAZgbtFqjR39puOmGH4hHEX1LZWM9GQHR7b/9/z+KP+l/hxImoVtY4fyajT9NoEB/lgl9Jn/IAwuqU2etQAj6/rHf50+GYA4TCtSUQpSSQsQqT7oJDsjFMpQPziQQyvD8ED5/vn/EbX3vBgUb+ABgAJoAzQOl2LtjWtuIgeCD4BxQUFFxrWBKeNTkZNYsFp4wZLkEWB8O4xveBSC9onxM9fZGdAA+Pwlz3X38f59ABWrMky3//9//5YQGWt+f//85GP679hAhgAAAACCTAAAAAMBgEHAAAQAAADAASAAAAICiGaED/DQIexLb/8FHoV8oFDzb/go9Ce8d74Ie7bPgn9g+wGlXgs73fQCfPL8FGhd/w8EXQDfL4W97C1/QdcvQfwUb+6XKHh33793Fh/+Cztu3+5Vnwz2KnDYvrhH2K7+l5r/xewb3/go7V90q8F3Yvaf4KPQCoBvLfDHe/VAPX/DHdAK9Jf6D8X77v4KPfeVPm0K35b/zX64Y3vsTrr/wp37vvYd8w89f2H9Tgf4Le+9BYfD3t92Avl/QF89fQf89f7H4vd+w4IeS/Gc3euHPddhf8M3fPf7AZ+qVLnroL0E+G+9PQD/gz56/Y/xG99C++1XJ7AXuweglwS397Df4Ivc6fff4IvTd8Et/vOn1OjrwroNANC7v2H/yX/iLu+/4a31+wvw1fdfQX8nf7veuP2D+9/w1e9U/b/BLu/udIL+b2D8N769D/wR76VeL9CoB/gjpXlSub38N0uv6FE812H+GL/sBL/YF4I9/Xy+/m9/Dl+W/t/UqXy74LuCbf7v8vv4JPQDLz4L7aAfpV7C/1OD4JPeEfDHtd1+gvwXbAX2FD+CTvKnze/l9Ay97B/gj7yp8EO/pw8LX+9dh/XVOvd/5N/xG+/8ENALnSC3k2D/fv6nT6nT4i/20A3xG/oP4jve7+S7/ghvzo6932EXnrQtAP+SgulhCEN39BaDgz5PYPwtv31+x/vf81/4KaAd++w+H8Pd9++vQD/1Sh4J9B7C7HwR7C8URwT4AHsYsIjI7etbv/OAjRD3Icg7PWU9/E0gc6PObqxYbnwS/uq2j0HV++Y+Crf3e/rJ55osho2O0APgoRR4Fsn1wAHAAJgZuAOoJQ8y/xQs4+AGBT0DSbadEGk/er/93Dh2IPKZ2vnx+/Pwmqe6A/pL/cAEO/R7+j6n+YAotcm/1//PXQXwZc2wf4n37+/fwSd6cPBX0A+92K8Hw/73fvZ0H/1b4KPfe48Ke+/oT+CI4LO+/tvF8FfQDv3QD4nDwV+nukw9+euEvfQP43v30A/T99f6noMOb2D8N769D/y774KLAV3vlRQ89f7iubf8Ed9BV82/4I9/UGnBNv93+X38Od6/21wVb7/ue+qVeX2D89dfiOCHQD5/gj78vu7/gk9yrHi+wfeDLk2D/fu+Gewc6fsC/DO+dP2H+Fb++voL+I37/u/EcNUD6+h/wS2/fTryX/ku/4i09B9wZcnsH4W376/Y/3v+CL374K9g337574I9/L4Z7Cv0A/+Cf3d93y7FiOuc+M0D779/4Wvd2uxQX/w3vwf0F8R79BeCXtd5wfXD4Kb/fYC449cnrgn3QeUAD+fBDfs+CW97F3Pgwv36p//UoHDwRd5Q/gh6Tp14Jt9gLlAvwWUD79/4eCbvvufBb739fD2/YbDsBdz0F/hXu6Dvfeh/4Ir72HhXT73X9j+vQ7zbB/iffv79/C/oBboGuw7F/BD7p147373QC+CvoB7XvSh5fcTwSXt4vgkugHx3wV+nukw90/wXe+/L5r/wQd9AN+nHb9fzb/hjfaYN6ddgX+HL9fof4R7978FvN7B+G99eh/5d/1KirwR72An+L37sH8EdAPaOnw33r+n8X77xPDd31/Q4NuCbf7v8vv4augfh/sfl9/DHpb1+w/w/f7+6UNv/hrYC+/QX7sPiOevsP+HO9dhdAVcvv5vYfhvvX+x+L9h7/VKvL7+G/dKuwv89dhf83d/F++8FXJsH+/f1OnwRd0DOnz1+/73QC+CW7Vivp14Jewb7oBnT7sB8T33+edPsf89af/v38K772Aq0P/xHd+/glv350+FehWD6sf/wrfvYCrYv/Jd/3sB/iO7vwVcnsH4W376/Y/3v+CXQD33c+Fb97Cr6F/Bbv3zp8M73Tp0Hfsfugf8IdhWvfEcEXvr6wfC+2++rD6r+Cu/v0H98O0HvvvrYugH+Gr9bAf2A/BdunYC5U+9/wRe7/D/ffoHqn9BfBLu7C7xOvBXv2Au+/wYUA3vQtdBf8O999/B+wvwrfYD3q3/8F1v33fBLv7/fCu/sBOx2Bf8LUAkDug31+gH+/YQI+bYP8T79/fv4Iu9z4J+wennB8R6B9/C3vfX9fgr9+7/CJ5qAf8FF3fv6DXm9g/De+vQ/8u+uW9/lvwIXBNv93+X38NaWlD+gLwW3+/nDwzvrQv/U4Irnr2/hxQ4y3+bTacy8ybTa8y8zFMZMZgUC0EgrBC8NwSHe0t9cg9IAgAEwABBIWNUYK6OPSwVKqtuTLABc+ek+h/9+ABVKZosyTzD9UqvFQx4ADgTjHAScE94deF2ZQRgBEf6bK/AM1hlazMiv3g/XAg9Jc/1w/wxncD3+/U//qlVg0khjgAI4IeUvVSrWKL2cN7fXgApiUotdvqQ55cosyNZNp4qcAa/v8+/AGRruMiN8+i5u/w37roXwV8mwf791wReknXiL/f4ig+/96E8V374IZ502F/fhn8BCCzW05Gnmw7yUD8zf4AUfW0B9+p4ABjgsV1LJx5X00zJJkkCOA6gjkErFLFzf/7nA/4SNoJ5TKWD/rhX6YAGu+AZImPChP/vTJ2jZNl/8H8e2N736lcpVPK9I6ei4TOHbj/wQ8A/d1afzBM3dT7w6fDMABsmYbGbKFW5Te6ITD5FlNIe3BhnSPA3fHRj/4jQP7yeC4wPLh+H+gBgFE9Kk2SaN7zXh//BvKrLpEz/nv0CI5G8Bp9bNqYdADYRYV+f65wZ/mDVX8B/8vUEFgtd+gGCGAAAAAIJMAAAAAwGAQcAABIAAAMABIAAAAenIZoSP8NAh7a0F/4KPTvlAoebf8FHpveO98EPdCZ8E/tdhJV4LO930G+eX4KNPv+Hgi6CfL4W96Aev7Aq5ewF8FG/uwfKHh33793FAX/gs6E6F+5Vnwz26cNAP64R9u7+wfmv/F7T3/go6B33SrwXdv0Df4KPQdBPLfDHe/VC2P/DHdB3sGv9gXi/fd/BR77yp82nQvLf+a/XDG99t12P/hTv3fegFfMPPX9AX1OB/gt772A8Ph70Luw/l/Qfz19gX89f7+L3foBQQ8l+M5u9cOe67f/DN3z3+xH6pUueun6b4b709C/gz56/f8RvfT++gdcnsP3a2A1wS396AT/BF7nT77/BF7E74Jb/edPqdHXhXYCQSfd+gL/kv/EXd9/w1vr9v8NX3X0/5O/3e9cftfe/4averC9Bfgl3f3OkF/N7XhvfXr/gj30q8X6dBfgjsHeVK5vfw3YPr+wHE810Avwxf9hr/Yfgj39fL7+b38OX5b+gvqVL5d8F3BNv93+X38EnoIvPgvoSC9g69v/U4Pgk94R8Megfdfp/gu2H9AOH8EneVPm9/L6Re9r8EfeVPgh39OHha/3roC+uqde7/yb/iN9/4IaD50gt5Nr9+/qdPqdPiL/QkE+I39gL4jve7+S7/ghvzo6930Ay89bAehfyWA+lhCE936AoM+T2vC2/fX7/vf81/4KaCv30AuH8Pd9++vQv9UoeCfYC0A+x8EegH4ojgn7jAPz+58EXfMfBVv7vf1k/COMBtGzijgA5AGyxhZJ5GraPsv/DfhgAVTwrzVrff+hg4bSE5GLwASye9F/n8AUAH6bK+Rp/3/89dP4Muba/E+/f37+CTvTh4K+gu927wfD/vd+9nYF/1b4KPfe48Ke+/pv4Ijgs77+hPF8FfQV+6C4nDwV+xbsGgFvz1wl76XxvfvoL2L32P+p6DDm9rw3vr1/y774KLDu98qKHnr/QxXNv+CO+wHXzb/gj39QacE2/3f5ffw53r/QS4Kt9/3PfVKvL7XnrsfxHBDoLn+CPvy+7v+CT3KseL7XeDLk2v37vhntTp+w/wzvnT9AX4Vv76+n/Eb9/3fiOGqXX1/gloXvp15L/yXf8RQN7AXcGXJ7Xhbfvr9/3v+CL374K9p9++e+CPfy+GegHfoX/BP7u+75dvEdc58Zpd9+/8LXu6B9in/8N78H9P4j37Afgl6B95wfXD4Kb/fYfHHrk9cE+7AWQPfnwQ37Pglve33Pgwv36sL/6lA4eCLvKH8EPYN068E2+w+UC/BZS79/4eCbvvufBb739fD2/QCQCsPuen/hXu7AV76HX/BFfew8K7F3uv7/Xod5tr8T79/fv4X9B7pLoCoB/wQ+6deO9+90H8FfQWgfvSh5fcTwSXoWL4JLoLjvgr9i3YNALdP8F3vvy+a/8EHfQT9ijt+x/m3/DG+gbT067D/w5fr9fwj3734Leb2vDe+vX/Lv+pUVeCPew3+L37tfBHQWgZ0+G+9f2F8X77xPDd31/WDbgm3+7/L7+GrpeH+/l9/DHsHvX6Avw/f7+6UNBf8NbD+/T/dALiOevoC/hzvXb6Drl9/N6AXhvvX+/i/QC3+qVeX38N+6Vdv/PXb/5u7+L994KuTa/fv6nT4Iu6R0+ev0P97oP4JboHbvp14Je0+6COn3YXE99/nnT7/z1sL/37+Fd97DrX/xHd+/glv350+Fena6v/8K372HWgH/5Lv+9hfiO7vwVcnteFt++v3/e/4JdBb7ufCt+9AOvsB/wW7986fDO906Q2BUPv7pfwh0A6B++I4IvfX1g+F9CffVAXY2P8Fd/fsBffDtgLfffWgH0L8NX62L7F4Lt2Kw+VPvf8EXu/w/336WrC+n8Eu7oB94nXgr37D77/BhQT3p66f/Dvfffwft/hW+wt6oL/4LqF77vgl39/vhXf2G7HYf/C1BpXYCfX6F+/QDBHzbX4n37+/fwRd7nwT9rYs4PiPS7+Fve+v7H8Ffv3f4RPNQX8FF3fv6DXm9rw3vr1/y765b3+W/AhcE2/3f5ffw1sHpQ/oPwW3+/nDwzvrYD/9TgiuevQXph/hi0ADI7q5z/3tAnIjLa3Xa+BEwImZaHLlRClQvSg14Awt3bt3AI/Orq71Sq8yDGAA2TNoTZSqzL8AAEAgAChzZn5rui4tsi34IaS8dkmV/VsENH9Nvzf/MCA+pdn9cFfHyI4Gb/chbzDQ54AHThhJ/6TYrTffAIlXGjT0rBEMwx+JCyhpmVFX+OB/XN3+G/ddgP4K+Ta/fuuCL2DTrxF/v8RYC7/3pvFd+6YIeFfzD4APeQohSxxF/SwgVTAkJivTIwklrc8OASAuHXezZ2ffaDBUikRz64V/GEESW1BAyEXe+Yf/ommRpi65Q/nm3sw651cvGBhSCATeuVP+Wf8EvABfpZz4n7vB11Vtfn4AMArtetsOnwrAR7o7OsAWGQVlEaSpiBpS7vXs2P3lc7uDwvG+kzZVa7/gEnRg6GkNweGp8oP3pB7SwALAIMkSRMgD3+nSYCHFh/LVJJCzNhATh/A6gTJuLBi5L6B3SyB2RxHpxwCpltWol67//ACREq7l32/beCjQTB3GyY+99+ggQwAAAAAgkwAAAADAYBBwAAFAAAAwAEgAAACEkhmhQ/w0CHoS0//BR7FfKBQ82/4KPYnvHe+CHumz4J/QPoBpV4LO932Anzy/BRsXf8PBF2A3y+Fvegtf2HXL2H8FG/u1yh4d9+/dxQf/gs6bp/uVZ8M9Cpw0L64R9Cu/tea/8XoG9/4KOlfdKvBd0L0n+Cj2ArAby3wx3v1YD3/wx3YCvaX+w/F++7+Cj33lT5tip+W/81+uGN76E67/8Kd+770HfMPPX9B/U4H+C3vvYWHw96fdAL5f2BfPX2H/PX+h+L3foOCHkvxnN3rhz3XQX/DN3z3+gGfqlS567C9hPhvvT2A/4M+ev0P8RvfYvvpVyegF7oHsJcEt/eg3+CL3On33+CL23fBLf7zp9To68K7DYDYu79B/8l/4i7vv+Gt9foL8NX3X2F/J3+73rj9A/vf8NXvVv0/wS7v7nSC/m9A/De+vY/8Ee+lXi/YrAf4I7V5Urm9/Ddrr+xRPNdB/hi/6AS/0BeCPf18vv5vfw5flv6f1Kl8u+C7gm3+7/L7+CT2Ay8+C+mwH7Vegv9Tg+CT3hHwx6XdfsL8F2gF9BQ/gk7yp83v5fYMvegf4I+8qfBDv6cPC1/vXQf11Tr3f+Tf8Rvv/BDYC50gt5NA/37+p0+p0+Iv9NgN8Rv7D+I73u/ku/4Ib86Ovd9BF562LYD/ksLpYYgm3f0CaDPk9A/C2/fX6H+9/zX/gpsB376D4fw933769gP/VKHgn2HoLsfBHoLxRHBP3v3Pgi75j4e34AK9kAQOmOHMuOCy+KhTVyHM950/YfJ+GYIIZjfv9+AIRxCuiG92jXN59L/747cgI/89dhfBlzaB/iffv79/BJ3pw8FfYD73QrwfD/vd+9nYf/Vvgo997jwp77+xP4Ijgs77+m8XwV9gO/dgPicPBX7e7SD3564S99g/je/fYD9v33/qegw5vQPw3vr2P/LvvgooBXe+VFDz1/qK5t/wR32FXzb/gj39QacE2/3f5ffw53r/TXBVvv+576pV5fQPz13+I4IdgPn+CPvy+7v+CT3KseL6B94MuTQP9+74Z6Bzp+gL8M750/Qf4Vv76+wv4jfv+78Rw1YPr7H/BLT99OvJf+S7/iKT2H3Blyegfhbfvr9D/e/4Ivfvgr0Dffvnvgj38vhnoK/YD/4J/d33fLoWI65z4zYPvv3/ha93S7Fhf/De/B/YXxHv2F4Jel3nB9cPgpv99ALjj1yeuCfdh5gAP58EN+z4Jb3oXc+DC/fq3/9SgcPBF3lD+CHtOnXgm30AuUC/BZYPv3/h4Ju++58Fvvf18Pb9BoOgF3PYX+Fe7sO99bH/givvYeFdvvdf0P69DvNoH+J9+/v38L+wFuwa6DoX8EPunXjvfvdgL4K+wHpe9KHl9xPBJeni+CS7AfHfBX7e7SD3T/Bd778vmv/BB32A37cdv3/Nv+GN9JA3p10Bf4cv1+x/hHv3vwW83oH4b317H/l3/UqKvBHvQCf4vfugfwR2A9I6fDfev7fxfvvE8N3fX9jg24Jt/u/y+/hq7B+H+h+X38Me1vX6D/D9/v7pQ0/+GtAL79hfug+I56+g/4c710F2BVy+/m9B+G+9f6H4v0Hv9Uq8vv4b90q6C/z10F/zd38X77wVcmgf79/U6fBF3YM6fPX6/vdgL4JbpUK+nXgl6BvuwGdPugHxPff550+h/z1t/+/fwrvvQCrY//Ed37+CW/fnT4V7FQPqh//Ct+9AKtC/8l3/egH+I7u/BVyegfhbfvr9D/e/4JdgPfdz4Vv3oKvsX8Fu/fOnwzvdOlYdeh+7B/wh0FS98RwRe+vrB8L6b76oPu/4K7+/Yf3w7Ye+++tC7Af4av1oB/QD8F27dALlT73/BF7v8P99+werf2F8Eu7oLvE68Fe/QC77/BhYDe9i12F/w73338H6C/Ct9APeqf/wXU/fd8Eu/v98K7+gE7HQF/wtYCYO7DfX7Af79BAj5tA/xPv39+/gi73Pgn6B7ecHxHsH38Le99f3+Cv37v8InmsB/wUXd+/oNeb0D8N769j/y765b3+W/AhcE2/3f5ffw1taUP7AvBbf7+cPDO+ti/9TgiuevT9QRwxAF2+TfmGUAAvZRlFjmnv8MqtkRm5feB9mkYS9Dt4ANAAQBkhkz3Qz0j8l5zAOEKJ8AExF8RlSOv1wBjpg+Qz5vVKvDGABaMaJJefiKb+6AoAAgIgFB/nWCSjgku2xQu//geAx03QTWu7YTr2X5g/gCmHASP0fs8fgR+z/v1/k8d94KN+BE9H+PoAoI4YliDRn2ySLRN09vD0MfhgAQ2aCm4dZxBPaJ4CpghA75U7yvxnQlWhlvT+GPQfYNyp/laubv8N+67F8FfJoH+/dcEXtJ14i/3+IsPv/exPFd+6Njs7f6DXADiSvcvwPEAkw69c/APgS6hVkGEnkPP7hg1kFWSBYT7Vs8Jv/1ESkcOLn/vXgAZAFF2UOHro7BR46KEhEF1wQJMiqVAvWrd99BA9dWVyr308kK9GYBeECNvT3eugI0jLCfORXIvT18T35zu/+KbU46f+7H3CvAd/1gPzGZ1o0f7XansgBBoVTo6PF+//50p//CuACMWJFxTicvvvf5sxveV3dwwBAQAAgDMPBInUQq7kxYSItAp9/tsz822wwyCcRk6APkmSN7/m38I3eHAFXPqq97381iDxPAOP+EOpwmqWSIR1r8TALIvuDZwjsMIHELLOe0GHCZuMHtkV1CiYFL/7cuRwhcaQ7ngroaWyPzE/fBuwAXkgy6ffY/fhAUIgQAnOcMG33Lq/wauWK0/P3/ef+FFDcNg/4EMy+plgGlr3NnX779gMEMAAAAACCTAAAAAMBgEHAAAWAAADAASAAAAHzCGaFj/DQIemthf+Cj275QKHm3/BR7b3jvfBD3YmfBP6XQSVeCzvd9hvnl+Cjb7/h4Iuwny+FvewHr+gKuXoBfBRv7oHyh4d9+/dxYF/4LOxOxfuVZ8M9OnDYD+uEfTu/oH5r/xek9/4KOwd90q8F3T9g3+Cj2HYTy3wx3v1YtD/wx3Yd6Br/QF4v33fwUe+8qfNt2Ly3/mv1wxvfTddD/4U7933sBXzDz1/YF9Tgf4Le+9APD4e9i7oP5f2H89fQF/PX+vi937AUEPJfjObvXDnuun/wzd89/oR+qVLnrt+2+G+9PYv4M+ev1/Eb32/vsHXJ6D90tANcEt/ewE/wRe50++/wRehO+CW/3nT6nR14V0AmE33fsC/5L/xF3ff8Nb6/T/DV919v+Tv93vXH6X3v+Gr3qgvYX4Jd39zpBfzel4b317/4I99KvF+3YX4I6B3lSub38N0D6/oBxPNdgL8MX/Qa/0H4I9/Xy+/m9/Dl+W/sL6lS+XfBdwTb/d/l9/BJ7CLz4L7EwvQOvT/1OD4JPeEfDHsH3X7f4LtB/YDh/BJ3lT5vfy+0XvS/BH3lT4Id/Th4Wv967AvrqnXu/8m/4jff+CGw+dILeTS/fv6nT6nT4i/2JhPiN/QC+I73u/ku/4Ib86Ovd9gMvPWgHsX8lAP1hCb0OvBNu/tNBnyel4W376/X97/mv/BTYV++wFw/h7vv317F/qlDwT6AWwH2Pgj2A/FEcE/e/c+CLvmOEYe34ADhgACACsDaDVF0Qgkbrsp15/NAACAYmygKABxcBiuQ9cAlg+ExwpIALYtSt1Iil93vwAU6TkfF+7vyeBAgogpg5hjAGubn0v9/v2B//nrt/BlzaX4n37+/fwSd6cPBX2F3uneD4f97v3s6Av+rfBR773HhT339t/BEcFnff2J4vgr7Cv3YXE4eCv0LdA2At+euEvfa+N799hehe+h/1PQYc3peG99e/+XffBRQd3vlRQ89f7GK5t/wR30A6+bf8Ee/qDTgm3+7/L7+HO9f7CXBVvv+576pV5fS89dD+I4Idhc/wR9+X3d/wSe5VjxfS7wZcml+/d8M9KdP0H+Gd86fsC/Ct/fX2/4jfv+78Rw1a6+/8Eti99OvJf+S7/iLBvQC7gy5PS8Lb99fr+9/wRe/fBXpPv3z3wR7+Xwz2A79i/4J/d33fLp4jrnPjNrvv3/ha93YPsW//hvfg/t/Ee/QD8EvYPvOD64fBTf76D449cnrgn3QCzh78+CG/Z8Et70+58GF+/VBf/UoHDwRd5Q/gh6BunXgm30HygX4LLXfv/DwTd99z4Lfe/r4e37ATAVB9z2/8K93QCvfY7/4Ir72HhXQu91/X69DvNpfiffv79/C/sPdpdgVgP+CH3Trx3v3uw/gr7C2D96UPL7ieCS9ixfBJdhcd8FfoW6BsBbp/gu99+XzX/gg77CfoUdv0P82/4Y32DSenXQf+HL9fv+Ee/e/Bbzel4b317/5d/1KirwR70G/xe/dL4I7C2DOnw33r+gvi/feJ4bu+v7wbcE2/3f5ffw1drw/18vv4Y9A96/YF+H7/f3ShsL/hrQf37f7sBcRz19gX8Od66fYdcvv5vYC8N96/18X7AW/1Sry+/hv3Srp/566f/N3fxfvvBVyaX79/U6fBF3aOnz1+x/vdh/BLdg6d9OvBL0n3YR0+6C4nvv886fX+etBf+/fwrvvQdb/+I7v38Et+/Onwr26XVf/hW/eg62A//Jd/3oL8R3d+Crk9Lwtv31+v73/BLsLfdz4Vv3sB19AP+C3fvnT4Z3unTGgKx9fdr+EOwHYP3xHBF76+sHwvsT76sC6Gh/grv79AL74doBb7762A+xfhq/WhfQvBduhUHyp97/gi93+H++/a1QX2/gl3dgPvE68Fe/Qfff4MLCe9vXb/4d777+D9P8K30FvVhf/BdYvfd8Eu/v98K7+g3Y6D/4WsNq6AT6/Yv37AYI+bS/E+/f37+CLvc+CfpaFnB8R7Xfwt731/Q/gr9+7/CJ5rC/gou79/Qa83peG99e/+XfXLe/y34ELgm3+7/L7+GtA9KH9h+C2/384eGd9aAf/qcEVz17C9MsJwxOQQAmm7Uu+vgFHYHpLyEg9zI7JkZ3wYEg2ADsDJZyeI5nTf+8AiVcAYkozRfXuBMPXpvVKvDGAAh3UjcVcZMMQWACj4SOeszucIWEqJck3rgPf/UcgWlIvdu1uCIPrmbwkYvO0T/w2cFfDTLV74BO/vc2gJ+3RTkR/e8C6NxWzkffDUHBdDH4Echm7iLlqv3/+B95UVZDPNNrwSe5Urm7/DfuugH8FfJpfv3XBF6Bp14i/3+IoBd/723iu/dPCcK+OtECQIG0oWnfze2SAgh/vgCzJ72kvrvAGBRpUu44aEfU7hY6WKgo87A2etDixubffhkHTn++z64V/oLFHmB99txyRJ/ICGkGY4ZceIRXSRB+fH/35t3/hLs6OgzLtfACrOtEaTNBh/BL02a15agAM0jTEuUilbkFvA0w9gBvvXRtz3+/222DDF/q3e/+AAEYAODFyrIwo/QkawhZNANYAAgDlOAAWAQGaXJEaET//beABjhY3vhllulTplCAor8EWpAggAk+rL9f730CAXMcf+v4MIuwD3b/LCr7779hAhgAAAACCTAAAAAMBgEHAAAYAAADAASAAAAIIyGaGD/DQIexLb/8FHoV8oFDzb/go9Ce8d74Ie7bPgn9g+wGlXgs73fQCfPL8FGhd/w8EXQDfL4W97C1/QdcvQfwUb+6XKHh33793Fh/+Cztu3+5Vnwz2KnDYvrhH2K7+l5r/xewb3/go7V90q8F3Yvaf4KPQCoBvLfDHe/VAPX/DHdAK9Jf6D8X77v4KPfeVPm0K35b/zX64Y3vsTrr/wp37vvYd8w89f2H9Tgf4Le+9BYfD3t92Avl/QF89fQf89f7H4vd+w4IeS/Gc3euHPddhf8M3fPf7AZ+qVLnroL0E+G+9PQD/gz56/Y/xG99C++1XJ7AXuweglwS397Df4Ivc6fff4IvTd8Et/vOn1OjrwroNANC7v2H/yX/iLu+/4a31+wvw1fdfQX8nf7veuP2D+9/w1e9U/b/BLu/udIL+b2D8N769D/wR76VeL9CoB/gjpXlSub38N0uv6FE812H+GL/sBL/YF4I9/Xy+/m9/Dl+W/t/UqXy74LuCbf7v8vv4JPQDLz4L7aAfpV7C/1OD4JPeEfDHtd1+gvwXbAX2FD+CTvKnze/l9Ay97B/gj7yp8EO/pw8LX+9dh/XVOvd/5N/xG+/8ENALnSC3k2D/fv6nT6nT4i/20A3xG/oP4jve7+S7/ghvzo6932EXhzoCrQtAP+SgvWGoKJGJGOCXYG7+g5ZP8McEO72gz5PYPwtv31+x/vf81/4KaAd++w+H8Pd9++vQD/1Sh4J9B7C7HwR7C8UQT9/C8AhaMbn5cBoY94W7CpQv3v/LsCZiQu5HI6z/8gLMpyOYq6L+h/EEnj28/+FfwESYtic4Xe08sPeLcYD6LyeG6F6Qe3wFAAMA5gEEAuVkGhKhvWd5f/8v08BgQSo2NLH1ZnJwfcBoYO6fTprppIKenjAfijXX+8QmMaBWM5QhG6WfGWCABNwAHZlxvQTGrSeLZwAXLSVGcP/fXOWVsVgog4BF2efL/v989dBfBlzbB/iffv79/BJ3pw8FfQD73YrwfD/vd+9nQf/Vvgo997jwp77+hP4Ijgs77+28XwV9AO/dAPicPBX6e6TD3564S99A/je/fQD9P31/qegw5vYPw3vr0P/LvvgosBXe+VFDz1/uK5t/wR30FXzb/gj39QacE2/3f5ffw53r/bXBVvv+576pV5fYPz11+I4IdAPn+CPvy+7v+CT3KseL7B94MuTYP9+74Z7Bzp+wL8M750/Yf4Vv76+gv4jfv+78Rw1QPr6H/BLb99OvJf+S7/iLT0H3Blyewfhbfvr9j/e/4Ivfvgr2Dffvnvgj38vhnsK/QD/4J/d33fLsWI65z4zQPvv3/ha93a7FBf/De/B/QXxHv0F4Je13nB9cPgpv99gLjj1yeuCfdB5QAP58EN+z4Jb3sXc+DC/fqn/9SgcPBF3lD+CHpOnXgm32AuUC/BZQPv3/h4Ju++58Fvvf18Pb9hsOwF3PQX+Fe7oO996H/givvYeFdPvdf2P69DvNsH+J9+/v38L+gFuga7DsX8EPunXjvfvdAL4K+gHte9KHl9xPBJe3i+CS6AfHfBX6e6TD3T/Bd778vmv/BB30A36cdv1/Nv+GN9pg3p12Bf4cv1+h/hHv3vwW83sH4b316H/l3/UqKvBHvYCf4vfuwfwR0A9o6fDfev6fxfvvE8N3fX9Dg24Jt/u/y+/hq6B+H+x+X38MelvX7D/D9/v7pQ2/+GtgL79Bfuw+I56+w/4c712F0BVy+/m9h+G+9f7H4v2Hv9Uq8vv4b90q7C/z12F/zd38X77wVcmwf79/U6fBF3QM6fPX7/vdAL4JbtWK+nXgl7BvugGdPuwHxPff550+x/z1p/+/fwrvvYCrQ//Ed37+CW/fnT4V6FYPqx//Ct+9gKti/8l3/ewH+I7u/BVyewfhbfvr9j/e/4JdAPfdz4Vv3sKvoX8Fu/fOnwzvdOnQd+x+6B/wh2Fa98RwRe+vrB8L7b76sPqv4K7+/Qf3w7Qe+++ti6Af4av1sB/YD8F26dgLlT73/BF7v8P99+geqf0F8Eu7sLvE68Fe/YC77/BhQDe9C10F/w73338H7C/Ct9gPerf/wXW/fd8Eu/v98K7+wE7HYF/wtQCQO6DfX6Af79hAj5tg/xPv39+/gi73Pgn7B6ecHxHoH38Le99f1+Cv37v8InmoB/wUXd+/oNeb2D8N769D/y765b3+W/AhcE2/3f5ffw1paUP6AvBbf7+cPDO+tC/9Tgiuevb9E/8COIDGNuXNc9kgA1KZDGmat9PdhpVyGvsEPDeNK+w73/+BMAASg5ZhNi1mGl7v/4AQABAAcGm0HmWH8ufaVWSrAB/aU0fr//n+AFyH03qpX3n2bhjADReSWGOeAAEAEACANTYiKpmpRNujMoU7oRyL8cuwRWRL1tm7WIaIPmFwAYfu2mv9deADumpy1/63/lmj3R+T/wnG9khbPfQJ+D2F83+dB9h2ADTS0lGze7wNjvEqSlJH/+60psGgYGObgQOt2mFS9tvw57lT/o1zd/hv3XQvgr5Ng/37rgi9JOvEX+/xFB9/70J4rv3TxEK+WmAOAdy0wDzgizZ0yEfv+Zbf+GIZgCAIQoQxW9xZiUo9TMC8Ww6+//tq3gBAdAVj8Urlk0XIGHA2tJLfb37/+FfuCAEfcEAeQFSa1yTN+NguNbL9tIoSr+D8Gg5akLcx6Ciz2Eg8bYUgnVVoKfh0Z19Y//gi8ADEXaeTaf/HTeDCPwETORcHiPwIuRsltKN8GDKUQ/BhLvk79AMEMAAAAACCTAAAAAMBgEHAAAaAAADAASAAAAHuCGaGj/DQIe2tBf+Cj075QKHm3/BR6b3jvfBD3QmfBP7XYSVeCzvd9Bvnl+CjT7/h4Iugny+FvegHr+wKuXsBfBRv7sHyh4d9+/dxQF/4LOhOhfuVZ8M9unDQD+uEfbu/sH5r/xe09/4KOgd90q8F3b9A3+Cj0HQTy3wx3v1Qtj/wx3Qd7Br/YF4v33fwUe+8qfNp0Ly3/mv1wxvfbddj/4U7933oBXzDz1/QF9Tgf4Le+9gPD4e9C7sP5f0H89fYF/PX+/i936AUEPJfjObvXDnuu3/wzd89/sR+qVLnrp+m+G+9PQv4M+ev3/Eb30/voHXJ7D92tgNcEt/egE/wRe50++/wRexO+CW/3nT6nR14V2AkEn3foC/5L/xF3ff8Nb6/b/DV919P+Tv93vXH7X3v+Gr3qwvQX4Jd39zpBfze14b316/4I99KvF+nQX4I7B3lSub38N2D6/sBxPNdAL8MX/Ya/2H4I9/Xy+/m9/Dl+W/oL6lS+XfBdwTb/d/l9/BJ6CLz4L6EgvYOvb/1OD4JPeEfDHoH3X6f4Lth/QDh/BJ3lT5vfy+kXva/BH3lT4Id/Th4Wv966AvrqnXu/8m/4jff+CGg+dILeTa/fv6nT6nT4i/0JBPiN/YC+I73u/ku/4Ib86Ovd9AMvPWwHoX8lgPyf+EIJOAg6eiL0zy+CHd7QZ8nteFt++v3/e/5r/wU0FfvoBcP4e7799ehf6pQ8E+wFoB9j4I9APxRHBPsBOh2D3Hgl5RLvYyfhDh5B7AGYozQnvPZz3f5XKnm5m8H4AAIAgAQCSh9jyqy+/5TSUD8QAMwwWM1ma2xCI5MNLh5FEUlh4p4PwcUA1kACuTJsT5CoraxVKJD8GkM/ACjTUZNhdl4+Oe8fPBR7YW/7566fwZc21+J9+/v38EnenDwV9Bd7t3g+H/e797OwL/q3wUe+9x4U99/TfwRHBZ339CeL4K+gr90FxOHgr9i3YNALfnrhL30vje/fQXsXvsf9T0GHN7XhvfXr/l33wUWHd75UUPPX+hiubf8Ed9gOvm3/BHv6g04Jt/u/y+/hzvX+glwVb7/ue+qVeX2vPXY/iOCHQXP8Effl93f8EnuVY8X2u8GXJtfv3fDPanT9h/hnfOn6Avwrf319P+I37/u/EcNUuvr/BLQvfTryX/ku/4igb2Au4MuT2vC2/fX7/vf8EXv3wV7T79898Ee/l8M9AO/Qv+Cf3d93y7eI65z4zS779/4Wvd0D7FP/4b34P6fxHv2A/BL0D7zg+uHwU3++w+OPXJ64J92Asge/Pghv2fBLe9vufBhfv1YX/1KBw8EXeUP4Iewbp14Jt9h8oF+Cyl37/w8E3ffc+C33v6+Ht+gEgFYfc9P/Cvd2Ar30Ov+CK+9h4V2Lvdf3+vQ7zbX4n37+/fwv6D3SXQFQD/gh9068d797oP4K+gtA/elDy+4ngkvQsXwSXQXHfBX7FuwaAW6f4Lvffl81/4IO+gn7FHb9j/Nv+GN9A2np12H/hy/X6/hHv3vwW83teG99ev+Xf9Soq8Ee9hv8Xv3a+COgtAzp8N96/sL4v33ieG7vr+sG3BNv93+X38NXS8P9/L7+GPYPev0Bfh+/390oaC/4a2H9+n+6AXEc9fQF/Dneu30HXL7+b0AvDfev9/F+gFv9Uq8vv4b90q7f+eu3/zd38X77wVcm1+/f1OnwRd0jp89fof73QfwS3QO3fTrwS9p90EdPuwuJ77/POn3/nrYX/v38K772HWv/iO79/BLfvzp8K9O11f/4Vv3sOtAP/yXf97C/Ed3fgq5Pa8Lb99fv+9/wS6C33c+Fb96AdfYD/gt3750+Gd7p0hsCoff3S/hDoB0D98RwRe+vrB8L6E++qAuxsf4K7+/YC++HbAW+++tAPoX4av1sX2LwXbsVh8qfe/4Ivd/h/vv0tWF9P4Jd3QD7xOvBXv2H33+DCgnvT10/+He++/g/b/Ct9hb1QX/wXUL33fBLv7/fCu/sN2Ow/+FqDSuwE+v0L9+gGCPm2vxPv39+/gi73Pgn7WxZwfEel38Le99f2P4K/fu/wieagv4KLu/f0GvN7XhvfXr/l31y3v8t+BC4Jt/u/y+/hrYPSh/Qfgtv9/OHhnfWwH/6nBFc9egvTxKBJAXHmB53gEMC9lyKhQ/Sqwi8NwmFJO16t2v8ABAKACAACAEwZXG5wK5uOzKI1pKsAQgocpJb1n4AcB8Zntvf/qGIAZtvSY+CjnQm5xF8wCwASBYNgGzEIpsKE/DKQMG+27wK33Vq53vRcEel354J9q+f5YMw9fXu/vDyf+CGFPMZxDm/YaW8+LhGWD+wHngErvfT3gk9ypXN3+G/ddgP4K+Ta/fuuCL2DTrxF/v8RYC7/3pvFd+6eFIa4Au6zT9wCbIXLisUhe33/Wl/khmAAgAAgFAChj78fUVOrAWlLxwWfhgBvIUApoSbuRNkfMGU4Ul41XKJdl91kMiQNwy1JLpal+/4LgjWtVkXcv/4V+MQPARej/2D5RYmGn9ma0/CIVz/+YMAZELY6ImYcvCe8tt1nR1Q+J24f/i//wS8oAAfAGRnTvsOnBZD8ANG5rfO+2yvHL3xv7bUG+AMF3WPj0v0H2X1OX6C/l3yd+ggQwAAAAAgkwAAAADAYBBwAAHAAAAwAEgAAAB7Ahmhw/w0CHoS0//BR7FfKBQ82/4KPYnvHe+CHumz4J/QPoBpV4LO932Anzy/BRsXf8PBF2A3y+Fvegtf2HXL2H8FG/u1yh4d9+/dxQf/gs6bp/uVZ8M9Cpw0L64R9Cu/tea/8XoG9/4KOlfdKvBd0L0n+Cj2ArAby3wx3v1YD3/wx3YCvaX+w/F++7+Cj33lT5tip+W/81+uGN76E67/8Kd+770HfMPPX9B/U4H+C3vvYWHw96fdAL5f2BfPX2H/PX+h+L3foOCHkvxnN3rhz3XQX/DN3z3+gGfqlS567C9hPhvvT2A/4M+ev0P8RvfYvvpVyegF7oHsJcEt/eg3+CL3On33+CL23fBLf7zp9To68K7DYDYu79B/8l/4i7vv+Gt9foL8NX3X2F/J3+73rj9A/vf8NXvVv0/wS7v7nSC/m9A/De+vY/8Ee+lXi/YrAf4I7V5Urm9/Ddrr+xRPNdB/hi/6AS/0BeCPf18vv5vfw5flv6f1Kl8u+C7gm3+7/L7+CT2Ay8+C+mwH7Vegv9Tg+CT3hHwx6XdfsL8F2gF9BQ/gk7yp83v5fYMvegf4I+8qfBDv6cPC1/vXQf11Tr3f+Tf8Rvv/BDYC50gt5NA/37+p0+p0+Iv9NgN8Rv7D+I73u/ku/4Ib86Ovd9BF562LYD/ksLyf4QiIY8AIjX3b/tmYAEkQtD7eAoIfsXZlZL0F/gh3e0GfJ6B+Ft++v0P97/mv/BTYDv30Hw/h7vv317Af+qUPBPsPQXY+CPQXiiOCfYbva3Hgi72N4OGH8AQA4AFwN5FIBn4CKJgdrA//AYAYNBrSRbc8wBFxq+9A08OYnMvCLape++CnsnQXxTvA8tfPfu/wNUDrAAeT3TslUvW/cMtAAey7WJ743XzW5u/wUe+/7567C+DLm0D/E+/f37+CTvTh4K+wH3uhXg+H/e797Ow/+rfBR773HhT339ifwRHBZ339N4vgr7Ad+7AfE4eCv292kHvz1wl77B/G9++wH7fvv/U9BhzegfhvfXsf+XffBRQCu98qKHnr/UVzb/gjvsKvm3/BHv6g04Jt/u/y+/hzvX+muCrff9z31Sry+gfnrv8RwQ7AfP8Effl93f8EnuVY8X0D7wZcmgf793wz0DnT9AX4Z3zp+g/wrf319hfxG/f934jhqwfX2P+CWn76deS/8l3/EUnsPuDLk9A/C2/fX6H+9/wRe/fBXoG+/fPfBHv5fDPQV+wH/wT+7vu+XQsR1znxmwfffv/C17ul2LC/+G9+D+wviPfsLwS9LvOD64fBTf76AXHHrk9cE+7DzAAfz4Ib9nwS3vQu58GF+/Vv/6lA4eCLvKH8EPadOvBNvoBcoF+Cywffv/DwTd99z4Lfe/r4e36DQdALuewv8K93Yd762P/BFfew8K7fe6/of16HebQP8T79/fv4X9gLdg10HQv4IfdOvHe/e7AXwV9gPS96UPL7ieCS9PF8El2A+O+Cv292kHun+C7335fNf+CDvsBv247fv+bf8Mb6SBvTroC/w5fr9j/CPfvfgt5vQPw3vr2P/Lv+pUVeCPegE/xe/dA/gjsB6R0+G+9f2/i/feJ4bu+v7HBtwTb/d/l9/DV2D8P9D8vv4Y9rev0H+H7/f3Shp/8NaAX37C/dB8Rz19B/w53roLsCrl9/N6D8N96/0PxfoPf6pV5ffw37pV0F/nroL/m7v4v33gq5NA/37+p0+CLuwZ0+ev1/e7AXwS3SoV9OvBL0DfdgM6fdAPie+/zzp9D/nrb/9+/hXfegFWx/+I7v38Et+/Onwr2KgfVD/+Fb96AVaF/5Lv+9AP8R3d+Crk9A/C2/fX6H+9/wS7Ae+7nwrfvQVfYv4Ld++dPhne6dKw69D92D/hDoKl74jgi99fWD4X0331Qfd/wV39+w/vh2w9999aF2A/w1frQD+gH4Lt26AXKn3v+CL3f4f779g9W/sL4Jd3QXeJ14K9+gF33+DCwG97FrsL/h3vvv4P0F+Fb6Ae9U//gup++74Jd/f74V39AJ2OgL/hawEwd2G+v2A/36CBHzaB/iffv79/BF3ufBP0D284PiPYPv4W976/v8Ffv3f4RPNYD/gou79/Qa83oH4b317H/l31y3v8t+BC4Jt/u/y+/hra0of2BeC2/384eGd9bF/6nBFc9en64JIDtc9gwdyLjelUn+CFYYgcDSS2gB3V0B7g//wAEBAxgok0ocNB8d+MGwuvoZRAR2YAB69dNNTcAMefd65qGI6BuZ8toAPQCTilyyVTZ/XjG2qMXB8wANo3eSR33fr7BP0Hc+/LAj1Nqcpv/gw9cIBvoFXb/YZ5ZAKPjJq8EnuVK5u/w37rsXwV8mgf791wRe0nXiL/f4iw+/97E8V37rk6BgD/c7iw3cKxngAmBh2DtVJsyaWRpn/wAzITx8VFI/JeAGAofGb15uxuKEU7S+wwBTbkWNo2pXm5JW4YcgpwgCMCeALVbWf88D/4VgLGY2Tu3mphf/Fs0BgA9kL5U7dinZ7qbvka0gqA1fNM4f8n4EcT4e9gsAFbXz67GYU6g//zz4IKzkrsDBZI2f/tfGqeNd9gJaGIuBW8mmwo7/AxCGiQlOc3+f8atvzf/y75O/YDBDAAAAACCTAAAAAMBgEHAAAeAAADAASAAAAHqyGaHj/DQIemthf+Cj275QKHm3/BR7b3jvfBD3YmfBP6XQSVeCzvd9hvnl+Cjb7/h4Iuwny+FvewHr+gKuXoBfBRv7oHyh4d9+/dxYF/4LOxOxfuVZ8M9OnDYD+uEfTu/oH5r/xek9/4KOwd90q8F3T9g3+Cj2HYTy3wx3v1YtD/wx3Yd6Br/QF4v33fwUe+8qfNt2Ly3/mv1wxvfTddD/4U7933sBXzDz1/YF9Tgf4Le+9APD4e9i7oP5f2H89fQF/PX+vi937AUEPJfjObvXDnuun/wzd89/oR+qVLnrt+2+G+9PYv4M+ev1/Eb32/vsHXJ6D90tANcEt/ewE/wRe50++/wRehO+CW/3nT6nR14V0AmE33fsC/5L/xF3ff8Nb6/T/DV919v+Tv93vXH6X3v+Gr3qgvYX4Jd39zpBfzel4b317/4I99KvF+3YX4I6B3lSub38N0D6/oBxPNdgL8MX/Qa/0H4I9/Xy+/m9/Dl+W/sL6lS+XfBdwTb/d/l9/BJ7CLz4L7EwvQOvT/1OD4JPeEfDHsH3X7f4LtB/YDh/BJ3lT5vfy+0XvS/BH3lT4Id/Th4Wv967AvrqnXu/8m/4jff+CGw+dILeTS/fv6nT6nT4i/2JhPiN/QC+I73u/ku/4Ib86Ovd9gMvPWgHsX8lAPyf5pYY8AiFNf/LnVmBSgoPQP/BDu9oM+T0vC2/fX6/vf81/4KbCv32AuH8Pd9++vYv9UoeCfQC2A+x8EewH4ojgn0Anege48EXexmkH1PAOPgAIETAHDhozYHyAEvVh80+D4v2B/i4YeQIT2nkoX4Cdw2z4IACsKAGoKNATsLUSBR0g5KUDTdGKUVH/BhzsSrOHN8g8IfLejXPz/BKwFgAX+eijAhphD/+DAYGuqvia5YABrG6sU6LHLwzvv//75/go99/3z12/gy5tL8T79/fv4JO9OHgr7C73TvB8P+9372dAX/Vvgo997jwp77+2/giOCzvv7E8XwV9hX7sLicPBX6FugbAW/PXCXvtfG9++wvQvfQ/6noMOb0vDe+vf/LvvgooO73yooeev9jFc2/4I76AdfNv+CPf1BpwTb/d/l9/Dnev9hLgq33/c99Uq8vpeeuh/EcEOwuf4I+/L7u/4JPcqx4vpd4MuTS/fu+GelOn6D/DO+dP2BfhW/vr7f8Rv3/d+I4atdff+CWxe+nXkv/Jd/xFg3oBdwZcnpeFt++v1/e/4Ivfvgr0n37574I9/L4Z7Ad+xf8E/u77vl08R1znxm1337/wte7sH2Lf/w3vwf2/iPfoB+CXsH3nB9cPgpv99B8ceuT1wT7oBZw9+fBDfs+CW96fc+DC/fqgv/qUDh4Iu8ofwQ9A3TrwTb6D5QL8Flrv3/h4Ju++58Fvvf18Pb9gJgKg+57f+Fe7oBXvsd/8EV97DwroXe6/r9eh3m0vxPv39+/hf2Hu0uwKwH/BD7p147373YfwV9hbB+9KHl9xPBJexYvgkuwuO+Cv0LdA2At0/wXe+/L5r/wQd9hP0KO36H+bf8Mb7BpPTroP/Dl+v3/CPfvfgt5vS8N769/8u/6lRV4I96Df4vful8EdhbBnT4b71/QXxfvvE8N3fX94NuCbf7v8vv4au14f6+X38Mege9fsC/D9/v7pQ2F/w1oP79v92AuI56+wL+HO9dPsOuX383sBeG+9f6+L9gLf6pV5ffw37pV0/89dP/m7v4v33gq5NL9+/qdPgi7tHT56/Y/3uw/gluwdO+nXgl6T7sI6fdBcT33+edPr/PWgv/fv4V33oOt//Ed37+CW/fnT4V7dLqv/wrfvQdbAf/ku/70F+I7u/BVyel4W376/X97/gl2Fvu58K372A6+gH/Bbv3zp8M73TpjQFY+vu1/CHYDsH74jgi99fWD4X2J99WBdDQ/wV39+gF98O0At999bAfYvw1frQvoXgu3QqD5U+9/wRe7/D/fftaoL7fwS7uwH3ideCvfoPvv8GFhPe3rt/8O999/B+n+Fb6C3qwv/gusXvu+CXf3++Fd/QbsdB/8LWG1dAJ9fsX79gMEfNpfiffv79/BF3ufBP0tCzg+I9rv4W976/ofwV+/d/hE81hfwUXd+/oNeb0vDe+vf/Lvrlvf5b8CFwTb/d/l9/DWgelD+w/Bbf7+cPDO+tAP/1OCK569heuCTCfVN0qk/wrBKcMQG4ZE7m2sKFcpp/N/hQ6jFyqPmww/r21QgLgAYA4aBYObOhWj1v2lNIEAd2gAOoQVNxjmPmbf/+xgBczlfT/934Y61OIaW5QT1Wd714+BwQFx+6Tvy/X/9A/lmVutP9X/1wwfEq/t4Rm6BfBJ7lSubv8N+66AfwV8ml+/dcEXoGnXiL/f4igF3/vbeK791yeMtE2LwEP9BrgQA5pknwALIZSVaJ6JS2WgAPpXjekBOLLI+vFUBBIELH7+r2O8c8AQVTj8+AsHGV28AsDDqGTYRm2kMyU5ISU4gfpPWmAKeAohmkYQfvtAgnvmSez/+b/gl063XtPv/LoCDD1x7906tQVB0bwk9TADCpW+X58A+A0bTtbWhwdP567eFQDLKUkKDtRCM2lUv8Xj71/JLBTSDSkVFW+l7LzB/l3yd+wgQwAAAACCTAAAAAMBgEHAAAgAAADAASAAAAHxCGaID/DQIexLb/8FHoV8oFDzb/go9Ce8d74Ie7bPgn9g+wGlXgs73fQCfPL8FGhd/w8EXQDfL4W97C1/QdcvQfwUb+6XKHh33793Fh/+Cztu3+5Vnwz2KnDYvrhH2K7+l5r/xewb3/go7V90q8F3Yvaf4KPQCoBvLfDHe/VAPX/DHdAK9Jf6D8X77v4KPfeVPm0K35b/zX64Y3vsTrr/wp37vvYd8w89f2H9Tgf4Le+9BYfD3t92Avl/QF89fQf89f7H4vd+w4IeS/Gc3euHPddhf8M3fPf7AZ+qVLnroL0E+G+9PQD/gz56/Y/xG99C++1XJ7AXuweglwS397Df4Ivc6fff4IvTd8Et/vOn1OjrwroNANC7v2H/yX/iLu+/4a31+wvw1fdfQX8nf7veuP2D+9/w1e9U/b/BLu/udIL+b2D8N769D/wR76VeL9CoB/gjpXlSub38N0uv6FE812H+GL/sBL/YF4I9/Xy+/m9/Dl+W/t/UqXy74LuCbf7v8vv4JPQDLz4L7aAfpV7C/1OD4JPeEfDHtd1+gvwXbAX2FD+CTvKnze/l9Ay97B/gj7yp8EO/pw8LX+9dh/XVOvd/5N/xG+/8ENALnSC3k2D/fv6nT6nT4i/20A3xG/oP4jve7+S7/ghvzo6932EXhzgBi9spj71oWgH/JQXk/zVDHgCpTTmnP+YmvSL2C/wQ7vaDPk9g/C2/fX7H+9/zX/gpoB377D4fw933769AP/VKHgn0HsLsfBHsLxRBPz9wvBtm3jVVXeASmWPKTnIUKr/67RiE8EcDSeYAMcR2RppsvD5zBD4b/Pf8KwBhKx2YVnrIWxqw/ELeGbOAcDcyuF2oe9ihUb5ggD5PCwQcIQjD8ABwCAMGPRVfdEWN6vAuH3B8BY4AJGwQILo/m8t/+D8AAwAUPESnuROI8qbrjRL8CVELM2zGjvfB+E27lb7oe9S34EUeAGApJCxP39XgWVUqVR4AFW4bqWW55w9+/v3+/f4KN9/3z10F8GXNsH+J9+/v38EnenDwV9APvdivB8P+9372dB/9W+Cj33uPCnvv6E/giOCzvv7bxfBX0A790A+Jw8Ffp7pMPfnrhL30D+N799AP0/fX+p6DDm9g/De+vQ/8u++CiwFd75UUPPX+4rm3/BHfQVfNv+CPf1BpwTb/d/l9/Dnev9tcFW+/7nvqlXl9g/PXX4jgh0A+f4I+/L7u/4JPcqx4vsH3gy5Ng/37vhnsHOn7AvwzvnT9h/hW/vr6C/iN+/7vxHDVA+vof8Etv3068l/5Lv+ItPQfcGXJ7B+Ft++v2P97/gi9++CvYN9++e+CPfy+Gewr9AP/gn93fd8uxYjrnPjNA++/f+Fr3drsUF/8N78H9BfEe/QXgl7XecH1w+Cm/32AuOPXJ64J90HlAA/nwQ37Pglvexdz4ML9+qf/1KBw8EXeUP4Iek6deCbfYC5QL8FlA+/f+Hgm777nwW+9/Xw9v2Gw7AXc9Bf4V7ug733of+CK+9h4V0+91/Y/r0O82wf4n37+/fwv6AW6BrsOxfwQ+6deO9+90Avgr6Ae170oeX3E8El7eL4JLoB8d8Ffp7pMPdP8F3vvy+a/8EHfQDfpx2/X82/4Y32mDenXYF/hy/X6H+Ee/e/BbzewfhvfXof+Xf9Soq8Ee9gJ/i9+7B/BHQD2jp8N96/p/F++8Tw3d9f0ODbgm3+7/L7+GroH4f7H5ffwx6W9fsP8P3+/ulDb/4a2Avv0F+7D4jnr7D/hzvXYXQFXL7+b2H4b71/sfi/Ye/1Sry+/hv3SrsL/PXYX/N3fxfvvBVybB/v39Tp8EXdAzp89fv+90Avglu1Yr6deCXsG+6AZ0+7AfE99/nnT7H/PWn/79/Cu+9gKtD/8R3fv4Jb9+dPhXoVg+rH/8K372Aq2L/yXf97Af4ju78FXJ7B+Ft++v2P97/gl0A993PhW/ewq+hfwW7986fDO906dB37H7oH/CHYVr3xHBF76+sHwvtvvqw+q/grv79B/fDtB77762LoB/hq/WwH9gPwXbp2AuVPvf8EXu/w/336B6p/QXwS7uwu8TrwV79gLvv8GFAN70LXQX/DvfffwfsL8K32A96t//Bdb993wS7+/3wrv7ATsdgX/C1AJA7oN9foB/v2ECPm2D/E+/f37+CLvc+CfsHp5wfEegffwt731/X4K/fu/wieagH/BRd37+g15vYPw3vr0P/Lvrlvf5b8CFwTb/d/l9/DWlpQ/oC8Ft/v5w8M760L/1OCK569v1wSbB6VXhmGMBD+zfR/KX4Aw566zfzAlA9XEX2Ru5P/uA+bwAt4pnojNx8F+wtFwx8MoACAqAbqzm4EKCcXhH/8tdTVBJ+69wCPUmOW2Jf/2rAa9HiefRpPX5Y0Bf6xAFwjN0vgk9ypXN3+G/ddC+Cvk2D/fuuCL0k68Rf7/EUH3/vQniu/dssEKD3D6W7Ahr114ABEfqvan7gAEAAUfcposggeIvgKnWKELxqkDeeXw77wCQCBGEV38MWOp3I1ysi6y8AkBcERyDZSFZ0fvfgC491lPn/X9QrsJjmWaug7nAYYYAGdqb6VLhunQ0IPGRT2DCHIf4CQGZUj+DRx8kgBJy5r9yHQKOFMwl+boPi9BeuXfJ36AYIYAAAAAgkwAAAADAYBBwAAIgAAAwAEgAAABywhmiI/w0CHtrQX/go9O+UCh5t/wUem9473wQ90JnwT+12ElXgs73fQb55fgo0+/4eCLoJ8vhb3oB6/sCrl7AXwUb+7B8oeHffv3cUBf+CzoToX7lWfDPbpw0A/rhH27v7B+a/8XtPf+CjoHfdKvBd2/QN/go9B0E8t8Md79ULY/8Md0Hewa/2BeL9938FHvvKnzadC8t/5r9cMb323XY/+FO/d96AV8w89f0BfU4H+C3vvYDw+HvQu7D+X9B/PX2Bfz1/v4vd+gFBDyX4zm71w57rt/8M3fPf7EfqlS566fpvhvvT0L+DPnr9/xG99P76B1yew/drYDXBLf3oBP8EXudPvv8EXsTvglv950+p0deFdgJBJ936Av+S/8Rd33/DW+v2/w1fdfT/k7/d71x+197/hq96sL0F+CXd/c6QX83teG99ev+CPfSrxfp0F+COwd5Urm9/Ddg+v7AcTzXQC/DF/2Gv9h+CPf18vv5vfw5flv6C+pUvl3wXcE2/3f5ffwSegi8+C+hIL2Dr2/9Tg+CT3hHwx6B91+n+C7Yf0A4fwSd5U+b38vpF72vwR95U+CHf04eFr/eugL66p17v/Jv+I33/ghoPnSC3k2v37+p0+p0+Iv9CQT4jf2AviO97v5Lv+CG/Ojr3fQDLz1sB6F/JYD8n+Engo4AZd0yG762Ogc98z9exy3wQ7vaDPk9rwtv31+/73/Nf+Cmgr99ALh/D3ffvr0L/VKHgn2AtAPsfBHoB+KI4XxsEG9E30+y/8PegeAAwZTmBj/ApgMhDCdC4S34AAEAoAOMF09SjQlyEV1vKBf/eqdkPKTuyocYwEK6l//fswBFpl2f9+v2GHhCWwHvDsjuV/qlQB1SK/O/4i9GZ2pH/gov3/fPXT+DLm2vxPv39+/gk704eCvoLvdu8Hw/73fvZ2Bf9W+Cj33uPCnvv6b+CI4LO+/oTxfBX0FfuguJw8FfsW7BoBb89cJe+l8b376C9i99j/qegw5va8N769f8u++Ciw7vfKih56/0MVzb/gjvsB182/4I9/UGnBNv93+X38Od6/0EuCrff9z31Sry+1567H8RwQ6C5/gj78vu7/gk9yrHi+13gy5Nr9+74Z7U6fsP8M750/QF+Fb++vp/xG/f934jhql19f4JaF76deS/8l3/EUDewF3Blye14W376/f97/gi9++Cvaffvnvgj38vhnoB36F/wT+7vu+XbxHXOfGaXffv/C17ugfYp//De/B/T+I9+wH4JegfecH1w+Cm/32Hxx65PXBPuwFkD358EN+z4Jb3t9z4ML9+rC/+pQOHgi7yh/BD2DdOvBNvsPlAvwWUu/f+Hgm777nwW+9/Xw9v0AkArD7np/4V7uwFe+h1/wRX3sPCuxd7r+/16Heba/E+/f37+F/Qe6S6AqAf8EPunXjvfvdB/BX0FoH70oeX3E8El6Fi+CS6C474K/Yt2DQC3T/Bd778vmv/BB30E/Yo7fsf5t/wxvoG09Ouw/8OX6/X8I9+9+C3m9rw3vr1/y7/qVFXgj3sN/i9+7XwR0FoGdPhvvX9hfF++8Tw3d9f1g24Jt/u/y+/hq6Xh/v5ffwx7B71+gL8P3+/ulDQX/DWw/v0/3QC4jnr6Av4c712+g65ffzegF4b71/v4v0At/qlXl9/DfulXb/z12/+bu/i/feCrk2v37+p0+CLukdPnr9D/e6D+CW6B276deCXtPugjp92FxPff550+/89bC/9+/hXfew61/8R3fv4Jb9+dPhXp2ur//Ct+9h1oB/+S7/vYX4ju78FXJ7Xhbfvr9/3v+CXQW+7nwrfvQDr7Af8Fu/fOnwzvdOkNgVD7+6X8IdAOgfviOCL319YPhfQn31QF2Nj/BXf37AX3w7YC3331oB9C/DV+ti+xeC7disPlT73/BF7v8P99+lqwvp/BLu6AfeJ14K9+w++/wYUE96eun/w73338H7f4VvsLeqC/+C6he+74Jd/f74V39hux2H/wtQaV2An1+hfv0AwR821+J9+/v38EXe58E/a2LOD4j0u/hb3vr+x/BX793+ETzUF/BRd37+g15va8N769f8u+uW9/lvwIXBNv93+X38NbB6UP6D8Ft/v5w8M762A//U4Irnr0F66pVeCGGMxzMcIzlTnMsLQ9gM+eGIAJCO5vaCEePZ/8AZewxkzEUjVL8M8oaCQtm9xAfaVaAX11i4Z/BJ7lSubv8N+67AfwV8m1+/dcEXsGnXiL/f4iwF3/vTeK7928BnQ1wMpA3QAgfdNv3+WgugFyeCCPHhOE4egAIHAMLzCHbHwhdVX6FIfhlOK9aSzVvF/TT+GUg2AA+BtwM2SmDZXhPH/XCd8NuUXcbTtbW4nB5fJgqAtgCYMMIfMLKABSJSUeN3zanjXAA3O29+iM/e4v2BGHKCjHRq6622nwHhJ9qUsoD3K5d8nfoIEMAAAACCTAAAAAMBgEHAAAkAAADAASAAAAHGiGaJD/DQIehLT/8FHsV8oFDzb/go9ie8d74Ie6bPgn9A+gGlXgs73fYCfPL8FGxd/w8EXYDfL4W96C1/YdcvYfwUb+7XKHh33793FB/+Czpun+5Vnwz0KnDQvrhH0K7+15r/xegb3/go6V90q8F3QvSf4KPYCsBvLfDHe/VgPf/DHdgK9pf7D8X77v4KPfeVPm2Kn5b/zX64Y3voTrv/wp37vvQd8w89f0H9Tgf4Le+9hYfD3p90Avl/YF89fYf89f6H4vd+g4IeS/Gc3euHPddBf8M3fPf6AZ+qVLnrsL2E+G+9PYD/gz56/Q/xG99i++lXJ6AXugewlwS396Df4Ivc6fff4Ivbd8Et/vOn1OjrwrsNgNi7v0H/yX/iLu+/4a31+gvw1fdfYX8nf7veuP0D+9/w1e9W/T/BLu/udIL+b0D8N769j/wR76VeL9isB/gjtXlSub38N2uv7FE810H+GL/oBL/QF4I9/Xy+/m9/Dl+W/p/UqXy74LuCbf7v8vv4JPYDLz4L6bAftV6C/1OD4JPeEfDHpd1+wvwXaAX0FD+CTvKnze/l9gy96B/gj7yp8EO/pw8LX+9dB/XVOvd/5N/xG+/8ENgLnSC3k0D/fv6nT6nT4i/02A3xG/sP4jve7+S7/ghvzo6930EXnrYtgP1hCSwvJ/iuGOAQ0ZNjiJbKdswwdX5btf8EO72gz5PQPwtv31+h/vf81/4KbAd++g+H8Pd9++vYD/1Sh4J9h6C7HwR6C8URwRd/PxcL4ACYAAgPgCcAD4hLOheMrypRvGF/AAD4CuoAHAWLqUWzksajcs8KwJYcbFDVCb32/JXAmHpH7uLkCABztMt/+/z9jOH4I8PfE/AColGA+3iL8fXT/r+Bf/gov3/fPXYXwZc2gf4n37+/fwSd6cPBX2A+90K8Hw/73fvZ2H/1b4KPfe48Ke+/sT+CI4LO+/pvF8FfYDv3YD4nDwV+3u0g9+euEvfYP43v32A/b99/6noMOb0D8N769j/y774KKAV3vlRQ89f6iubf8Ed9hV82/4I9/UGnBNv93+X38Od6/01wVb7/ue+qVeX0D89d/iOCHYD5/gj78vu7/gk9yrHi+gfeDLk0D/fu+Gegc6foC/DO+dP0H+Fb++vsL+I37/u/EcNWD6+x/wS0/fTryX/ku/4ik9h9wZcnoH4W376/Q/3v+CL374K9A337574I9/L4Z6Cv2A/+Cf3d93y6FiOuc+M2D779/4Wvd0uxYX/w3vwf2F8R79heCXpd5wfXD4Kb/fQC449cnrgn3YeYAD+fBDfs+CW96F3Pgwv36t//UoHDwRd5Q/gh7Tp14Jt9ALlAvwWWD79/4eCbvvufBb739fD2/QaDoBdz2F/hXu7DvfWx/4Ir72HhXb73X9D+vQ7zaB/iffv79/C/sBbsGug6F/BD7p147373YC+CvsB6XvSh5fcTwSXp4vgkuwHx3wV+3u0g90/wXe+/L5r/wQd9gN+3Hb9/zb/hjfSQN6ddAX+HL9fsf4R7978FvN6B+G99ex/5d/1KirwR70An+L37oH8EdgPSOnw33r+38X77xPDd31/Y4NuCbf7v8vv4auwfh/ofl9/DHtb1+g/w/f7+6UNP/hrQC+/YX7oPiOevoP+HO9dBdgVcvv5vQfhvvX+h+L9B7/VKvL7+G/dKugv89dBf83d/F++8FXJoH+/f1OnwRd2DOnz1+v73YC+CW6VCvp14Jegb7sBnT7oB8T33+edPof89bf/v38K770Aq2P/xHd+/glv350+FexUD6of/wrfvQCrQv/Jd/3oB/iO7vwVcnoH4W376/Q/3v+CXYD33c+Fb96Cr7F/Bbv3zp8M73TpWHXofuwf8IdBUvfEcEXvr6wfC+m++qD7v+Cu/v2H98O2HvvvrQuwH+Gr9aAf0A/Bdu3QC5U+9/wRe7/D/ffsHq39hfBLu6C7xOvBXv0Au+/wYWA3vYtdhf8O999/B+gvwrfQD3qn/8F1P33fBLv7/fCu/oBOx0Bf8LWAmDuw31+wH+/QQI+bQP8T79/fv4Iu9z4J+ge3nB8R7B9/C3vfX9/gr9+7/CJ5rAf8FF3fv6DXm9A/De+vY/8u+uW9/lvwIXBNv93+X38NbWlD+wLwW3+/nDwzvrYv/U4Irnr0/XVKrwQz0q/XJ/izAcYYgA+FpJ0MQw/+B+hujWYgt77/8AEej5Pqf//0q/svLgfgPPT//WLhHvwxyAg+66P65u/w37rsXwV8mgf791wRe0nXiL/f4iw+/97E8V37t485OAFX3up/WxjFtt/5Nu/imvj8ADL+6d0Al0HaLCZmZ194BhzQsnhThcyVULGg970HZrRxkgOkP7nwU8wvIpMfP+ust+nAAL/0ubdd/4gEyEjDuj6cn4iEImCjQC6AWluVxe+hfCG+/YDBDAAAAAIJMAAAAAwGAQcAACYAAAMABIAAAAcVIZomP8NAh6a2F/4KPbvlAoebf8FHtveO98EPdiZ8E/pdBJV4LO932G+eX4KNvv+Hgi7CfL4W97Aev6Aq5egF8FG/ugfKHh33793FgX/gs7E7F+5Vnwz06cNgP64R9O7+gfmv/F6T3/go7B33SrwXdP2Df4KPYdhPLfDHe/Vi0P/DHdh3oGv9AXi/fd/BR77yp823YvLf+a/XDG99N10P/hTv3fewFfMPPX9gX1OB/gt770A8Ph72Lug/l/Yfz19AX89f6+L3fsBQQ8l+M5u9cOe66f/DN3z3+hH6pUueu37b4b709i/gz56/X8Rvfb++wdcnoP3S0A1wS397AT/BF7nT77/BF6E74Jb/edPqdHXhXQCYTfd+wL/kv/EXd9/w1vr9P8NX3X2/5O/3e9cfpfe/4aveqC9hfgl3f3OkF/N6XhvfXv/gj30q8X7dhfgjoHeVK5vfw3QPr+gHE812Avwxf9Br/Qfgj39fL7+b38OX5b+wvqVL5d8F3BNv93+X38EnsIvPgvsTC9A69P/U4Pgk94R8Mewfdft/gu0H9gOH8EneVPm9/L7Re9L8EfeVPgh39OHha/3rsC+uqde7/yb/iN9/4IbD50gt5NL9+/qdPqdPiL/YmE+I39AL4jve7+S7/ghvzo6932Ay8OcAZ6bSYm8FDJpseLQD2Lyf+GIJ6Af4aZaXwR8ASyO8mTOeKU+CHd7QZ8npeFt++v1/e/5r/wU2FfvsBcP4e7799exf6pQ8E+gFsB9j4I9gPxRBPz8sPaeCfbfttnvsqvytnPVuQX6CUcg6gFFbeFQcdFN5p9r78s+v8n4ChCxoCvMNgHmAzZt4EPnx6tg9Xh8DcHQfFegLCsUAxYf/wYADjNelOcACpBp3dy3/8D24FGVbEr+fd8bMfvdf7ffwYyxBRNM05J5/gcp+i3qz96AEhJHACntWf///XFhjz8AN19XOrgXKJcIkJ6/On+oQ98Ec3XKbvqXF2/SNUbT+Ci/f989dv4MubS/E+/f37+CTvTh4K+wu907wfD/vd+9nQF/1b4KPfe48Ke+/tv4Ijgs77+xPF3BX2FfuwuJw8FfoW6BsBb89cJe+18b377C9C99D/qegw5vS8N769/8u++Cig7vfKih56/2MVzb/gjvoB182/4I9/UGnBNv93+X38Od6/2EuCrff9z31Sry+l566H8RwQ7C5/gj78vu7/gk9yrHi+l3gy5NL9+74Z6U6foP8M750/YF+Fb++vt/xG/f934jhq119/4JbF76deS/8l3/EWDegF3Blyel4W376/X97/gi9++CvSffvnvgj38vhnsB37F/wT+7vu+XTxHXOfGbXffv/C17uwfYt//De/B/b+I9+gH4JewfecH1w+Cm/30Hxx65PXBPugFnD358EN+z4Jb3p9z4ML9+qC/+pQOHgi7yh/BD0DdOvBNvoPlAvwWWu/f+Hgm777nwW+9/Xw9v2AmAqD7nt/4V7ugFe+x3/wRX3sPCuhd7r+v16HebS/E+/f37+F/Ye7S7ArAf8EPunXjvfvdh/BX2FsH70oeX3E8El7Fi+CS7C474K/Qt0DYC3T/Bd778vmv/BB32E/Qo7fof5t/wxvsGk9Oug/8OX6/f8I9+9+C3m9Lw3vr3/y7/qVFXgj3oN/i9+6XwR2FsGdPhvvX9BfF++8Tw3d9f3g24Jt/u/y+/hq7Xh/r5ffwx6B71+wL8P3+/ulDYX/DWg/v2/3YC4jnr7Av4c710+w65ffzewF4b71/r4v2At/qlXl9/DfulXT/z10/+bu/i/feCrk0v37+p0+CLu0dPnr9j/e7D+CW7B076deCXpPuwjp90FxPff550+v89aC/9+/hXfeg63/8R3fv4Jb9+dPhXt0uq//Ct+9B1sB/+S7/vQX4ju78FXJ6Xhbfvr9f3v+CXYW+7nwrfvYDr6Af8Fu/fOnwzvdOmNAVj6+7X8IdgOwfviOCL319YPhfYn31YF0ND/BXf36AX3w7QC3331sB9i/DV+tC+heC7dCoPlT73/BF7v8P99+1qgvt/BLu7AfeJ14K9+g++/wYWE97eu3/w73338H6f4VvoLerC/+C6xe+74Jd/f74V39Bux0H/wtYbV0An1+xfv2AwR82l+J9+/v38EXe58E/S0LOD4j2u/hb3vr+h/BX793+ETzWF/BRd37+g15vS8N769/8u+uW9/lvwIXBNv93+X38NaB6UP7D8Ft/v5w8M760A//U4Irnr2F66pV6phwMMMYAS9/2ud/wIdwD/R9f1+XuAv6xcI9+b3XN3+G/ddAP4K+TS/fuuCL0DTrxF/v8RQC7/3tvFd+74jyZgTagLTjL64dSeAmAxgoEAhEhDgrzbROUfz3lCBpoc0VBTfz63/b6+DP/YY4I6FkAALlcXOQe2f+EN9+wgQwAAAAAIJMAAAAAwGAQcAACgAAAMABIAAAAa4IZooP8NAh7Etv/wUehXygUPNv+Cj0J7x3vgh7ts+Cf2D7AaVeCzvd9AJ88vwUaF3/DwRdAN8vhb3sLX9B1y9B/BRv7pcoeHffv3cWH/4LO27f7lWfDPYqcNi+uEfYrv6Xmv/F7Bvf+CjtX3SrwXdi9p/go9AKgG8t8Md79UA9f8Md0Ar0l/oPxfvu/go995U+bQrflv/Nfrhje+xOuv/Cnfu+9h3zDz1/Yf1OB/gt770Fh8Pe33YC+X9AXz19B/z1/sfi937Dgh5L8Zzd64c912F/wzd89/sBn6pUueugvQT4b709AP+DPnr9j/Eb30L77VcnsBe7B6CXBLf3sN/gi9zp99/gi9N3wS3+86fU6OvCug0A0Lu/Yf/Jf+Iu77/hrfX7C/DV919Bfyd/u964/YP73/DV71T9v8Eu7+50gv5vYPw3vr0P/BHvpV4v0KgH+COleVK5vfw3S6/oUTzXYf4Yv+wEv9gXgj39fL7+b38OX5b+39SpfLvgu4Jt/u/y+/gk9AMvPgvtoB+lXsL/U4Pgk94R8Me13X6C/BdsBfYUP4JO8qfN7+X0DL3sH+CPvKnwQ7+nDwtf712H9dU693/k3/Eb7/wQ0AudILeTYP9+/qdPqdPiL/bQDfEb+g/iO97v5Lv+CG/Ojr3fYReetC0A/WEIXoL6B5ei/wR8ZbeXwQ7vaDPk9g/C2/fX7H+9/zX/gpoB377D4fw933769AP/VKHgn0HsLsfBHsLxRHBVsXIdyDTAenyeEYeE4Sh7ABR8EjnpDFcgCAAwAQSkUG1jH9M9TJvS56OpFNac49g7gANbMx9yqru68MOWjr6rw+5zCA/3v+Ci/f989dBfBlzbB/iffv79/BJ3pw8FfQD73YrwfD/vd+9nQf/Vvgo997jwp77+hP4Ijgs77+28XwV9AO/dAPicPBX6e6TD3564S99A/je/fQD9P31/qegw5vYPw3vr0P/LvvgosBXe+VFDz1/uK5t/wR30FXzb/gj39QacE2/3f5ffw53r/bXBVvv+576pV5fYPz11+I4IdAPn+CPvy+7v+CT3KseL7B94MuTYP9+74Z7Bzp+wL8M750/Yf4Vv76+gv4jfv+78Rw1QPr6H/BLb99OvJf+S7/iLT0H3Blyewfhbfvr9j/e/4Ivfvgr2Dffvnvgj38vhnsK/QD/4J/d33fLsWI65z4zQPvv3/ha93a7FBf/De/B/QXxHv0F4Je13nB9cPgpv99gLjj1yeuCfdB5QAP58EN+z4Jb3sXc+DC/fqn/9SgcPBF3lD+CHpOnXgm32AuUC/BZQPv3/h4Ju++58Fvvf18Pb9hsOwF3PQX+Fe7oO996H/givvYeFdPvdf2P69DvNsH+J9+/v38L+gFuga7DsX8EPunXjvfvdAL4K+gHte9KHl9xPBJe3i+CS6AfHfBX6e6TD3T/Bd778vmv/BB30A36cdv1/Nv+GN9pg3p12Bf4cv1+h/hHv3vwW83sH4b316H/l3/UqKvBHvYCf4vfuwfwR0A9o6fDfev6fxfvvE8N3fX9Dg24Jt/u/y+/hq6B+H+x+X38MelvX7D/D9/v7pQ2/+GtgL79Bfuw+I56+w/4c712F0BVy+/m9h+G+9f7H4v2Hv9Uq8vv4b90q7C/z12F/zd38X77wVcmwf79/U6fBF3QM6fPX7/vdAL4JbtWK+nXgl7BvugGdPuwHxPff550+x/z1p/+/fwrvvYCrQ//Ed37+CW/fnT4V6FYPqx//Ct+9gKti/8l3/ewH+I7u/BVyewfhbfvr9j/e/4JdAPfdz4Vv3sKvoX8Fu/fOnwzvdOnQd+x+6B/wh2Fa98RwRe+vrB8L7b76sPqv4K7+/Qf3w7Qe+++ti6Af4av1sB/YD8F26dgLlT73/BF7v8P99+geqf0F8Eu7sLvE68Fe/YC77/BhQDe9C10F/w73338H7C/Ct9gPerf/wXW/fd8Eu/v98K7+wE7HYF/wtQCQO6DfX6Af79hAj5tg/xPv39+/gi73Pgn7B6ecHxHoH38Le99f1+Cv37v8InmoB/wUXd+/oNeb2D8N769D/y765b3+W/AhcE2/3f5ffw1paUP6AvBbf7+cPDO+tC/9Tgiuevb9dUq9UqwIsMUAkAtAIAHbq+6e+lX9j8sH1S9NiK6v/6xcI9+HPddgvrm7/DfuuhfBXybB/v3XBF6SdeIv9/iKD7/3oTxXfuyfgq4II/xwVWAMRVRFU23+AEC0m283V+wqTDEHrSbZDKfcEkxypVRr3vlfnrWtUv65zX/BHT7lQhNQuTv0AwQwAAAAAIJMAAAAAwGAQcAACoAAAMABIAAAAbAIZoqP8NAh7a0F/4KPTvlAoebf8FHpveO98EPdCZ8E/tdhJV4LO930G+eX4KNPv+Hgi6CfL4W96Aev7Aq5ewF8FG/uwfKHh33793FAX/gs6E6F+5Vnwz26cNAP64R9u7+wfmv/F7T3/go6B33SrwXdv0Df4KPQdBPLfDHe/VC2P/DHdB3sGv9gXi/fd/BR77yp82nQvLf+a/XDG99t12P/hTv3fegFfMPPX9AX1OB/gt772A8Ph70Luw/l/Qfz19gX89f7+L3foBQQ8l+M5u9cOe67f/DN3z3+xH6pUueun6b4b709C/gz56/f8RvfT++gdcnsP3a2A1wS396AT/BF7nT77/BF7E74Jb/edPqdHXhXYCQSfd+gL/kv/EXd9/w1vr9v8NX3X0/5O/3e9cftfe/4averC9Bfgl3f3OkF/N7XhvfXr/gj30q8X6dBfgjsHeVK5vfw3YPr+wHE810Avwxf9hr/Yfgj39fL7+b38OX5b+gvqVL5d8F3BNv93+X38EnoIvPgvoSC9g69v/U4Pgk94R8Megfdfp/gu2H9AOH8EneVPm9/L6Re9r8EfeVPgh39OHha/3roC+uqde7/yb/iN9/4IaD50gt5Nr9+/qdPqdPiL/QkE+I39gL4jve7+S7/ghvzo6930Ay89bAehfwT2A/gAzNurW/7/Mt2o7yD4I/xZfBDu9oM+T2vC2/fX7/vf81/4KaCv30AuH8Pd9++vQv9UoeCfYC0A+x8EegH4ojgh29Pk/BgQMRkbgAGSdBxfIWWeF2fQBIAAQFUJAJQAa0XSjaqvd5Z3Lvb0DgAIRjDFOUIY0kQSYYSsm/30s9vB+DIqcwzQt+azp7jq8a0MEXA4nf3fXzhAGTPid/n+Ci/f989dP4Muba/E+/f37+CTvTh4K+gu927wfD/vd+9nYF/1b4KPfe48Ke+/pv4Ijgs77+hPF8FfQV+6C4nDwV+xbsGgFvz1wl76XxvfvoL2L32P+p6DDm9rw3vr1/y774KLDu98qKHnr/QxXNv+CO+wHXzb/gj39QacE2/3f5ffw53r/QS4Kt9/3PfVKvL7XnrsfxHBDoLn+CPvy+7v+CT3KseL7XeDLk2v37vhntTp+w/wzvnT9AX4Vv76+n/Eb9/3fiOGqXX1/gloXvp15L/yXf8RQN7AXcGXJ7Xhbfvr9/3v+CL374K9p9++e+CPfy+GegHfoX/BP7u+75dvEdc58Zpd9+/8LXu6B9in/8N78H9P4j37Afgl6B95wfXD4Kb/fYfHHrk9cE+7AWQPfnwQ37Pglve33Pgwv36sL/6lA4eCLvKH8EPYN068E2+w+UC/BZS79/4eCbvvufBb739fD2/QCQCsPuen/hXu7AV76HX/BFfew8K7F3uv7/Xod5tr8T79/fv4X9B7pLoCoB/wQ+6deO9+90H8FfQWgfvSh5fcTwSXoWL4JLoLjvgr9i3YNALdP8F3vvy+a/8EHfQT9ijt+x/m3/DG+gbT067D/w5fr9fwj3734Leb2vDe+vX/Lv+pUVeCPew3+L37tfBHQWgZ0+G+9f2F8X77xPDd31/WDbgm3+7/L7+GrpeH+/l9/DHsHvX6Avw/f7+6UNBf8NbD+/T/dALiOevoC/hzvXb6Drl9/N6AXhvvX+/i/QC3+qVeX38N+6Vdv/PXb/5u7+L994KuTa/fv6nT4Iu6R0+ev0P97oP4JboHbvp14Je0+6COn3YXE99/nnT7/z1sL/37+Fd97DrX/xHd+/glv350+Fena6v/8K372HWgH/5Lv+9hfiO7vwVcnteFt++v3/e/4JdBb7ufCt+9AOvsB/wW7986fDO906Q2BUPv7pfwh0A6B++I4IvfX1g+F9CffVAXY2P8Fd/fsBffDtgLfffWgH0L8NX62L7F4Lt2Kw+VPvf8EXu/w/336WrC+n8Eu7oB94nXgr37D77/BhQT3p66f/Dvfffwft/hW+wt6oL/4LqF77vgl39/vhXf2G7HYf/C1BpXYCfX6F+/QDBHzbX4n37+/fwRd7nwT9rYs4PiPS7+Fve+v7H8Ffv3f4RPNQX8FF3fv6DXm9rw3vr1/y765b3+W/AhcE2/3f5ffw1sHpQ/oPwW3+/nDwzvrYD/9TgiuevQXrqlXqlWLi5aItE/5YAD7eIySTkVS8GH9YuCHsRwUegLuVK5u/w37rsB/BXybX791wRewadeIv9/iLAXf+9N4rv3ZPDzIGSqgVcAApQ5J1/94dFtmEgG+POCvMuOJx/+/3wdteTNMfBPxtmZzr53/3xcUvupfT/o/4I7F3Khianyd+ggQwAAAAAgkwAAAADAYBBwAALAAAAwAEgAAABr8hmiw/w0CHoS0//BR7FfKBQ82/4KPYnvHe+CHumz4J/QPoBpV4LO932Anzy/BRsXf8PBF2A3y+Fvegtf2HXL2H8FG/u1yh4d9+/dxQf/gs6bp/uVZ8M9Cpw0L64R9Cu/tea/8XoG9/4KOlfdKvBd0L0n+Cj2ArAby3wx3v1YD3/wx3YCvaX+w/F++7+Cj33lT5tip+W/81+uGN76E67/8Kd+770HfMPPX9B/U4H+C3vvYWHw96fdAL5f2BfPX2H/PX+h+L3foOCHkvxnN3rhz3XQX/DN3z3+gGfqlS567C9hPhvvT2A/4M+ev0P8RvfYvvpVyegF7oHsJcEt/eg3+CL3On33+CL23fBLf7zp9To68K7DYDYu79B/8l/4i7vv+Gt9foL8NX3X2F/J3+73rj9A/vf8NXvVv0/wS7v7nSC/m9A/De+vY/8Ee+lXi/YrAf4I7V5Urm9/Ddrr+xRPNdB/hi/6AS/0BeCPf18vv5vfw5flv6f1Kl8u+C7gm3+7/L7+CT2Ay8+C+mwH7Vegv9Tg+CT3hHwx6XdfsL8F2gF9BQ/gk7yp83v5fYMvegf4I+8qfBDv6cPC1/vXQf11Tr3f+Tf8Rvv/BDYC50gt5NA/37+p0+p0+Iv9NgN8Rv7D+I73u/ku/4Ib86Ovd9BF562LYD/gnsL4ErePlNNagNB8EfXMuXwQ7vaDPk9A/C2/fX6H+9/zX/gpsB376D4fw933769gP/VKHgn2HoLsfBHoLxRHBDoWnyf4o6jYAHN8hZSqzKAeYuLIKmRmFzr/vwNuYAgCxUgQXOd4AQCOSYCHmukRPHa0jZgxYcKg3/CYyh8WVJUTeRjf27/pgN4TyEKJ6x/Uy7m/CXugAOk97TSqwwaSCB4I/+J3znP4KL9/3z12F8GXNoH+J9+/v38EnenDwV9gPvdCvB8P+9372dh/9W+Cj33uPCnvv7E/giOCzvv6bxfBX2A792A+Jw8Fft7tIPfnrhL32D+N799gP2/ff+p6DDm9A/De+vY/8u++CigFd75UUPPX+orm3/BHfYVfNv+CPf1BpwTb/d/l9/Dnev9NcFW+/7nvqlXl9A/PXf4jgh2A+f4I+/L7u/4JPcqx4voH3gy5NA/37vhnoHOn6AvwzvnT9B/hW/vr7C/iN+/7vxHDVg+vsf8EtP3068l/5Lv+IpPYfcGXJ6B+Ft++v0P97/gi9++CvQN9++e+CPfy+Gegr9gP/gn93fd8uhYjrnPjNg++/f+Fr3dLsWF/8N78H9hfEe/YXgl6XecH1w+Cm/30AuOPXJ64J92HmAA/nwQ37Pglvehdz4ML9+rf/1KBw8EXeUP4Ie06deCbfQC5QL8Flg+/f+Hgm777nwW+9/Xw9v0Gg6AXc9hf4V7uw731sf+CK+9h4V2+91/Q/r0O82gf4n37+/fwv7AW7BroOhfwQ+6deO9+92Avgr7Ael70oeX3E8El6eL4JLsB8d8Fft7tIPdP8F3vvy+a/8EHfYDftx2/f82/4Y30kDenXQF/hy/X7H+Ee/e/BbzegfhvfXsf+Xf9Soq8Ee9AJ/i9+6B/BHYD0jp8N96/t/F++8Tw3d9f2ODbgm3+7/L7+GrsH4f6H5ffwx7W9foP8P3+/ulDT/4a0Avv2F+6D4jnr6D/hzvXQXYFXL7+b0H4b71/ofi/Qe/1Sry+/hv3SroL/PXQX/N3fxfvvBVyaB/v39Tp8EXdgzp89fr+92AvglulQr6deCXoG+7AZ0+6AfE99/nnT6H/PW3/79/Cu+9AKtj/8R3fv4Jb9+dPhXsVA+qH/8K370Aq0L/yXf96Af4ju78FXJ6B+Ft++v0P97/gl2A993PhW/egq+xfwW7986fDO906Vh16H7sH/CHQVL3xHBF76+sHwvpvvqg+7/grv79h/fDth77760LsB/hq/WgH9APwXbt0AuVPvf8EXu/w/337B6t/YXwS7ugu8TrwV79ALvv8GFgN72LXYX/DvfffwfoL8K30A96p//BdT993wS7+/3wrv6ATsdAX/C1gJg7sN9fsB/v0ECPm0D/E+/f37+CLvc+CfoHt5wfEewffwt731/f4K/fu/wieawH/BRd37+g15vQPw3vr2P/Lvrlvf5b8CFwTb/d/l9/DW1pQ/sC8Ft/v5w8M762L/1OCK569P11Sr1SrAw1Srw3ADoSJU/X/P+uz/6xVCMOc4xAG/tP/BU/3XN3+G/ddi+Cvk0D/fuuCL2k68Rf7/EWH3/vYniu/doPSQnwAKSkc5PA1P/0oY8mCCsX/zIYbnx/lwBfwR2+5XNYuTv2AwQwAAAAAIJMAAAAAwGAQcAAC4AAAMABIAAAJZrIZouP8NAh6a2F/4KPbvlAoebf8FHtveO98EPdiZ8E/pdBJV4LO932G+eX4KNvv+Hgi7CfL4W97Aev6Aq5egF8FG/ugfKHh33793FgX/gs7E7F+5Vnwz06cNgP64R9O7+gfmv/F6T3/go7B33SrwXdP2Df4KPYdhPLfDHe/Vi0P/DHdh3oGv9AXi/fd/BR77yp823YvLf+a/XDG99N10P/hTv3fewFfMPPX9gX1OB/gt770A8Ph72Lug/l/Yfz19AX89f6+L3fsBQQ8l+M5u9cOe66f/DN3z3+hH6pUueu37b4b709i/gz56/X8Rvfb++wdcnoP3S0A1wS397AT/BF7nT77/BF6E74Jb/edPqdHXhXQCYTfd+wL/kv/EXd9/w1vr9P8NX3X2/5O/3e9cfpfe/4aveqC9hfgl3f3OkF/N6XhvfXv/gj30q8X7dhfgjoHeVK5vfw3QPr+gHE812Avwxf9Br/Qfgj39fL7+b38OX5b+wvqVL5d8F3BNv93+X38EnsIvPgvsTC9A69P/U4Pgk94R8Mewfdft/gu0H9gOH8EneVPm9/L7Re9L8EfeVPgh39OHha/3rsC+uqde7/yb/iN9/4IbD50gt5NL9+/qdPqdPiL/YmE+I39AL4jve7+S7/ghvzo6932Ay8OcI/TgDS8jF17i0A9i/gnoB/GcmgAGD4I+1l8EO72gz5PS8Lb99fr+9/zX/gpsK/fYC4fw933769i/1Sh4J9ALYD7HwR7AfiiCfie4J4A32exq6rfB/DjUgCNab7U/uu/lnyeGixAUhWNgAIAAIAYDuGII7VJE3bEbaKTgFE9MX+F8hd9fg+kr28fG/wUmsMhTvnfW4fPkPnad/B3igABrU99mr9/AGmSRZ9//d/4KL9/3z12/gy5tL8T79/fv4JO9OHgr7C73TvB8P+9372dAX/Vvgo997jwp77+2/giOCzvv7E8XwV+wr92FxOHgr9C3QNgLfnrhL32vje/fYXoXvof9T0GHN6XhvfXv/l33wUUHd75UUPPX+xiubf8Ed9AOvm3/BHv6g04Jt/u/y+/hzvX+wlwVb7/ue+qVeX0vPXQ/iOCHYXP8Effl93f8EnuVY8X0u8GXJpfv3fDPSnT9B/hnfOn7Avwrf319v+I37/u/EcNWuvv/BLYvfTryX/ku/4iwb0Au4MuT0vC2/fX6/vf8EXv3wV6T79898Ee/l8M9gO/Yv+Cf3d93y6eI65z4za779/4Wvd2D7Fv/4b34P7fxHv0A/BL2D7zg+uHwU3++g+OPXJ64J90As4e/Pghv2fBLe9PufBhfv1QX/1KBw8EXeUP4Iegbp14Jt9B8oF+Cy137/w8E3ffc+C33v6+Ht+wEwFQfc9v/Cvd0Ar32O/+CK+9h4V0Lvdf1+vQ7zaX4n37+/fwv7D3aXYFYD/gh9068d797sP4K+wtg/elDy+4ngkvYsXwSXYXHfBX6FugbAW6f4Lvffl81/4IO+wn6FHb9D/Nv+GN9g0np10H/hy/X7/hHv3vwW83peG99e/+Xf9Soq8Ee9Bv8Xv3S+COwtgzp8N96/oL4v33ieG7vr+8G3BNv93+X38NXa8P9fL7+GPQPev2Bfh+/390obC/4a0H9+3+7AXEc9fYF/Dneun2HXL7+b2AvDfev9fF+wFv9Uq8vv4b90q6f+eun/zd38X77wVcml+/f1OnwRd2jp89fsf73YfwS3YOnfTrwS9J92EdPuguJ77/POn1/nrQX/v38K770HW//iO79/BLfvzp8K9ul1X/4Vv3oOtgP/yXf96C/Ed3fgq5PS8Lb99fr+9/wS7C33c+Fb97AdfQD/gt3750+Gd7p0xoCsfX3a/hDsB2D98RwRe+vrB8L7E++rAuhof4K7+/QC++HaAW+++tgPsX4av1oX0LwXboVB8qfe/4Ivd/h/vv2tUF9v4Jd3YD7xOvBXv0H33+DCwnvb12/+He++/g/T/Ct9Bb1YX/wXWL33fBLv7/fCu/oN2Og/+FrDaugE+v2L9+wGCPm0vxPv39+/gi73Pgn6WhZwfEe138Le99f0P4K/fu/wieawv4KLu/f0GvN6XhvfXv/l31y3v8t+BC4Jt/u/y+/hrQPSh/Yfgtv9/OHhnfWgH/6nBFc9ewvXVKvVKvVKvLAIdMa//NnHB/6xVCMOeBEqzPIqdfrm7/DfuugH8FfJpfv3XBF6Bp14i/3+IoBd/723iu/dcNeACrmEPEHWQeeuEFk/foMj8PcxAMVOyfPhjBdgWp12/7Vm99Ovab/LQf8EdC7lc1vk79hAhgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTAAAAAMBgEHAAAwAAADAASAAADDLyGaMD/DQIexLb/8FHoV8oFDzb/go9Ce8d74Ie7bPgn9g+wGlXgs73fQCfPL8FGhd/w8EXQDfL4W97C1/QdcvQfwUb+6XKHh33793Fh/+Cztu3+5Vnwz2KnDYvrhH2K7+l5r/xewb3/go7V90q8F3Yvaf4KPQCoBvLfDHe/VAPX/DHdAK9Jf6D8X77v4KPfeVPm0K35b/zX64Y3vsTrr/wp37vvYd8w89f2H9Tgf4Le+9BYfD3t92Avl/QF89fQf89f7H4vd+w4IeS/Gc3euHPddhf8M3fPf7AZ+qVLnroL0E+G+9PQD/gz56/Y/xG99C++1XJ7AXuweglwS397Df4Ivc6fff4IvTd8Et/vOn1OjrwroNANC7v2H/yX/iLu+/4a31+wvw1fdfQX8nf7veuP2D+9/w1e9U/b/BLu/udIL+b2D8N769D/wR76VeL9CoB/gjpXlSub38N0uv6FE812H+GL/sBL/YF4I9/Xy+/m9/Dl+W/t/UqXy74LuCbf7v8vv4JPQDLz4L7aAfpV7C/1OD4JPeEfDHtd1+gvwXbAX2FD+CTvKnze/l9Ay97B/gj7yp8EO/pw8LX+9dh/XVOvd/5N/xG+/8ENALnSC3k2D/fv6nT6nT4i/20A3xG/oP4jve7+S7/ghvzo6932EXhzsFWhaAf8E9BfCFgCqg4PrL4Id3tBnyewfhbfvr9j/e/5r/wU0A799h8P4e7799egH/qlDwT6D2F2Pgj2F4ojhewH2GAAkbyF3TP0zPDLP4zL+Tw0fCxQyQPwAEYD+KDvJqsQtDlOhiM0b8GWO28TsD+5t2eab3Mzgk9/QRvsl9zgS35Kf3f+Ci/f989dBfBlzbB/iffv79/BJ3pw8FfQD73YrwfD/vd+9nQf/Vvgo997jwp77+hP4Ijgs77+28XwV/QDv3QD4nDwV+nukw9+euEvfQP43v30A/T99f6noMOb2D8N769D/y774KLAV3vlRQ89f7iubf8Ed9BV82/4I9/UGnBNv93+X38Od6/21wVb7/ue+qVeX2D89dfiOCHQD5/gj78vu7/gk9yrHi+wfeDLk2D/fu+Gewc6fsC/DO+dP2H+Fb++voL+I37/u/EcNUD6+h/wS2/fTryX/ku/4i09B9wZcnsH4W376/Y/3v+CL374K9g337574I9/L4Z7Cv0A/+Cf3d93y7FiOuc+M0D779/4Wvd2uxQX/w3vwf0F8R79BeCXtd5wfXD4Kb/fYC449cnrgn3QeUAD+fBDfs+CW97F3Pgwv36p//UoHDwRd5Q/gh6Tp14Jt9gLlAvwWUD79/4eCbvvufBb739fD2/YbDsBdz0F/hXu6Dvfeh/4Ir72HhXT73X9j+vQ7zbB/iffv79/C/oBboGuw7F/BD7p147373QC+CvoB7XvSh5fcTwSXt4vgkugHx3wV+nukw90/wXe+/L5r/wQd9AN+nHb9fzb/hjfaYN6ddgX+HL9fof4R7978FvN7B+G99eh/5d/1KirwR72An+L37sH8EdAPaOnw33r+n8X77xPDd31/Q4NuCbf7v8vv4augfh/sfl9/DHpb1+w/w/f7+6UNv/hrYC+/QX7sPiOevsP+HO9dhdAVcvv5vYfhvvX+x+L9h7/VKvL7+G/dKuwv89dhf83d/F++8FXJsH+/f1OnwRd0DOnz1+/73QC+CW7Vivp14Jewb7oBnT7sB8T33+edPsf89af/v38K772Aq0P/xHd+/glv350+FehWD6sf/wrfvYCrYv/Jd/3sB/iO7vwVcnsH4W376/Y/3v+CXQD33c+Fb97Cr6F/Bbv3zp8M73Tp0Hfsfugf8IdhWvfEcEXvr6wfC+2++rD6r+Cu/v0H98O0HvvvrYugH+Gr9bAf2A/BdunYC5U+9/wRe7/D/ffoHqn9BfBLu7C7xOvBXv2Au+/wYUA3vQtdBf8O999/B+wvwrfYD3q3/8F1v33fBLv7/fCu/sBOx2Bf8LUAkDug31+gH+/YQI+bYP8T79/fv4Iu9z4J+wennB8R6B9/C3vfX9fgr9+7/CJ5qAf8FF3fv6DXm9g/De+vQ/8u+uW9/lvwIXBNv93+X38NaWlD+gLwW3+/nDwzvrQv/U4Irnr2/XVKvVKvVKrCHLBEUrO/6xVDMOeAGJu6/f1AIlXReubv8N+66F8FfJsH+/dcEXpJ14i/3+IoPv/ehPFd+6eAgYIuAICRe/Rn4XyIDr4e4AmXV6fxlCA+gr9U//lsBfwR0+5XNQuTv0AwQwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgkwAAAADAYBBwAAMgAAAwAEgAAAwy8hmjI/w0CHtrQX/go9O+UCh5t/wUem9473wQ90JnwT+12ElXgs73fQb55fgo0+/4eCLoJ8vhb3oB6/sCrl7AXwUb+7B8oeHffv3cUBf+CzoToX7lWfDPbpw0A/rhH27v7B+a/8XtPf+CjoHfdKvBd2/QN/go9B0E8t8Md79ULY/8Md0Hewa/2BeL9938FHvvKnzadC8t/5r9cMb323XY/+FO/d96AV8w89f0BfU4H+C3vvYDw+HvQu7D+X9B/PX2Bfz1/v4vd+gFBDyX4zm71w57rt/8M3fPf7EfqlS566fpvhvvT0L+DPnr9/xG99P76B1yew/drYDXBLf3oBP8EXudPvv8EXsTvglv950+p0deFdgJBJ936Av+S/8Rd33/DW+v2/w1fdfT/k7/d71x+197/hq96sL0F+CXd/c6QX83teG99ev+CPfSrxfp0F+COwd5Urm9/Ddg+v7AcTzXQC/DF/2Gv9h+CPf18vv5vfw5flv6C+pUvl3wXcE2/3f5ffwSegi8+C+hIL2Dr2/9Tg+CT3hHwx6B91+n+C7Yf0A4fwSd5U+b38vpF72vwR95U+CHf04eFr/eugL66p17v/Jv+I33/ghoPnSC3k2v37+p0+p0+Iv9CQT4jf2AviO97v5Lv+CG/Ojr3fQDLw52VbAehfwT2A/oBYPrL4Id3tBnye14W376/f97/mv/BTQV++gFw/h7vv316F/qlDwT7AWgH2Pgj0A/FEE/8cwT2FwAZgYXkLWt/4Bjzdahcv/DSlU/F18D/88+xTw/AARj+5ZZtJZTdb+odhkcAkBl/vTQQ+WHuVOl/3f+Ci/f989dP4Muba/E+/f37+CTvTh4K+gu927wfD/vd+9nYF/1b4KPfe48Ke+/pv4Ijgs/vv6E8XwV/0FfuguJw8FfsW7BoBb89cJe+l8b376C9i99j/qegw5va8N769f8u++Ciw7vfKih56/0MVzb/gjvsB182/4I9/UGnBNv93+X38Od6/0EuCrff9z31Sry+1567H8RwQ6C5/gj78vu7/gk9yrHi+13gy5Nr9+74Z7U6fsP8M750/QF+Fb++vp/xG/f934jhql19f4JaF76deS/8l3/EUDewF3Blye14W376/f97/gi9++Cvaffvnvgj38vhnoB36F/wT+7vu+XbxHXOfGaXffv/C17ugfYp//De/B/T+I9+wH4JegfecH1w+Cm/32Hxx65PXBPuwFkD358EN+z4Jb3t9z4ML9+rC/+pQOHgi7yh/BD2DdOvBNvsPlAvwWUu/f+Hgm777nwW+9/Xw9v0AkArD7np/4V7uwFe+h1/wRX3sPCuxd7r+/16Heba/E+/f37+F/Qe6S6AqAf8EPunXjvfvdB/BX0FoH70oeX3E8El6Fi+CS6C474K/Yt2DQC3T/Bd778vmv/BB30E/Yo7fsf5t/wxvoG09Ouw/8OX6/X8I9+9+C3m9rw3vr1/y7/qVFXgj3sN/i9+7XwR0FoGdPhvvX9hfF++8Tw3d9f1g24Jt/u/y+/hq6Xh/v5ffwx7B71+gL8P3+/ulDQX/DWw/v0/3QC4jnr6Av4c712+g65ffzegF4b71/v4v0At/qlXl9/DfulXb/z12/+bu/i/feCrk2v37+p0+CLukdPnr9D/e6D+CW6B276deCXtPugjp92FxPff550+/89bC/9+/hXfew61/8R3fv4Jb9+dPhXp2ur//Ct+9h1oB/+S7/vYX4ju78FXJ7Xhbfvr9/3v+CXQW+7nwrfvQDr7Af8Fu/fOnwzvdOkNgVD7+6X8IdAOgfviOCL319YPhfQn31QF2Nj/BXf37AX3w7YC3331oB9C/DV+ti+xeC7disPlT73/BF7v8P99+lqwvp/BLu6AfeJ14K9+w++/wYUE96eun/w73338H7f4VvsLeqC/+C6he+74Jd/f74V39hux2H/wtQaV2An1+hfv0AwR821+J9+/v38EXe58E/a2LOD4j0u/hb3vr+x/BX793+ETzUF/BRd37+g15va8N769f8u+uW9/lvwIXBNv93+X38NbB6UP6D8Ft/v5w8M762A//U4Irnr0F66pV6pV6pV5bIFN9/WKoRqlXhuABiaa9a2D0QqPKuEotkWSbf97yi4AB9PVyn334ADy9pPreg/N3+G/ddgP4K+Ta/fuuCL2DTrxF/v8RYC7/3pvFd+6gIGI5CD4PyPj+STC2V/5bD/gjsXcrmp8nfoIEMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIJMAAAAAwGAQcAADQAAAMABIAAAMMvIZo0P8NAh6EtP/wUexXygUPNv+Cj2J7x3vgh7ps+Cf0D6AaVeCzvd9gJ88vwUbF3/DwRdgN8vhb3oLX9h1y9h/BRv7tcoeHffv3cUH/4LOm6f7lWfDPQqcNC+uEfQrv7Xmv/F6Bvf+CjpX3SrwXdC9J/go9gKwG8t8Md79WA9/8Md2Ar2l/sPxfvu/go995U+bYqflv/Nfrhje+hOu//Cnfu+9B3zDz1/Qf1OB/gt772Fh8Pen3QC+X9gXz19h/z1/ofi936Dgh5L8Zzd64c910F/wzd89/oBn6pUueuwvYT4b709gP+DPnr9D/Eb32L76VcnoBe6B7CXBLf3oN/gi9zp99/gi9t3wS3+86fU6OvCuw2A2Lu/Qf/Jf+Iu77/hrfX6C/DV919hfyd/u964/QP73/DV71b9P8Eu7+50gv5vQPw3vr2P/BHvpV4v2KwH+CO1eVK5vfw3a6/sUTzXQf4Yv+gEv9AXgj39fL7+b38OX5b+n9SpfLvgu4Jt/u/y+/gk9gMvPgvpsB+1XoL/U4Pgk94R8Mel3X7C/BdoBfQUP4JO8qfN7+X2DL3oH+CPvKnwQ7+nDwtf710H9dU693/k3/Eb7/wQ2AudILeTQP9+/qdPqdPiL/TYDfEb+w/iO97v5Lv+CG/Ojr3fQReeti2A/4IrC8H1l8EO72gz5PQPwtv31+h/vf81/4KbAd++g+H8Pd9++vYD/1Sh4J9h6C7HwR6C8UQT/w1C9APgCESHIcZptTasWlbGaKN5/9OzcFcAIGX2efvQ+lS3d3Anf/2mjdHcBF93/gov3/fPXYXwZc2gf4n37+/fwSd6cPBX2A+90K8Hw/73fvZ2H/1b4KPfe48Ke+/sT+CI4LPvv6bxfBX/YDv3YD4nDwV+3u0g9+euEvfYP43v32A/b99/6noMOb0D8N769j/y774KKAV3vlRQ89f6iubf8Ed9hV82/4I9/UGnBNv93+X38Od6/01wVb7/ue+qVeX0D89d/iOCHYD5/gj78vu7/gk9yrHi+gfeDLk0D/fu+Gegc6foC/DO+dP0H+Fb++vsL+I37/u/EcNWD6+x/wS0/fTryX/ku/4ik9h9wZcnoH4W376/Q/3v+CL374K9A337574I9/L4Z6Cv2A/+Cf3d93y6FiOuc+M2D779/4Wvd0uxYX/w3vwf2F8R79heCXpd5wfXD4Kb/fQC449cnrgn3YeYAD+fBDfs+CW96F3Pgwv36t//UoHDwRd5Q/gh7Tp14Jt9ALlAvwWWD79/4eCbvvufBb739fD2/QaDoBdz2F/hXu7DvfWx/4Ir72HhXb73X9D+vQ7zaB/iffv79/C/sBbsGug6F/BD7p147373YC+CvsB6XvSh5fcTwSXp4vgkuwHx3wV+3u0g90/wXe+/L5r/wQd9gN+3Hb9/zb/hjfSQN6ddAX+HL9fsf4R7978FvN6B+G99ex/5d/1KirwR70An+L37oH8EdgPSOnw33r+38X77xPDd31/Y4NuCbf7v8vv4auwfh/ofl9/DHtb1+g/w/f7+6UNP/hrQC+/YX7oPiOevoP+HO9dBdgVcvv5vQfhvvX+h+L9B7/VKvL7+G/dKugv89dBf83d/F++8FXJoH+/f1OnwRd2DOnz1+v73YC+CW6VCvp14Jegb7sBnT7oB8T33+edPof89bf/v38K770Aq2P/xHd+/glv350+FexUD6of/wrfvQCrQv/Jd/3oB/iO7vwVcnoH4W376/Q/3v+CXYD33c+Fb96Cr7F/Bbv3zp8M73TpWHXofuwf8IdBUvfEcEXvr6wfC+m++qD7v+Cu/v2H98O2HvvvrQuwH+Gr9aAf0A/Bdu3QC5U+9/wRe7/D/ffsHq39hfBLu6C7xOvBXv0Au+/wYWA3vYtdhf8O999/B+gvwrfQD3qn/8F1P33fBLv7/fCu/oBOx0Bf8LWAmDuw31+wH+/QQI+bQP8T79/fv4Iu9z4J+ge3nB8R7B9/C3vfX9/gr9+7/CJ5rAf8FF3fv6DXm9A/De+vY/8u+uW9/lvwIXBNv93+X38NbWlD+wLwW3+/nDwzvrYv/U4Irnr0/XBHS6VeqVeqVeEuAkFlN+BED9BiSm+IM/1iqEapVN/nQYvh2ADmlpFD7e7waMg0dSIik8IkJQuEuAAd0rMyRj4PRZTjUt+Jjh71xBOoqwYcweTOBNvP9yevzd/hv3XYvgr5NA/37rgi9pOvEX+/xFh9/72J4rv38nlp74HbaPzX/loBfwR2+5XNYuTv2AwQwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTAAAAAMBgEHAAA2AAADAASAAADDLyGaNj/DQIemthf+Cj275QKHm3/BR7b3jvfBD3YmfBP6XQSVeCzvd9hvnl+Cjb7/h4Iuwny+FvewHr+gKuXoBfBRv7oHyh4d9+/dxYF/4LOxOxfuVZ8M9OnDYD+uEfTu/oH5r/xek9/4KOwd90q8F3T9g3+Cj2HYTy3wx3v1YtD/wx3Yd6Br/QF4v33fwUe+8qfNt2Ly3/mv1wxvfTddD/4U7933sBXzDz1/YF9Tgf4Le+9APD4e9i7oP5f2H89fQF/PX+vi937AUEPJfjObvXDnuun/wzd89/oR+qVLnrt+2+G+9PYv4M+ev1/Eb32/vsHXJ6D90tANcEt/ewE/wRe50++/wRehO+CW/3nT6nR14V0AmE33fsC/5L/xF3ff8Nb6/T/DV919v+Tv93vXH6X3v+Gr3qgvYX4Jd39zpBfzel4b317/4I99KvF+3YX4I6B3lSub38N0D6/oBxPNdgL8MX/Qa/0H4I9/Xy+/m9/Dl+W/sL6lS+XfBdwTb/d/l9/BJ7CLz4L7EwvQOvT/1OD4JPeEfDHsH3X7f4LtB/YDh/BJ3lT5vfy+0XvS/BH3lT4Id/Th4Wv967AvrqnXu/8m/4jff+CGw+dILeTS/fv6nT6nT4i/2JhPiN/QC+I73u/ku/4Ib86Ovd9gMvDnAi3Dj+QjBuwxITrloB7F/BFQD8H1l8EO72gz5PS8Lb99fr+9/zX/gpsK/fYC4fw933769i/1Sh4J9ALYD7HwR7AfiiCfwhhCF4FDUqqvuD9kAGL19L32v6Qgbz76IDv7P8IQAJ9tmeYfVVAkDvePfors9jv7v/BRfv++eu38GXNpfiffv79/BJ3pw8FfYXe6d4Ph/3u/ezoC/6t8FHvvceFPff238ERwWfvv7E8XwV/2FfuwuJw8FfoW6BsBb89cJe+18b377C9C99D/qegw5vS8N769/8u++Cig7vfKih56/2MVzb/gjvoB182/4I9/UGnBNv93+X38Od6/2EuCrff9z31Sry+l566H8RwQ7C5/gj78vu7/gk9yrHi+l3gy5NL9+74Z6U6foP8M750/YF+Fb++vt/xG/f934jhq119/4JbF76deS/8l3/EWDegF3Blyel4W376/X97/gi9++CvSffvnvgj38vhnsB37F/wT+7vu+XTxHXOfGbXffv/C17uwfYt//De/B/b+I9+gH4JewfecH1w+Cm/30Hxx65PXBPugFnD358EN+z4Jb3p9z4ML9+qC/+pQOHgi7yh/BD0DdOvBNvoPlAvwWWu/f+Hgm777nwW+9/Xw9v2AmAqD7nt/4V7ugFe+x3/wRX3sPCuhd7r+v16HebS/E+/f37+F/Ye7S7ArAf8EPunXjvfvdh/BX2FsH70oeX3E8El7Fi+CS7C474K/Qt0DYC3T/Bd778vmv/BB32E/Qo7fof5t/wxvsGk9Oug/8OX6/f8I9+9+C3m9Lw3vr3/y7/qVFXgj3oN/i9+6XwR2FsGdPhvvX9BfF++8Tw3d9f3g24Jt/u/y+/hq7Xh/r5ffwx6B71+wL8P3+/ulDYX/DWg/v2/3YC4jnr7Av4c710+w65ffzewF4b71/r4v2At/qlXl9/DfulXT/z10/+bu/i/feCrk0v37+p0+CLu0dPnr9j/e7D+CW7B076deCXpPuwjp90FxPff550+v89aC/9+/hXfeg63/8R3fv4Jb9+dPhXt0uq//Ct+9B1sB/+S7/vQX4ju78FXJ6Xhbfvr9f3v+CXYW+7nwrfvYDr6Af8Fu/fOnwzvdOmNAVj6+7X8IdgOwfviOCL319YPhfYn31YF0ND/BXf36AX3w7QC3331sB9i/DV+tC+heC7dCoPlT73/BF7v8P99+1qgvt/BLu7AfeJ14K9+g++/wYWE97eu3/w73338H6f4VvoLerC/+C6xe+74Jd/f74V39Bux0H/wtYbV0An1+xfv2AwR82l+J9+/v38EXe58E/S0LOD4j2u/hb3vr+h/BX793+ETzWF/BRd37+g15vS8N769/8u+uW9/lvwIXBNv93+X38NaB6UP7D8Ft/v5w8M760A//U4Irnr2F/mzkH8EcxLpV6pV6pV5OEXwABI5iaSlOJy/DPmAkKI0pLRN56lNf1Au9gROG/ACAKSE4uLM8uz5S/zd/hv3XQD+Cvk0v37rgi9A068Rf7/EUAu/97bxXfv4jzAzHWj99JgLzX/loP+COhdyua3yd+wgQwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAgkwAAAADAYBBwAAOAAAAwAEgAAAwy8hmjg/w0CHsS2//BR6FfKBQ82/4KPQnvHe+CHu2z4J/YPsBpV4LO930Anzy/BRoXf8PBF0A3y+Fvewtf0HXL0H8FG/ulyh4d9+/dxYf/gs7bt/uVZ8M9ipw2L64R9iu/pea/8XsG9/4KO1fdKvBd2L2n+Cj0AqAby3wx3v1QD1/wx3QCvSX+g/F++7+Cj33lT5tCt+W/81+uGN77E66/8Kd+772HfMPPX9h/U4H+C3vvQWHw97fdgL5f0BfPX0H/PX+x+L3fsOCHkvxnN3rhz3XYX/DN3z3+wGfqlS566C9BPhvvT0A/4M+ev2P8RvfQvvtVyewF7sHoJcEt/ew3+CL3On33+CL03fBLf7zp9To68K6DQDQu79h/8l/4i7vv+Gt9fsL8NX3X0F/J3+73rj9g/vf8NXvVP2/wS7v7nSC/m9g/De+vQ/8Ee+lXi/QqAf4I6V5Urm9/DdLr+hRPNdh/hi/7AS/2BeCPf18vv5vfw5flv7f1Kl8u+C7gm3+7/L7+CT0Ay8+C+2gH6Vewv9Tg+CT3hHwx7XdfoL8F2wF9hQ/gk7yp83v5fQMvewf4I+8qfBDv6cPC1/vXYf11Tr3f+Tf8Rvv/BDQC50gt5Ng/37+p0+p0+Iv9tAN8Rv6D+I73u/ku/4Ib86Ovd9hF4c4dXL1oWgH/BFQXg+svgh3e0GfJ7B+Ft++v2P97/mv/BTQDv32Hw/h7vv316Af+qUPBPoPYXY+CPYXiiCf5DhSNwAPr/6Vb//1oBmhyFYUlH8eSCBQ4AF5Ci6lIdlI+/6hCdEnd/X1//f/CKwH2nTLCdRGyn8Ae1213et8Id3us3e/3f+Ci/f989dBfBlzbB/iffv79/BJ3pw8FfQD73YrwfD/vd+9nQf/Vvgo997jwp77+hP4Ijgs++/tvF8FfoB37oB8Th4K/T3SYe/PXCXvoH8b376Afp++v9T0GHN7B+G99eh/5d98FFgK73yooeev9xXNv+CO+gq+bf8Ee/qDTgm3+7/L7+HO9f7a4Kt9/3PfVKvL7B+euvxHBDoB8/wR9+X3d/wSe5VjxfYPvBlybB/v3fDPYOdP2BfhnfOn7D/Ct/fX0F/Eb9/3fiOGqB9fQ/4Jbfvp15L/yXf8Raeg+4MuT2D8Lb99fsf73/BF798Fewb79898Ee/l8M9hX6Af/BP7u+75dixHXOfGaB99+/8LXu7XYoL/4b34P6C+I9+gvBL2u84Prh8FN/vsBcceuT1wT7oPKAB/Pghv2fBLe9i7nwYX79U//qUDh4Iu8ofwQ9J068E2+wFygX4LKB9+/8PBN333Pgt97+vh7fsNh2Au56C/wr3dB3vvQ/8EV97Dwrp97r+x/Xod5tg/xPv39+/hf0At0DXYdi/gh9068d797oBfBX0A9r3pQ8vuJ4JL28XwSXQD474K/T3SYe6f4Lvffl81/4IO+gG/Tjt+v5t/wxvtMG9OuwL/Dl+v0P8I9+9+C3m9g/De+vQ/8u/6lRV4I97AT/F792D+COgHtHT4b71/T+L994nhu76/ocG3BNv93+X38NXQPw/2Py+/hj0t6/Yf4fv9/dKG3/w1sBffoL92HxHPX2H/DneuwugKuX383sPw33r/Y/F+w9/qlXl9/DfulXYX+euwv+bu/i/feCrk2D/fv6nT4Iu6BnT56/f97oBfBLdqxX068EvYN90Azp92A+J77/POn2P+etP/37+Fd97AVaH/4ju/fwS3786fCvQrB9WP/4Vv3sBVsX/ku/72A/xHd34KuT2D8Lb99fsf73/BLoB77ufCt+9hV9C/gt3750+Gd7p06Dv2P3QP+EOwrXviOCL319YPhfbffVh9V/BXf36D++HaD3331sXQD/DV+tgP7Afgu3TsBcqfe/4Ivd/h/vv0D1T+gvgl3dhd4nXgr37AXff4MKAb3oWugv+He++/g/YX4VvsB71b/+C6377vgl39/vhXf2AnY7Av+FqASB3Qb6/QD/fsIEfNsH+J9+/v38EXe58E/YPTzg+I9A+/hb3vr+vwV+/d/hE81AP+Ci7v39BrzewfhvfXof+XfXLe/y34ELgm3+7/L7+GtLSh/QF4Lb/fzh4Z31oX/qcEVz17f+LzkHOQf6pV6pV6pVR+TjvoXvgAnjEnxxXc1fgmnYlbqPmwjw3ooErdvrX9Avm7/DfuuhfBXybB/v3XBF6SdeIv9/iKD7/3oTxXfv75Bkl+/Yfmv/LYC/gjp9yuahcnfoBghgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIJMAAAAAwGAQcAADoAAAMABIAAAMMvIZo6P8NAh7a0F/4KPTvlAoebf8FHpveO98EPdCZ8E/tdhJV4LO930G+eX4KNPv+Hgi6CfL4W96Aev7Aq5ewF8FG/uwfKHh33793FAX/gs6E6F+5Vnwz26cNAP64R9u7+wfmv/F7T3/go6B33SrwXdv0Df4KPQdBPLfDHe/VC2P/DHdB3sGv9gXi/fd/BR77yp82nQvLf+a/XDG99t12P/hTv3fegFfMPPX9AX1OB/gt772A8Ph70Luw/l/Qfz19gX89f7+L3foBQQ8l+M5u9cOe67f/DN3z3+xH6pUueun6b4b709C/gz56/f8RvfT++gdcnsP3a2A1wS396AT/BF7nT77/BF7E74Jb/edPqdHXhXYCQSfd+gL/kv/EXd9/w1vr9v8NX3X0/5O/3e9cftfe/4averC9Bfgl3f3OkF/N7XhvfXr/gj30q8X6dBfgjsHeVK5vfw3YPr+wHE810Avwxf9hr/Yfgj39fL7+b38OX5b+gvqVL5d8F3BNv93+X38EnoIvPgvoSC9g69v/U4Pgk94R8Megfdfp/gu2H9AOH8EneVPm9/L6Re9r8EfeVPgh39OHha/3roC+uqde7/yb/iN9/4IaD50gt5Nr9+/qdPqdPiL/QkE+I39gL4jve7+S7/ghvzo6930Ay89bAehfwRWA/B9ZfBDu9oM+T2vC2/fX7/vf81/4KaCv30AuH8Pd9++vQv9UoeCfYC0A+x8EegH4og12uOiVxkwAIgviFlL2ZfABMxXABwSfvWDBMwJSbC3EYOwXucNdtO9BP2JclsA7lzdiip98r7q//0GaN3YNoA4NSGWKXWRlgMiCg7AAQG2uJbe9YpEcOgA7nRGlnvf/9Pwh3d9T7/d/4KL9/3z10/gy5tr8T79/fv4JO9OHgr6C73bvB8P+9372dgX/Vvgo997jwp77+m/giOCz++/oTxfBX0FfuguJw8FfsW7BoBb89cJe+l8b376C9i99j/qegw5va8N769f8u++Ciw7vfKih56/0MVzb/gjvsB182/4I9/UGnBNv93+X38Od6/0EuCrff9z31Sry+1567H8RwQ6C5/gj78vu7/gk9yrHi+13gy5Nr9+74Z7U6fsP8M750/QF+Fb++vp/xG/f934jhql19f4JaF76deS/8l3/EUDewF3Blye14W376/f97/gi9++Cvaffvnvgj38vhnoB36F/wT+7vu+XbxHXOfGaXffv/C17ugfYp//De/B/T+I9+wH4JegfecH1w+Cm/32Hxx65PXBPuwFkD358EN+z4Jb3t9z4ML9+rC/+pQOHgi7yh/BD2DdOvBNvsPlAvwWUu/f+Hgm777nwW+9/Xw9v0AkArD7np/4V7uwFe+h1/wRX3sPCuxd7r+/16Heba/E+/f37+F/Qe6S6AqAf8EPunXjvfvdB/BX0FoH70oeX3E8El6Fi+CS6C474K/Yt2DQC3T/Bd778vmv/BB30E/Yo7fsf5t/wxvoG09Ouw/8OX6/X8I9+9+C3m9rw3vr1/y7/qVFXgj3sN/i9+7XwR0FoGdPhvvX9hfF++8Tw3d9f1g24Jt/u/y+/hq6Xh/v5ffwx7B71+gL8P3+/ulDQX/DWw/v0/3QC4jnr6Av4c712+g65ffzegF4b71/v4v0At/qlXl9/DfulXb/z12/+bu/i/feCrk2v37+p0+CLukdPnr9D/e6D+CW6B276deCXtPugjp92FxPff550+/89bC/9+/hXfew61/8R3fv4Jb9+dPhXp2ur//Ct+9h1oB/+S7/vYX4ju78FXJ7Xhbfvr9/3v+CXQW+7nwrfvQDr7Af8Fu/fOnwzvdOkNgVD7+6X8IdAOgfviOCL319YPhfQn31QF2Nj/BXf37AX3w7YC3331oB9C/DV+ti+xeC7disPlT73/BF7v8P99+lqwvp/BLu6AfeJ14K9+w++/wYUE96eun/w73338H7f4VvsLeqC/+C6he+74Jd/f74V39hux2H/wtQaV2An1+hfv0AwR821+J9+/v38EXe58E/a2LOD4j0u/hb3vr+x/BX793+ETzUF/BRd37+g15va8N769f8u+uW9/lvwIXBNv93+X38NbB6UP6D8Ft/v5w8M762A//U4Irnr0F/lnIP9Uq9Uq9UqTxMEvhoQgrRLG+uNgohHnVgf0oDtXwEfTMKur0PmJZYUKm20096Vebv8N+67AfwV8m1+/dcEXsGnXiL/f4iwF3/vTeK4j344199xH79ALzX/lsP+COxdyuanyd+ggQwAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACCTAAAAAMBgEHAAA8AAADAASAAADDLyGaPD/DQIehLT/8FHsV8oFDzb/go9ie8d74Ie6bPgn9A+gGlXgs73fYCfPL8FGxd/w8EXYDfL4W96C1/YdcvYfwUb+7XKHh33793FB/+Czpun+5Vnwz0KnDQvrhH0K7+15r/xegb3/go6V90q8F3QvSf4KPYCsBvLfDHe/VgPf/DHdgK9pf7D8X77v4KPfeVPm2Kn5b/zX64Y3voTrv/wp37vvQd8w89f0H9Tgf4Le+9hYfD3p90Avl/YF89fYf89f6H4vd+g4IeS/Gc3euHPddBf8M3fPf6AZ+qVLnrsL2E+G+9PYD/gz56/Q/xG99i++lXJ6AXugewlwS396Df4Ivc6fff4Ivbd8Et/vOn1OjrwrsNgNi7v0H/yX/iLu+/4a31+gvw1fdfYX8nf7veuP0D+9/w1e9W/T/BLu/udIL+b0D8N769j/wR76VeL9isB/gjtXlSub38N2uv7FE810H+GL/oBL/QF4I9/Xy+/m9/Dl+W/p/UqXy74LuCbf7v8vv4JPYDLz4L6bAftV6C/1OD4JPeEfDHpd1+wvwXaAX0FD+CTvKnze/l9gy96B/gj7yp8EO/pw8LX+9dB/XVOvd/5N/xG+/8ENgLnSC3k0D/fv6nT6nT4i/02A3xG/sP4jve7+S7/ghvzo6930EXnrYtgP+CKwvB9ZfBDu9oM+T0D8Lb99fof73/Nf+CmwHfvoPh/D3ffvr2A/9UoeCfYegux8EegvFEIQOw7AAtipObofHeZArttt/5//+8OjuosN10CLUMBtYgWmk9IqR0Pf+D8CeuTjuimGP8Id3egb7/d/4KL9/3z12F8GXNoH+J9+/v38EnenDwV9gPvdCvB8P+9372dh/9W+Cj33uPCnvv7E/giOCzvv6bxfBX2A792A+Jw8Fft7tIPfnrhL32D+N799gP2/ff+p6DDm9A/De+vY/8u++CigFd75UUPPX+orm3/BHfYVfNv+CPf1BpwTb/d/l9/Dnev9NcFW+/7nvqlXl9A/PXf4jgh2A+f4I+/L7u/4JPcqx4voH3gy5NA/37vhnoHOn6AvwzvnT9B/hW/vr7C/iN+/7vxHDVg+vsf8EtP3068l/5Lv+IpPYfcGXJ6B+Ft++v0P97/gi9++CvQN9++e+CPfy+Gegr9gP/gn93fd8uhYjrnPjNg++/f+Fr3dLsWF/8N78H9hfEe/YXgl6XecH1w+Cm/30AuOPXJ64J92HmAA/nwQ37Pglvehdz4ML9+rf/1KBw8EXeUP4Ie06deCbfQC5QL8Flg+/f+Hgm777nwW+9/Xw9v0Gg6AXc9hf4V7uw731sf+CK+9h4V2+91/Q/r0O82gf4n37+/fwv7AW7BroOhfwQ+6deO9+92Avgr7Ael70oeX3E8El6eL4JLsB8d8Fft7tIPdP8F3vvy+a/8EHfYDftx2/f82/4Y30kDenXQF/hy/X7H+Ee/e/BbzegfhvfXsf+Xf9Soq8Ee9AJ/i9+6B/BHYD0jp8N96/t/F++8Tw3d9f2ODbgm3+7/L7+GrsH4f6H5ffwx7W9foP8P3+/ulDT/4a0Avv2F+6D4jnr6D/hzvXQXYFXL7+b0H4b71/ofi/Qe/1Sry+/hv3SroL/PXQX/N3fxfvvBVyaB/v39Tp8EXdgzp89fr+92AvglulQr6deCXoG+7AZ0+6AfE99/nnT6H/PW3/79/Cu+9AKtj/8R3fv4Jb9+dPhXsVA+qH/8K370Aq0L/yXf96Af4ju78FXJ6B+Ft++v0P97/gl2A993PhW/egq+xfwW7986fDO906Vh16H7sH/CHQVL3xHBF76+sHwvpvvqg+7/grv79h/fDth77760LsB/hq/WgH9APwXbt0AuVPvf8EXu/w/337B6t/YXwS7ugu8TrwV79ALvv8GFgN72LXYX/DvfffwfoL8K30A96p//BdT993wS7+/3wrv6ATsdAX/C1gJg7sN9fsB/v0ECPm0D/E+/f37+CLvc+CfoHt5wfEewffwt731/f4K/fu/wieawH/BRd37+g15vQPw3vr2P/Lvrlvf5b8CFwTb/d/l9/DW1pQ/sC8Ft/v5w8M762L/1OCK4YwCHNb6ABde6KMR64HoHi5rsNP11Sr1Sr1SpE/C/wRcs2BdfBRkAAOAHVLSbD/uuL6Vebv8N+67F8FfJoH+/dcEXtJ14i/3+IsPv/exPFVEWw0Sz3iW7wP5gMGMLR0MowVxHoPmp5r/y0Av4I7fcrmsXJ37AYIYAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADSG1vb3YAAABsbXZoZAAAAADegIIC3oCCAgAAdTAAAHkXAAEAAAEAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAIAAAKPdHJhawAAAFx0a2hkAAAAAd6AggLegIICAAAAAQAAAAAAAHkXAAAAAAAAAAAAAAAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAQAAAAAAAAAAAAAAAAAAQAAAAARgAAABUAAAAAACK21kaWEAAAAgbWRoZAAAAADegIIC3oCCAgAAdTAAAHkXVcQAAAAAAC1oZGxyAAAAAAAAAAB2aWRlAAAAAAAAAAAAAAAAVmlkZW9IYW5kbGVyAAAAAdZtaW5mAAAAFHZtaGQAAAABAAAAAAAAAAAAAAAkZGluZgAAABxkcmVmAAAAAAAAAAEAAAAMdXJsIAAAAAEAAAGWc3RibAAAAKJzdHNkAAAAAAAAAAEAAACSYXZjMQAAAAAAAAABAAAAAAAAAAAAAAAAAAAAAARgAVAASAAAAEgAAAAAAAAAAQpBVkMgQ29kaW5nAAAAAAAAAAAAAAAAAAAAAAAAAAAAABj//wAAADxhdmNDAUJAH//hACQnQkAflaARgrsBQIAAAAMAgAAAHnQgAFuMAABAFk3vfB2hwyoBAAUozjyAAAAAABhzdHRzAAAAAAAAAAEAAAAfAAAD6AAAABxzdHNjAAAAAAAAAAEAAAABAAAAHwAAAAEAAACQc3RzegAAAAAAAAAAAAAAHwAA6GMAAApLAAAQgQAAGEYAAAveAAAI9gAACJEAAAgIAAAIJAAAB8EAAAhjAAAH5gAACD0AAAfSAAAHygAAB8UAAAfeAAAHRgAABzQAAAcvAAAG0gAABtoAAAbZAACWhQAAw0kAAMNJAADDSQAAw0kAAMNJAADDSQAAw0kAAAAUc3RjbwAAAAAAAAABAAAAUAAAABRzdHNzAAAAAAAAAAEAAAABAAAARXVkdGEAAAA1bWV0YQAAAAAAAAAhaGRscgAAAAAAAAAAbWRpcgAAAAAAAAAAAAAAAAAAAAAIaWxzdAAAAAhYdHJhUEsHCJt/Y/DWowcAAAAAANajBwAAAAAAUEsDBC0ACAAIAAKDkFQAAAAAAAAAAAAAAAATAAAAW0NvbnRlbnRfVHlwZXNdLnhtbG2Oyw6CMBBFf6WZPQwaY4yhsPDxBfgBTRlKlT5CK8G/t8DOuJwz98ydsp7NwCYag3aWwy4vgJGVrtVWcXg09+wEdVU2H0+BpagNHPoY/RkxyJ6MCLnzZNOmc6MRMY2jQi/kSyjCfVEcUTobycYsLjegKq/UifcQ2W1OeKt9egXssuWWKg7aLP7K8a9i/OFHmXRLDleeFFxfrr5QSwcIiHoWxJoAAAAAAAAA4AAAAAAAAABQSwECLQAtAAgAAAACg5BU1yZ4V///////////GQAcAAAAAAAAAAAAAAD/////Zm9ybWF0cy9saXZpbmcvbGl2aW5nLmpwZwEAGAD54QAAAAAAAPnhAAAAAAAA4EABAAAAAABQSwECLQAtAAgAAAACg5BUm39j8P//////////GQAcAAAAAAAAAAAAAAD/////Zm9ybWF0cy9saXZpbmcvbGl2aW5nLm1wNAEAGADWowcAAAAAANajBwAAAAAAKCMCAAAAAABQSwECLQAtAAgACAACg5BUiHoWxP//////////EwAcAAAAAAAAAAAAAAD/////W0NvbnRlbnRfVHlwZXNdLnhtbAEAGADgAAAAAAAAAJoAAAAAAAAATccJAAAAAABQSwYGLAAAAAAAAAAtAC0AAAAAAAAAAAADAAAAAAAAAAMAAAAAAAAAIwEAAAAAAAAwyAkAAAAAAFBLBgcAAAAAU8kJAAAAAAABAAAAUEsFBv////////////////////8AAA==)

Figure 18: Serilog Row

Serilog properties.

Serilog is one of the most popular logging packages and it contains all the features that we might need. We can also log into the internal database and create our own control panel or use an external dashboard such as Kibana. But Serilog provides a modern, elegant, simple solution without subsequent implementations and labor costs. Thus, it is considered the best choice for this application.

### 5.2.2. MiniProfile

An ADO.NET profiler, capable of profiling calls on raw ADO.NET (SQL Server, Oracle, etc), LINQ-to-SQL, Entity Framework (including Code First and EF Core), and a range of other data access scenarios [32]. Profiling is used for complex operations and database requests. This gives us a clear idea of the project's performance and weaknesses in the code. The parent class of all Operation classes has a protected method that accepts any function and runs it via Profiler [Code 1]. This gives us a complete understanding of the function’s steps and how it works [Figure 90]. MiniProfile sends profiling results to Serilog [Code 2].

Code 1: MiniProfile usage

await ExecuteAndProfile(() => Func());

protected virtual TResult ExecuteAndProfile<TResult>(Func<TResult> function)

{

using (MiniProfiler.Current.Step(codeBlockDescription))

{

try

{

return function.Invoke();

}

catch (Exception exception)

{

throw new BaseException(CODE\_DESCRIPTION\_PROFILE, exception);

}

}

}

Code 2: MiniProfile Url to Seq Logging Connection

app.UseSerilogRequestLogging(options =>

{

options.EnrichDiagnosticContext = (diagnosticContext, httpContext) =>

{

diagnosticContext.Set("ProfilerUrl", ProfilerConstants.GetUrlToProfilationDetail((Guid)httpContext.Items["ProfilerId"]));

};

});

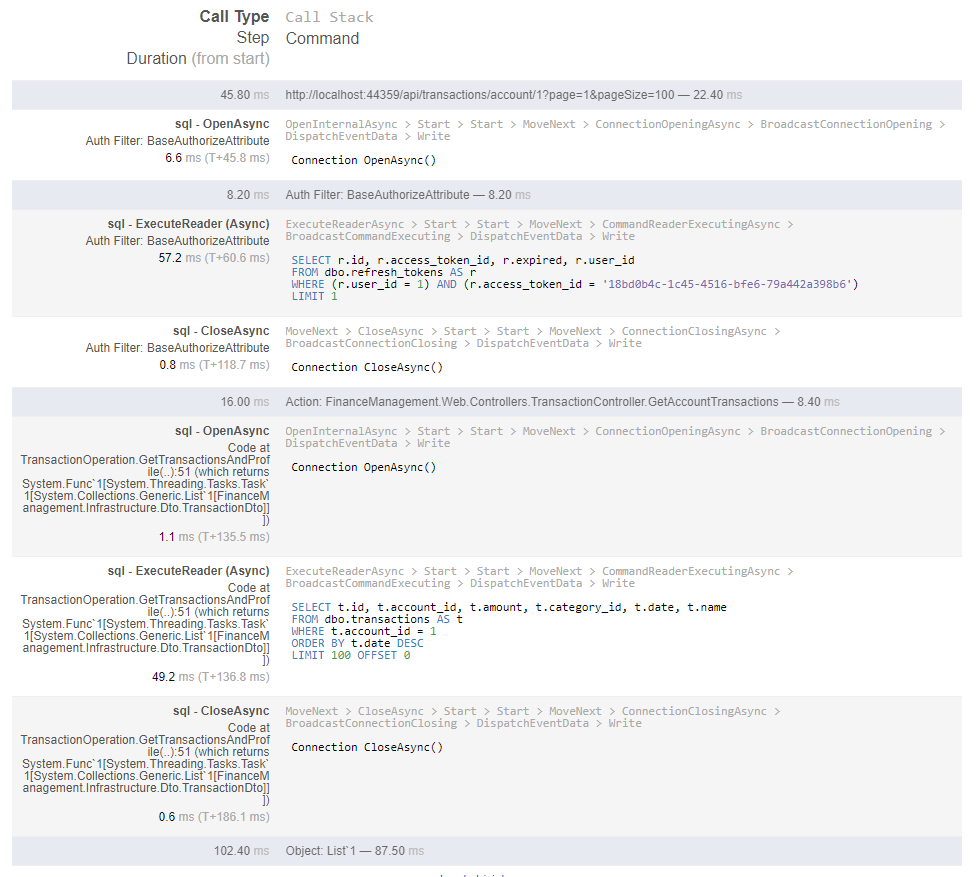


Figure 19: MiniProfile Result

## 5.3. API Controllers

Other applications can communicate with this backend app via API Controllers.

An API gateway is an [API management](https://www.redhat.com/en/topics/api/what-is-api-management) tool that sits between a client and a collection of backend services. API management refers to the processes for distributing, controlling, and analyzing the [APIs](https://www.redhat.com/en/topics/api) that [connect applications and data](https://www.redhat.com/en/topics/integration) across the enterprise and across clouds. An API gateway is one part of an API management system. The API gateway intercepts all incoming requests and sends them through the API management system, which handles a variety of necessary functions [4].

Exactly what the API gateway does will vary from one implementation to another. Some common functions include authentication, routing, rate limiting, billing, monitoring, analytics, policies, alerts, and security. An API gateway is a way to decouple the client interface from backend implementation. When a client makes a request, the API gateway breaks it into multiple requests, routes them to the right places, produces a response, and keeps track of everything. An API gateway acts as a reverse proxy to accept all [application programming interface (API)](https://www.redhat.com/en/topics/api/what-are-application-programming-interfaces) calls, aggregate the various services required to fulfill them, and return the appropriate result [4].

Api Controlers use REST API. REST is a set of architectural constraints, not a protocol or a standard. REST is an acronym for **RE**presentational **S**tate **T**ransfer. In REST, the primary data representation is called resource. Having a consistent and robust REST resource naming strategy – will prove one of the best design decisions in the long term. REST APIs use Uniform Resource Identifiers (URIs) to address resources. REST API designers should create URIs that convey a REST API’s resource model to the potential clients of the API. When resources are named well, an API is intuitive and easy to use. If done poorly, that same API can be challenging to use and understand. [43]. The application API uses best practices and guidelines written in [43].

API Controllers use Attributes inherited from System.Attribute to different verifications and operations before executing the endpoint’s logic. The attribute may forbid the next execution. For example, BaseAuthorizeAttribute: Authorize will forbid the next execution if the user's authorization fails validation.

Some requests may wait on the response a long time, therefore FE will send with the request a Cancellation Token, which will be checked each time after some process on BE. If FE wants to cancel the request (web page closing, user action) it will close the cancelation token. BE will catch this action and will stop its own process.

Every data access route starts with '/api'. This helps the frontend application recognize when it should send an API request or switch a page. In development mode, the frontend and backend work in parallel, the frontend requires a proxy to the development server, and for all routers that start with "/api" it can use the server's URL instead own. When the route does not start with '/api', Frontend Router System just switches its own pages.

Graphical user interface, text, application

Description automatically generatedGraphical user interface, text, application, email

Description automatically generatedSwagger [2] is used for API documentation [Figure 21]. Swagger is a language-agnostic specification for describing REST APIs. It allows both computers and humans to understand the capabilities of a REST API without direct access to the source code. [44]. It has a clear, concise user interface separated by controllers and provides all information about the endpoints (request method  
and path), as well as the ability to try to call each endpoint and shows information about the input parameters and the returned object. [Figure 20].

Figure 20: Swagger Endpoint

Figure 21: Swagger API

## 5.4. WebSocket and SignalR

### 5.4.1. WebSocket

WebSocket is a computer communications protocol, providing full-duplex communication channels over a single TCP connection. It's used in apps that benefit from fast, real-time communication. [10].

### 5.4.2. SignalR

ASP.NET SignalR is a library for ASP.NET that makes it incredibly simple to add real-time web functionality applications. SignalR will use WebSockets under the covers when it's available, and gracefully fallback to other techniques and technologies when it isn't, while your application code stays the same. SignalR also provides a very simple, high-level API for doing server to client RPC (Remote procedure call, call JavaScript functions in clients' browsers from server-side .NET code), as well as adding useful hooks for connection management, e.g. connect/disconnect events, grouping connections, authorization [33]. The Application uses SignalR for notification handling [Code 5], changes in groups, and requests for dashboard data. Each SignalR Hub inherits from BaseHub which is responsible for the authentication process and the creation of users groups. In the OnConnected event, BaseHub creates a user group by ConnectedId and UserID from the HttpContext [Code 4]. This makes it possible to send some information to all user sessions (multiply open browser tabs) [Code 3].

Code 3: SignalR Hub, OnConnected

public override async Task OnConnectedAsync()

{

await Groups.AddToGroupAsync(Context.ConnectionId, userId);

await base.OnConnectedAsync();

Log.Information("Client connected {UserId} {ConnectionId}", userId, ConnectionId);

}

Code 4: SignalR NotificationHub

public interface INotificationHub

{

Task SendNotification(NotificationDto notification);

}

IHubContext<NotificationHub, INotificationHub> notificationHubContext;  
  
await notificationHubContext.Clients.Group(userId.ToString()).SendNotification(new NotificationDto());

## 5.5. App Services

The Application can use different services for distributing work and logic. It will bring a lot of benefits.

* Flexibility
* Distributing Processing
* Independent Processes
* Easier understanding

FinanceManagement. AccountantService helps to application check the validity of subscriptions, debts, etc, and also bills subscriptions. The Service communicates with the main app via database.

FinanceManagement.MessageService is responsible for sending emails and SMS to users from the system. The Service communicates with the main app via database.

## 5.6. Mappers

* Mappers Adapt Database Model to DTO and vice versa
* AutoMapper uses in almost all cases. MapperConfiguration.cs sets AutoMapper Rules [Code 5].
* Static Mappers uses in cases when we need to rewrite most properties.

Code 5: Setting AutoMapper Rule to Convert Model Notification to DTO inside MapperConfiguration.cs

config.NewConfig<Notification, NotificationDto>()

.Map(s => s.NotificationType, m => (NotificationTypeEnum) m.NotificationTypeId);

## 5.7. Authorization and Authentication

* API uses a JWT (JSON Web Token) [9] as authentication.
* HTTP Authorization header using the Bearer schema.
* Access tokens [7] carry the necessary information to access a resource directly [34]. Access tokens are stored on the client side in local storage.
* Refresh Tokens [8] are credentials used to get access tokens. Refresh Tokens are stored in the Database and Cached. A user doesn't have access to it.

The API controller can secure each endpoint with an authentication attribute that verifies the access token. The frontend can obtain an access token via a login request and must send it with every request where authentication is required. The authentication attribute converts an access token from the header into claims (identifier, roles, user data, token data), validates it, and compares it with the refresh token stored in the database. If all verifications are successful, the attribute grants permissions to a request and an endpoint executes its logic.

There are no other independent projects that need this authentication process (token generation, data caching). We don't need a separate service that can authenticate users for multiple different sites. Thus, the authentication logic is implemented inside the main application.

## 5.8. Data Context

### **5.8**.1. Entity Framework Core

Entity Framework Core is a modern object-database mapper for .NET. It supports LINQ queries, change tracking, updates, and schema migrations. EF Core works with many databases, including SQL Database (on-premises and Azure), SQLite, MySQL, PostgreSQL, and Azure Cosmos DB [27]. Entity Framework is used for almost all requests because it is very simple and convenient. Entity Framework allows you to write SQL queries in C# and returns prepared result as C# object [Code 6]. Entity Framework is an object-relational mapper (O/RM) that enables .NET developers to work with a database using .NET objects. It eliminates the need for most of the data-access code that developers usually need to write [38].

Code 6: Entity Framework Query

return await this.Entities.OrderBy(s => s.Id).Select(s => s.Id)

.Skip(skip).Take(count).ToListAsync();

### **5.**8.2. Dapper

Dapper is a popular simple object mapping tool. It is designed primarily to be used in scenarios where you want to work with data in a strongly typed fashion - as business objects in a .NET application, but don't want to spend hours writing code to map query results from ADO.NET data readers to instances of those objects. [35]. Dapper is used in the application for calling and writing Stored Procedures [Code 7].

Code 7: Calling Stored Procedure via Dapper

DynamicParameters sqlParameter = new DynamicParameters();

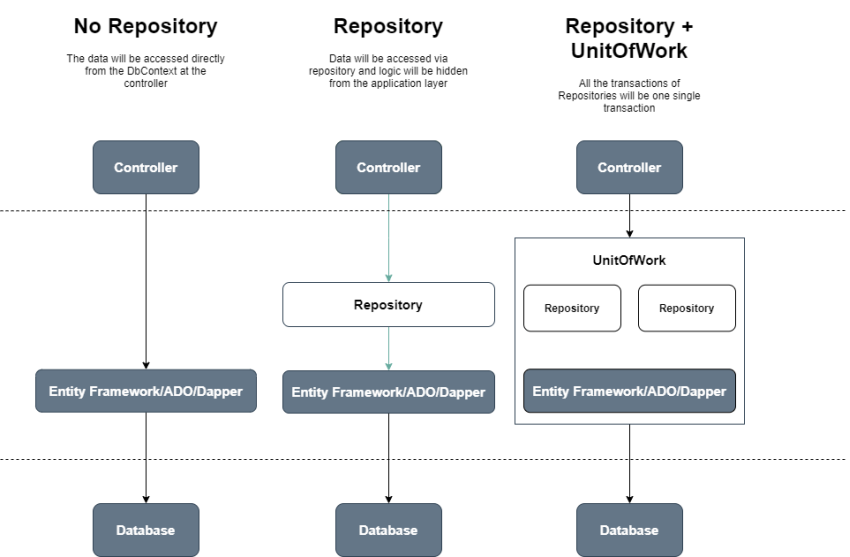
sqlParameter.Add("messages\_count", limit);

sqlParameter.Add("message\_type", messageTypeId);

return (await DbConnection.QueryAsync<Message>("dbo.get\_created\_messages", sqlParameter, commandType: System.Data.CommandType.StoredProcedure)).ToList();

### **5.8**.3. Repository

DataAccess.cs provides Repository and Unit of work patterns, Cached Repository, and DbContext. It is responsible for the connection and middleware between .NET and the database [Code 8]. [Figure 22] shows the difference between projects with and without these patterns. The repository is nothing but a class defined for an entity, with all the operations possible on that specific entity. Unit of Work is referred to as a single transaction that involves multiple operations of insert/update/delete and so on kinds. To say it in simple words, it means that for a specific user action (say registration on a website), all the transactions like insert/update/delete and so on are done in one single transaction, rather then doing multiple database transactions. This means, one unit of work here involves insert/update/delete operations, all in one single transaction [26]. DbContextFactory.cs provides Factory for different DbContextes.



Code 8: IDataAccess Interface

public interface IDataAccess : IDisposable

{

T Repository<T>() where T : IRepository;

GeneratedDbContext DbContext { get; }

Task SaveDbContext();  
}

Figure 22: Repository and UOW Patterns, [26]

### **5.8**.4. Indexes

A SQL index is used to retrieve data from a database very fast. Indexing a table or view is, without a doubt, one of the best ways to improve the performance of queries and applications. [36]

The Database Tables use indexes for primary keys; foreign keys; properties, which uses in SQL queries [Code 9].

Code 9: Entity Framework query and index creation to efficiently execute that query

Entities.Where(e => e.Id == accountId && e.UserId == userId && !e.IsDeleted);

CREATE UNIQUE INDEX ui\_account\_id\_user\_id\_is\_deleted

ON dbo.accounts (id, user\_id, is\_deleted);

## 5.9. Caching

One of the most important features of an application is data caching. Each entity that the user wants to access is cached and has its own type of cache invalidation. There are no external packages, the project itself implements caching. The application uses its own memory to store cached data. There is no need to use Redis [42] yet.

IMemoryCache [Code 10] provides all the necessary operations. It has a provider that is responsible for getting, adding, and deleting cache data. Dependencies are used to invalidate the cache by data type. The Invalidate method invalidates the parameter cache data. If the application is running on multiple servers, this method can provide a notification system between them to reload the cache on another machine.

public interface IMemoryCache

{

ICacheProvider Provider { get; }

ICacheDependencyManager Dependencies { get; }

bool Enabled { get; set; }

void Invalidate(DataCacheNotification invalidateMessage);

}

Code 10: IMemoryCache Interface

After invalidating the cache, you need to query the database for up-to-date data. Cache modules [Code 11] implement this logic. They process invalidation requests and reload all data by invalidation type. They are also used for periodic reloading of data and at application startup.

Code 11: ICacheModule Interface

public interface ICacheModule

{

void Run();

......

bool HandleDataCacheNotification(DataCacheNotification notification);

}

The base class of each class of operations has methods for storing and retrieving cached results. These methods try to get data from the cache by the given key. If there is no requested data, it calls callback functions that return entities from the database, after which this data is stored in the cache and returned from the function.

Code 12: ExecuteMemoryCachedAsync method

protected virtual async Task<TResult> ExecuteMemoryCachedAsync<TResult>(

Func<Task<TResult>> function,

string cacheKey,

bool ignoreCachedValue,

bool cacheNullValue,

params CacheDependency[] dependencies);

## 5.10. Project Installation

Thanks to the monolithic architecture, launching the application is very easy. It has three different configurations: Debug, Debug Backend Only, and Release. Debug and Debug Backend Only are used for development and differ in that Debug also runs a frontend development server while Debug Backend Only supports only the backend part. The Release configuration is used for building and publishing [Code 13]. It does not build the frontend and does not run the frontend development server but uses the prepared assembly in the FinanceManagement.Web/wwwroot folder.

There are also different launch profiles with their own settings [Code 14]. It helps to set environment variables, application URL, a command to execute, browser open status, and so on.

The application can be run with any configuration and profile using IDEA or the dotnet run command [Code 15].

Code 13: dotnet build command

Code 15: dotnet run command

dotnet run --configuration %configuration% --launch-profile "dotnet run"

Code 14: Launch profiles

"profiles": {

"IIS Express": {

"commandName": "IISExpress",

"launchBrowser": false,

"environmentVariables": {

"ASPNETCORE\_ENVIRONMENT": "Development"

}

},

"dotnet run": {

"commandName": "Project",

"environmentVariables": {

"ASPNETCORE\_ENVIRONMENT": "Development"

},

"applicationUrl": "http://localhost:44359"

}

}

dotnet build --configuration Release

## 5.11. Design Patterns

### 5.11.1. Repository and Unit of Work

Diagram

Description automatically generatedThe repository and unit of work patterns [Figure 23] are intended to create an abstraction layer between the data access layer and the business logic layer of an application. Implementing these patterns can help insulate your application from changes in the data store and can facilitate automated unit testing or test-driven development (TDD). [11]. Usage in DataAccess.cs.

Figure 23: Repository and Unit of Work DP

### 5.11.2. Dependency Injection

Dependency Injection (DI) is a design pattern used to implement IoC. It allows the creation of dependent objects outside of a class and provides those objects to a class through different ways. Using DI, we move the creation and binding of the dependent objects outside of the class that depends on them. [47]

Dependency Injection manages the lifecycle of the services. [47]

* Transient: creates a new instance of the service, every time you request it.
* Scoped: creates a new instance for every scope. (Each request is a Scope). Within the scope, it reuses the existing service.
* Singleton: Creates a new Service only once during the application lifetime, and uses it everywhere

Dependency Injection implements Lazy Initialization [Code 16]. Lazy Initialization is a tactic to delay the creation of an object, the calculation of a value, or any other computationally expensive process until the time when it is to be used for the first time. [46].

Dependency Injection also has a scan option that adds all dependencies on the implemented

class/interface. This is very useful, for example, for Operation or Repository classes that implement the same interface [Code 17].

Code 16: Lazier

services.AddTransient(typeof(Lazy<>), typeof(Lazier<>));

internal class Lazier<T> : Lazy<T> where T : class

{

public Lazier(IServiceProvider provider) : base(() =>

provider.GetRequiredService<T>()){}

}

Code 17: Dependency Injection: Adding dependencies

services.AddFactory<IDataAccess, DataAccess>();

services.Scan(scan => scan.FromAssemblyOf<InfrastructureServiceInstaller>()

.AddClasses(classes => classes.AssignableTo<ITransientOperation>())

.AsImplementedInterfaces()

.WithTransientLifetime()

);

### 5.11.3. Facade

The implementation has a wide range of objects with their own logic and structure. We have to disguise it with a simple and clear interface for better understanding and hiding implementation details. To do this, we can use the Facade Design Patter. **Facade is a structural design pattern that provides a simplified interface to a library, a framework, or any other complex set of classes.** [48].

Application-wide use [Figure 24], configuration is in InfrastructureServiceInstaller.cs.

Diagram

Description automatically generated

Figure 24: Facade Design Pattern

### 5.11.4. Observer

The client should be notified about some background tasks (group changes, subscription expiration, etc.). It can send constant requests to the server, for example every minute, to check if there are new notifications on the server. But this leads to a large overload of requests and a load on the system. Most of these requests will be negative and will not return any information. Instead, we can notify the client from the server when something new has happened. It perfectly implements the Observer Design Pattern. The observer is a behavioral design pattern that lets you define a subscription mechanism to notify multiple objects about any events that happen to the object they’re observing. [49].

Diagram

Description automatically generatedUsage in BaseHub.cs [Figure 25].

Figure 25: Observer Design Pattern

### 5.11.5. Strategy

Strategy is a behavioral design pattern that lets you define a family of algorithms, put each of them into a separate class, and make their objects interchangeable. [50]. It helped us create a service process with multiple processors, where each processor inherits from the base processor with a specific interface and has a different implementation inside.

Diagram

Description automatically generatedUsage in FinanceManagement.AccountantService.BaseProccessor.cs [Figure 26].

Figure 26: Strategy Design pattern

### 5.11.6. Builder

Builder is a creational design pattern that lets you construct complex objects step by step. The pattern allows you to produce different types and representations of an object using the same construction code. [51]. It made it easy for us to set up a web hosting instance with our own customizations and extensions.

Application-wide use, FinanceManagement.Web.Program.cs [ Code 18].

Code 18: Builder Design Pattern

Host.CreateDefaultBuilder(args)

.UseSerilog(…)

.ConfigureWebHostDefaults(…)

.UseWindowsService()

.Build()

.Run();

# Testing

One of the most important tasks for the backend is to check how fast the program is and how much memory it uses. For these purposes, Benchmarks were used. They call functions with the same input many times and show the average time and memory usage results.

The next type of test is security testing. For this, Unit and Functional tests were used. They call the same functions with different user roles and check if any role without the necessary rights can access some logic or not. For example, an unauthorized user cannot create a Subscription or any authorized user cannot obtain another user's Transactions.

It's also very important to know if functions do exactly what they're supposed to. For example, if a function needs to create an object in a database, the test will check if the database will have this new object after the function is called. These tests should also check for exceptions and errors. For example, a function that updates an object in the database and receives as a parameter an object ID that does not exist should throw an exception.

## 6.1 Benchmarks

Benchmark testing compares performance testing results against performance metrics that are agreed upon in the organization based on different industry standards. It helps determine the quality standards of every software application that belonged to an organization. Benchmark testing covers software, hardware, and network performance. The goal for benchmark testing is to test all the current and future releases of an application to maintain high-quality standards [39].

Dashboard Operations are the most complex and difficult operations. Here, Benchmarks are used to test charts and statistical data receiving. The dashboard also has a request GetTopEntities, it allows testing for cache misses [Code 19]. Benchmark Result [Figure 27] shows Mean (arithmetic mean of all measurements), Error (half of 99.9% confidence interval), StdDev (standard deviation of all measurements). Benchmarks will be very helpful when an application will have many rows in a database table to determine if the application is still fast.

Code 19: Dashboard Benchmark

Summary summary = BenchmarkRunner.Run<DashboardBenchmark>();

[Benchmark]

public async Task GetTopEntitiesBenchmark()  
  
[Benchmark]

public async Task GetTransactionsAmountInTimeChartData()

A screenshot of a computer

Description automatically generated with medium confidence

Figure 27: Benchmark Result

## 6.2 Unit Tests

Unit Testing is a type of software testing where individual units or components of a software are tested. The purpose is to validate that each unit of the software code performs as expected. Unit Testing is done during the development (coding phase) of an application by the developers. Unit Tests isolate a section of code and verify its correctness. A unit may be an individual function, method, procedure, module, or object [40].

One of the most important parts of an application is cache hits. Unit Tests can help test operations that need to store certain entities for caching. Such tests call a function that must create a cache entry, check if that cache entry actually exists, and compare it to the object that should be stored by this cache key [Code 20].

Code 20: GetUserByIdCachedTest

var user = await userOperation.GetUserByIdCached(userId);

Assert.True(user != null); // user found

var cacheItem = Cache.Current.Provider.Get<UserDto>(cachekey);

Assert.True(cacheItem.HasValue && !cacheItem.IsNull); // cache Item exists

Assert.Equal(user.Id, cacheItem.Value.Id); // cache Item is the same as function result Item

The unit tests found no cache misses and no redundant database queries, which means the app can work fine with the cache-store, invalidate and reload its data.

## 6.3 Functional Tests

Functional Testing is a type of software testing that validates the software system against the functional requirements/specifications. The purpose of Functional tests is to test each function of the software application, by providing appropriate input, and verifying the output against the Functional requirements [41].

Functional tests are used to verify that functions actually do what they are supposed to. For example TransactionOperationTest.CreateUpdateDeleteTransactionTest() creates, updates, deletes Transaction and checks its properties after each operation. It also checks if the account’s amount has been updated. These tests cover all important operations with transactions, subscriptions, accounts, debts, and goals.

Functional testing has shown that the application logic executes correctly and doesn't do anything else that it shouldn't. This means that any external application can be connected to this server application and use its API.

## 6.4 Conclusion

The tests cover the most important features of the application. They check authentication, user roles, database queries, and function logic, measure complex queries and help us change some functions without possible errors in the future.

# Conclusion

## 7.1 Summary

This project provides a good foundation for a finance management application with basic and essential functions that were chosen after a detailed analysis of existing similar apps. Of course, it may be extended with other important features and options that will help the application to be as useful as possible to users. But already now this backend app could be helpful and has great potential. This is proven by the described options, structure, and implementation.

The most modern technologies and platforms were used which allows the application to compete with others in the next 5 years. It is easy to support due to chosen programming language and rigorous project structure. It may be connected with all frontend frameworks that are popular now. It uses long-term support for external libraries and does not strictly depend on them. In addition, the code is well commented, each endpoint has a summary and description, and each public function has either a friendly name or a comment about what it does. All this proves that the main goals of each backend project have been achieved.

## 7.2 Future

The implemented application works and meets the functional and non-functional requirements, but also has room for improvement. For example, premium status and premium user role logic. In addition to income, it also limits the number of entities that one user can have, which gives us more free disk space. The next possible improvements are the following authorization possibilities, such as authorization via Facebook, Twitter, and Google.

# Bibliography

[1] Why is Financial Management important in life: <https://www.mymoneysouq.com/financial-blog/why-is-financial-management-important-in-life>*,* 2022, [online]

[2] Swagger: [https://swagger.io/*,*](https://swagger.io/,%20) 2021, [online]

[3] What is a REST API [*https://www.redhat.com/en/topics/api/what-is-a-rest-api*](https://www.redhat.com/en/topics/api/what-is-a-rest-api)*,* 2020, [online]

[4]: What does an API gateway do: <https://www.redhat.com/en/topics/api/what-does-an-api-gateway-do>, 2019, [online]

[5]: The Critical Importance of Frontend and Backend Website Maintenance: <https://norakramerdesigns.com/the-critical-importance-of-frontend-and-backend-website-maintenance>, 2021, [online]

[6] SignalR: <https://dotnet.microsoft.com/en-us/apps/aspnet/signalr>*,* 2022, [online]

[7] Authorization Access tokens: <https://www.okta.com/identity-101/access-token>*,* 2020, [online]

[8] Authorization Refresh tokens: <https://www.oclc.org/developer/news/2013/authentication-and-authorization-refresh-tokens.en.html>*,* 2013, [online]

[9] Authorization JWT: <https://fusionauth.io/docs/v1/tech/apis/jwt>, 2021, [online]

[10] Web Sockets: <https://medium.com/easyread/websocket-connection-handsake-under-the-hood-560ab1ceaff5>, 2020, [online, Jonathan Natanael Siahaan]

[11] Implementing the Repository and Unit of Work Patterns [*https://docs.microsoft.com/en-us/aspnet/mvc/overview/older-versions/getting-started-with-ef-5-using-mvc-4/implementing-the-repository-and-unit-of-work-patterns-in-an-asp-net-mvc-application*](https://docs.microsoft.com/en-us/aspnet/mvc/overview/older-versions/getting-started-with-ef-5-using-mvc-4/implementing-the-repository-and-unit-of-work-patterns-in-an-asp-net-mvc-application)*,* 2021, [online]

[12] Difference between ASP.NET and Sring Boot: [*https://medium.com/@putuprema/spring-boot-vs-asp-net-core-a-showdown-1d38b89c6c2d*](https://medium.com/@putuprema/spring-boot-vs-asp-net-core-a-showdown-1d38b89c6c2d)*,* 2021, [online]

[13]: Why personal finance is crucial in everyday life: <https://www.financialexpress.com/money/why-personal-finance-is-crucial-in-everyday-life>, 2021, [online]

[14]: Wallet: [https://budgetbakers.com/,](https://budgetbakers.com/) 2022, [online]

[15]: CoinKepper: <https://about.coinkeeper.me/eng>, 2022, [online]

[16]: Spendee: [https://www.spendee.com/](https://www.spendee.com/%20), 2022, [online]

[17]: Gin: [https://semaphoreci.com/community/tutorials/building-go-web-applications-and-microservices-using-gin](https://semaphoreci.com/community/tutorials/building-go-web-applications-and-microservices-using-gin%20), 2022, [online]

[18]: Spring Boot: [https://scand.com/company/blog/pros-and-cons-of-using-spring-boot/](https://scand.com/company/blog/pros-and-cons-of-using-spring-boot/%20), 2022, [online]

[19]: .Net: <https://dotnet.microsoft.com/en-us/apps/aspnet>, 2022, [online]

[20]: Spring Boot vs ASP.NET Core: <https://medium.com/@putuprema/spring-boot-vs-asp-net-core-a-showdown-1d38b89c6c2d>, 2021, [online, Putu Prema]

[21]: Difference between SQL and NoSQL: <https://www.geeksforgeeks.org/difference-between-sql-and-nosql>, 2021, [online]

[22]: Microservices vs Monolithic architecture: <https://www.n-ix.com/microservices-vs-monolith-which-architecture-best-choice-your-business>, 2018, [online, Romana Gnatyk]

[23]: Microservices: <https://avinetworks.com/glossary/microservice>, 2021, [online]

[24]: Monolithic architecture: <https://whatis.techtarget.com/definition/monolithic-architecture>, 2016, [online, Ivy Wigmore]

[25]: What is microservices architecture: <https://cloud.google.com/learn/what-is-microservices-architecture>, 2022, [online]

[26]: Unit of Work in Repository Pattern: <https://www.c-sharpcorner.com/UploadFile/b1df45/unit-of-work-in-repository-pattern>, 2018, [online, Jasminder Singh]

[27]: Entity Framework: <https://docs.microsoft.com/en-us/ef>, 2022, [online]

[28]: Design the infrastructure persistence layer: <https://docs.microsoft.com/en-us/dotnet/architecture/microservices/microservice-ddd-cqrs-patterns/infrastructure-persistence-layer-design>, 2021, [online]

[29]: Controller layer: <https://help.hcltechsw.com/commerce/9.0.0/developer/concepts/csdcontrollerbase.html>, 2021, [online]

[30]: Use multiple environments in ASP.NET Core: <https://docs.microsoft.com/en-us/aspnet/core/fundamentals/environments?view=aspnetcore-6.0>, 2022, [online]

[31]: Serilog: [https://serilog.net/,](https://serilog.net/) 2022, [online]

[32]: MiniProfiler: [https://miniprofiler.com/,](https://miniprofiler.com/) 2022, [online]

[32]: Serilog GitHub: [https://github.com/serilog/serilog/blob/dev/README.md,](https://miniprofiler.com/) 2022, [online]

[33]: ASP.NET SignalR: <https://dotnetfoundation.org/projects/asp.net-signalr>, 2022, [online]

[34]: How to: Use API Access Token for API: <https://kb.vmware.com/s/article/79543>, 2020, [online]

[35]: Dapper: <https://www.learndapper.com/>, 2019, [online]

[36]: SQL index overview and strategy: <https://www.sqlshack.com/sql-index-overview-and-strategy/>, 2018, [online, Bojan Petrovic]

[37]: SQLite vs MySQL vs PostgreSQL: A Comparison Of Relational Database Management Systems: <https://www.digitalocean.com/community/tutorials/sqlite-vs-mysql-vs-postgresql-a-comparison-of-relational-database-management-systems>, 2014, [online]

[38]: What is Entity Framework?: <https://www.entityframeworktutorial.net/what-is-entityframework.aspx>, [online]

[39]: Performance Testing: Baseline and Benchmark Testing: <https://www.loadview-testing.com/blog/performance-testing-baseline-and-benchmark-testing/>, 2021, [online, Glenn Lee]

[40]: Unit Testing Tutorial: <https://www.guru99.com/unit-testing-guide.html>, 2022, [online, Thomas Hamilton]

[41]: What is Functional Testing: <https://www.guru99.com/functional-testing.html>, 2022, [online, Thomas Hamilton]

[42]: Redis Cache: <https://redis.io>, 2022, [online]

[43]: REST naming: <https://restfulapi.net/resource-naming/>, 2021, [online, Lokesh Gupta]

[44]: ASP.NET Core web API documentation with Swagger: <https://docs.microsoft.com/en-us/aspnet/core/tutorials/web-api-help-pages-using-swagger>, 2022, [online]

[45]: What is Web Application Architecture: <https://stackify.com/web-application-architecture/>, 2017, [online, Angela Stringfellow]

[46]: Lazy Initialization: <https://medium.com/geekculture/software-design-pattern-4-lazy-initialization-35f606f1ddf3>, 2021, [online]

[47]: Dependency Injection: <https://www.tutorialsteacher.com/ioc/dependency-injection>, 2022, [online]

[48]: Facade Design Pattern: <https://refactoring.guru/design-patterns/facade>, 2022, [online]

[49]: Observer Design Pattern: <https://refactoring.guru/design-patterns/observer>, 2022, [online]

[50]: Strategy Design Pattern: <https://refactoring.guru/design-patterns/strategy>, 2022, [online]

[51]: Builder Design Pattern: <https://refactoring.guru/design-patterns/builder>, 2022, [online]

[52]: Clean Code, 2008, [Robert Cecil Martin]

[53]: Clean Architecture: A Craftsman's Guide to Software Structure and Design, 2017, [Robert Cecil Martin]

[54]: C# in Depth, 2019, [Jon Skeet]

[55]: C# 10 and .NET 6 – Modern Cross-Platform Development: Build apps, websites, and services with ASP.NET Core 6, Blazor, and EF Core 6 using Visual Studio 2022 and Visual Studio Code, 6th Edition 6th ed. Edition, 2021, [Mark J. Price]

# Supplement A. Abbreviations List

JWT Jason Web Token   
DB Database

SQL Structured Query Language  
HTTP Hypertext Transfer Protocol  
API Application Programming Interface  
REST Representational State Transfer   
CRUD Create, Read, Update, Delete  
DAO Data Access Object  
DTO Data Transfer Object  
URL Uniform Resource Locator  
CAP Consistency, Availability & Partition Tolerance  
RPC Remote procedure call   
DP Design Patterns

# Supplement B. Diagrams

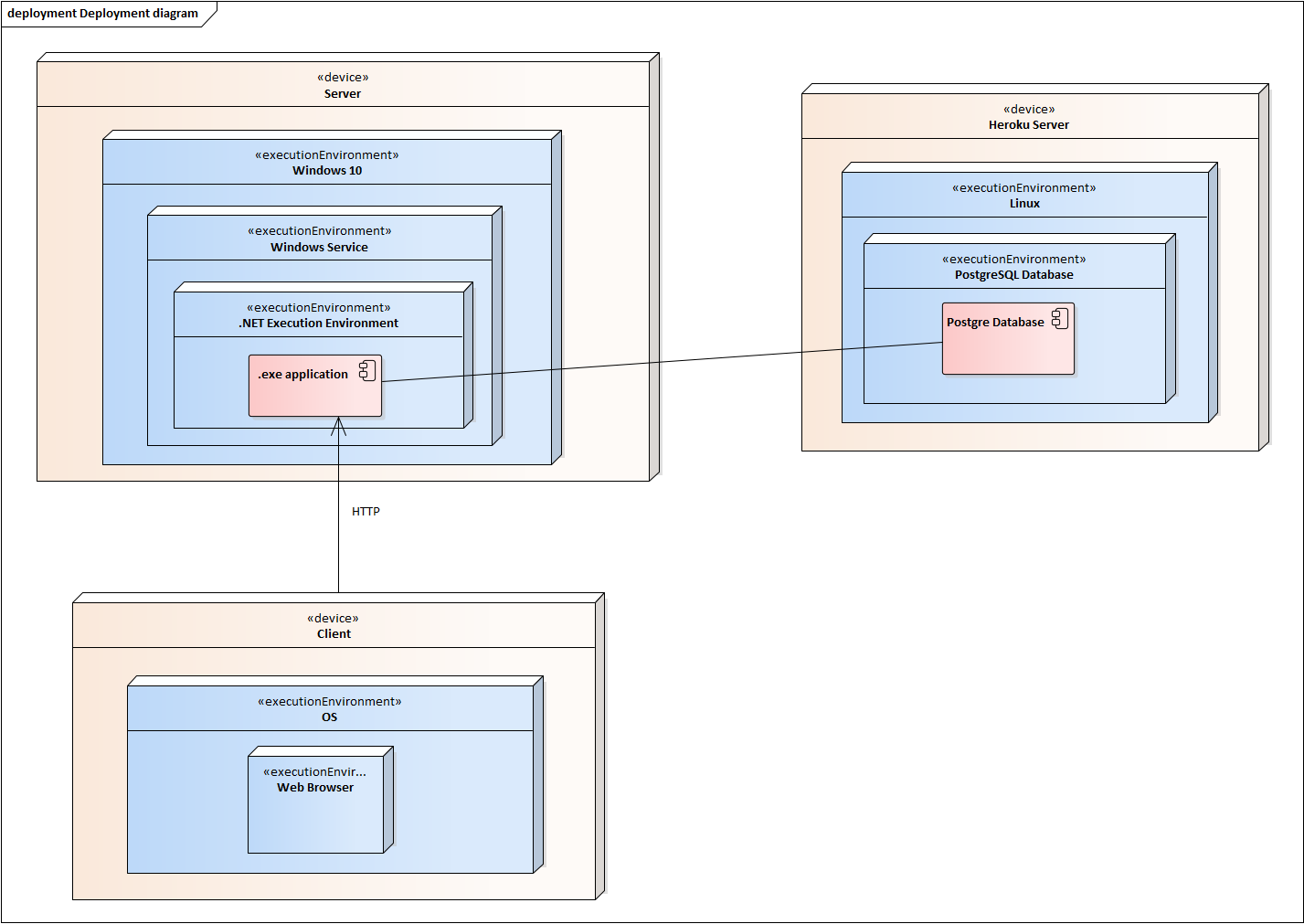
B.2. Deployment Diagram

Figure 28: Deployment Diagram