SLOVENSKÁ TECHNICKÁ UNIVERZITA V BRATISLAVE

FAKULTA ELEKTROTECHNIKY A INFORMATIKY

Evidenčné číslo: FEI-16605-115084

Web aplikácia na správu OPC UA serverov

Bakalárska práca

SLOVENSKÁ TECHNICKÁ UNIVERZITA V BRATISLAVE

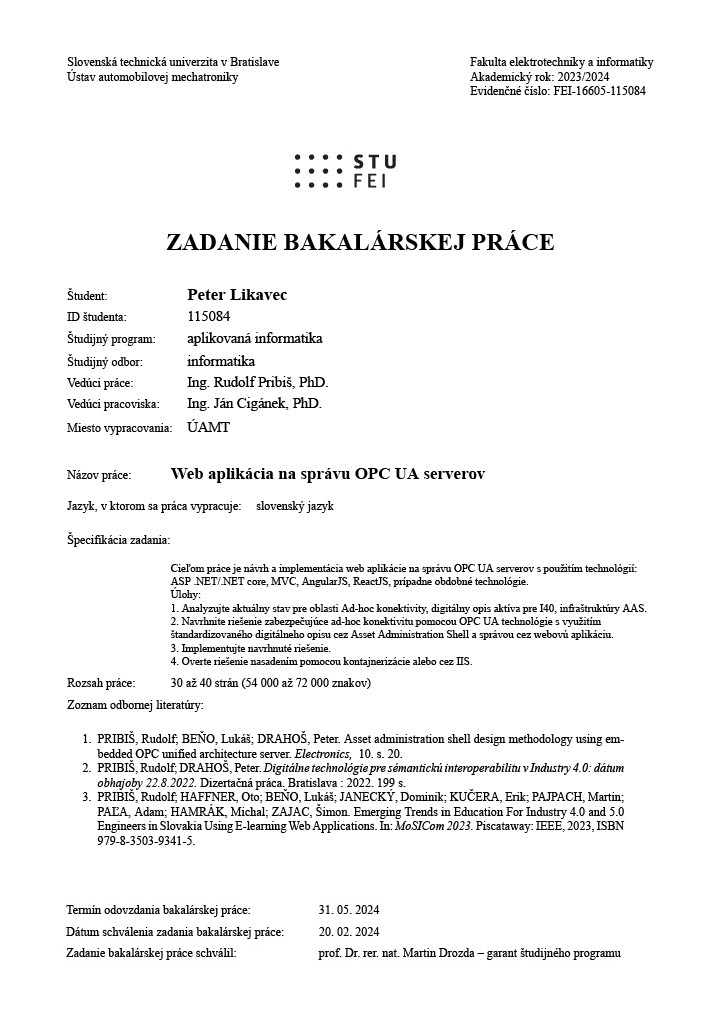
FAKULTA ELEKTROTECHNIKY A INFORMATIKY

Evidenčné číslo: FEI-16605-115084

Web aplikácia na správu OPC UA serverov

Bakalárska práca

|  |  |
| --- | --- |
| Študijný program : | Aplikovaná informatika |
| Číslo študijného odboru: | 2511 |
| Názov študijného odboru: | 9.2.9 Aplikovaná informatika |
| Školiace pracovisko: | Ústav informatiky a matematiky |
| Vedúci záverečnej práce: | Ing. Rudolf Pribiš, PhD. |
| Konzultant ak bol určený: | Meno konzultanta |



SÚHRN

SLOVENSKÁ TECHNICKÁ UNIVERZITA V BRATISLAVE

FAKULTA ELEKTROTECHNIKY A INFORMATIKY

|  |  |
| --- | --- |
| Študijný program : | Aplikovaná informatika |
| Vyberte typ práce | Web aplikácia na správu OPC UA  serverov |
| Autor: | Peter Likavec |
| Vedúci záverečnej práce: | Ing. Rudolf Pribiš, PhD. |
| Konzultant ak bol určený: | Meno konzultanta |
| Miesto a rok predloženia práce: | Bratislava 2024 |

Bakalárska práca sa zaoberá získaním analýzou informácií o OPC UA serveroch, administratívnej schránke aktív a ich prepojeniu s Industry 4.0, ktoré sú základným pilierom vedomostí webovej aplikácie. Úvodná časť je zameraná na získanie vedomostí a porozumeniu oblasti ohľadom Internet vecí, administratívnej schránke aktív, OPC UA serverov a Industry 4.0. Nasledujúcou časťou je spraviť analýzu pre možnosti riešenia implementácie a zvoliť vhodné technológie pre návrh a vývoj aplikácie. Cieľom bakalárskej práce je vďaka získaným poznatkom navrhnúť, implementovať a následne nasadiť aplikáciu v IIS s využitím vhodných technológií, ktorá ma slúžiť na prácu s OPC UA servermi, aby mal užívateľ k dispozícii jednoduchý nástroj na prácu s OPC UA servermi. Realizácia práce obsahuje štruktúru webovej aplikácie, ktorá pozostáva z frontendu a backendu. Riešenie zahŕňa detailný opis aplikácie ako aj zoznam a vysvetlenie všetkých použitých technológií, prehľad funkcionality a dôležitých častí, ktoré sú obsiahnuté v užívateľskej príručke. V závere práce sú zdokumentované a zhodnotené výsledky projektu spolu s odporúčaním pre ďalší rozvoj aplikácie.

Kľúčové slová: Webová aplikácia, Industry 4.0, AAS, RAMI 4.0, React.js, ASP .NET

ABSTRACT

SLOVAK UNIVERSITY OF TECHNOLOGY IN BRATISLAVA

FACULTY OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY

|  |  |
| --- | --- |
| Study Programme: | Applied Informatics |
| Bachelor Thesis: | Web application for managing OPC  UA servers |
| Autor: | Peter Likavec |
| Supervisor: | Ing. Rudolf Pribiš PhD. |
| Consultant: | Meno konzultanta |
| Place and year of submission: | Bratislava 2024 |

The bachelor’s thesis deals with obtaining and analyzing information about OPC UA servers, Asset Administration Shell and their connection with Industry 4.0, which are the basic pillar of web application knowledge. The introductory part is aimed at gaining the knowledge and understanding of the area regarding the Internet of Things, Asset Administration Shell, OPC UA servers and Industry 4.0. The next part is to make an analysis for the possibilities of the implementation solution an choose suitable technologies for the design and development of the application. The goal of the bachelor’s thesis is to design, implement and the deploy and application in IIS using appropriate technologies, which will server to work with OPC UA servers, so user has a simple tool for working and managing OPC UA servers. The implementation of the work include structure of the web application which consist of backend and frontend. The solution includes a detailed description of the application as well as a list of all technologies used, and overview of functionality and important parts. At the end of the work, the results of the project are documented and evaluated together with recommendation for further development of application.

Key words: Web application, Industry 4.0, AAS, RAMI 4.0, React.js, ASP .NET

Vyhlásenie autora

Podpísaný Peter Likavec čestne vyhlasujem, že som Bakalársku prácu Web aplikácia na správu OPC UA serverov vypracoval na základe poznatkov získaných počas štúdia a informácií z dostupnej literatúry uvedenej v práci.

Uvedenú prácu som vypracoval pod vedením Ing. Rudolf Pribiš, PhD..

V Bratislave dňa 26.03.2024

..................................................

podpis autora

Poďakovanie

Týmto spôsobom by som chcel poďakovať vedúcemu práce Ing. Rudolf Pribiš, Phd. za usmernenie pri písaní práce a odbornú pomoc pri riešení práce.

Obsah

[Úvod 1](#_Toc160716817)

[1 Teoretická časť 1](#_Toc160716818)

[1.1 Industry 4.0 1](#_Toc160716819)

[1.2 OPC UA 1](#_Toc160716820)

[1.2.1 OPC UA a vzťah s Industry 4.0 2](#_Toc160716821)

[1.2.2 Informačný model 3](#_Toc160716822)

[1.2.3 Adresný priestor OPC UA 3](#_Toc160716823)

[1.2.4 OPC UA Server 5](#_Toc160716824)

[1.3 RAMI 4.0 6](#_Toc160716825)

[1.3.1 Os úrovní hierarchie 6](#_Toc160716826)

[1.3.2 Os životného cyklu a hodnotového toku 7](#_Toc160716827)

[1.3.3 Os vrstiev architektúry 9](#_Toc160716828)

[1.4 IoT – Internet of Things 10](#_Toc160716829)

[1.5 IIoT – Industrial Internet of Things 10](#_Toc160716830)

[1.6 Asset Administration Shell 11](#_Toc160716831)

[1.6.1 Štruktúra AAS 11](#_Toc160716832)

[1.6.2 AAS Submodel 12](#_Toc160716833)

[1.7 MVC 13](#_Toc160716834)

[1.7.1 MODEL 14](#_Toc160716835)

[1.7.2 VIEW 14](#_Toc160716836)

[1.7.3 CONTROLLER 14](#_Toc160716837)

[1.8 DOM vs. Virtual DOM 15](#_Toc160716838)

[1.8.1 Document Object Model 15](#_Toc160716839)

[1.8.2 Virtual Document Object Model 16](#_Toc160716840)

[1.8.3 Rozdiely medzi DOM a Virtual DOM 17](#_Toc160716841)

[2 Použité technológie 18](#_Toc160716842)

[2.1 React.js 18](#_Toc160716843)

[2.2 ASP .NET 19](#_Toc160716844)

[2.3 Eclipse BaSyx 19](#_Toc160716845)

[2.3.1 Eclipse BaSyx AAS Server 19](#_Toc160716846)

[2.3.2 Eclipse BaSyx AAS Registry 19](#_Toc160716847)

[2.4 Docker 21](#_Toc160716848)

[2.4.1 Docker compose 22](#_Toc160716849)

[2.5 MySQL 22](#_Toc160716850)

[2.6 MongoDB 22](#_Toc160716851)

[3 Návrh aplikácie 23](#_Toc160716852)

[3.1 Špecifikácia požiadaviek 23](#_Toc160716853)

[3.1.1 Funkcionálne požiadavky 24](#_Toc160716854)

[3.1.2 Nefunkcionálne požiadavky 25](#_Toc160716855)

[3.2 Architektúra aplikácie 25](#_Toc160716856)

[3.3 Štruktúra dátového modelu 27](#_Toc160716857)

[3.4 Grafické rozhranie 29](#_Toc160716858)

[3.5 REST API 30](#_Toc160716859)

[4 Implementácia aplikácie 31](#_Toc160716860)

[4.1 dasda 31](#_Toc160716861)

[5 32](#_Toc160716862)

[6 Popis šablóny 33](#_Toc160716863)

[6.1 Popis nastavenia strany 33](#_Toc160716864)

[6.2 Popis nastavenia štýlov 33](#_Toc160716865)

[Záver 35](#_Toc160716866)

[Zoznam použitej literatúry 36](#_Toc160716867)

[Prílohy I](#_Toc160716868)

[Príloha A: Štruktúra elektronického nosiča II](#_Toc160716869)

Zoznam obrázkov a tabuliek

[Obr. 1 Toto je obrazok cislo jendasd 1](#_Toc160657538)

Zoznam skratiek a značiek

**AAS** Asset Administration Shell

**AASX** Súborový formát balíka pre AAS

**API** Application Programming Interface

**CSS** Cascading Style Sheets

**DOM**  Document Object Model

**HTML** HyperText Markup Language

**HTTP** HyperText Transfer Protocol

**IIS** Internet Information Services

**IoT** Internet of Things

**IIoT** Industrial Internet of Things

**JSON** JavaScript Object Notation

**NPM** Node Package Manager

**OPC UA** Open Platform Communications Unified Architecture

**RAMI 4.0** Reference Architectural Model Industrie 4.0

**REST API** Representational State Transfer API

**SQL** Structured Query Language

**XML** Extensible Markup Language

**MVC** Model-View-Controller

**URN** Uniform Resource Name

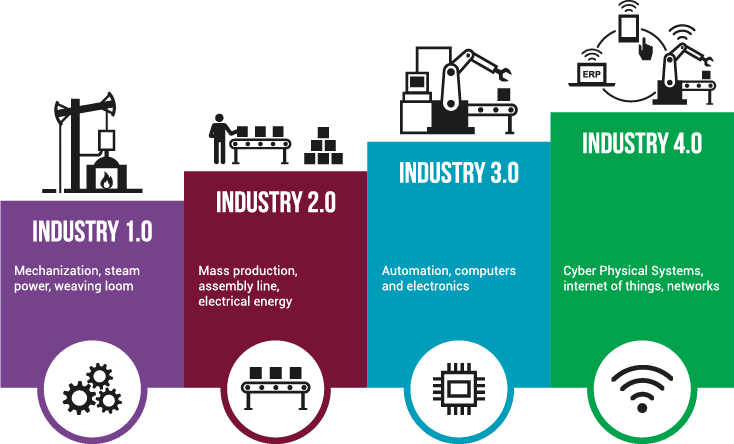
**GUI** Graphical User Interface

**Úvod**

Industry 4.0, známa aj ako štrvrtá priemyselná revolúcia, predstavuje revolučný posun v oblasti priemyselnej výroby, kde sa inteligentné technológie a kybernetické systémy prelínajú s tradičnými výrobnými procesmi. V tomto novom priemyselnom paradgme zohráva kľúčovú úlohu komunikácia a interoperabilita, čo prinása do popredia technológiu OPC UA.  
Technológie OPC UA serverov sa stali rozhodujúcim prvkom v kontexte Industry 4.0, poskytujúc spoľahlivý a bezpečný spôsob prenosu dát medzi rôznymi zariadeniami a systémami. Ich využitie umožňuje efektívne riadenie a monitorovanie výrobných procesov, a to nielen v rámci jedného podniku.  
Cieľom bakalárskej práce je dostatočné porozumenie materiálov týkajúcich sa témy a následne spracovať nadobudnuté poznatky. Následne ďalšou časťou je získané informácie analyzovať a určiť potrebné technológie pre vývoj aplikácie a vytvoriť si vedomostnú bázu o danej téme. Koncovým bodom bakalárskej práce na základe podmienok navrhnúť aplikáciu. Medzi hlavné požiadavky aplikácie je užívateľsky prijateľné prostredie s funkcionalitou pre manažovanie OPC UA serverov. Hlbšej špecifikácií funkcionality sa budeme venovať v ďalších kapitolách bakalárskej práce.

1. Teoretická časť
   1. Industry 4.0

Industry 4.0 označuje novú fázu priemyselnej revolúcie, ktorá môže byť definovaná integráciou inteligentných digitálnych technológií do výroby a priemyselných procesov. Industry 4.0 umožňuje firmám a spoločnostiam inteligentnú výrobu a vytvorenie takzvaných inteligentných prevádzok. Cieľom je vylepšenie produktivity, efektívnosti a flexibility. Industry 4.0, ktorá veľmi úzko súvisí s IIoT (Industrial Internet of Things) a zautomatizovanú výrobu spája fyzickú výrobu s operáciami s inteligentnými digitálnymi technológiami, strojovým učením a prácu s dátami aby vytvorili lepší ekosystém pre spoločnosti, ktoré sa zameriavajú na výrobu. Industry 4.0 je založená na 9 technologických pilieroch, pričom skutočná sila Industry 4.0 je dosiahnutá práve použitím technológií spoločne.



Obr. 1 Toto je obrazok cislo jendasd

* 1. OPC UA

OPC Unified Architecture je priemyslový komunikačný štandard ktorý definovala organizácia OPC Foundation. Od pôvodnej špecifikácie OPC založená firmou Microsoft (funguje iba v OS Windows), je OPC UA technológia založená na obecne používaných komunikačných štandardoch ako sú TCP/IP, http alebo SOAP. Vďaka tomu môže OPC UA fungovať aj na iných platformách ako je Windows.

OPC UA sa používa v priemyselných doménach, ako sú priemyselné senzory a akčné členy, riadiace systémy, systémy na vykonávanie výroby a systémy plánovania podnikových zdrojov, vrátane priemyselného internetu vecí (IIoT), Machine To Machine (M2M). Tieto systémy sú určené na výmenu informácií a na používanie príkazov a riadenia priemyselných procesov. OPC UA definuje spoločný model infraštruktúry na uľahčenie tejto výmeny informácií. OPC UA špecifikuje nasledovné:

* informačný model reprezentujúci štruktúru, správanie a sémantiku;
* model správy na interakciu medzi aplikáciami;
* komunikačný model na prenos údajov medzi koncovými bodmi;
* model zhody na zaručenie interoperability medzi systémami

https://documentation.unified-automation.com/uasdkcpp/1.5.1/html/L2OpcUaOverview.html

A diagram of a diagram of a company

Description automatically generated with medium confidence

* + 1. OPC UA a vzťah s Industry 4.0

OPC UA hra kľúčovú rolu v rámci priemyslu 4.0, poskytuje štandardizovaný a platformovo nezávislý komunikačný protokol, na bezproblémovú komunikáciu medzi rôznymi priemyselnými zariadeniami. Podporuje veľké množstvo komunikačných mechanizmov vrátane výmeny údajov v reálnom čase, oznamovania udalostí,... OPC UA podporuje bezpečnosť bezpečnostnými funkciami ako sú napr. šifrovanie, autentifikácia, autorizácia,...

* + 1. Informačný model

Informačný model v OPC UA je Štandardizovaná reprezentácia štruktúry, organizácie alebo dát v systéme. Model nám umožňuje definovať ako sú informácie modelované, vymieňané medzi rôznymi zariadeniami a systémami, ktoré komunikujú prostredníctvom OPC UA. Hlavnými komponentami informačného modelu sú:

* Objekty a Nodes – Node obsahuje jednotlivé časti informácie ako sú premenné, metódy alebo eventy, objekty pozostáva z viacerých nodes a formuje skupinu dát
* Atribúty – Nodes v informačnom modely majú atribúty, ktoré definujú dáta (hodnotu premennej, dátový typ,...)
* Referencie – definujú vzťahy medzi jednotlivými nodes
* Dátové typy – OPC UA definuje set štandardizovaných dátových typov, ktoré popisujú dáta a ich hodnoty
* Metódy – Informačný model môže zahŕňať metódy, ktoré reprezentujú funkcie alebo operácie ktoré môžu byt spustené

Informačný model predstavuje framework na popis štruktúr a sémantických dát, zabezpečenie konzistentnosti a interoperability medzi rôznymi zariadeniami.

Aby sme to zhrnuli, informačný model OPC UA je štandardizovaná definícia jedinečných uzlov v adresnom priestore servera OPC UA. Jedinečnosť uzlov zabezpečuje ID uzla. A každý objekt, systém zariadení alebo aj celú továreň je možné reprezentovať pomocou prepojenia uzlov a ich vzťahov v adresnom priestore OPC UA servera je možné reprezentovať pomocou prepojenia uzlov a ich vzťahov v adresnom priestore OPC UA servera.

* + 1. Adresný priestor OPC UA

Hlavnou úlohou AddressSpace v OPC UA je poskytnúť štandardný spôsob pre servery na reprezentáciu objektov pre klientov. AddressSpace sa chová ako virtuálny priestor kde dáta metódy a ďalšie komponenty sú organizované v hierarchicky. AddressSpace je modelovaný pomocou Nodes, ktoré sú sprístupnené pre klientov pomocou OPC UA services. Nodes v AddressSpace sa používajú na reprezentáciu reálneho objektu, ich definícii a referencii medzi sebou.

<https://commsvr.gitbook.io/ooi/semantic-data-processing/addressspaceaddressspacemodel>

<https://reference.opcfoundation.org/Core/Part3/v105/docs/4.3>

Model adresného priestoru je definovaný nasledovným setom typu Node:

* View: Definuje podmnožinu uzlov v adresnom priestore
* ObjectType: Poskytuje definíciu objektov
* Object: Používa sa na reprezentáciu komponentov, systémov, objektov reálneho sveta a softvérových objektov
* ReferenceType: Používa sa na definovanie vzťahov medzi uzlami (nodes)
* DataType: Používa sa na definovanie jednoduchých a komplexných hodnôt premennej
* VariableType: Používa sa na definovanie typu premennej
* Variable: Používa sa ako úložisko real-time premennej, ktorá obsahuje hodnotu
* Method: Je funkcia ktorej rozsah je ohraničený objektom, kde je definovaná

Obrázok, na ktorom je rad, dizajn

Automaticky generovaný popis

Obr. 1: Adresný priestor model [1]

* + 1. OPC UA Server

OPC UA server je architektonický model serverového endpointu pre klientske/serverové interakcie.

* Reálne objekty - sú fyzické alebo softwarové objekty sprístupnené pre serverovú aplikáciu.
* Serverová aplikácia - je kód, ktorý implementuje funkcionalitu serveru, využíva Server API na posielanie a prijímanie správ od klienta. Server API je interný interface ktorý izoluje aplikáciu od OPC UA komunikačného stacku.
* AddressSpace - je modelovaný ako kolekcia Nodes sprístupnené pre klienta použitím OPC UA services.
* AddressSpace View – slúžia na reštrikciu Nodes, ktoré server umožní vidieť klientovi
* MonitoredItems – sú entity v servery vytvorené klientom, ktoré monitorujú Nodes v AddressSpace.

Obrázok, na ktorom je text, diagram, náčrt, kresba

Automaticky generovaný popis

Obr. 2

* 1. RAMI 4.0

https://industry40.co.in/rami-reference-architecture-model-industry-4-0/

RAMI 4.0 alebo Reference Architectural Model Industry 4.0 je trojrozmerná mapa, ktorá ukazuje ako sa vysporiadať s problematikou Industry 4.0 systematickým a štrukturovaným spôsobom. RAMI 4.0 je jednotný model pre všetky komponenty, ktorý zabezpečuje účastníkom zapojeným do ekosystému Industry 4.0 zdieľanie dát a informácii efektívne. RAMI 4.0 mapuje všetkých účastníkov prepojených v priemyselnom odvetví do troch osí definície:

* Os vrstiev architektúry
* Os životného cyklu a hodnotového toku
* Os úrovní hierarchie

A diagram of a diagram of a diagram

Description automatically generated with medium confidence

Obr. 3: co

* + 1. Os úrovní hierarchie

Industry 4.0 architektúra na hierarchickej úrovni ukazuje funkčné priradenie komponentov. Táto os v rámci podniku alebo závodu sa riadi normami IEC 62264 a IEC 61512. Úroveň nad a pod oblasťou noriem IEC predstavuje kroky a popisuje ako skupiny továrni spoluprácu v rámci externých firiem.

Úrovne hierarchie sú:

* Produkt
* Poľné zariadenie
* Riadiace zariadenie
* Stanica
* Pracovné centrum
* Podnik
* Pripojený svet

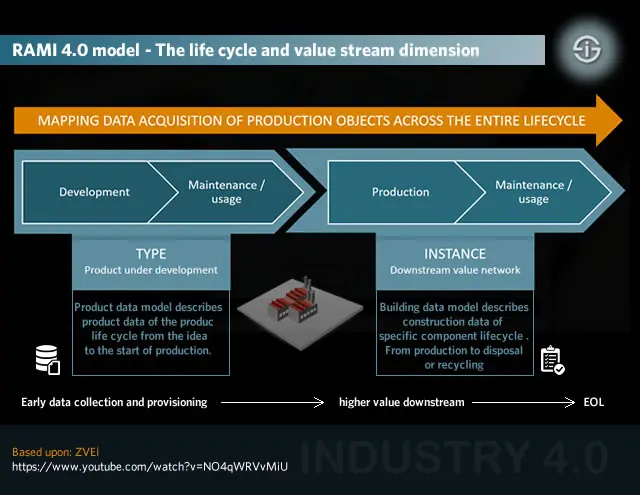
![A diagram of a pyramid with Mediterranean Sea in the background

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD4RXhpZgAATU0AKgAAAAgABAE7AAIAAAAPAAAISodpAAQAAAABAAAIWpydAAEAAAAeAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEthcG9vciwgVml2YXJ0AAAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADNTcAAJKSAAIAAAADNTcAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMTc6MDg6MjQgMTU6NDU6NDYAMjAxNzowODoyNCAxNTo0NTo0NgAAAEsAYQBwAG8AbwByACwAIABWAGkAdgBhAHIAdAAAAP/hCyFodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDE3LTA4LTI0VDE1OjQ1OjQ2LjU3MjwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5LYXBvb3IsIFZpdmFydDwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAG6AwgDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6RooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoorC8ReLtM8MvbpqDuXnb7kYyUTu59h/nvVRjKbtFXZMpKKuzdopkM0dxCk0DrJFIoZHU5DAjIIPpT6koKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiqmparYaNZNeardw2lumA0kzhQKp3HijSIfDp1tL2OexK5jlibcJD2C+pzTSbdkJtJXYnibxHbeG9LNzP+8mf5YIAfmlb/D1PavFb+7nvrue81CTzLm4bLt2Hoo9AOmKk13X59WvZtW1d1iVVOxM/LBGOcf1JrHkmMrbh07V9RgsKsPG8viZ4GKxDrSsvhR3fgLxgdGuY9H1SQmxmbbbyseIGP8ACf8AZJ/KvW6+bEYTRlHGa9L+HfjNpGXQdYlJlUf6LO5/1g/uE+o7Vw5hg7fvaa9f8zrweJv+7n8j0iiiivEPVCiiigArM1fxLoWgNEuva1p2mNMCYhe3aQlwOuNxGcZHT1rTrzzwqIP+Fl/EA60I/tW+32m4xj7F5A24zxs3eZnHG7OeaAPQkdZI1eNg6MAVZTkEeopa8xudae78Vr4c8J63beH9CtNAOpWtzpkNu6TnzCvy71ZPKTGSFAOW+8K5dPiD4w1+Mzxam+iEeBm1zybe1iYG5WZ1DfvFY7GVRxnoRgg80Ae7UV4hqHjnxVqS3NxY64+mpD4Di8QLHBawtm5ILHPmIx2kDBH0wRzmHUPiV4vvZLy50x2tBp2l6beom6yhtJmnRZHNw9w6uEJPljyjwepzigD3WivNNO8R6vrHiHXri+8TReG4NF1aKxXT7iGFoZUKqcuzYctIXIUq6jgcNznidJ17xJoNhdw2+r6reT6p42uNMlmItWmQRg4EZlVYxI4RV+clAFwiigD6Bqimt6VLpUupx6nZvp8O7zLtbhDEm0kNl84GCCDzxivK9M8X+LdU1bwzoF9qg00X19qEcuoW5tJp547dQY4zs8yFJDuO9QMgx8Y73/hHp8evfA2406eRJYtQl1CB5Ix8rLJLIpI5PBz6mgD0Y61pYvLO0OpWYub5DJaQmdd9woG4si5ywA5yM8VLZ6jZah5/2C8guvs8zQTeRKr+VKv3kbB4YdweRXy7o+o3l1o1h46uo50PgH+ztNePnLIrulyMeu2SPn29K7j4fXetG38PaAupyaCur6VdeI7i+hiieS4lknyIx5qsuAjqx+XOAOQM0Ae5VXsdQstTtftOm3cF5BuZPNt5RIu5TgjIOMggg+hryTwv408UeL9c8JW1xqkmlxahpd1c3X2S3i/0hoZ9iOvmI+1XUZ47Nx2NY/w81rVVg8MeHbHVDo9nfXOr3U1ykUbvMYp2xEpkVlA+bc2BnA4I60Ae52Go2Wq2SXml3kF7ayZCT28qyI2CQcMpIOCCPqDVivOvgIc/BLQzkNl7rkdD/pUtei0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUViReMdCnkmSO9b9zcJbM7QSKhkd/LVVcrtbLcZUkUmo+MtA0pZDfagqGOZoGVY3dvMVQ5UKoJJCsDx2+hoAxfHhls9S0TW5LaS7sdKnkluIol3OoaMoJFXuVJz/KvGfGfiO/8RazdXtrp97FYTWjJaQKNpEm4/vJFBwrEc5610fj34maZ4huo7SzvQulR4kDhW/0jPRjgcIPfHPWuKbXfNuJIZBGirPLGG34+VADn9a9rB4WMVzzev5Hl4mvKT5IrQydQtrm7fUYVt7mbzrVxvlZ0CuANqL82GBI64BplzbyujLBaX6kwqLIh2Agk5yX545wfmyMVqHWbEQmVp9qBgp3RsDkjI4Iyc1JDqNtcTtDDIWdRkjy2AHTuRjPPTrXo8lNvff0OLnmuhnNpks16JpjdZa8O/bMyjydvTAPCk/jUL2mpSC1WSS9jjgD+U0MZkdGEh2k/MD93GCc1sXN/BabPtDlS5woVGYn8ADQNUto7lojNh1BJ+U44GT82MZ9s5pyp03dNiVSa1sek/DzxTb202o33ie5vJNVa4WKLdI7ebG5VV8uMHHXk8ZHJ6V7KDkcV8sWmv2rSJe2F4I57VftCSlCNoH8QyOR16V7R4Y+K2japoP2rVJBaXMc3kNBCjzO7YzuVFUtjg9uO5rwsZhlSfPB3TPWw1d1Fyz3R39FY/8AwlmijVF09rzbcMMjdC4QHbu2lyu0NjnaTn2qfRte0/X7VrnSpZJYVbbveB4weM5G8DIweoyK4DsNGszV/DWha+0Ta9ounam0IIiN7aJMUB643A4zgdPStOigDN1Pw5omt28MGs6Np+oQ2/8AqY7u1SVY+MfKGBA49Klm0bS7m5kuLjTbSWeW2NpJK8CszwE5MRJGSmSTt6c9Ku0UAZw8O6Iqsq6PYBWtBYsBapg2w4EJ4/1f+x09qjn8LeH7maymudC02aXT1VbN5LONmtgvKiMkfIBgYxjGK1aKAM648O6Ld6xDq13o9hPqUAAivJbVGmjxnG1yNwxk9D3qKbwp4duPtv2jQdMl/tBla832cbfaSpypkyPnIPIznFa1FAGVceFvD93pEGk3ehabPp1uwaGzks42hiIyMqhG0H5j0Hc+tXbHT7LTLX7NptpBZwbmfyreIRruY5JwBjJJJPqasUUAZy+HtFSwu7FNIsFtL6Rpbq3FsgjuHbG5nXGGJwMk5zgUl/4c0TVdPgsdU0bT72zt8eTb3NqkkcWBgbVYEDA447VpUUAVRpenreQXa2NsLm3iMMMwhXfFGcZRWxkLwOBxxVOXwr4euLGKyn0HTJbSGUzxW72cZjSQkkuFIwGJJ5HPJrWooAr2Gn2WlWSWel2cFlax5KQW8SxouSScKoAGSSfqTViiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKbJ9w4/SnUUAeZT+BtWdr9k1K1tRJcwXVtBa2siwJLHN5u942kO5mIAYrtz9cY888YT6r/ahsbLUre4uPtk1xe3aQFYkZ4ljMQXdnACkZ3Z5AJODn0/4j+N/7IjOi6PJt1GZcyzL/wAu6H3/AL57eg59K8ZmuUhTy0bnvzXq4LCc/wC8nt0PPxWI5fchuYkml3MDPaW06LA9sIpJHjzuJYs23njk98ikk0RZFZGnOxmmONvOHVQPy2/jWgZQT1o8wetet7OB53PIz7XRhbrHxaRlJVkzbwFN4UEYOWPrT5ba8gu7i7tGiLOpCQqpUOxIw0nzYOMdQAcZ+lXfNHrR5o9afJBKyFzybuyDUrOW9WPyZY4XQkiUoxdPdSGGD+dVE0NY7uaRRbMJC7B3gJlUsMfezj9K0vNHrR5o9abhCTuwUpJWRUn0szQWcaz7Ps6hHIX/AFicZX2zgfrWlprajoetxa3oN1FFeQySELLGWjeN8ZRgCD/COc1B5o9afHcBD14qZUqck01uONScXdM9Q8O+HINd1Z/Eunro8/2m4NxL9psGe4t59oDKsgkAADcjKk4OM9Mdp4H8P3vh62uYLu6hkieQGC2tYnigtkAxtjRncqCeSAcew5z434V8UXHhXWRf2uZbaXC3UAPEi+v+8Ox+vrX0Lpeo2mr6bBf6dKs1vOu5HXv7exHQivn8Th3Rl5Hs0Kyqx8y3RRRXIdAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXL+L/Ff9jRrYaZ5curXCkRIx4i9Hb+g71b8V+JoPDelmQ4ku5flt4e7N6/Qd68YubueS4lvLyUy3czb5JD1J/wFengcH7d88/hX4nBi8V7JcsdyrN4N8RTySSTywvJKxeSRpSWcnqSag/4QDWfS2/77P8AhV7+27r+8fzpf7buv73617/sF/X/AA54vtZmf/wgOs+lv/32f8KX/hANZx0t/wDvs/4Vf/tu6/vH86P7buv7x/Oj2Hn/AF94e1mZ/wDwgOs+lv8A99n/AAo/4QLWv7tv/wB9n/CtD+27r+8fzo/tu6/vH86PYL+r/wCYe1mZ/wDwgOteluPq5/wpf+EA1r/p2/77P+FX/wC27r+8fzo/tu6/vH86PYL+r/5h7WZn/wDCA616W3/fZ/wo/wCEA1r0tv8Avs/4Vof23df3j+dH9t3X979aPYf1r/mHtZlFfAmtocr9nH0kP+FdP4OvNa8AzO2pGKTSJ3HmwoxLIx43qP5jvisX+27r+8fzpkmoy3WEnbKjoDUzwsZx5ZbFQr1IS5kfQttcw3lrHcW0iyRSKGR1OQRUteO+BPF3/CPXY03UHxpk7ZR2P+oc/wDsp/SvYVYMoZTkEZBHevl8Rh5UJ8sj6CjWjWhzIWiiiuc3CiiigAorN1fxHofh/wAn+3tZ0/TPP3eV9tukh8zbjO3cRnGRnHqKl0rWdL120N1ompWmo26uUM1pOsqBgASuVJGcEce9AF2iiigAooooAKKr22oWd7NcRWd3BcSWsnlzpFKGaF8Z2sAflOCDg1YoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACs7XNbtNA0uS+vnwq8Ko6u3ZR71Zvr6202xmvL2VYYIVLu7dgK8P8AE3iWbxNqpu5t0dnCSLWBhjaP7zf7R/SuzCYZ4idui3ObEV1Rj5kOraxc6xqUupaicSycJGDkRL2UVzOuanLZ6XcXcKq7xqCquTtJJA5x9asz3BkbjpWZq9tJf6TPbQlQ8gABY4HDA/0r6drkp8sOi0PAT5p80yIa8z+HFv1hH2p/3SwE8ednbt+gOc+wNPtdft20azvb91ga4hEhRFZtuRz0BIHuapro0o117kun2PBlSLuJyoUt9MA/ixqt/Y+pppllaJKpSK08mRY7l4sPx82VGXGOxxWHPWWv9epty03/AF+BuT63p1s4Wa6UMUEgCqzZU9G4B496nW+tnm8pJlZzF5wA5yn96sWw0m4tv9aYj/xLkteCT8wGD26U2LTL6za2ktlt5HWyFrIHkKhSDwwwDke3H1rRVKm7RDhDZMsXGuLNrNhaWV0UjnjMpdYC+8ZG1RkYAOTz2rQh1exuLhoYblWkALYwQGA6kEjDD3BNZdhpdzazaezvH/o1m0DlST8xIOQPTiqUWh6hNcRNfTDCwSwu/wBpeTcXAG5UIAQcdBUKdVa23/4BThTel9v+Cat34n0+3sJ7qKRp/JXdsVGG4eoJHI9xxV6LUrWeRY4pcu0ZkCsjKdoOM4IHeseWy1G70GXT50tYiLcRRujlt5GOeg2jjpz19uZJ4NRfUYr+KG381rdoJYmnOFy2Qwbbz06YH1qlUqXu/Lp94uSFrL8zQOt6epgBuQTON0QVWJcZxkAD1FQw65braCW/nhjZ5pI0EW5g21iMDjJOOo/KqemaVcWd1YyTNE32e0aFypPLFycj2xTLXSLiGazaRoiILu4mbBPRyduOOvNHPVdnb+tP+CHJT7/1qap1mwFolybkGJ2KKQrElhnI2gZyMHjHaprO/t7+3FxZy+ZESQG2lckdeoFcrqcU2nTwOLmK2d72edJWlWNAGHQsykZ56YOeeeKv6HdyG3s7e1t8W483zpWYuGIY/Mr8BtzHPTpmlGvJz5Zf1sEqSUeZHUpIssZjk5BGOa9F+HfjQwyR6DrExO47bOZu/wDsE+vpXlofHSrAcTJgkhhyCDgg+op4ihHEQ5ZCo1ZUZ8yPpmiuE+Hnjb+2YP7J1V8alAvyOx/4+EHcf7Q7j8fp3dfKVKcqUnCW59FCcakeaIUUUVmWeZfEKO/l+MXw6TSbm3tropqmyW5t2njH7mPOUV0J4z/EPx6Va8V6n4o0zVfCGlHXIYZtW1CW3uriwsFjBj8pmG1JWlwwIznJGeoI4rsdX8OaH4g8n+3tG0/U/I3eV9ttUm8vdjO3cDjOBnHoKjsvCfh3TRCNO0DS7QQTGeIQWcaeXIV2l1wOGK8ZHOOKAPHbXWfEHiTUvA32/X7xZI9f1CymkgjhQTeSsmx2TYVLbRjpgZOADzV7wn4+8X6xqGlX1y8i22pyX8c1pcvZRxQ+VuK/Z1D/AGhnTYA4dTwxOAMGvVpfC+gT2iWs+h6bJbpcG6WF7SMosxzmQDGA/J+brzToPDmiW2qz6nbaNp8N/cqVnu47VFllBxkM4GSDgZye1AHkWl+KvFlz4T8A3114tuI7jxPfiC6kNpahYl2yACMeVwxIXlt3zY4xlTLa+NPFN/e6Xoy67JHnxTe6PJqUVtCZLqCKPer4aMoGBO3KrjK9DyK73xB8PtN1v/hH4IY7Wz07RrppjYLaKYZ0aNkMW3IVVO854I9ua3YdA0e3hsorfSbGKPT2LWaJbIotmOcmMAfITk9MdTQB49Prvim2vvEdn4YntGvh4mjtSFNnaXV1EIAW2NImx5ScHLKxxnA9Fh+JGv6vb+G9P06+1cvdLfm7uV0+ztb1pLcgCNo7h/JG0NufacnAwE+YD1258NaFeQXUF5ounzxXkomuY5bVGWeQYw7gj5mGByeeKZP4U8O3WkwaVdaDpk2nWzboLOSzjaGI88qhGAeT0Hc0AV/A+qajrXgfStQ1tbYX88AM5tJkliZgSNyshKkHGeCRzit6mRRRwQpDBGscUahURFwqgcAADoKfQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABSO6xoXchVUZJJxilryT4jeNRqMsmg6TKDaIcXk6H/WH/nmD6evr09c7UaMq0+WJlVqxpR5mZvjfxi3ia++zWTMmlW7HHOPtLD+Mj+6Ow/H0xx1xc7jtU8VHcXAA2JwB6VV319TSpxpQUIngVJyqS5pE26k8wDqR+dRb65e/ihn1jV0ksZLqVoo1gZI92x/LGDn+A5x83HTrxRUqciTQQhzM63eKPMHqPzrmJkurY36PbT3El1ZpGrRoWBcKykE9vxqay0/dq0k9xbcpaQLE8i8K43Zx7jjnqM+9QqzbtYr2aSvc2b++Flp89yFEhhTds3Yz+NTxyiSNW45AOM9K5NLP/iQzwDTpl1D7OyTTeWQZWzz838eTyOuParL2b2NxI+n2R2tYYZEyoeQN3I6tj8TSVaV720/ryG6cbWvqdJ5gxnI/OjzBjORj1zXH21k7DUEmglhtpoYiogsWjBcMc/u8nd0GfUU6a2upbWz3WccdtFLLviSxLKwP3HMAIPrxzgnNL28rX5f6uHsVff8Aqx1++kDg9CKw9NmFhb21l++madpGQGIxeWoycbScqvYfUVlWtvfvfrLDam1ke3mWQrbGPa5HyhnJPmc/xVTrNWshKle+p1E2oCLUbW1CBvtAc7t33doHb8as+YvqPzrkrazUTWZtdMmt2jtZUndoiu5yo6/3iTn5u/rUlpo0SvpPm2Ix5Di63rkM3y7Q+ev8WM5/SpjWm+n9aeRTpx7/ANanSSXQW6hh8qRxKrN5irlExjqe2c8fQ1KHHQYrl7a0uU+wKYJAsKXSYIPyKWAQfkOKdpmnGy/saWO1aKRbcpdMFwx+Tox7/MBjPSmq0m9v60/zE6cbb/1qdPupVk2nIqnbXJuLZJWhkgLZzHKMMvOOal310KV1cxtY0YbiSOaK5tZDFcQuHjkHVWHevc/A/jGHxTpeJQsWo24C3EI6E/3l/wBk/p09z8+pLsbIrS03VrvSNSh1PS5NlxCc4P3XXurDuDXFi8Oq8brdHThq7pS12Ppiisfwx4ls/FGjpfWR2t92WFj80Tdwa2K+aacXZnuppq6CiiikMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoorlfGPittIjGnaSI5tWuFPlozYEQ/vN/QVdOnKpLlitSJzjCPNLYxPiT44OnI2h6NNi+kX/AEiZf+WCHt/vH9K8cluEhjEcZHHpWvN4P8SzyO8phd5GLO7S/M5PUk1X/wCEE13P+rt/rvr6LD0lQhyrfqeJWrKrK7Zi+aD1NHmj1rb/AOED1z+5B/31S/8ACA63/dt/++q6OZmN49zD80etRokKTyTIoEkuN7f3sDA/Sug/4QHXOyW//fdH/CBa5/zzg/77pcz7BePcw/NHrR5o9a3P+EB1z+5APq9H/CA63/dt/wDvunzMLx7mH5g9aPNHrW5/wgOt/wBy3/77o/4QLW/7lv8A990czC8e5h+aPWjzR61t/wDCA65/ct/++6P+EB1z+5b/APfdLmYXj3MPcm7dxuxjOOcelL5o9a2/+EC1z+5b/wDfdB8B65/zzt/++6OZhePcxPMHrR5g9a2/+ED1v/nnB/33S/8ACA63/ct/++6fMwvDuYfmj1o80etbf/CA632S3/77o/4QHXf+edv/AN90uZh7vcxPNHrR5o9a2/8AhAtd/wCedv8A990f8IHrn/PO3/77p8zC8e5ieaPWnx3ARuvFbH/CBa3/AHLf/vuk/wCEC1z/AJ52/wD38o5mHu9yfwx4mufC2tLqNkfMhcBLmDPEif4jsa+hdJ1az1vS4b/TphLBMuVYdvUH0Ir51XwLr6H5Vtx/20rqPB13rngK4kk1JY30mZh50Ub5Ksf41H8xXnYvDe19+C1/M7cNiY0/dk9D2+iorW6hvbWO5tZFlhlUMjqcgg1LXhnrhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUVn63rdnoGlyX1/JtReEUfekbsoHcmmk5OyE2krspeK/E0HhrS/NI8y7mytvCOrt6n2Hc14xc3k73Et5dzNLdzNveQ9Sf8B6VNq2sXOsalLqeokCaQYSNTlYk7KP8e5rGlmMjZJr6rBYVYeF38TPn8ViHWlZbI0f7cuv7360f25df3j+dZe6jdXdc47Gp/bl1/eP50v8Abt1/eP51lbqN1GgWNX+3br+8fzo/t26/vfrXL6leXFnqmmlZMWs0hhlUgfeI+U57ciqOn67cSeIr6O7YCwCu1scAYEZw5z1PY1k60VLlZoqTaujtv7duv7360DXbod/1rjdP1uYabaG5jlury7Vp1hiCKUjJyMklQAAQOTkn15qwviG2kghaCKaWaZnRbZQocMnDg5IUY9c49M5FCrQauDpSTOr/ALeu/wC9+tJ/b12f4j+dcTe62kzadLFJJbKl8YrmN22lcKSQ2DgjoepFOudWkubjSJrZbmKKW4cbW+UzKEJHGeh7ZxS9vDoP2MjtP7duv7360f25df3v1rmItetZ7WxniWVvtsnlxoANynBJzzxjHNZ+oXEkt9qV5A2BpVm6RNjIEzLuJ9OAEH4mnKtFK61/q/5CVJt2Z239uXX979aX+3bv+8fzritI12VdEuZNXk3XFku6RwoHmKy7kbA45Bx9Qai0jXLuC0vW1t2lnjuVijijjG7LKGEYAxkjOMn0qViIO3n/AFqV7CWvkd1/b13/AHj+dL/b11/eP51yj+IYYIro3dvcW8trGJXhcKWKE4BBViD+dC66HkeH7FdRzeQZ4UkCAzLnBx83GOOGweav2sCPZS7HVf25df3v1o/t27/vfrXAPrt5daDpV9LBNbPJdQb/ACiMSqTyFCsTg+hqxrGtNLoWpLCtxZXdqF3K7AMoboQVJGDz0Pao+sQs35XL9hK9jt/7du/7x/Oj+3br+9+tcu2vW0dvfSSLKpsGCyoQNzEgEbeec54rRSTfGrYK7gDg9R7VqpxlsZuDW5r/ANu3f979aP7duv7361lbqN1VoTY1f7cuv7361HLqUt3hJmyo7VnbqN1Fwsdx4F8Xf8I7djT9RkxpczZRz/ywc/yU/pXsQIIBByD0NfNaSCRDG/IPHNei/Dvxn5MkegaxMTu+Wync9f8ApmT6+n5emfDzDB/8vqfz/wAz18Fif+Xc/ken0UUV4R6wUUUUAcvL8SfCcOg2GszauqWGoXhsraVoJQWmDMpQrt3Lgo3LAD35Fa9rr2m3uvX+jWtz5l/pqRPdxBG/dCQEplsbckAnAOa+ernwlc+IvGHjDwU0BFrof9o6rZ/3fNukia3Uf7p8wg+/tVvwzrOp6j4Xg8W6lcz6ZpniXxIg1e+t5GhaK1iiEcYaVeYkMqbS4K4yBuG6gD6LrOsNe03U9W1LTLK58280t40vIvLYeUXXcoyRg5HPBNeLXGratdjTLOz1zVJPD9x41SysL6O+kEl1aGJvMjE4O+SMPuAcsTxw3ygilJcXuhfGvXTLd3dt4Ug1bToNQnhvJBOHNrtgMshJZot2A5LZJYEk80Ae761rum+HrFbvV7kQRSSpDGAjO8sjHCoiKCzseyqCah0TxPpPiKS7i0u4ka4snVLq2uLeS3mgLLuXdFIquoYcgkYPOM4Ncv8AEH/iX+NPBXiC/wDk0bTbu4S9nb7lu0sJSKRz0VQ3BY8DcMkVnfEHx1HqPg6aXwTqf2qC11O1g1O+tJJI4YrdyDJtukUgYBUM8e4oG5ANAHp9RyzxQbPPlSPe4RN7AbmPQDPUn0rwhNW1iew0GGPxHLNpt34zS1ik0/U7mYm3Mbb4PtTojTpuBww3Y6BsqMZ08guptJbxDq18bDRfHd9pi3l1qcyGKAKxQNLvByOgYndjgHBxQB9GUV4X4O13xFfePrKO+1hIdU/tS7TUdOl1G5ldrdc7V+xiIxQKB5ZWXeN3qSxFdd8DPtF78LNL1nUtQ1DUL+/R/Plvb2WfOyWRV2q7FV4GMgAnAzmgD0aiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKR3WNGeRgqqMsxOAB60AQ3t7b6dYy3d5KsUEKl3duwFeH+JvE0/ibVTdzbo7OIkWkDfwD+8f9o/p0+tzxz4wbxJfG0s3xpNu/y4P/AB8OP4j7Dt+dcZcXJc7VPFfQ4DCezXtJ7/keNi8RzvkjsPnuDI3tUO+ot1G6vVuefYl30b6i3UbqLhYl30b6geeOIZlkRBjPzMBTRdwEoBPETJ9wbx8309aXMg5SPV7N9R02SCF1jmBV4nborqcgmsu88Ozz6NY2sNxGlxBuWWQ5w6uMSY789q2GuYVlETTRrIeiFwGP4UPdQxtiSeJDnGGcDn0rKcITbb9DSMpxskZ+o6KLi9trqG3s7jyYTCYLxcoVzkEHBwQfboaiudA85bKRbXTTJbF82zRYgIfGQODyMDnHPoM1seapYqGXcBkrnkCs3UdZFrPaQWz27S3TEBpZcIqgEkkj6YHvUzhTV2+pUZTdkiK40Bby0tYJreyhijuPNlht02rtxjAIAyffA/SpItMvt2ni5uY5hYzsyyHO9024GePvCtAXMXmiJpo/Ox/q94z+XWhrmFJRG80ayEZCFwCfwp+zhe4ueexiafa+R4h1OeNXktbMsYIlU/6xwGkA9eQAPrV2106ZvDE1rKQt3eRSNKW6CSQHOfYE4+gqe01ezvo3eC4QiNijZYDGDj8s96smZQ2C6g4zgnt60oQhbR9/x/qw5SlfXy/AyJ/D7zXlhL5yrHHEkd2nP74Jgrj8QfwNOm0Wd57q4jmiEzXqXcG7OMqoG1vrg8jNXZ71h5Ys2gmbzFWQNMBtU9/r6DvUxuoQ4QzxhicBS4yT6Yo9nTYc8zLu9HvNQW+lupLeOe4gEEaRszIihs5JIBJ/Crslg8mr2l1vTy4bZ4WXnJLbeR7cVPJdwQsFmnijJ5AdwpP507zlCby67f72ePzquSH9feTzSMiDR7xdKsLKWS3xY3ETq6s3zoh7jHB/Me9P1LRZ72TUmjliX7ZDHGm7PylSSc8e9aP2uDyzJ58Xlg4L7xgH0zTvtEWxX82PY33W3DB+hpezha39dh8873/ruYuo2X2jxbaJGxEckQku1xwwjPyc/U10e+qyXMckXmJKjRjq6sCv50iXUMkZkjmjdF6srggfjVQSi211Jk3JJdizvo31nXGsWVq8SzXMYMsnlrhwcNgnnnjpVsSBlBUggjIIOc1amm7Ilxa3Jt9G+ot1G6quKxNvxU4cTR7ScMOQQcEH1qlupVkKnIpXCx7X8PPGv9s2w0rVZANSgX5GJ/4+EH8X+8O/513VfMsF1LFNHc2kzQXELbo5FOCpr3PwP4wi8VaXiXEeoW4C3EXqf7w9j+lfO47CeyfPDZ/ge3hcR7Rcktzp6KKK8w7gooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK8m+I3jU3txJoWkTEW8ZK3ky/xn/nmD6ev5Vq/EnxwdOjbQ9Hl/06Vf38yH/j3Q9v8AeP6da8cmuEhTy0PP1r1sDhbv2s9uh52LxFv3cPmS3FwFGyPgDjiqu+oDKD1NHmD1r27nlWJ99G+oPMHrR5g9aLhYn30b6g8wetHmD1ouFihqUAude0oyQ+bGnmlsrlR8oxmsiSwEeh6m0VoVnF8TEVjO4AMpG30HJ6V03mD1o80etYSpRk2+/wDlY2jUcUkczrLTTTXgEbRzLcoY447XcXUEfP5mOPoD+FW5bJZ7jX5JrbezxYjZkySfK/h98+lbfmj1o80etL2Kbu3/AFr/AJj9o7WS/rT/ACMS0ney1KO5vI5iJ7CJVKxliXUnKnHQ/MOuKr6dZkx+HRPan5PNEm+L7vytjORxzXR+aPWjzR60eyXV/wBXT/QPaeX9WscxdtNLchvLaO4S/U+VHa9EDffMmMnI54PtWhZ/Z4r67i1G1eS7kuyyOYS25D90hsYAA9xWv5vvR5vvQqVne4OpdWsc59mA0LVrOK2IuhM77RFgsnmBhg4weB0zViW4+3aw0tvFMY102WPe0TKCxZTgZHWtvzR60eaPWj2XS/8ASD2nkYIsxD4c0VIbYq4ltmkAT5s5BJbvwc9elRzWQbSNcl+zE3BuWeJth3cbcFf16V0Xmj1o8wetDoxenl+ge0Zy16HubzUhNAZLfMfnTeQJGiCgE4ORjp0xWzrwFz4XmS3UyK6x7Qg6jevQD2p02l2c0srt5q+ccyokzKkh/wBpQcH39auq6ooVcKAMADtSjTdpJ9f+CEpr3Wuhj6tbeTeWDRgwWcauHMduJVVyBglMHPAIzg1TuIbe1t9N3ma5gfUWlIeHbwUOdqD+HPOPrxXS+aPWoZ4obiSCSUZaB/MjOcYbBH8jRKkm21/WwRqWSTMGeJ5fts1rbyf2e11CzRrGV8xR98heDjp25xS6iguV1SXS7d1t2sPLYLEUEkmSRhSASQO+K6PzR60eb70exTVr/wBa/wCYe0fYx9Ts7e3tNLdbRfKguEMoWHcQuxhkgDJ5xW6jqY1MYwuBtGMcfTtUXmj1o8wetaxiottGcm5JJk++jfUHmD1o80etaXIsT76N9QeYKPMHrRcLFlJdjZrS03VbrSNTg1PTJClxCckZ4kXureoNYnmD1p8dwEbrxUytJcr2Grxd0fTHhfxJaeKNFjvrQhW+7NFnJifuprYr5u8MeJrnwtrK6jZ7pIXwtzADxKv+I7V9DaVqlprWlwahp8olt50DIw/kfQ+1fN4rDujLTZnuYesqsfMt0UUVyHSFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVzPjLxQ+iWX2TS1WbV7lD9mibov+23sPTv+dXvE3iO38NaS11MvmzOdkEAODI3p7DuTXi93qN1PfSajezGS7lbcWz930UegFelgcG675pfCvxOHF4r2K5Y7mPP4b8U3M0ks9tvlmcvJIZDl2PUniq58G69n/jxX/vs/wDxNdB/wkd16n86X/hJLr+83517/sPM8X20uxzv/CG69/z4r/30f/iaX/hC/EH/AD4J/wB/D/hXQ/8ACR3Xdm/Oj/hI7r1b86PYeYe2l2Oe/wCEL8Q/8+Kf99n/AApP+EM8Qf8APjH/AN9n/Cui/wCEkuvVvzo/4SO7HdqX1d9w9tLsc7/whniD/nyj/wC+z/hR/wAIbr//AD5R/wDfZ/wrov8AhJLr+8350f8ACSXX95vzp+w8w9tLsc9/whniD/nyj/7+H/Cj/hDPEH/PlH/38P8AhXQ/8JJd/wB5vzpD4lugMsxAHUlqPYeYe2l2Of8A+EM1/wD58o/+/h/wo/4QzX/+fJP++z/hXQf8JNcE4Dc4zgN2pf8AhI7n1b86PYeYe2l2Oe/4QzX/APnyT/vs/wCFJ/whmv8A/Pkn/fZ/wrof+EjuvVvzo/4SO69T+dHsPMPbS7HPf8Ibr3/Pkn/fZ/wo/wCEN17/AJ8U/wC+z/hXQjxLcsMq5I9Q2aX/AISS69T+dHsPMPbS7HPf8IZr/wDz4r/32f8ACj/hDNf/AOfBf++z/hXQ/wDCSXXv+dL/AMJJc+po9h5h7aXY53/hDNf/AOfBf++z/hR/whmv/wDPgv8A32f8K6L/AISS69WpieJ7hxmOTcPVWzR7DzD20uxgf8IX4g/58U/76P8AhR/whniD/nxX/vs/4V0A8S3LDKsSPUNS/wDCSXPq350ew8w9tLsc9/whniD/AJ8V/wC+z/hR/wAIZ4g/58V/77P+FdD/AMJJc+p/Oj/hJLn1NH1d9w9tLsc9/wAIZ4g/58E/77P+FJ/whniD/nwT/v4f8K6L/hI7r1P50g8SXLDKtkeoNL2HmHtpdjnv+EM8Qf8APgn/AH8P+FKPBmv4/wCPFB/20P8AhXQDxLcsMq2R6g0v/CR3Xq350/YeYe2l2Oe/4QzX/wDnxT/vs/8AxNH/AAhuv/8APiv/AH2f8K6D/hJrndt3nPXG6l/4SS59W/Oj2HmHtpdjnf8AhDdf/wCfBf8Avs//ABNA8G6+f+XBf++z/hXRf8JJderfnR/wkl16n86PYeYe2l2Od/4Q3X/+fBP+/h/wo/4Q3X/+gen/AH8P+FdF/wAJHdep/Oj/AISO59T+dHsPMPbS7HPr4P8AESHK2Kj/ALaH/Cuu8C6lrvgi8c6vbY0edh5wDk+SxON6jH5j/CqP/CSXXqfzqG41ea+QRTMdmc4z1qJ4VVI8snoVDEThLmR9BRSxzwpLC6yRuoZWU5BB70+vI/APjAaHOukapJjT5Wxbyn/lgx/hP+yf0P149c69K+ZxFCVCfLI+go1o1ocyCiiiuc2CiiuI+K3iTU/C/he11DTftUNr9uiXUryzgSaa1teS7qrgrnIUZIIAJ4zigDt6K8ut/iPcWFn4Wh0y6/4TSLXL6SJdSgjht3WMAuI2j3qPNAwDkIMDkZ4O0/xU0pPFJ8PNpupJqMizm1ilEMbXJiUsQEaQOgYKdrSKitjg0AdvRXk+gfE+61+TwVqOom40ODV21B5LUQQzQ3UcMRcMZd++MIB1CgswOVVcGuksvihpN21q0un6nZ22oQTXGm3NzEgS/SNS58vDllJQbgJAhIoA7SiuO8NfErTPE2pWFnBp2p2Z1KxN/ZS3ccYSeMEBsbHYggt0YD1GRgnsaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKo6xq9poely31/IEijHA7ueyj1Jqzc3MNnayXF1IsUMSlndjgKBXiPirxRL4n1TziWj0+An7NC3f/bPuf0rrwuGliJ26dTmxFdUY36lfWtbudd1R9S1D5WI2wxA8Qp2A9/U96xJZjI2e1Rz3JkbAPFQbq+rhGMIqMdkfPSbm+aW5Puo3VBuo3VVxWJ91G6oN1G6i4WKPiG8ngs7eC0kMMt5cpbiUDlAx5I98U42llosMl8jXCpDETIDMz7xjuGJ5+mKXU7FdStPJaRonV1kilXqjqcg1CbW+vIJLfVJ7doJIiji3jILEjGcknHrxWEk+du1+xrG3Klf1GrrN9D9imv7SGO2vXEa+W5LxMwyu7jHPtTZNdvXtru+srSGSztXZW3uRJKEPzlRjHY4z6UxNLvZVsodQuoZILNw6iJCrSMowpbJxx7UxtHu0truxtLuKOyundjuQmSMP98Kc47nGfWs71bdfwvt/X/DF2p3/wCHLL63cz6xFZabbxSJLaLdCaViAAWIwQBn0qjrOqXd7oesG1tYmtIFeBmZyHYgfMQOmBnv1wav2+mC21hbuJwIks1tVixyMNnOfpVO40O7Nrf2VneRRWt67SHdGS6M33gDnGCfx60pqq4tPrft8hx9mpL5Dre8itrxCtpGZ4tHWXztxyQB9zHTHFSWmv3ki6bPd2cMVvqB2pskLOjbcjPGMHBo/sd/tBk89cHT/seNp64xu+ntSjSHFjpMHnrnT3V2O37+FI49OtNKqtv07oG6b3H6lrlxps2+VLQwCVIzH5/7/DEANt6dwcelR2l5qknirUbaR7drWJI2CEtlVO7px1OOc8elU7jw3PKk8S3FtsmuRcec8O6b74bbu9OMcdsVpCxmi1ya+gli8u4jRJkdTu+XOCpH170L2rld7X/z/wCAL92o6b/8N/wSppurrHpFhBptjFFNdSyrFDvPloFZtzE9e2fxqW58RXFlaal9qtozd2CpJsjc7JUYgAgkZHWooNCmtbOxEFzH9qspXdHZDscOSSpGc9DRcaHNeWmo/abmP7XfKib0Q7I1UggAZyelSvbKNlvby7f5lfunK72+ff8AyL1tqt3/AGpBaX9tFF9phMsTROWxgjKtnvyORxU2palJa3FraWkSy3V0zeWJCQiqoBZmI54BHTuRUMti0mq2V35gAtonjK45bdt5/Sk1Gxkubm1u7WVY7m1ZthkBKsrDDKQOew/Ktv3ii15/hpf9TL3HJFDVdWvX0TWbZo4Yby0g3MyO21kZThlPXPBHNauiwfZtFgQwW8JMYO23XCn5RyeBz61nyaLLcWep/abhDd6hF5RdFISNQCFAHXuTWtCpito4iclECZ9cDFTTUufml2/V/oObjy8sf60Oa0TVLvTPDMNw1tEbJJyjnefMwXI3AdMAke9bEWr3lzrl3ZW9vCIbUoXmkc/MrKDwAOvX26VnQ6BeJpiaZNexPZ+b5j4jIcjdu2g5xjOPetO0sDbapf3TSKyXZTCY+6FULz69KimqqUY9NO3Z/wDALm6bbf8AW6/4JSj8VF44Lsra/Y55ljVRNmcBjtDFemM4464NWNW1y40rfK6WhgjZcxmfEzKSMsq9O/Q+lQWGiy6eIreI2TW0TZV2t8zbc5xnp7Z6496rXnhue5W9iS4tvLupTL5ssO6VOnyg+nFK9fk8/kO1Lm8jUudUupb+6tNOt4pBbRBpmlcrksOFXHfHrTfCDf8AFL2XGODx6fMajl026j1G4udPuYohdxqkwkQsQRwGX3x61Y0aybStKgs3lEpiGC4GN3Oa0jz+1vLz/NW/Azly8ll5fkYej6pd6Z4cluhbRPZW9zMZCXPmMDKclR0wM9/Q1tatq1zYRSTQrZmOOPzAs8+15eM4Uf41mx+H7xdLl0x76JrOeVnkxGQ4VmLFVOcc+p9TUl9oU1zeXssUtsUvI1QmeHe0OAR8nYA9frmso+1jDlXZdvP/AIBpL2cp3f6/13IL3WYLbxLZXxVmNxpx8iID5nZmUqv1rQl1u7juYbJksobww+dN505WNMnAUHqTVeTw4lw1uLmUMkViLX5QQwYYw4PbG2j+xrr7RFdyTWlzdiHyZjcQbkkAPytjqG9fWmvbJvz/AKYfumka2k6muq6cl0i7SSUZQcgMDg4PcVd3ViO97b3Gn2lt5eGZnuWSEKgQDoPQ5I961N1dMJNqz3Rzyir3RPuo3VBuo3VpcmxPuo3VBuo3UXCxeVxKhSTmvS/h34zaQpoOsS5lUYtJ3PMg/uH3Hb1rycOQcirAk81QQxWRSCrKcFSOhFc2JoRxEOV79DehWlRldH0xRXF+AfGq+ILX+z9RdV1SBeR085R/EPf1rtK+TqU5U5OMtz6GE4zjzRCszXLLVryCA6Fq6aZcRSh2MtotxFMuOUdcq2O+VZTx36Vp0VBZ5vZ/CT+zbewl03VbaDUbXXJtZkcafi2ZpEMZjSFZAUULsA+c/dyc54h0T4Q3Gj65o92dfhntNIv7u8ih/s4LLObgMH86XzDvYAqA20cLgg8Y9OooA8y0r4Pmzt/DNnf61Hd2Xh5b6KOJLIxtPDcxGMq7eYfmXcx3AAHgYHU2rP4XTrDpVpqeureWWhWs1tpUaWXlvGJIzGrTNvIkKocDaqAnkj09DooA4bw/8Nv7C1Dwtdf2r5//AAj+mSaft+zbftG/b8+dx2429OevWu5oooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACkZgqlmICgZJJ6UteW/Efxv5zy+H9GmICnbezr/6LU+vqfwrajRlWnyxM6lSNOPMzL8eeMh4huzp+nv/AMSu3bLSA/8AHw4/9lH61xFxc7jtXpUc9wEURx8ADHFVd9fUUacaMFCJ8/UnKrLmkS7qN1Rb6N9a3M7Eu6jdUW+jfRcLBdXkNnbNPcv5cSYDNgnGSAOnuRUu6sDxZFFP4cnMsaOY2RlLKDt+dcn24zUU9taHW7GwlhiWw+zyPHAFAjeXIzkdCQCTj8axlVala3b8Waxppxv6/gdJuo3GuJvMDSdStrdiLOPUYUg2nAXLLvVT2AbPTpV9dLsT4nntfIX7MbRZGgH+rZ92NxXoTg9TzUqu27Jfj6+XkV7JJXb/AK0/zOn3VFc3kNnD5ty/lpuVc4J5JwBx7muVsrpZtF020uLdb2WV5FjS4kIjwp/i4OeMY4P4VTkjin8M3QljhaO31ELGFO9IkMi5CkgfLzjoOKl4n3bxXS/4XKVDWz7nd7qN1c3JbWkniCGxuIYvsMdoZILcoBGX3HcdvQkAj6ZNWPDz4t7uOMk20d0625PQJxwPYHIFaxq3laxm6dlc3N1G6uOMVhPceI2virSQyMyb2/1XyDDKOxz3HNTtMt5FZ219ZQXVwtmJZWvJSiID3Hyt83qcenNQsR5f1e3Yr2J1W6omvIUu47VnxNKrMiYPIGMn9RXJWsUl/oOlTObe7MMbs9rdv8so6Bs88jGASCOT0p6RafqGsaNcNZx+VPaSELMoYnG3AJPUgdKX1htKy7fjb/MfsUm7vudfuo3VxjQ3F/JqkkkNp9pjnKpcXFwyPbgAbSo2HaO/BGc108NynyQSTRtcCMMyhuT/ALWPTNaQrc/QidPlJ3vIY7qK2d8TTAlFwfmA6/zqXdXN6rZ2k/ijTWubaGQSRyhjIgO4gLjOeuKhENleNrMurBGlglZFaTrDGFBTZ/d9cjqan20k2rdf0uP2aaT/AK3Oq3VDdTzQqht7Y3BZwrAOF2r3bn09K5SIi81LQ11g7nlsW3pIcCRvlOGHf1we9RuwTT5IoT/osWrIsAB4UZGQPYHPFQ8Ro9P6tcpUdTtt1JurkXs7e6k8STXCb5InYxMx/wBWRHnK+hyOo5qvfX0DXNp/akS3cbacrLHLJGihyTlhvYAk4HI5FN4iy1X9Xt2BUb7M7bdRurG0QW+m6HY25nt8ugCtGw2yNjJx/e+veoPFLoNPtjJIY0+1xbnVtpUbuuR0rR1bQ52ZqnefKdBuo3VyzPa6VrF59kTZZrY+ZPHb8DOeCMdGIzz1qG1ZoNetjaWttaGezkby7eXeZOhUuNo5z35781H1izs0X7HqdhuqnpWo/wBqaXBeiMxCZd2wtnHOOtZGgQWBsLG8byzeyjLzE/vJHIO4E9T34PTHtWT4YYbbAaocqsBawAHyk87+P74/l070vbvmj5/8AfslaXl/wTuN1G41xkU8cl/pF7aWsFqt1ccOJszSoc53jbz/AN9HFVT9k1G6a3uY4Dd/byTcTyR7tgP3dpO72xjFJ4rsv6+4fsO7O3hnmknnSW3MUaMBHIXB80Y647fjU26uM1Q/6L4kCkqPNgAxxjlOlX1gh07xDbLZJ5Ins5PNCDO8qVwxH8TfMeTzzVKu72t/V2v0JdJWv/WyZ0m40bq4PRBZajd6S5it1uog0s8sksbvOxU9gxYnJ3fMBjFdvvq6Vb2ivYmpT5HYl3Ubqi30b61uZWJd1KshVsiod9G+i4WNO1vJ7W6ivbGUw3UDbo5B1B/wr3XwZ4ttvFek+Yv7u8gwtzCeqt6j1B9a+eUl2NWpo+tXehatDqmmt+9j4eMsQsq91NcOMwyrxuviR14au6UrPZn0rRWX4d8QWXiXRotR09jtcYeNvvRt3Vh6itSvm2mnZnuJpq6CiiikMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoorm/GHid9BsfI02JbnVrhT9mgJ4H+03sP1q4QlOXLFakylGEeaWxi/EbxydFhOj6S//ABMrhMvKp/49kP8AF/vHsPx+vjE1wsKlQ2WJySTkknqSfWrdzoXii6uJp57NnmncvLI0g3Ox6mqv/CJa+f8AmHH/AL+CvosPSVCFktep4lat7aV29CiZMnJNHmD1q9/wiOv/APQOP/fwUf8ACI6//wBA7/yIK6OZ9jD3e6KPmD1o8wetX/8AhEdd/wCgcf8Av4KT/hE9c/6B5/77FHM+we73KPmD1o8wetXv+ET1z/oHn/vsUv8AwiGvf9A5v++xRzPsHu9zOcpJGySBXRhhlYZBHoRUJs7JrZbZrW3MCnKxGJdgPqBjHc/nWv8A8Ihr3/QOb/v4KT/hEde/6Bx/7+Cle+6HdLqZnk2/kLD5MXlLjbHsG0Y5GB0p+I/NMu1fMI2l8ckemfStD/hEde/6Bx/7+Cj/AIRHXv8AoHf+RKLvsGncyntbOSAQSW0Dwg5EbRqVB9cYxThDbCF4hDEI3+8gQbW+o71qf8Ijr/8A0Dv/ACJR/wAIhr//AEDv/Igov5BdfzGQ1nYyW6QPaW7QocrG0SlV+gxgVMmyONUjCoijCqowAPQCtH/hEdf/AOgcf+/gpP8AhEde/wCgcf8Av4KE7bILp9TBi0q1S6uZ50iuGmm85fMiB8s4A4Jz6datTQW1yyNcwQzMhyhkQMVPtnpWn/wieuj/AJh//kSj/hE9d/6B/wD4/SSsrKI3JN35jKks7KaFIpbW3kjTlUaJSq/QY4p00FtcIqXEEMqocqsiBgp9s9K0/wDhE9c/6B//AI/S/wDCJ67/ANA//wAfp/8Aborr+Yypba0nnWea3gkmX7sjxgsPoSM0yK2RNRnvGffLKoQcY2KO351sDwlrp6aef++6P+ER1/8A6B3/AJEFLrsF1/MZk8VvdKFuYoplByBIgYA+vNNltbOeZZZ7aCWVMbXeNWZcdMEjitX/AIRHX/8AoHf+RKP+ER1//oHH/v4Kd79Auv5jDudPgu9RjubgpIiRNGYXQMrZIOTn6VZ8q3EKRCGLy4yCibBtUjpgdq0/+ER1/wD6Bp/7+Cj/AIRHX/8AoGn/AL7FJaO9h8yenMZuyEeZiOP97/rPlHz8Y59ePWqb2MiX5urC5S3Zo1iKPDvUBc424Ix1re/4RHX/APoGn/v4KX/hEdf/AOgaf+/goeu6BSS6o5210eG2+yAzGRbZnkAIxukbq3t1OB71Y1C0XUI4UaXYI5ll6ZztOcVtf8Ijr/8A0DW/7+Cj/hEdf/6Bjf8AfwVKSS5baD5ru/MZUMFtbRsltBDCjcssaBQfqBTYbSztmzbW1vCeTmONV69egrW/4RHX/wDoGn/v4KP+ER1//oGn/v4Kq/kTdfzGUltaR3LXEdvCk7Z3SrGAzZ65OM0ogthHGgghCRMGjXYMIfUDsa1P+ER1/wD6Bp/7+Cj/AIRHXu+nH/vsU7+QXXcyUtLKOUyx2tukhbcXWNQSfXOOtZ50ZzaPYm+H2KSQuyeT+8OTnG/Pr3xXT/8ACI69/wBA5v8AvsUn/CJa7/0Dj/32KlxT3iUp2+0Zhgtirq0MTCTG8FAd+OmfXoKJooZlO8AMUKBxwyg9cHtWn/wiOvf9A7/yIKP+ER17/oHf+RBVX8ibr+Y5uPSX8uzguLxZLezdXiRIdjEr93Lbj+gFa28etX/+ER17/oHH/v4KT/hEte/6Bx/7+Cpj7uyG5KW7RR8wetHmD1q9/wAIlr3/AEDT/wB9ij/hEdfPTTT/AN/BV8z7E+73RR8wetHmD1q9/wAIjr//AEDT/wB/BR/wiOv/APQNP/fwUcz7B7vdFHzB60+O42Hk8Vb/AOER1/8A6Bp/7+Cj/hEtf/6Bp/7+CjmfYPd7o1/Cfiu48JayLy3Bls5iFu4B/Gv94f7Q/XpX0Jp9/bapYQ3tjKs0Eyhkde4r5nTwr4hT7unkf9tBXZeAdY1vwXcSRazaMujTEFzvz9nbpuUeh7ivNxmGdX34LU7sNiFD3JPQ9vopkM0dxCk0Lh45FDKynIIPQ0+vEPWCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooqlq+q2uiaXNf377IYhk4GSx7ADuTTSbdkJtJXZU8TeIrfw3pLXMxDzvlbeHPMr+n09TXjF3qd1cahJqV7LvvJW3Fx/Djoo9AKk1rXLrXNSfUNQYjqIYu0Keg9/U1iSzmRvavqMFhFQjzS+JngYrEOtKy2Rsf8JLdf3m/Oj/hJbr+8351h7qN1ehZdjisbv/CS3X95vzpP+Eluv7zfnWHuo3UWXYLG5/wkt1/eb86X/hJrv+8351hbqN1K0ewWN3/hJbonq351iyfFXSYZnil1aNXRirDD8EfhTN1YHiOOP7Zo37tOb4Z+Uc/KayrNxjeNvmjWnGMpWkdlYeN11S2+0afdefFnbuXI5/GrR8S3X95vzrzLX/Exstbk02DUrfSUhRXaV7Yyl2YZwABgDGOaRvFd5N4Lk1G1eJrqG5EBkVPkl+cDIB6Ag/hWX1mmm4vdX/DfS9y/q8mk1s/1PTv+Eluv7zfnSf8ACS3X95vzrzaa88UWmrWtg93ZTPfoxRvJ2rbleWx/e46Zqe31bVILHW4L6eOa609N0dwkYUOCuRlelUq8L2cbfd2v+QvYO101/Wh6F/wkt1/eb86X/hJbr+83515n/aniG10201m6urWS2kMYltUhxhWIG7d1zz06V1wbIBHetKdSM+liJ03Dqb3/AAkt1/eb86P+Eluv7zfnXGeIr+aw01ZYL62scyBWmuF3bVwfur3bpx6ZrJ0HxJcX0WpxNfRX/wBli8yK6jgMe7IPBU+mKmVanGfI1r8v+HHGjKUOdHpP/CTXf95vzpf+Emuv7zfnXlkOseI00Sz1u4urVreRkD2ywgFlJxu3dj7DitW+vtVvvEEumaPdQ2a20KSzSyRCQsW6KAe2KhV4NX5e3bqU6DT3R2lp41e+kukgaXNrMYJN3HzAA8e3Ipp8bsNYXTS8v2hoTOOPl2g46+ua4vwkbjOs/bfL+0f2i/mGPO0nYvTNVNWGoSePYE0qWKCVtPIaWVN2xd/UDuenWl7X92p23f6j9lHncb9D0r/hJbr+8350f8JLdf3m/OvOV1rVINA1wXcsb32mZCzpGAHyAQdvTvV7UNUurfTdJmikAe5mhWU7QchlyfpVqtTavb+r2I9jK9v67ncf8JLdf3m/Oj/hJbr+835153Le69f+JNS0/TLy3tYbYIyySQhyMr90D3OeTVBdc8SS+HjrnnWkcNvkPbCLJm2ttYlv4eQeBUvEQV/dfXoum5Sw7fVdPx2PTG8Yst8lm0+Lh0Mix5OSo6mluvF09naS3MzP5cKF228nArjpdTmHiy0tQVFvJZvKwKjdkEd+tYlxe69q/h6+1KG7tUsnSRUtGhySgyM7+oP6USrRSdld69O3/DhGje19Eejx+OQ7Wq/aCr3ib4UbOWGM1ZTxVNIWEc28o21gr52n0Poa8/hv7iG48P2kLqsdxaHdlATkKMc9qp+G7XWPtmsEatHgXkyuv2Zfnlxw+ewzg49qSre8ly3+7sn3G6Ks3e3/AA9j07/hJbr++350n/CS3f8Aeb8687XxDeXPh6wELCPVLm4Fq+UB8t1P7xtvToCfxFbuq6gNM0m5vSu/yYy4X1PYVrGrTkm0tLXM3SknZnT/APCTXf8Aeb86X/hJbv8Avt+dcHp7a/EEvdUvraa2aIyyW6Q7TH8uQFbv+NZ41HxJLop16O7tVt9hmWxMOcxj1frnFS60UtYv8Nu5SotvdHpn/CTXf95vzpG8UXKKWeUqqjJJbAArzy+1fVbnWbC00eWGBLuyMzGaMN5fPUep7Y6c1Xmu9WudD17Try7i+1WK83CQjEkbJuxt6A44zUuvDW0f6tcaoPS7/q9j0pfE9w6K6SFlYZDK2QR6il/4SW6/vN+deZLdavovgJLv7fHO/k2/2YeQq+UpAG0/3uCBn2q7dX2t6bZRJNcW9zfahOsdviLakGRkg/3se9NV421j0v0B0HfR9T0H/hJbrszfnVTT/G7anDJLavJtjlaJtwx8ynBrjLa81nTNds7LVruG+hvQ4SRIRGyMoyRgdRijwaf+JZd/9f03/oVNVVKaja29/wAP8xOlaLd+x33/AAkt1/fb86ZP4tntreSeaUpHGpZmJ6AVwt5e6tqGuz6bo9zDZJaRo008kQkZmbJCgHjGB1rM1O+1S88Ka3a3U8Ud1YHZNJHHlZ0K54H8JINTOvFJ2j3/AAHGg21d9vxPQdK8etrVu81oLlUUgfvkKbs8gj1FXv8AhJbv+8351yHh+O7h0W3F9dLcsY0KMsQTau0YXA649a091bU9YJyWpnOKUmkbn/CS3f8Afb86X/hJbv8Avt+dYW6jdV2XYixuf8JLdf3m/Oj/AISW7/vN+dYe6jdRZdgsbn/CS3X95vzqG51ia+jEUzMUzkgnrWTuo3U9OwWO/wDAPjBtGuk0fVJS1hM2LeRj/qGP8JP90/pXrdfNius0Zjk5zXpnw68ZNKY9A1eXMyjFpO7cyAfwH3Hb1rwcwwdv3tP5/wCZ7GCxN/3c/kej0UUV4h6phax400PQr5rK+uLh7pIfPkhs7Ke6aKP++4iRtgPOC2M4OOhrVsNQtNV0+C+025jurW4QPFNEwZXU9wa880vWtM8F/ELxo/i6/t9L/tG4gvLO5vJBGt1CsCptQn7xQggqORkcciqPinxFa3njBG8Qa5qGheF5dCNzp863E2nedclzuy3yOXVNpWNuuc7TQB6zUZuIRcrbmVBOyF1iLDcVBALAdcAsBn3HrXgD6n4q1SWVfEmqatYX0Pw9fUngtruS123SzybJWRCuH2hcjHsRxio3vCfETeIL7U7m31TUfhwl7byi/kiMtz5TlgihgCQBv2AYB+fAPNAH0PWdda9ptlr1ho1zc7NQ1FJXtYfLY+YIwC53AYGAR1Iz2ryW0upLTSvh83iDXtUtNA1bTPtep6hPq08YkuzboY0e43gxKcuwVWQMw5yeDV8LX2qah4++Hk+rTT3KbNYWxubn/W3FoAohkYkAsWQA7jywwxznJAPVtV8baJo2vLot3JeSak1sLv7NZ6bcXTCEsU3nyo2wNwI5/qK09I1ew17SLbVNHuo7uyukDwzRnhh/Qg5BB5BBB5Fec6prmk6D+0kbjXNTs9NgfwkiJLeXCQqzfbGO0FiATgE49q4VL7VtLt9MlmnbTPC+t6zqt/BJNqk+lxsrfNbq88aF0BXzHVMAOcHngUAfRlZ9tr2m3ev3ui29zv1CxjjluIfLYbFkzsO4jBzg9CfevEdR1rxtofh/QrlNUudUuPFWljSIJ4mmSOG8Mv7m4CyKjKWhZiTsGTHn3NrxPqviDQ9X8X6fp2rapLaabp+kxzTCd5Jbe3JK3E65yQ5QEs45HLZyMgA90orxPxPr1raaTbjwb4nv9R0Ntdhh1O6uNWnWC2UxZEa34V3WNn2bmDNtJC5QNg918Lbq/vPBpl1DUo9SjN5OLO4jllmzBv8AkUyyojS7eR5mMMADk0AdlRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFBIAJPAHWgCO5uYbS2kuLqRYoYlLO7nAUDvXiHirxTL4o1Pzjuj0+AkW0JP3v8AbPue3oKv+PfGX9v3babpz/8AErt3/eOP+Xhx/wCyg/nXDXFzu+Vele/gMJyL2s9+h4+MxHO/Zw2Hz3BkbAPFQ7qh3Ubq9e551ibdRuqHdRuouFibdRuqHdRuouFibdRuqHdRuouFibdVHUbD7fNZP5vl/ZZ/Oxtzu4Ix1461Y3UbqmSUlZjV07ozNR0WefUWv9L1J9PuJECSnyllWQDplT3HrSXOhSXehf2fcahJLIZVlaeRASSGBwFGMDjFam6jdWbpQd/P1L9pJW8ivc2H2nWbG/8AN2/ZBINm3O/euOueMVQ1PT/s9nrl4Jd5u4Pubcbdq4655rX3UbqcoRkn/XSwoyat/XW5zOl+H7m703T/ALZq881iipKto0YHzDkAv1Iz2roFtZl1iS8N5IYGiEYtf4VIP3uvX8Km3UbqUKUYKy/r+uw5VJSepR1rSTq0du0N0bW4tpPMilCBwDjHKng1XsdBltpb2a61F7ua8gETu0QXaRnkAcY56frWtuo3U3Tg5cz3EpyUeUzG0IN4Yg0f7TjyQg83Z12tnpn+tJqOiTz6kL/TNSk0+4aMRSlYhIsijpwe/vWpuo3UnSg1a3b8BqpNO/8AWpS0XSv7HjulN1JdG4nMxeQfNkgDk9+nXintpobxEmqedytsYPK29ctnOc/pirW6jdVKEUlG2iJ5pNt9yiujRltW86UvHqZBZQuNgC7cZ7+tZ8Xhi7xard63NcR2kqvDGYgqgDscHJPv2re3Ubql0qb3X9blKpNdStaad9l1q+1Dzt32zZ+7242bRjr3qoug7fC02jfav9Zv/feX03OW6Z98datPqMaatHp5VvMkhaYN/CACBj681a3UKNN3Xr+O4c01r6fhsVDpYOt2+oGb/U27QeXt+9nHOc+1ZT+Fbjybi0t9anh0+YsRbCJTtLdt3Xb7V0G6o57qG2jD3EixIWChmOBk9BSlSpvcI1JrYqDRgLzTJ/P/AOQfEY9uz/WZAGevHT3ptpo89lrVxdwag4tbmRppLQxjBcjru649qtTX0MF1BbylhJcEiMBSQcDJye341PupqFO+nT+vyDmnbU53TLGOTxxqV3GW8i3PyqfuiZ1G8j3wBn610N5bxX9jNa3AzFMhRgD2NLuo3U4QUYtd7/iKUnJp9jK07Rb+0kRbvWpru0jQoluYlTKkYwzDluKqL4VuVgNiut3A0onH2Xyl3bc/d8zriug3Ubqn2NO1v1f9fIr2s73/AERTOlINbtr+OTYtvbG3WEL1BOc5zSLpCfatVlklLJqQVWQLjYAmzrnn1q7uo3VfJDt/VrE80u/9bmIPDly/h+TSrrVmnTMYhZoAPKVDkLgHn6k1o6tpaarZJCZngkiYPDNH95GHerW6jdSVKCVreQ+eTdzLsNFuItRjvtW1N9RnhUrDmJY1jz1OB1PvVrR9NGk20sQm83zJ3lzt243HOOtWt1G6iNOEXdClOUtzL1DRJ59SOoaVqb6fcugjlIiEiyAdMqe/vQvh5F0K+sPtTvPfAma6kGWZj3x6D0rU3UbqXsoXbtuP2k7JXFt0+z2sMO7d5UapnpnAxmpd1Q7qN1arQzsTbqN1Q7qN1O4WJt1G6od1G6i4WJt1G6od1G6i4WJg+DkVYWTzVUqxSRCGV1OCpHQiqO6nLIVORSvcLHuXgDxmviGzNjfsF1O2Ub8/8tl/vj+tdlXzRa3s9pdw3thKYrmBtyOD+h9j6V7t4N8WW/irRxMMRXkXy3MGeUb1HseoNfOY3C+ylzw+F/ge5hcR7RcstzoaKKK807QooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK8v+I/jYtJL4f0eUrgYvLhG+7/0zU+vqffFanxF8cnQ4f7K0iVTqcy/vHHP2dCOv+8e35+leLTTrCmxW+Y8kk5JPqa9XA4XmftJ7dDz8ViLL2cdySe4CKI4+ABjAqrvqAyZOSaN49a9y55NibfRvqHePWjePWi4WJt9G+od49aN49aLhYm30b6h3j1o3j1ouFibfRvqHePWjzB60XCxNvo31DvHrRvHrRcLE++jfUG8etHmD1ouFibfRvqHePWjePWi4WJt9G+od49aN49aLhYm30b6h8wetHmD1ouFibfVHW7qS20K8mt3KSxxFlYDoaseYPWs/XsyeH75IwXZoWAVRkmoqS9x27FwS5kZsk+r2FrZ6pPqXnpJJGstt5QC7XIHB655qV31O/wDE1/aW+pNaW8CxMAsYY5I6DPY9/wAKZYeH4/Ls5Lm8upY4QsiWsjfKjY/PitSCyig1S6vlkYvcqisp6LtGOK5Ywm7Xvb18mbylFXtv6eZno2qa3eXklrqZsILeYwxRpGGLEYyWzUP9t6hd6RYQxSpDeXVy9s04XIXZnLAe9WrnQY5buae11C6svtHMyQsNrn19qkn0Oyl0uGxjLwrA2+KRG+ZW9c+tPlq6/wCe+v4aBzU9P8tv8yrZ295a+NLdL29N4PsUmyRkCtjeMg4p9jqd5L4NvruSZjcxrcFXIGRt3Y/LFTWOipZ6kL5724urjyzGWmYHIJB/DpVeXwxBI1wq391HbXDM7W6PhNx7/wD1qSjUitF3697A5Qb18ug6a9v72TTLC1uzbPNaiea4Chm4A4A6ck1V8Q2V/HoUCXOqPKy3aAOIwNwLDaT7jmtG70WK5htBHczW89ogSOeI4bGMH88UPosUujvYT3dxLvk80zu2XDdiPypypzkpJ9fMIzjFpr8hk017p+q6PZvfyXAmkkEzuoBkGMgED0qGE6trc11PbaobGGKZooYkjDbtpxls1bXSV86ylnvJp5bNmYPJglywxzUE+gRvdTS2uoXVmtw26WKFvlc9z7U3Gfy7X8l1EpQ+fp5lOXWtSutF0eW2mSC6ubowSNtypxuXOPTIzV7TpdQsvEB0+9vjfRSW/nK7oFZSCARx25qVtHtPJsIYS0UdjKJI1XnJGev51YNpGdWW/wDMbesJi2dsE5z+lEYVE029dOvlqJyg1ZLv/wAA0N9LvqDePWjePWuu5z2J99G6oN49aN49aLhYn30b6g3j1o3j1ouFibfRvqHePWjePWi4WJt9G+ofMHrR5g9aLhYm30b6h8wetG8etFwsTb6N9Q7x60bx60XCxPvo31Bv96PMHrRcLE2+jfUPmD1o8wetFwsTb6XfUG8etG8etFwsWUm2NWro2uXmgapHqmlMPOQbXjb7sqd1P+PasHePWnxT7DyeKmSU48stio3i7o+nPD+v2XiTR49Q058o3DofvRt3U+4rTr5z8KeK7rwnrC3cDNLZSkC6tgeHH94ejD/61fQen39tqmnwXtjIJYJ0Dow7ivmsTh3Ql5HuUKyqx8yzRRRXKdAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXMeLPFf9kIdP0sLPq80ZMUZPEfozf0HerXivxLD4b0oy48y6l+S3i/vN6n2HevGZ724a5kvbuYy3crb5JPU+3tXp4HB+3fPP4V+JwYvFeyXLHcp3PhjxReXEs9ygknmbfJK0uWc+pOKqHwPrp628Z/7af/AFq1/wC37r+8fzo/t+6/vH869/2B4vtZGR/wg2uf8+0f/fz/AOtR/wAILrn/AD7R/wDfz/61a/8Ab91/eP50f2/df3j+dHsfMPayMg+BtcH/AC7J/wB/D/hSf8IPrn/Psn/fZ/wrZ/4SC7/vH86P+Eguu7N+dHsfMPayMYeB9cPS3j/7+f8A1qP+EG1z/n3j/wC/v/1q2P7fuv7x/Oj+37r+8fzo9j5h7WRj/wDCD65/z7R/9/P/AK1H/CD65/z7R/8Afz/61bP/AAkF16n86P8AhILr1/Wj2PmHtZGN/wAIPrn/AD7R/wDfz/61H/CD67/z7R/9/P8A61bH9v3Xqfzpf+EguvU/nR7HzD2sjH/4QbXf+feP/v5/9aj/AIQbXP8An3j/AO/n/wBatf8At+6/vH86P7fuv7x/Oj2PmHtZGR/wg2uf8+8f/fz/AOtR/wAIPrn/AD7x/wDfz/61a/8Ab91/eP50f2/df3j+dHsfMPayMg+B9bH/AC7x/wDfz/61J/whGt/8+6f99n/Ctn/hILv++350f8JBdf3m/Oj2Ie1kYv8AwhGuf8+yf99n/Cl/4QjW/wDn3T/vs/4Vs/8ACQXPqfzpP7fuv7x/On7HzD2sjI/4QbXP+feP/v7/APWo/wCEG1z/AJ94/wDv5/8AWrX/ALfuv7x/Oj+37r+8fzpex8w9rIyf+EG1z/n3j/7+f/WpP+EG1z/n3T/v5/8AWrY/4SC6/vH86P8AhILr+8fzo9j5h7WRj/8ACDa5/wA+8f8A38/+tR/wg+uf8+8f/fz/AOtWx/wkF3/eb86P+Ehu/wC8fzo9iHtZGL/whGu/8+8f/fw/4Uf8IRrn/PtH/wB/D/hW1/wkN3/eP50f8JBd/wB5v++qPY+Ye1kYv/CEa5/z7x/9/D/hS/8ACEa5/wA+8f8A32f8K2f+Egu/7zf99Uf8JBdf3m/On7HzD2sjG/4QfXP+fZP++z/hR/wg+uf8+yf99n/Ctn+37n1b86T+37r+8fzo9j5h7WRjjwPrh/5do/8Av4f8KP8AhBtc/wCfaP8A7+//AFq2P7fuv7x/Ol/4SC69T+dL2PmHtZGP/wAINrn/AD7R/wDf3/61H/CDa5/z7x/9/f8A61a/9v3Xqfzo/t+6/vH86PY+Ye1kZH/CC67/AM+0f/fz/wCtR/wguu/8+8f/AH8/+tWv/b91/eP50f2/df3j+dHsfMPayMj/AIQbXP8An3j/AO/n/wBaj/hBtc/594/+/n/1q2P+Eguv7x/Oj/hILr+8fzo9j5h7WRj/APCDa5/z7x/9/P8A61H/AAg2uf8APvH/AN/P/rVsf8JBdf3j+dJ/b9z6n86PY+Ye1kZH/CDa5/z7x/8Afz/61H/CDa5/z7x/9/P/AK1a/wDb91/eP50f8JBdep/Oj2PmHtZGR/wg2uf8+8f/AH8/+tR/wg2uf8+8f/fz/wCtWv8A2/df3j+dH9v3X94/nR7HzD2sjI/4QbXP+feP/v5/9aj/AIQbXP8An3j/AO/n/wBatf8At+6/vH86P7fuv7x/Oj2PmHtZGR/wg2uf8+8f/fw/4UHwNrn/AD7x/wDfz/61a/8Ab91/eP50f2/df3j+dHsfMPayMj/hBtc/594/+/n/ANaj/hBtc/594/8Av4f8K2P+EguvU/nSf8JBdep/Oj2PmHtZGP8A8IPrn/PvH/38P+FH/CD65/z7x/8Afw/4Vsf8JBd/3j+dL/wkF3/eb/vqj2PmHtZGN/wg+tn/AJd4/wDv4f8ACl/4QXXP+feL/v7/APWrX/t+6/vH86P7fuv7x/Oj2PmHtZGR/wAINrn/AD7x/wDfz/61J/wg2uf8+8f/AH8/+tWx/b91/eP50f2/df3j+dHsfMPayMlPBevRn5YIx/20P+Fdd4K1LW/Apm/tWAPo8h3SIj5MTHjco/mKx/7fuv7x/Oo5tVmvFEczHbnOM1M8LGpHllsVCvOEuZH0Fa3UN7ax3NrIssMqhkdTkMDUteOeBfFzeHr5dP1CT/iVzt8rsf8AUOf/AGU/pXsSsGUMpBBGQR3r5jEYeVCfKz6ChWjWhzIWiiiuY3CiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACs/XNatNA0qW+vnARBhVzy7dlHuas3l5Bp9nLdXkqxQQqWd2PAFeH+JvE0/ibVPtcu6OyhJFrA38I/vn/aP6CuzCYZ4idui3ObEV1Rj5kGraxc6xqUmp6iQJXGEjBysS9lH9T3rGlmMjZJqOe4MjdeKi319VFRhFRjsj56TcnzPcm3Ubqh30b6q4rE26jdUO+jfRcLE273o3VDvo30XCxNuo3VDvqK4MzW0gtXRJip8tnBKg+4pXCxb3Ubq48XXig6y2nfbdN3rCJt/kNjBOMVsjW7GCaOzvdQthe4AZA2Mt9O1ZRrxlvp6mkqTW2voa+6jdWfdapZWLbby6igOwvh2x8o4J/WoG8RaQtslw2pW4hclVff1PpVupBaNkqnJ7I191G6qM2o2kEcUk1zGiTHEbM3DHGeDTLLV7DUS4sLuK4KfeCNnFPnje19Rcjtexo7qN1Q76p3us6fprKt/eQ27MMqHbk0OairtgotuyNLd70bqoSalaRW8c8lzGsMpASQt8rE9OaZZ6xYahI6WN5FO8f3lRskUe0je1w5JWvY0s0bqw9U16xtre7t0v4Y71IJGRN3zBgpI/GrOj3MlxollNO5eWSBGdj3JHJqVVi5cqKdNqPMzT3Ubq5XSvEkET6kusahGjJqU0MAkIBCDGAPbmt6S+t4mhWSZFNwdsQz984zxShWjNXTCVOUXZlzdRu96pm9gFybcyr5yp5hTPIX1qqviHSXmjiXUbcyS/cXf96qdSK3YlCT2Rrbvejd71m22safeXL29reQzTR/eRGyRTbS9LTXvnXdvIkEmMICDEMZw5PfvR7SL2Ycj6mpu96N1cxfeIbe4vNMj0nUI5N96sc6xsDlSDwatzawtkupzXN5bPHa/cjUENGduQrH1JqPbw11/rcr2Ujc3UbqwdM8T6ff6fBO11Ckj7FeMMTsdui/oa05LyCK4igklVZZs+WhPL4GTj6CrjUjJXTJdOUXZot5o3VSub62swhup0hEjbFLnGTjOP0qqviLSHt3nTUrcxRnDNv6Gh1Ip2bBQk9UjX3UbqpwX1vc2oubeeOSAjIkVvlx9ar2uu6Ze3BgtL+CaUfwK3NP2kdNdxckuxqbqN1ZVzr2l2but1fwxNGwVlZuQcZx+VF9f7bS3mtby3iSWVAJJQWVwT0GO57UvaR112H7OXY1d1G6uefxXYxeIpdNnnhjVIwRIWOTITjZirt5rmm6fMIb6+hgkPRHbmkq0Gm77DdKatoam6jd71Rm1K0t4o5Z7mNI5ThHLcMcZ4P0FVDq8NzJZSWGoWxhmlKHIJMuB91fQ03UiuolCT6Gzuo3VlXGv6XaM63N/BEyNsYM3IOM4/Kp5tRtbez+1T3EaW+AfNLfKRR7SPcOSXYvbqN1ZdlrumajMYrC9hnkA3FUPIHrU93f21jAZrydIIhxuc4FNVItcyeguSSdmi7uo3VmRa1p09lLdwXkMkEQy8itkL9axvCmqy6tJNdS6qJyxb/QggAhXdhTnr0H61m60eZRWty1SlyuT6HWbqN1Z11q1jZOUvLuKBgm/Dtj5emajk1WC40ee80+9t9ioSJ2+ZEI7nvVupFaXJUJdjV3Ubqx5te06wSFdR1CCOWSMOMkgMD3HtwadP4g0q2hhlnv4Y4513RMxOHHqKXtYd0Hs5djW3UbqzG1vTUsUvXvYVtnOFlLcN9KmtNQtr+DzrKdJ4843IcjNUqkW7Ji5JJXaLu6jdUO6jfVXFYm3Ubqh30b6LhYm3Ubqh30b6LhYm3Ubqh30b6LhYupIsiFH5zXonw78ZtFKmg6xKWzxZzt3H9xj6+hry4Pg8VOHE8eCSrDkEHBB9RXNiKEa8OWRtRqyoz5kfTNFcL8PfG39tW40rVZANSgX5WPHnoP4vr6j8a7qvlKlOVKThLc+ihONSPNE5D4h+JtV8N2/h9ND+xrcavrdvpjSXkLSpEsiuSwVXQkgqO/rSajrGv6BdaHb6rq+hzPqWprakjT7iDfGUY7IwJJf3mRnLFVxnvS/EPwbL40t/D9sq2cltYa3b395DeAlJoEVw6BdpDE7xwcA85NVvEPw9guZfDUfhqz03SrLS9XF/cQQxCFWXy2U7VRcFuR1x061mWXh8Q9AvUu4dHvxPdx29xLb+ZbypFcmHIfy5GULKFYYOxjXPw/Fm2T4b2up30sA8Q3Ohvqi2cFtLJGmFOGfbny4y2Bl2GegNZfhr4R6no32S1uzY3EOlW15DZXj6jeyyMZVZEIgZhDB8jHftD5PQDrUdl8K/E+j6O1rps+kTy33hgaJefaJpEEMi7gssZEZLqQ5BUhTkA57UAdPq3jfUrD4FR+NIYLVtRbSLe+MTI3k75FQkY3btvzHHzZ96WLxXrWieKNF07xXPplzZ65BK1vd2dq9t9nliTzGWQPLICpTJDAjBU5HOaTVvBGpX/wKj8Fwz2q6iukW9iZWdvJ3xqgJzt3bflOPlz7VV1LwNrXjC6s/wDhKhYaba6dYXNtbpp93JctJLPEYTIxeOMAKhOFwcluSMcgGwvxR8IHT7u9OqSJb2lul1I0llOhaB32LKgKAyR7uC6BlHBJANR+MPHdro1vd22malYRanZtatOL2Gd4Y45pQi5MSn5mGdo+hPHNc94W+FVxbq1t4qgsprdNFOkrLFqV5dSyq3DsBMwjgXaq4RVbB6MAMGja/CLXY/hre6TfanZ3uv32o2txPeyM4Robdo1jTO3ORHH6feY845oA9Al8deHIddGkSagRdG5WzLC3lMK3DDIhMwXyxIRj5C27JAxkijTPHPh3WNYGmafqBluX80QkwSJHcGJgsgikZQku0nnYxxWJoXhnxR4X1jUrfSJdJm0jUtZk1OW5u3lNxEkvMkSxKArHcOHMnAPKnGKxfBHwqv8AwzrGjrffY7qx0Q3LWt22o3kszl8hNtuWEMB2s24jfu4wBnNAHqtFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFNd1ijZ5GCIoJZmOAB6mnV5N8SPGhvZpfD+lSEQRnbeyj+M/8APMH09fy+u1GjKtPliZVakaUeZmd458YHxJfG0snxpVs+VYH/AI+HH8R/2R2/OuLuLncdq9KjnuAo2JwB6VV319TSpxowUIngVJyqS5pE26jdUO+jfWlzOxNuo3VDvo30XCxNuo3VDvo30XCxNuo3VDvo30XCxNuo3VDvo30XCxlo3/FcS4IB+wr/AOhVxoJSxurG+v7W2md38yGSxLzMSeobufQ5r0bK7s4GfXFIQhbcVUn1K81yVKHP17/j80dMK3L07fgc9c20U/irRY7tRP5dm5/eL1YY5IpdN02wOva/utIWCsgUFQQoaPJwO2TXQ5XdnAz64oyoJIAyevHWr9jG933v+Fifau1vL9bnETSQr4N8Om6Qywrc/OuN2VDNxjvWrY3VjqPjC3n0NVMMNsyTyRx7FJJG1eg5rS1LThfvZFZBELWcTY253Y7e1X12r9xQv0GKzjRkpa7K34IuVVNeev4jNP1O31O3aa13bFdozvXHIODXM+INREWvyQs1nZEQLtnubYzNP1+Vfp/WuqBVfugD6CkOxiCyqxHTIzitqkJTglfUyhJRlexxCosvgTTYZhuQ34QqRjjzDxjt9K35be3tPG2l/ZYY4d1tMpCKACBjGa2PlxjauM5xilyMgkDI6HFZxoKKWvb8C5VW+nf8TiIbvSrbw/qVjqkAbUy0xZGhLOxOSrA+g4Oa67Qm/wCKfsM/8+6fyqwQhbcVUn1xzShgBgcD2qqVJ03e/S2wqlTnVrHMaNY2dxD4iluLeOSRr+4Qsy5O0YOPzJqBphb+H/DF/OW8i2kUysBnau0jP0rrQVGcADPJwOtHy7du0bfTHFT7BJWT/q9x+21u1/VrHP2mp2+peKrmazZni+wFQ5UgNz2z1FZQsbT/AIVlLP5EfmkhzLj5s+YBnP0NdqNg6KBxjgUfJt27Rt9McUOhzJ8z79O41Vs1ZdvwMO6tLWz8QeHvskEcPMyHYuMjys4PrzWZdpNNpvilLYMzm6UlV6lQFLD8s12BKkgkDI6HHSgFRnAAz14605UE7q9r/wCVhRqtW0/q9zkrnUNEvdU0P+x4k3x3aAskJXYuPuk46+1XLZPO1DxTHsDluApGcny+K3wEHRFHOeF704FQSQACepx1pKi73b/DysDqK1kv6vc5rTVs9a8Fmwsiq3cUCh9qbSkq8rk465FTeH7ttc1RtUlQqttbrbIpHSQ/NIfzwK3eFVvKCox6Hb3qppFgNL01LbzPNfJZ5MY3sTkmhU2pRv03+WwOonGXn/TKPiyKO5bR4Z0DxyajGrqehBB4ph06xbx0ubWHAs9wXYMZ3Yzjp0reJU4yAcHIyOlGRuzgZ9cVcqSlLmfdfgSqjUbLzOSaFv8AhG9ct7ONiiXpzFH1KZBYAfSnXF7pGpS6VBoMStdRXMbnyoipijH3txx6cV1YKjOABnrgdaRQiklVVSeuBis/YdL/AIed9C/a9bGBplna3HivXpbiCOV1eNVLrnAKc1mDC+D9ORfupqW1R6ASniuyBUEkAAnqcdaPkxjauM5xim6Ctv3/ABdxKq77dvwVjAurmx0/xy8moIiJcWqJEzRZDPv+nWqttfaTpt/qkfiCNRdS3DMDLEW81D0CnFdSdrEFlBI6EjpQwRiCyqxHQkZpuk73TW99u4lUVrNficabU/8ACOaBb3kJCPqI/dSf3CWIB/DHFbOspHDrGhLDGsa/amO1FAH3TW0SpxkA45GR0oJU4yASOmR0oVBJWv2/Abqtu9u/4nPaVZ2txrniCW4t45XEqoC6g4BTmsmadbfwjornytsVy5HngmPgnAbFduCozgAZ68day9X0p9RNvJa3P2Wa2Ysh8sOvPXKnionRah7u+v4u5UKqcve20/BWKnhWSC5ub6+WeyaecruhtBhYwBjuAead4hlgt9c0y61OPfYRrIGYruWOQ4wWFT6XpEtnfS3t7di6uZEEeUiEahRz0FaxKsMMAR6EZqoQk6XK9H/wbkymlU5lqv8AgHO6W9nf+Jry70uJTYmz8uRxHtjkk3ZGARzgZqz4MVE8MwMqKGZnywUAn5z3rYBVRhQAPQDFKCFGFAA9AKuFLlkpN9/xsTKpzK3p+BzWtXVja+NbSbVFUwLaNyybwp3cEiqheG40rxNd2CbLCZB5WF2hmC/MwHoa6GTThJr8eotICqQGExFc5yc5zV75du3aNvpjisvYylKV+7/Kxp7RJK3l+dzltY1SzSz07S7qSK3NxbK01xIm4pF0wvBOTgj2qXWdX0uDS7Czs5II4LlCkVy8e5YYxwSOM57D3ro2WNvvIrY6ZUGgrGQAY0IHQFRxVOlPXVa+X/BJVSOmhy2pX9hbaZpcelfZRZAsqXlxEZEiI68Y6nmp/Bspe61VvNSUNKrb44vKVvl6he1dFiPbt2Lt9NvFKCq/dAH0FEaLVRTvt/lbuDqJwcbf1cn3Ubqh30b66rnPYm3Ubqh30b6LhYm3Ubqh30bqLhYm3Ubqh30b6LhYm3UqyFTkVBvo30XCxpQXUsM8V1ZymG5gYPHIvVTXufgjxhB4p0vDkR6hbgLcw9Of7w/2T+lfPiS7GyK09L1e60bUodT0x9txF2PR17qfY1xYvDKvG63R14au6UrPY+l6KyPDPiOz8T6PHfWTAEjEsRPzRP3U/wCPetevmmnF2Z7iaaugooopDCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKK5fxj4qfRbf7FpUYuNXuEJgjyMJ/tN/h3q4QlUlyxWpM5xhHmlsYvxH8cHSozoujyD7fMv76VT/wAe6H/2Y9vTrXjc06wp5aHn61fn8N+KLmaWae23yzOXlkMg3Ox6kmq//CGa8etkM/79fRYekqELJa9Tw61b2srt6GYZAe9HmD1rT/4QzXv+fIf99/8A1qUeCteP/Lmo+sldHM+xj7vcy/MHrR5g9a1P+EK17/nzX/v5R/whWvf8+S/9/KOZ9g93uZfmD1o8wetan/CFa9/z5L/38pP+EL17/nxH/fdHM+we73MzzB60eYPWtP8A4QvXv+fIf990f8IZr3/PkP8AvujmfYPd7mZ5g9aPMHrWn/whmu/8+Y/77o/4QzXe1kP++/8A61HM+we73MzzB60eYPWtP/hCtf8A+fEf99n/AApf+EK13/ny/wDHqOZ9g93uZfmD1o8wetan/CF67/z5f+PUo8Fa6f8AlyH/AH3RzPsHu9zK8wetHmD1rU/4QrXe1mv/AH8o/wCEK17/AJ81/wC/lHMw93uZfmD1o8wetav/AAhWu/8APmP+/lJ/whWu/wDPmP8AvujmfYPd7mX5g9aPMHrWp/whWu/8+Y/77o/4QrXu1mv/AH8o5n2D3e5l+YPWjzB61qf8IVr/APz5L/38o/4QrXv+fJf+/lHM+we73MvzB60eYPWtT/hCte/58l/7+Uf8IVr3/Pkv/fyjmfYPd7mX5g9aN49a1P8AhCte/wCfJf8Av5R/whWvf8+S/wDfyjmfYPd7mXvHrRvHrWp/whWu/wDPmv8A38o/4QrXf+fNf+/lHM+we73MvzB60eYPWtT/AIQrXv8AnyX/AL+Uf8IVr/8Az5L/AN/KOZh7vcy/MHrR5g9a1P8AhCtf/wCfFf8Av5R/whWv/wDPiv8A38o5mHu9zL8wetHmD1rT/wCEK1//AJ8V/wC/lH/CFa//AM+K/wDfyjmYe73MzzB60eYPWtP/AIQvXv8AnxX/AL+Uf8IXr3/Piv8A38o5n2D3e5meYPWjzB61p/8ACF69/wA+K/8Afyj/AIQvXv8AnyH/AH3RzPsHu9zM8wetG8etaf8Awhevf8+Q/wC+6P8AhC9e/wCfEf8AfdHM+we73MzePWjzB61qDwVrx/5cl/77pf8AhCte/wCfNf8Av5RzPsHu9zK8wetHmD1rU/4QrXv+fJf+/lH/AAhWvf8APkv/AH8o5n2D3e5l+YPWjzB61p/8IVr3/Pkv/fyj/hC9e/58l/7+Ucz7B7vczPMHrR5g9a0/+EL17/nyX/v5R/whevf8+K/9/KOZ9g93uZnmD1o8wetaf/CF6/8A8+I/7+Uf8IXr3/PiP++6OZ9g93uZnmD1o8wetan/AAhWvf8APiv/AH8o/wCEK17/AJ8h/wB/KOZ9g93uZfmD1o8wetan/CF69/z5L/38pP8AhC9e/wCfEf8AfyjmfYPd7mZ5g9aPMHrWn/whev8A/Piv/fyj/hC9f/58V/7+Ucz7B7vczPMHrR5g9a0/+EL17/nxH/fyl/4QvXf+fL/x6jmfYPd7mX5g9aPMHrWp/wAIVrv/AD5f+PUp8Ea92s1/7+UczD3e5lbx60eYPWtT/hCdf/58l/7+Uf8ACFa9/wA+K/8AfyjmfYPd7mX5g9aPMHrWp/whWvf8+I/7+Un/AAhevf8APiP+/lHM+we73MzzB60eYPWtT/hCte/58V/7+Un/AAhevf8APiP+/lHM+we73MzzB60+OcI3XitD/hC9f/58V/7+Uf8ACFa//wA+A/7+Uud9g93uaHhjxTd+FdYS+tCZLaQgXVv2kX1How7GvoTS9TtdY02G/wBPlEsEy7lb+hHY182r4O8RRn5LED/tpXWeB9S17wPcSnVbRv7GlOZkVwxib++o/mK8/F4b2vvwWv5nbhsQqfuyeh7jRUdtcRXdtHcW0iyRSKGR1OQQakrwz1wooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKo6zq9roelTX98+2KMcAdXPZQO5NNJt2Qm0ldlLxT4lg8NaUZ32yXMny28GeZG/wAB3NeM3WoXMl7LqF3L5l5M2939PYegHpUus61c63qcupagcM3EUWciFOyj+p9axJZjI2c8V9TgsKsPC8viZ8/isQ60rLZGt/wkV16n86P+EiuvVvzrG3Ubq79DjsbX/CRXX95vzo/4SK6/vN+dYu6jdRoFja/4SK69T+dH/CR3PqfzrF3UbqNAsbX/AAkV1/eP50f8JFdep/OsXdRuo0Cxtf8ACR3XqfzoPiK6Pc/nWLuo3UaBY2v+EiuvU/nR/wAJFdep/OsXdRuo0Cxtf8JHd/3j+dH/AAkd3/eb86xd1G6jQLG1/wAJHdf3m/Oj/hI7v+8351i7qN1GgWNn/hIrr1b86P8AhIrr1b86xt1G6jQLGz/wkV16t+dH/CRXXqfzrG3UbqNAsbP/AAkN16n86P8AhIrr1P51jbqN1GgWNn/hIrr1P50f8JFdep/OsbdRuo0Cxtf8JHdf3jS/8JHdeprE3UbqNOwWNs+Irk9z+dJ/wkVz6t+dYu6jdRoFja/4SO59W/Oj/hIrn1b86xd1G6jQLG1/wkV16n86P+EjuvU/nWLuo3UaBY2v+EjuvU/nR/wkV16n86xd1G6jQLG1/wAJHderfnR/wkd16t+dYu6jdRoFja/4SK69T+dH/CRXXqfzrF3UbqNAsbX/AAkd16n86P8AhI7r1b86xd1G6jQLG1/wkd1/eb86P+Ejuv7zfnWLuo3UadgsbR8R3X95vzpP+EiuvVvzrG3UbqNAsbP/AAkV16t+dH/CRXXq351jbqN1GgWNn/hIrr1b86X/AISK59W/76rF3UbqNAsbX/CRXXq3/fVH/CRXPq351i7qN1GgWNr/AISK59W/Oj/hIrn1b86xd1G6jQLG1/wkV16t+dJ/wkN16n86xt1G6jQLGz/wkN16n86P+Eiuv7x/OsbdRuo0Cxs/8JFdep/Oj/hIrr1P51jbqN1GgWNr/hIrr1P50f8ACR3Xq351i7qN1GgWNr/hI7v+8350f8JFdep/OsXdRuo0Cxtf8JHderfnR/wkd1/eb86xd1G6jQLG1/wkV1/eb86T/hIrrsx/OsbdRuo0Cxs/8JFdHqT+dH/CQ3Xq351jbqN1GgWNn/hIrr+8350v/CRXXqfzrF3UbqNAsbX/AAkV16n86in1ea9QRTMdmc4z1rK3UbqNAsd34D8XtoV4umanKTps7Yhdj/x7ue2f7p/SvXwcjI5FfNiSLLGY5BkHjnvXpPw58ZMzR+H9Xly4G2zmY/fA/gJ9QOnrXhZhg/8Al9T+f+Z6+CxP/LufyPSqKKK8M9YK5fVvHEem+MB4atND1TVtR/s8aiy2XkBVhMhj6yypzuHQZ6j3rqK811Xw9qupfH43lpeappNn/wAIwsJ1CygjKtJ9qY+Vvljdc4IbAw3APSgDtfDHiOw8W+G7TW9IMn2W6UkLKm142BKsjDsysCD1GRwSOa1a8nX4dadpvxM8K6bDor3mhado9ypluoTNH55lVg0jEbTIWLNz35AGBjD0Pw9rMb+HYk0q9t/GtvrTza3rMlpIqT2u5y4NyRslRkMYVAzYwPlG00Aet6v4nstF1zRdKuop3n1qaSG3aNQVRkQud5JBAwOwPNbNfP3hPw7eWuveAxP4c1SLWrHUr5/EGoSWUoWWRhJtkecjbMGOSrgsADjI3AGPwxoviCC3+H+kRaNqlrf6Lc6wt1cTWMiw27yCUxN5hXayncMMCR2znFAH0Dc3MFnay3V5NHBbwoZJZZXCpGoGSzE8AADJJqOwvrfVNNtr+xk822uoUmhk2ldyMAynB5GQRwa8U0vwzZXvw7vNIl8GaqniuTQruHULyazdI5rnBwZJGIW5dpQHRl8zHUFa9L+G1tBZfDfQ7a30+TTmis40nt5LNrZlmCgSEoyqcl9x3Y+brk5zQB1FFFFABRRRQAUUUUAFFFFABRRR060ARXNzDZ2slzdSLFDEpd3booHevEfFfimXxPqfnHdHp8BP2WFhgn1dvc/oKv8Aj3xkdfu30zT3H9mW7/PIrf8AHw4/9lB/M8+lcNcXO47V6V7+AwnIvaz36Hj4zEc79nDYfcXJkbAPFQ76h3Ubq9e551ibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibdRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFibfRvqHdRuouFht/M0em3LxsVZYmKkHocVyMUGpxeE49bi1++M6wCZo53Dxn2wa6fUm/wCJVdf9cW/lXNaF4atr3QbGW9vb64iaNX+yvOfKHsFA6VxV1KVRJdn1t8zppWjC779rmvHqa3N1oks091DLdRM4gjI8pztyd/fjtTb3xja6e0v2nTtUWOJypl+zfIecZDE9D2qHVML4s0FUACqJgAOw21SudVsNW8RmO+vbeGw01+I5ZQpnmHfB/hX+dKVSUbpPW9vwRUacZWbWlv1Zt3/iOLT5FR9P1KcGMSb4LbeoB7E560i+KLFtIg1AJcmO4YrFGsRaRyOwAz6etZXiPV4Lm5g0YXkVtDcIJLmd5AoEXopPUt/KnatrSWNlp8Oi3NrBbTP5Quzh44QB+WfrTlXalL3tF+ZKpJqOmrNfTPEVpqtxJbxx3FvcRjc0NzF5b49cVqb64bRbh5vHGZNWTVStow86OFYwORx8vB+tdnurWhVdSN33/ruZ1qahKyJt9G+od1G6ui5lYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30bqh3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYm30b6h3UbqLhYmEmDkVZWTzApVikikMrKcFSOhBqhupyyFWyKVwse4fD/AMarr9p/Z2osE1S3XnJ/16D+Me/qPx+naV80Wt9cWl1Fe6fMYLqBt0bjsfQ+o9q928HeK4PFWjrMNsd5EAtzDn7reo9j2r5vG4X2UuePwv8AA9vC4j2i5ZbnQ0UUV5x3BRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV5h8SfGp3SeH9HmKt0vZ0/hB/5Zg+p71sfEPxuPD1p/Z2murarcLkcZEKHjeff0FeJTTiFSNxZ2JLMTyxPUmvVwOF5n7Se3Q8/F4jlXJHcfPOqKI4+AOOKq76hMmTkmjePWvcueTYm30b6h3j1o3j1ouFibfRvqHePWjePWi4WJt9G+od49aN49aLhYm30b6h3+9G+i4WJt9G+od9G+i4WJt9G6od/vRv96LhYm30b6h30bx60XCxNvo31DvHrRvHrRcLE2+jfUO8etG8etFwsTb6N9Q7x60b/AHouFibfRvqHfRvouFibfRvqHePWjf70XCxNvo31Dvo30XCxNvo31Dvo30XCxNuo3VDvo30XCxNvo31Dvo30XCxNvo31Dv8AejePWi4WJWKupVwGUjBBGQaSNY4Y1jhRY0UYVUGAB7Co949aN49aLhYe0cTypK8aNJHnY5UErnrg9qrPpWmSOXk06zZmOSzQKST+VTbx60b6TUXuNXWxHLp2nzsGnsbWVlUKC8KsQB0HI6U4WdmLb7OLWAQZz5XlLt/LGKdvo30rR7Bd9witrWFlaG3hjKLtUpGBtHoMdBU2+od9G+qVlsGrJt9G+od9G+i4rE26jdUO+jfRcLE26jfUO+jfRcLE2+jfUO+jfRcLE26jdUO8etG/3ouFibdRuqHfRvouFibfRuqHfRv96LhYm3Ub6h3j1o3j1ouFibfRvqHePWjePWi4WJt9G+od49aN49aLhYm30b6h3j1o3j1ouFibfRvqHePWjePWi4WJt9G+od/vRv8Aei4WJt9G+od/vRvouFibdRuqHfRv96LhYm30b6h3j1o3j1ouFibfRuqHePWjePWi4WLCTbG61raLrl34f1eLVNNb94nEkROFlTup/p6Vg7x60+KfYeTxUySnHllsOLcXdH05oGuWfiLR4dR0+QNHIPmXujd1PuK0q+d/B/i6bwjq4uBvl06cgXUKnp/tgeo/WvoK0u4L+ziurOVZYJVDI6nIINfNYnDuhO3Toe7QrKrG/UmoppkQSrGXUSMpZUzyQMZOPQZH5inVynQFFFFABRRRQAUUUUAFFFFABRRRQAVk+JdWutG0Oa607T5NQugMRQIQMk9ySegrWqG5t1uYyjdDTWjE9j5m1CHxNe309ze6bdvczuWkkYqST6DngDsKoHRdZY5OlXRP1X/GvpQ+GrQnJWk/4Rm0/uiu769USsrHL9UhufNf9iax/wBAq6/Nf8aP7E1j/oFXX5r/AI19Kf8ACM2n90Uf8Izaf3RR9fqi+qUz5r/sTWP+gVdfmv8AjR/Ymsf9Aq6/Nf8AGvpT/hGbT+6KP+EZtP7oo+v1Q+qUz5r/ALE1j/oE3X5r/jR/Ymsf9Aq6/Nf8a+lP+EZtP7oo/wCEZtP7oo+v1Q+qUz5r/sTWP+gVdf8Ajv8AjR/Ymsf9Aq6/Nf8AGvpT/hGbT+6KP+EZtP7oo+v1Q+qUz5r/ALE1j/oFXX5r/jR/Ymsf9Aq6/Nf8a+lP+EZtP7oo/wCEZtP7oo+v1Q+qUz5r/sTWP+gVdfmv+NH9iax/0Crr81/xr6U/4Rm0/uij/hGbT+6KPr9UPqlM+a/7E1j/AKBV1+a/40f2JrH/AECbr81/xr6U/wCEZtP7oo/4Rm0/uij6/VD6pTPmv+xNY/6BN1+a/wCNH9i6x30m6/Nf8a+lP+EZtP7oo/4Rm0/uij6/VD6pTPmz+xNX/wCgVdf+O/40n9iav/0Crr/x3/GvpT/hGLP+7R/wjNp/dFH1+qH1SmfNf9iav/0Crr/x3/Gj+xNX/wCgVdf+O/419Kf8Izaf3RR/wjNp/dFH1+qH1SmfNf8AYmr/APQKuv8Ax3/Gj+xNY/6BN1+a/wCNfSn/AAjNp/dFH/CM2n90UfX6ofVKZ81/2LrH/QJufzX/ABo/sTWP+gTc/mv+NfSn/CM2n90Uf8Izaf3RR9fqh9UpnzX/AGJrH/QJufzX/Gj+xNY/6BV1+a/419Kf8Izaf3RR/wAIzaf3RR9fqh9UpnzX/Ymsf9Aq6/Nf8aP7E1j/AKBV1+a/419Kf8Izaf3RR/wjNp/dFH1+qH1SmfNf9iax/wBAm6/Nf8aP7E1j/oE3X5r/AI19Kf8ACM2n90Uf8Izaf3RR9fqh9UpnzX/Ymsf9Aq6/Nf8AGj+xNY/6BV1+a/419Kf8Izaf3RR/wjNp/dFH1+qH1SmfNf8AYmsf9Aq6/Nf8aP7E1j/oE3X5r/jX0p/wjNp/dFH/AAjNp/dFH1+qH1SmfNf9iax/0Crr81/xo/sTWP8AoE3P5r/jX0p/wjNp/dFH/CM2n90UfX6ofVKZ81/2JrH/AECrr81/xo/sTWP+gVdfmv8AjX0p/wAIzZ/3RR/wjFn/AHaPr9UPqlM+a/7E1j/oFXX5r/jR/Ymsf9Aq6/Nf8a+lP+EZtP7oo/4Rm0/uij6/VD6pTPmv+xNY/wCgVdfmv+NH9iax/wBAq6/Nf8a+lP8AhGbT+6KP+EZtP7oo+v1Q+qUz5r/sTWP+gVc/mv8AjR/Ymsf9Aq6/Nf8AGvpT/hGbT+6KP+EZtP7oo+v1Q+qUz5r/ALE1j/oFXX5r/jR/Ymsf9Aq6/Nf8a+lP+EZtP7oo/wCEZtP7oo+v1Q+qUz5r/sTWP+gVdf8Ajv8AjR/Yusf9Aq6/8d/xr6U/4Rm0/uij/hGbT+6KPr1UPqlM+bP7F1j/AKBV1/47/jR/Yusf9Aq6/Nf8a+k/+EZtP7oo/wCEZtP7oo+vVQ+qUz5r/sTWP+gVc/mv+NH9iax/0Cbn81/xr6U/4Rm0/uij/hGbT+6KPr9UPqlM+a/7E1j/AKBVz+a/40f2JrH/AECrn81/xr6U/wCEZtP7oo/4Rm0/uij6/VD6pTPmv+xNY/6BVz+a/wCNL/Ymsf8AQKuvzX/GvpP/AIRm0/uij/hGbT+6KPr1UPqlM+bP7E1j/oFXX5r/AI0n9iax/wBAq6/Nf8a+lP8AhGbT+6KP+EYs/wC7R9fqh9UpnzX/AGJrH/QKuv8Ax3/Gj+xNY/6BV1/47/jX0p/wjNp/do/4Rm0/uij6/VD6pTPmv+xNY/6BV1+a/wCNH9iax/0Cbr81/wAa+lP+EZtP7oo/4Rm0/uij6/VD6pTPmv8AsTWP+gTdfmv+NH9iax/0Crr81/xr6U/4Rm0/uij/AIRm0/uij6/VD6pTPmv+xNY/6BN1+a/40f2Jq/8A0Crr/wAd/wAa+lP+EZtP7oo/4Rm0/uij6/VD6pTPmz+xNX/6BV1/47/jR/Ymr/8AQKuv/Hf8a+k/+EZtP7oo/wCEZtP7oo+v1Q+qUz5s/sXWP+gTdfmv+NJ/Ymsf9Am5/Nf8a+lP+EZtP7oo/wCEZtP7oo+v1Q+qUz5r/sTWP+gVc/mv+NL/AGJrH/QKuf8Ax3/GvpP/AIRm0/uij/hGbT+6KPr9UPqlM+bP7F1j/oFXP5r/AI0f2JrH/QKuf/Hf8a+k/wDhGbT+6KP+EZs/7oo+vVQ+qUz5s/sTWP8AoFXX/jv+NJ/Ymsf9Aq6/Nf8AGvpT/hGLP+6KP+EYs/7tH1+qH1SmfNf9iax/0Cbr81/xo/sTWP8AoE3X5r/jX0p/wjFp/do/4Rm0/uij6/VD6pTPmv8AsTWP+gTdfmv+NH9iax/0Cbr81/xr6U/4Rm0/uij/AIRm0/uij6/VD6pTPm6PStbj+7pV1j0JX/GvSPhVqviLSr8aTe6TctpUxJVyV/0Z/Xr909x2Nek/8IxZ/wB2rFrosFpJuj4qKmLnUjyyRcMPGEuaLM6+/wCSpaH/ANgbUf8A0dZV0lc3e8fFHQ/+wNqP/o6yrpK4zpCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAImtoGu47poYzcRo0aSlRuVWKllB6gEopI77R6VLRRQAUUUUAFFFFABRRRQB//Z)

Obr. 4: Opis hierarchického levelu na príkladu výroby pizze

* + 1. Os životného cyklu a hodnotového toku

Os životného cyklu a hodnotového toku je rozdelená na dve časti a sú nimi typ a inštancia. Typ je rozdelený na vývoj a údržbu/použitie, kým inštancia je rozdelená na produkciu a údržbu/použitie. Typ reprezentuje počiatočnú myšlienku vývoja produktu, kým každý vyrobený produkt reprezentuje inštanciu tohto typu. Inak povedané kým je produkt v štádiu vývoja označujeme ho ako “typ”, akonáhle sa presunie do výroby označujeme ho “inštanciou”. Hocikedy kedy je produkt redizajnovaný alebo je pridaná nová vlasnosť, opäť sa stáva typom.



Obr. 5: Mapovanie získavania údajov o výrobe počas celého životného cyklu - https://www.i-scoop.eu/industry-4-0/

* + 1. Os vrstiev architektúry

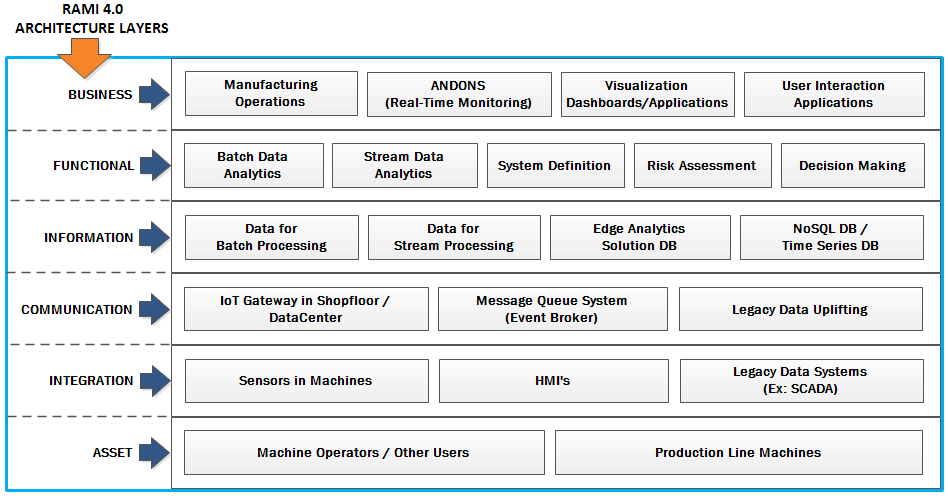
Vrstvy architektúry zahŕňa vrstvy, ktoré umožňujú vývoj Industry 4.0 softvérových riešení konzistentným spôsobom tak, aby boli rôzne a vzájomne závislé výrobné operácie prepojené s prihliadnutím na fyzický a digitálny svet.

A blue and white diagram with text

Description automatically generated with medium confidence

Obr. 6: Vrstvy architektúry RAMI 4.0

RAMI 4.0 rozdeľuje komplexné procesy do častí, čo umožňuje jednoduchšie pochopenie a už od začiatku zahŕňa ochranu údajov a bezpečnosť IT. Odpovedá na všetky otázky k problematike ohľadom sémantiky, identifikácie, funkcií, komunikačných štandardoch pre inteligentnú továreň. S RAMI 4.0 architektúrou je továreň nie je vrchnou vrstvou ale sieťou interakcii medzi inteligentnými produktami a svetom.



Obr. 7: Zobrazenie architektúry riešenia analýzy RAMI 4.0

* 1. IoT – Internet of Things

https://www.oracle.com/internet-of-things/what-is-iot/

Internet vecí opisuje site fyzických objektov – zariadení, ktoré obsahujú sensory, softvér a iné technológie na účel komunikácie a výmeny údajov s inými zariadeniami cez internet. Tieto zariadenia siahajú od bežných domácich zariadení až po sofistikované premyslné stroje. Medzi zariadenia patriace do IoT patrí každé zatiadenie, ktoré môže byť monitorované alebo ovládané zo vzdialenej lokácie.

* 1. IIoT – Industrial Internet of Things

https://www.iberdrola.com/innovation/what-is-iiot

Industrial Internet of Things je kolekcia senzorov, nástrojov a autonómnych zariadení pripojených cez internet k priemyselným aplikáciam. Táto sieť umožňuje zhromažďovať dáta, vykonávať analýzy a optimalizovať výrobu, zvyšovať efektivitu a znižovať náklady na výrobný proces a poskytovanie služieb. Priemyselné aplikácie sú kompletné technologické systémy, ktoré prepájajú zariadenia a tie následne s pracovníkmi, ktorí riadia procesy. Súčasné IIoT aplikácie sa predovšetkým sustreďujú na výrobu, dopravu a energetiku. Rozdielom medzi IoT a IIoT je že kým Internet of Things sa zameriava na služby pre zákaznikov (spotrebiteľov), Industrial Internet of Things sa zameriava na zvýšenie bezpečnosti a efektivity vo výrobných prevádzkach. Pre príklad sa spotrebiteľské riešenie zamerali hlavne na riešenia inteligentných zariadení pre domácnosť, virtuálnych asistentov či teplotné senzory... Medzi zariadenie patriace do IIoT sa považujú zariadenia, ktoré musia byť sieťové systémy, ktoré generujú dáta pre analýzu.

Obrázok, na ktorom je text, snímka obrazovky, mapa, diagram

Automaticky generovaný popis

Obr. 8 Industrial Internet of Things vs Internet of Things

* 1. Asset Administration Shell

Asset Administration Shell (AAS) je štandardizovaná digitálna reprezentácia aktíva, základným prvokom pre interoperabilitu pre komponenty v Industrie 4.0 systémoch. Industrie 4.0 komponenty sú kombináciou aktíva (senzor, stroj,..) a jej digitálnej reprezentácie, AAS. AAS môže byť logickou reprezentáciou jednoduchého komponentu alebo stroja. AAS pozostáva z počtu submodelov, v ktorých sú opísané všetky informácie funkcionalita daného aktíva, ktorá zahŕňa vlastnosti, charakteristiku, nastavenia, statusy, parametre a namerané dáta. Štruktúra AAS je definová pomocou rôznych technologicky nezávislých modelov a pomocou mapovania ako je XML, JSON alebo OPC UA. Jeho obsah je definovaný prostredníctvom submodelu špecifického pre doménu.

AAS má momentálne 3 používané typy:

* Type 1 Asset Administration Shell – Súbory typu JSON alebo XML, obsahujú statické informácie a môžu byť distribuované ako súbor
* Type 2 Asset Administration Shell – Existujú ako bežiace inštancie, sú hostované na servery, môžu obsahovať statické informácie ale môžu interagovať s ostatnými komponentami. Type 2 AAS poskytujú frontend napríklad pre zariadenia, live dáta zo senzorov...
* Type 3 Asset Administration Shell – Sú nadstavbou Type 2 AAS, avšak navyše dokážu samé od seba začať komunikáciu medzi sebou
  + 1. Štruktúra AAS

AAS pozostáva z hlavičky a tela. Hlavička obsahuje informáciu pre identifikáciu, administráciu a použitie aktíva, subkomponenty a administration shell ako celok. Tieto informacie su uložené v časti manifest v hlavičke. Telo AAS obsahuje submodely ktoré obsahujú hierarchicky organizované nastavenia aktíva. Tieto nastavenia obsahujú vlastnosti ktoré referujú dátam a metódam ktoré využíva aktívum. Telo AAS obsahuje takisto manifest ktorý pozostáva z listu všetkých submodelov.

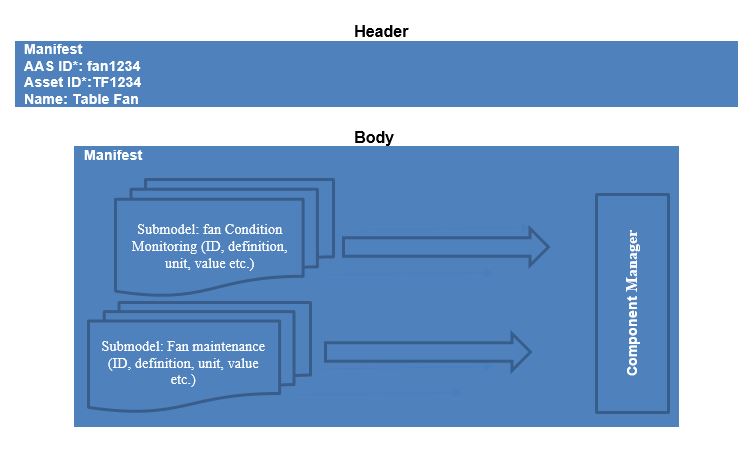
![Obrázok, na ktorom je text, snímka obrazovky, dizajn

Automaticky generovaný popis](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RD4RXhpZgAATU0AKgAAAAgABAE7AAIAAAAPAAAISodpAAQAAAABAAAIWpydAAEAAAAeAAAQ0uocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEthcG9vciwgVml2YXJ0AAAABZADAAIAAAAUAAAQqJAEAAIAAAAUAAAQvJKRAAIAAAADMzcAAJKSAAIAAAADMzcAAOocAAcAAAgMAAAInAAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAADIwMTc6MDk6MTcgMTM6MTI6MTEAMjAxNzowOToxNyAxMzoxMjoxMQAAAEsAYQBwAG8AbwByACwAIABWAGkAdgBhAHIAdAAAAP/hCyFodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDE3LTA5LTE3VDEzOjEyOjExLjM3MjwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5LYXBvb3IsIFZpdmFydDwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAIBAQIBAQICAgICAgICAwUDAwMDAwYEBAMFBwYHBwcGBwcICQsJCAgKCAcHCg0KCgsMDAwMBwkODw0MDgsMDAz/2wBDAQICAgMDAwYDAwYMCAcIDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAz/wAARCAHCAtUDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD9/KKKKACiignFABRQDn1oJxQAUUm72NG72NAC0Um72NG72NAC0UA59aCcUAFFJu9jRu9jQAtFGaTd7GgBaKTd7Gjd7GgBaKAc+tBOKACik3expc0AFFGaTd7GgBaKTd7Gjd7GgBaKAc+tBOKACik3exo3exoAWik3exo3exoAWigHPrRQAUUZpN3saAFopN3saN3saAFopN3saN3saAFopN3saN3saAFoozRmgAopN3saN3saAFopN3saN3saAFooBz60E4oAKKTd7Gjd7GgBaKTd7Gjd7GgBaKAc+tBOKACik3exo3exoAWik3expc0AFFGaTd7GgBaKTd7GlzQAUUZozQAUUA59aCcUAFFJu9jSg59aACiignFABRSbvY0bvY0ALRSbvY0bvY0ALRQDn1oJxQAUUm72NG72NAC0Um72NLmgAoozRmgAopN3saXNABRSbvY0bvY0ALRSbvY0bvY0ALRRmigAooooAKjum2wNzj3qSo7w4tm/D+dAFUTsD99vzoNyxH3v1qPd7UbvagB/nN/z0b86POb/AJ6N+dM3e1G72oAf5zf89G/Ok89t332/Om7/AGpN3zUASec3/PRvxNL57f3/AMqj3e1G72oAf5zf89G/OkMrEf6xvzpu72o3e1ADvMZf+WjfnSiZiPvt+dRlsjpShsCgB/nN/wA9G/Ojzm/56N+dM3e1G72oAf5zf89G/Ojzm/v0zd7UbvagBxlYj/WN+dG9v+ejfnTd3tRu9qAHB2B/1jfnS+c3/PRvzpm72o3e1AD/ADm/56N+dHnN/wA9G/Ombvajd7UAP85v+ejfnR5zf36Zu9qN3tQA/wA5v+ejfnR5zf32/Ombvajd7UAO86T+8350vnN/z0b86j3Uu72oAf5zf89G/E0GZmH3/wAqZu9qN3tQA4OwP+sb86Xzm/56N+dM3e1G72oAf5zf89G/Ojzm/wCejfnTN3tRu9qAH+c3/PRvzo85v+ejfnTN3tRu9qAH+c3/AD0b86QysR/rG/Om7vajd7UAO3t/z0b86A7A/wCsb86bu9qN3tQA/wA5v+ejfnR5zf8APRvzpm72o3e1ADzOw/5aN+dI9wysPnY/jUbnch2rk46CvEb/AP4KHfCPR9TurObxRJ51nM8EwGlXrbGRirDIhIOCMcE1th8PVxD5aMXK3YwxOIpYdc1WSS8z3MzMD95vzo89v7zflXhP/DyH4PM3/I0zf+Cm+/8AjNL/AMPHvg7/ANDVN/4Kb7/4zXZ/Y+O/58z+44/7awP/AD+j957r5zf3pKPOb+/JXhf/AA8d+Dv/AENU3/gpvv8A4zR/w8d+Dv8A0NU3/gpvv/jNT/ZOO/58T+4P7awP/P6P3nunnN/z0b86POb+9JXhf/Dx34O/9DVJ/wCCi+/+M0f8PHfg7/0NU3/gpvv/AIzR/ZOO/wCfE/uD+2sD/wA/o/ee6ee396Sjz2/vN+VeF/8ADx34O/8AQ1Tf+Cm+/wDjNH/Dx34O/wDQ1Tf+Cm+/+M0f2Tjv+fE/uD+2sD/z+j957p5zf3pKPOb+9JXhf/Dx34O/9DVN/wCCm+/+M0f8PHfg7/0NU3/gpvv/AIzR/ZOO/wCfE/uD+2sD/wA/o/ee5mZiPvSUb2/vyV4Z/wAPHfg7/wBDVN/4Kb7/AOM0f8PHfg7/ANDVN/4Kb7/4zR/ZOO/58T+4P7awP/P6P3nuYkYH78lL5zf3pK8L/wCHjvwd/wChqm/8FN9/8Zo/4eO/B3/oapv/AAU33/xmj+ycd/z4n9wf21gf+f0fvPczMxH3pKN7f35K8M/4eO/B3/oapv8AwU33/wAZo/4eO/B3/oapv/BTff8Axmj+ycd/z4n9wf21gf8An9H7z3Pe39+SgSMD9+SvDP8Ah478Hf8Aoapv/BTff/GaP+Hjvwd/6Gqb/wAFN9/8Zo/snHf8+J/cH9tYH/n9H7z3Tz2/vSUee395vyrwv/h478Hf+hqm/wDBTff/ABmj/h478Hf+hqm/8FN9/wDGaP7Jx3/Pif3B/bWB/wCf0fvPdPPb+/JR57f89G/GvC/+Hjvwd/6Gqb/wU33/AMZpP+Hjvwd/6GqT/wAFN9/8Zo/snHf8+J/cH9tYH/n9H7z3Xz2/vUee395q8L/4eO/B3/oapP8AwUX3/wAZo/4eO/B3/oapv/BTff8Axmj+ycd/z4n9wf21gf8An9H7z3Tzm/56N+dHnN/ekrwv/h478Hf+hqk/8FF9/wDGaP8Ah478Hf8Aoapv/BTff/GaP7Jx3/Pif3B/bWB/5/R+89085v70lHnN/ekrwv8A4eO/B3/oapv/AAU33/xmj/h478Hf+hqm/wDBTff/ABmj+ycd/wA+J/cH9tYH/n9H7z3Tz2/vSUee395vyrwv/h478Hf+hqm/8FN9/wDGaP8Ah478Hf8Aoapv/BTff/GaP7Jx3/Pif3B/bWB/5/R+89085v70lHnN/ekrwv8A4eO/B3/oapv/AAU33/xmj/h478Hf+hqm/wDBTff/ABmj+ycd/wA+J/cH9tYH/n9H7z3MzMR96Sje39+SvDP+Hjvwd/6Gqb/wU33/AMZo/wCHjvwd/wChqm/8FN9/8Zo/snHf8+J/cH9tYH/n9H7z3Pe39+T86A7A/wCsb868M/4eO/B3/oapv/BTff8Axmj/AIePfB3/AKGqT/wUX3/xmj+ycd/z4n9wf21gf+f0fvPczKxH+sb8DQJGB+/JXhn/AA8d+Dv/AENUn/govv8A4zSN/wAFHvg6o/5Gqb/wU33/AMZo/snHf8+J/cH9tYH/AJ/R+89185v78lIZ2A/1jfnXhP8Aw8i+Dv8A0NM3/gpvf/jND/8ABST4OrGzf8JXIu0FiTpN7wByf+WNV/Y+N60Z/cNZ1gv+fsfvPeBI2zPmN+dNMrEf6xvzrm/hd8UNF+MfhC31/wAP3TX2k3bSJDcGGSLcUco3ysoPVWH4V0fHtXnOMo3jLdM9CNSM488dmLvb/no350UnHtRSKNGiiigAqK9/49m/D+dS1Fe/8ezfh/OgChRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFKWw47iMN6mvxs+JjMfiL4iUtlY9XvAuSWxmdyeWyfyr9lF5r8afiQ+/4j+JPfV7s/wDkeT/Cv0nw6ssRWXZI/OuPrulRb63/AAMUZB60u40gGaAcjPbtnvX6z7p+YC7jRuNJRS5Yi94XcaNxpD06E+woKkA9OMZ57f8A1qPZeY/eF3mjccUux4oo5HHlpIMh3UqnJwMFgM8BifQKetNaJiN218qSr5VgFbPCjgg5UMw5HSs+amlzc2m3zL9nUT5HHXf5C7jSFyBQfvbf4sZ2n7wHuP8A65ozg8bW+XdjPf0rb2ce5nzPsODZH3sUm85/rTJZ1jkChvmZfMXOMOgIG4ZIyDztPQ4IyDgFsM63EjKrRySK5RikowhyRgjru46Y9euM1nJ01pcbp1EuZrT0Jdxo3Gmxt5n8LLwWJI4AFDOI49zYVcbslgMDPuQP1q5RtG7X4i06fkO3GjcaRlKH5htz0z3+nrx6UVGi1Hq15i7jRuNJRVWiL3hdxo3GkootEnUXcaNxpCcUY/yKnlDmYu40bjSUUcoai7jRuNJRRyhzC7jRuNJRRyhzC7jRuNJRRyhzC7jRuNJRRyhzC7jRuNJRRyhzC7jRuNJRRyhzC7jSEkiiinyhzCYpQu7gFl3cZU4OO9FKpww+tPlTUr9jTms1Y/Tf/gmp+8/ZF8Ou2CzXN8SSP+nub/Gve+PavBP+CaQx+yD4d/6+L/8A9K5a9749q/nDNn/tlT1f5n7/AJMv9jgvIOPaijj2orzj0zRooooAKivf+PZvw/nUtRXv/Hs34fzoAoUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQF7aixrl1Hqa/Gb4jnb8RPEn/YVu8e/7+Wv2ah/1q/UV+M3xDG74keIhll/4m11jb1/4+JK/R/Dz+NXf92L/ABPzvj9fuaFu8l+Bxnjr4i+Hfhnp8N14k1zS9BtbiQQxy39ytukj4yAGb5evqRXLyftbfC7dub4jeCWbChj/AGzbgKSDx9/tjrUfxmDL8SvhcdvlltfkI28bT5MgOD16HmvShdXCD5ppPU/O3JJbPfsB+tfpbdSUvcdj89pqjCF6iu/W36HnP/DXHwq/6KR4J/8AB1bf/F0D9rf4VsePiP4J/wDB1bf/ABdejf2hcZUeZKNx+UNIVyPXrTvtkzFv303ynBG9gf59Peq5cR3X3Mar4Ps//Al/kecP+1n8L1TK/ETwW3sNagzjv0Y12+ia3a6/pVpqOl3VvdWNx89rcQyLLHIPUMM5/HFXnvJMFWkkbIxhnbB/WmA+ZOC4MjRqFbdjLKeMBiCeOvGOlbUade0nUMp4nDKouTufIXwL+ImveCv2x/HE2q6xqV94X8WeLdX8N2lvPM00Gl3dqRNEArE7VePzVwMZCY53cWPiF8Rdc8a/tteE9Q07XL+z8H6X4ll8I29tb3Dx2+oPFaTyXM0i52uFklEant5beldtrX7Iusat8PviLZ2+rabba94k8Zt4v8NahCzldOuRIHhM+5QQeGDYBAB5yK0tF/ZavfCfh34Q21jfWMi/D/VptT1eW5Lq2pzSwOjyqMZZ2kkdyCcEE5BzivlY0MX/AA2tOZP8T6qWIwkv3jeri1+BrfEX49+Ivhbq+nzax4Z0u08Nap4hg0IY1nzNS09rg+XFLJB5PlLGXKk4nZwrg7ecVk67+0x4sHij4hWOg+CLXULf4bEvfSXmrfZWu0W3S4xHGIXbeA2HRgqj5cSHdxwi/sL69HbadZzQ/D+8vNJ8UR68/iy4WSTxBqEEd5HOsDl4g0LbQUVld1IVV2qPnHq3h/4DahoerfF6d73S3Tx7dSXOnRx7mFo5tBAWcbTlg8bHchLFSM53YHYpY+VRprQ55U8tVJNO8vmYGj/FXTPGfx98KX3h3w1a3niLxF4Bl1TS9RvNSmtVFu1xBJ9hkVA8eH3qxdN7KwAwoyw8v/Y/+Jt54E+AXgzUR4S0LWvF3xK1OS1sLqK8P2zWZRLcy3NxfTvArxpCu7ay+eSoCbcncPYvhF+zhrHw4+I3w+1e+utPntvBvgY+FbxLdnMjzie3mLLuUAgiOReTu7ba4nS/2HLyx+Afw50e8j8H674i+G89w32bU7ZrnR9TjuDIs9vIDGWQFG8xJFjO1olOOcrzVMPiXJST/r3f8zo9pg3T5Jf1rL/gHSa7+2BH4J8I+NW1vSdPh8QeCprO0nhtdT83Tporx0WC6W4kjjbyfmw5MQZMZCuMZp/tG/GL4leDvhrpuoWOn+GNGvpvEthZTT2urNeQzQyzW6IYSbbc0bF5Y5GeJChTKrIGU11nhf4T6x4J8F66dL8J/CvQptWlRJNLsLCSPTtStlRvMgubpIVM25XlCl4GA34YOCxbirP9jjWIPhP4k0e3k0DRL7VvE9t4l0nSbL7SdH0p4JbdjGr7QQJfLLOViChmJSNcKF3ccXJcrbOanLBKV2loz3TQ7vUIPCYvNbtbe3vljkmni0+WS8jZg3AjZo0Z/l7eWh/2TXLS/tAaXDt3aB8RfmGf+RJ1bP4D7Pkj3HFdd4ebUbjRYZ9WtNNtNTkP+kLaSGaEOBn93K0aMykEH5gHB+lWshnZhtZm4Ztozj64yfxJr3IxqKkoJ6ngynRddylHTpqcL/w0PpA/5gPxH/8ACG1j/wCRqQ/tFaOB/wAgH4kf+ENrH/yNXeAADOFx9KUBc8qoyM0vZVu/4G3tMN/I/wDwJHA/8NG6N/0AfiT/AOELrH/yNQf2jdHx8ugfEhm7D/hBtYGfztq747f+eYP4U5Cow2FGCP4RSVOrf4l9zJ9phP5Jf+BL/I4XS/2g9C1TxPpuktY+MtLuNWuBaW0upeFNQs4XlIztLyxKgyAerD8TgV3IRhGu6No3AxIOcBuOOg9eteb/AB5tVbxX8MVYRyeX4rhALRruH+jTA8475/DFejlY9xZUVScfwr0Kj29qqhUnzuM9TLFU6SipUlYKKKK6jjuFFFFAuVBRRRQHKgooooDlQUUUUByoKKKKA5UFFFFAcqCiiigVkFC/eX6iihfvL9RRf3Gypbx9T9Ov+Caf/JoPh3/r4vv/AErlr3nj2rwb/gmn/wAmg+Hf+vi+/wDSuWveePav5vzX/fKnq/zP6Cyf/c4egce1FHHtRXnnpGjRRRQAVFe/8ezfh/Opaivf+PZvw/nQBQooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigGOh/wBav1FfjL8RP+SjeIv+wtdH/wAmJK/ZqH/Wr9RX4y/EX/ko3iT/ALCt1/6US1+keHf8av8A4Y/mfnfiB/Aof4pfkcrrXhHT/EeoaZeXVv5k2jTm5tCD/q3YFSfyJrnvEXxcbw/+0L4Z8Drp8bxeItMvb03nmbTbmB0424+bduxnIx6HpXZouRt45IyT2FeH/FvTr6//AGyvBS6crC6m8Ia5FBKAyok0mFjVmyAMlR1PQ4we/wCj5hUnSjzU9z4PK6cKlXkqbWLn7QP7VuleAdB+zeGNd8M6h4ktdbtNMv7GW5W5khjlmSKXcgIKbN+OcYJB7YPofjb4u+Evh54lt9G1rxFo+lapc7VtLW8vAtxJuYogCYztdgdpPt65r438UeJ/Dc/7GXw68GrZtceMPDviKwbVLEae73GlXK3oE81w20+S0gbBYECRSOB0PZeJ4rjRfir8bNE8VeM/D/hOHxpeTPbwax4aOoXGq6bJD5dt9mkNxEhwCdqKrMHVWGTgV4n9qYlVOV3at3Z9BLKcNKKaaR9J+Mfi/wCE/h/ctDr3iTRNIkWJblRd3aoWhZmVJOM/K7RyBT0IXOQM45b4p/te+B/hNbeGZNQ1i0uYPFkwjspIbmIRxxOrbZ3fcVMJIILLnFcF8JvA0fhX9sTQYLoy6pLoXw8tYbbU7+zMc0rCWQNK0bkNHI6qu5WO4jP1rzzTI/8AhDv2ePBOozIlnpPhX4r3t1cbuIbCAz3Kq7rnBj34yeynk45rR5jiWtmjjhlmDUrS1Pe9c/aDsvDWt63rd14s8EXng+x8PwanaW8d2wvpWfdhnPKCKZk2xqGJYZzgkKeR+BH7Q/iD4peE/AviFvHHw4mj166Md9prwSW1xb7oWmNjE2+QPcL8hYlU2xq+AaoeKNRXxF+0h8TNS0+7l1DTdS+F4NvdQzGRZ4mN3jEikbkYHnBYD5QB2rC8NRvbfDr9kmSRZ4/s88TXJT92Y1GnuG5JBUHAGcqW6YbODM8VXU1Jef5pHTDDYeUWvJf+ktn0RdfGrwnY+Oz4Xm8UaPD4gLJAmnNqKtclnj3p/ETnBHydcY6ZwG/8Ls8GyeNf+EYbxNoaa9Ifsg05r9BcxSbMsoQ8YGCwXGW27ee/jv7LXjvw/wDDvw7P4H8WzWdv47bxXdvf6dcWx+0X88lyZ4rgptDyJsaKQSfMEhToSpry/wAffFvUPitpHhLT5rjQNFvLX4h2I/4Qe10F11LSAmpiH7RcXCyDYzbznMeGF0i84JPZWzScY2he/ocmHySnUqWl8PqfQvhL9rvwV8TPFviTw7ouu6THrWhyPBa+dNEy3bGAzs8ag+ZIqMTuwqhWUjaMbq3vDfxe0/SvhLofiLxd4k8Ix/bIFR9WsLrbpdw7ZO+GR3+6WzjceEGACSK828L+KI/Bv7Qvxw0vV9QFnq2vPBqumI8oja+hXTUUTQ7iAzI0MgLKeHGNp3ba85+BGpW/w3/4UH4s8UqsPhjT/Bcul2l9cgrBpeoSmOUeYzA+U8lsJVVyQGG5ApLAHnpZliLpOP8AWhq8rw07qL2s999G/wAz6jsvi94T1PwkviW28RaI2h3E626ag10otnlyEMYb+/uYKBgEnPBxgp4L+L3hf4myXi+H9e0vXJLUItwLO6juHQucLlkJ+UsDz8p+XPQgn5S+K2iR+OfBPxU1jT4Wm8C+L/HXh/8As9WTy7fUhFNbw3d5HEQAySSLJ8wVg3zNjBBPtbWcdr+3HophhitY5vh7cwsIkSGNFW9tgiALhVQGSQKCSR8zYyxNdGHzKu5JSj0XTzsYYjK6EYuUJa3fXsrnS/tE/G2b4LeE7W80/ST4i8QareR6dp+loywvcyZd5cvsYqqRpK3CknCgtg1peDPjNofib4N6Z42uL6z0/RtS06G/M1xMIo7fzFDbXdsKNvIJz1UjjrXlHjk+JviN+2fZt4Zs9D1C1+FOk7GGs3s1nDFqWoBstG0cMnmMtvGuVAORK/IIweD8E6BH4T+GHjT4ceMdWl8ETeBvE1vq2i6rpkM11p+jR3UxvbSXM0SqYopzIm6YICxRcKSDWM8yqwxDfL7u3zNv7Jw88NGLkufRv0Ppp/jT4PTwA3ij/hJtEOg+aYf7Sa7RbZju2BSwJCuX4C85AJBwMma++LPhfSvBn/CRzeItFj8PsildSluo1tuX2Abt2CS+VAB5I4zlc/Pv/CZwfFz4dLrnijxBpvg670Dx7PJoXjay0hpNH1drdDH9qliYspElu8qMfNPzRKVc58s8/r/jTxd4v0z4R+NtWm0fwrpOj63q5vdZXR2utJ+0TExWep+QHRhHMzSlZ2xte4U8liTUs2rJ6RJjkOH35ke7fFX9rTwX8LfhG3jR9Uh1jSpJRb2w06ZJHvJd4QrHzsOPnyN24bD8vTO9fftA+BbHw3a65J4t8O/2Lds0dveLfxGC5deqI2fvDk4OPuPyME181/Fz4err/wCy58ata0jxRbeMV8T3tlf3T6ZpDafp6yWrR+c8IEsokBhGWZWPzRkNjBz6B+0L8UPDuq6voPxE8O/ETTdI1zT9NvYtKur23N5p2uwPsMloSSrpMZY0I8uTKkYwaI5lir+9ewSyvDW5eb8WeqeOfBknxF1LwTqOn3lpLa6Rqq6z5itlbuEQlQUJx8rGRSDyeGyAQRXXBeG9FIGexwMVzvwi1S81z4T+Hbq/0T/hHby6023ln0sW7xJp5MQURKCowI8FcHgbhjGQB0bHKqOiqMACvaoXa57Hg4iKpy9mthKKKK6DlCiiigAooooAKKKKACiiigAooooAKKKKACiiigAoX7y/UUUL95fqKX2GEt4+p+nX/BNP/k0Hw7/18X3/AKVy17zx7V4N/wAE0/8Ak0Hw7/18X3/pXLXvPHtX84Zr/vlT1f5n9BZP/ucPQOPaijj2orzz0jRooooAKivf+PZvw/nUtRXv/Hs34fzoAoUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQDHQ/wCtX6ivxl+Iv/JRvEn/AGFbr/0olr9mof8AWr9RX4y/EX/ko3iT/sK3X/pRLX6N4eu1Wu/7sfzPz3j/APg0P8UvyMckhTtxuxxn17VyviL4s6foHxd8N+D5rW7mvvEltPdwzhN0aRxKDJGSqlvmYgYHfHBzXVCPzTt3MvPBXqD2/XFeG/GCaRP20/hj9nSIXTaBrTQxmVNpmZYiqncduSc4z3xX6ZmdeVGkp2uux+f5bh4zru7tdHcftB/HRfgv8NbrXGjt9avLW4htpbGe8ERBlmSFm5yVdRIMZTPGCuMmu1fV4dMeD7Tcx2vmSIwiln8nHTd8rbc87QCg5ycc4r4Q8UWfguX9h/QtZvJNPXx9qHiGIXV5LIRqV5drfKs8M0hPmNAq4yrDYAMgHFdlrHhe8+JPxY+M0OtWHw7mnR47bTbnxNqE9reaTYG2L289mEt3CxBm3b4ijblCngk14tPOJqt8HQ9uWVRlRvz6pn15c6pBpkbQ3F1FalF3zbrgIycnHG4Z6k5O7lSpYE4rB8e/GfQPhfp+k3WsasLaHWb+HTLXyHeRZJp9+zBUBdpAbdITgbTnrx8/6R8L7fxj+1p8M7HxedO8aSaf8NTNJKyG4tNTnW9kCSyIw2yKQx++g4IyCRurg9f8J6PN8BtLh1Cz03UNO8KfF5dLtXvLdbg2Oli4uF+z5IO2DcEATKphsba0r5nVlTbUbaGFLJ6amm5n1td/EHUrHxdffa7XS/8AhEbHTVv11eHVIWkkmJYOBFkbV252vnaWIXJzg8X8Hvj/AONPij4X0HxJaeHfDsOjeIryJMJrpa6sYGjeQPMrRBHkVFTMcZ/iYE4U54rxH4W0Gb9q3xlpsWn6O2ix/DVBHZw28X2RUWa5ZQI1+TAAjIHO0qG7ccJ4F8I6R4f/AGfP2Z5rTS9Ls5NQ8RWT3sltaxRNdN9lud7OyY8xhx94tznpnjGpjqkWny6av/yZG9PAUWpR5tdP/SWfZUOt2sM0WnreRxOeEtTOhbackBkboDnPTLE54BChsXiK3huFtm1CHzPLV2ga5Uu6lNxGxsttCMv8I3fdzkgj54/Z30Pwf4gtPFGs+NItJuvHUPjO5jv7nUJF/tKxuEvkSxiSRjujTb9nQLGSr+aoJKswrzb4r+OrHxRpmh+L9D0HwX4TkHxGt7ez1I38sfijzxqPlXLSKIyVjbdN+7aYKse0YOBnoq5k6VP2vLfysYU8n9pX9jzSS79D6us/jHoms+K/EHhrR9Ut5fEXhqKNJbdJhCqzSRGeEI/SXCE4Zdwi6NggqL3gzxlfaj4JstY163sdBv5oGe8t4NQ8+2si5yVWcfLtAcFX6rk4U9D4P8L/AAD4Z0n9r741Sf2D4esrlbbS7jTh9lijnhWWxCzvGQAR5kquHVdxJ3ZySS3C/A63tNT8Jfs5aZ4mWO48H3mgXzrBeFHsbzU0MckSyqx2SAQ+YUEnDPGcZ2GiOZVFJVJR3bsrbapGk8qpyg6cZ7Ja9/dZ9jSanGthIzXEapxGkm7KDLKgCg4XJcgKV7s3y/dAWDVYdQFwIbuOY28jG4MM6nyGwAfmJ4JYN8ueSPu18TfHbSbXTvhZ+0FpfhlY7fwHbar4dg0uKzIjsbbUGu7Nb1LR1IRMMqF/L2kOZBgYYD2Sy8CaH8Iv2x/Btj4b02x0XT9V8I6nbXkFoqBLxIJ7fyZXUEiSb55cyMCx3deK1hmsueMeTdL/ANKa/Q5q2UxUJPn6y/8ASU/1PdrzUIbG1ZrqdbOMfuGa5l8tY2Zm2qSx24UkNlxkZGM4APG/Hz46WPwU+DGseMpfs99HpsLTW9sLoIt05kMQi8wkqE3sc4PBz8p6Hg/jtFZa/wDtV+A9L8YJaXPg+60bUbi1ttR/eWF5qn7hxHKGBWXZESQJBgEZHKgHw39oPw5ps3wK/aJi02zsLrwTouvafLoLGCI29hfsLcX62hJ2x5kbBWLHWUEYzSx2YSUZU4R/4crC5XGbhWnPt919j7O8A6xrOreHob7Wl0WHVBIMvpV0b6IAfPGFmkiVsKckjAAbGM43VsGeQ5PmSbmxkls54K59yQcZOeOKo6J4ZsfCGlw6fpdjp+n2Nvnybezt44IIixzJsWMBRufk+p5OTVsNzXqYeF6UdNbani4ibdSVnpfQke4kebzPNm35B3+YS7f7x6HqSDjIycEDil+1StL5jSO7sCHLO2ZM53bjnLZz0JIqM8Nt/iXrRXR7PujCM5Rd0wPJz/ESSxwPmYkkt6bjnkjrgUUUVXSxO7uwooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAChfvL9RRQv3l+opfYYS3j6n6df8E0/+TQfDv8A18X3/pXLXvPHtXg3/BNP/k0Hw7/18X3/AKVy17zx7V/OGa/75U9X+Z/QWT/7nD0Dj2oo49qK889I0aKKKACor3/j2b8P51LUV7/x7N+H86AKFFFFABRRRQAUUE4pA2Tj5d3oD19OuBk/WgBaKaJAR6cgYPGCcYHpnntkcdadjBUfxOcKPUZ4P8umetABRTVlBTcfl4yM8Ej2HXOM5BxgjFLnLFVBZgOg7HsD70ALRTfM6ejDI4P09PXindTxz6kdKACilxSbSen86ACijG373FGP16e9ABRTgufrR5R9vzoAbRRj8aGOxWYhsKCTx2FABRQOfwPrnjsfoePzooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKM4ovbUT2HRnDg/3ea/Gf4kJs+I/ibn7ur3Y/8AI8n+NfsqTx2545Nfjf8AFixn0n4p+JobqGa3m/tW5cxSptYAysQcenPWv0Tw5qR9vV5na6X4bH594gQk6NPlWid/v3MAHB649/So5NBgu9UhvvsMM11aqyQ3Kwfvo0cjcFdeVBAwT8vGcc1NGMltysdw2oF/jJ4xXz/+0pqml+NfG/ifQbfQPFvibWPDPh77beCy1waVbaCJFJhmUM8RlyAWIy2MY5zX6lmOIjSpao/PctwksRVvF2PZx8M/Dd/4ivL/AP4RvQbrVtQcLeTDTreS4vpByBK5G4sMAruPUA571yng7W/Cf7Q/i/xFDeeF9Jv9Q8B6qdFW81S0huZXfIkBiLhnCH5gnK7enTmvEfhv4o1P9oPV/gx4b8WatqV7pWteCJtcvYI72SFtWu4pTEiSNC+9tsYJ6jleTjNcHerd+Hfh78TNP0XxJr4Wf4x6fpw1iO9b7W8TlUx5inBITccZOAgz3rwambUuZOEdl2Peo5XJRcKk73dv0PuQ6HZpq8OotY27aksAjhungQXKQZJKCXPmFFYdASuTjA61zXi+302x1LTfDL+C/wC2tJ8S3k8d+UsbabT7KZVEgkulc7SHYthnBAYDOc8eQaV8FNPvP2vtW8FNqvixPCNx4etdXn0kavcNDJetO8HmmTdvTIAcqjbdxBIwOeH+CvxO8QeJ4v2bxf61qUkk2ua9pl4ftD4vobZCIxLziQjPG4NyBW1TMVOCbhucdPK2p2U+35N/mfWem+CdL0uNP7P0XTovJs0tAbWyEYjtymRD8oA8smQEJnYQwIQckZWlT2N94t1DQW8Hy6fpnhcW0+m6jPZRJp05kjZi1p1CtHu2khQe/tXylBp1837JXjzx+/iDxQ/iXwz4lvJNOmXVpvL02OLUShhij3lCjo7k71YqXwuBgV29+3ij4hfGH48aDo+vTaPqF5oGgLpzPcvFbWk01qhkROvlecNylhyC+ecYrOWZKSTcO34q/wCZX9l8smnPXXX0aS/Bnu3jjRvBfhKb/hLPEmneHrGbTUi/4nF7YxrcWgYrBColdS658xUU5yfMUHgZqdvhT4buNRub/wD4Rfw5/aV/EFuboaVALi4VirqSxCu/zorAPnaygqDkMvyX8f4dE179lD4n+G7zRPEnhvXvCN9pFxqWmX+tT30UTy3NtH9qjkLsGjaEPneQV4OwHGPQfi/8NYNK+PXwZ8H2d5r2j+G7qDWLjVbKHUrp/tm2OCQxO0j+YfnIJ+f5VJCsucCo45c0vd6R/GTTNKmXy5Y/vHf3k9eiV0fQ154J0nWvE41i80PSbzWLLzI47+SxSa5tlIYsnnFTJHhHLHBGAso5zWPf2Xg3UbxPBVxZ+G7vy7KPUotEns4ZI0tl3otyYWUr5YmVwMDAIbjDEH5v/aZ1GwHgz4gXHhPSPGGo6h8NLcWEevJ4j8m38O3VsqyQwRxzSqblUWMMzNHIX85gGJAzseHPh3pPjT9u/Tb6+t72aS9+Htlrcvl6jdozXJv3BbEb7QAoGFx5QwmQpNTUzJOpbkNqeVOMU3PS36f8E9t+G9tpXiLwddaTN4OHhzTbK9exi0q8s4YIJkgm80TRxJ+7Mbyq0i4B5KscEknqH0q1bVbW6aztV1C3i8qC5kgjSSCOQq+FJClVZthB7gNkDv8AJOj+Odc1TQIdBvNa1Kz0jxV8W9Y0fULj7XIJDao88kVpE5Y+XHLIixt5Z5GAGzW/8V4rj4M+M/it4T8P6hrMegN8ML7xBPb3N/cXEuj6gnnRRyB5CXiaSMBhGSQREGBAOBX9qezjzcuy/LX9TnrZQ6lSzn1/4H6H0d4h8LaP4v0RrTWtL03V9PjcO0V9aia384ZBDF1IJbJPAIdSM4A5r6h4b8MaF4b/ALLvLHQrTQX2wmxmtYbe2IIabYIwAgb7z4CnHB64r5z8IaNcfDGx/Z88TWureIbvWvFE0Om6/Jf6nNcpq0dxpsspRo3PlhUaBAhUAr5ZJJ3YHo37RXwk1bxp4s0PXtH0vw740uPDVnc28vhvXJQYL1JWTM0RYECdDHgO6bdpIDA4NdUsdGcZzULWt+O5zxy2UatKmp3Tv+B6cvjLTZ/En9kDULGTWFtvt5skddwhZ2VpCEyFHmZUZHJVvQZ0GIaX+4pIUF/lyScf5/8ArV8rfDPXbr4p/HHRtW+HEkHhXSbj4a27W0epWMl/JaRJfSxCHZ5qruYgjcZCBt3Yyau2n7XXi/x9B4VtdOgutMutS8G2/iC8utO8Nz66s000rxGMIhj2KrRzMXyR8yqASQSU87hbVE1chnKTcHbufQGv/E7w54SmvLfVNYtbGbS7AaneRSH57W33bDI3+zu4B7kjpW3E3mR7laNlzwUbcCPyFfGHx28Q6t4ts/HGpa5ol14e1q6+EEb32nTxGOSyl+2SrJGcjnlcgHBxzgHivsywD/2fB5u7esYXtjOAT09810YLHTrTd9jHHZfGhTTT1JKKKK9I8kKKKKACiiigAoNFKvXox9cDNADc4pQMipFjMqEqu75tnALDd6EqDjtyfWog2Ztit827GFw3HQnGc8Gpc4a67DdOpa6W4tBOBTni2ElwyqvDOyldvrxjJ9BjuaAjeT5mx2Taf4SOfTn8KFJaNvcqUXF2a6XGgZFFK42jPzKowGyAACenfp70FSOzbh1BRh+WRz+FVKUU+VESupLTSwlFA5XPzN64UkD9Kbezx6bayTXEkcMMKGSR3YKqKOSSWwBgVHNbW5W+lh1FBPy/Kyyf7SHchBAIIYcHIOaBz/tdztB4/PFUoytzPYnmjflW4UZ28+ho6Nt/ixnA9KAFOdzBVUbnbrtH+PtTq2hTcm9ClHmaS3P06/4JqLj9kDw97XN+P/JyYf0r3nj2rw3/AIJxaZdaT+yN4cjvLeS2kkmvJgjjB2PdzOpI7ZBFe5ce1fzdmj/2yo/Nn9BZSmsHTT3sHHtRRx7UVwHoGjRRRQAVFe/8erfgBnuc8VLUN8223zu2gMpJx23DNAFANlwvrk/QDGf1IH507A/vCvnn9pXxh8StZ/ak+HXw2+H/AIy0fwLH4g8I+IPE2oajd+HRrMkx0+80S2ihWNpoguf7UlYtk/dA28ghn/Chf2jv+ji/D/8A4bCD/wCTaAPonA/vCkOAPvCvnf8A4UL+0d/0cX4f/wDDYQf/ACbQfgL+0af+bjPD/wD4bCD/AOTaAPomMgSLuwckDbjOa+YP+Csvxr8VfAX9mLw7rPg7XLzQ9VufHfhbSpp7ZEdmtrnVbWCeLDKww8Ujocjox5HUdr8M/hH8bfDfjizvvFHxu0fxRocbk3OmweAYtOkuBtIGJ1u3KYYq3CnIUjvmub/4Kc/s4eK/2of2ctF8N+DbWzuNXs/G3h3W3S5ufIWKCz1O2uZn3Y6iOJ2A6EgDnNAHz1/wWw/bM+J3hPwX4q8L/BPxNP4TvPhdoq+LfHWv2cEc02nQSSNFp+mRiTKrLcvvkZhnbDbynqVNfd2ueKz4a+E99r14izR6fpUl/MI33RybITIQDjPzAEZ2r16V8V/t9/8ABIS++KX7Pfxsg+GXjn4nR+KPipeSarcaBceILSHRtRuiYY8SB7cyCERxKFj80KNoxjcc/QVt4N+IHhIeC/h3DYzeMvh/faBqNn4t8X6/r0MuuWM5iPkII4olW43tIyFgF2pGPlJqeZ9g07nxnrf7Q/xl8F/8E9PB/wC2JJ8UvEFxfeINT07XtT8DS21r/wAIzb6HeXC25tI4RH54mitnWQS+b880RbYAxA+w/wDgpT+1Frf7Jf7K914g8MWlpqHizXNX0/w14eju08y2ivtQukt4pJV43JHvLNzzjHHWvmK2/Yk+N+v/ALGngn9k7WvDOl2vgjw1qVlZaj8QRrduyapodjdLPHHFZf8AHwlxLGkUB3ZCnc+WztH1R/wUF/ZZvP2xf2abrw3o+sR6H4j0vUbPxJ4d1K5TdbW1/YTpNB9oHDeU7oA4Azhie1HtF2K5V3KfgP8AZ08XfAjU4fFmvfHrx94gh0uzkufENpr6Wk2kTosTmSSCKKKOS1AkwyEvL8iFMEndXEaB/wAFXbO90Twv4x1X4Y+M/Dvwb8baxFpei+O7qe2e3nNw/l2lxLZoxuYYJ3+USOgC70J+Ulhv22vfGT9ovwtfeBfGnwh0vwDpfiLS7nTNd1w+KrS/hYy28kf+hRQkzHLMGVZQoCZ78V4RqP7IXx0+MX7IHw9/Zl8W+D9H0Hwv4UutLttc8ew6xazw6lpumSLJELaxQiaOeZYIlIcAR/McuTwe0XYOVdz0f4i/8FfYfCGv/Gi10j4OfEDxTp/wF1D7L4s1K1uLKC3ghFuk5mh8yUGdgrEmJMvhTgEkKet+GP8AwU20jx38XfAOg6l4C8YeEfDvxetri48BeItW8mOLxGYYlmeM2ysbi1do23os6L5ig7cnAPn+j/sSfEC28MfttQzafpscnxy1Oa48KBL1cXiPpSwKZWx+6PmZGD6DBrR8T/scePNb1v8AYllt7GweH4IMP+ErDagg+ygaMLImIcmUibKDGDtJJJ5BPaLsFjO0P/gtZpfiL4Xaz8QrX4O/Ek/Dbwjrtx4f8T+JJDaxw6PNDdfZnljiaTzbqFWIZnhB2DduAKkV6T45/wCCgt1H8U/EPg/4Y/DXxL8YtS8F2FtqGvTaRfWlha6f9qQy20AkunRZZpIsP5ceWAYDHNfBv7GHgD4wftG/8E0viJ8HfDfhPw3N4T+InjzxDpo8XzazHBHoNk2rSG5+0WhxJNOAjKhhBGWUsVAJr6q8F/A34tfsIftC/FC++GngCy+JnhH4mQaXeWhfX7XR59A1O0sY7IpcJKU8yB1iSTMW5wAw+bNHOuw+V9jpdZ/4K6eFNT0r4K3Hg3wb4y8cXXx1tb+TQLGwjigntrizEYnt7rzXUQFGcozuQilepByNXSP+CpPhWP4F+OvFPiPwv4r8M+Ivh7r48K6p4SkjjvNUm1WRoxa2tsYGeK488SxlXjcoAxycAmvJP2dP+Cbfjf4AeN/2WZDNpmtQ/Ds+Jr3xdf29wsCRXeq+XIY7aNsPJGsoZVI/hXJ61iftF/8ABKjxp+0Gv7QUlza6X5niX4n6F8QPCkH9pvFHrcem6dDatbzSRYe2kkKyoJF5Vtj5ABIPaLsLlfY90/4eap4R034i2Pj74Z+KPh740+H3g+bxyPDl5fWd6+u6VGj7pba5tpJItyzRtE6MQynacEMCafw3/wCCo48ceJPh7FqHwk8eeFdF+LttcyeB9U1S5s1XWruGD7QlpJEshe1kmRXMZmAVghOcZx5Xpv7A934w+DHxk/sX4E2vwz8VeJ/AOoeF9Ik1jx5N4h1O5luI5MxrIJ5oobUs0bBt4cs2SFwAPQvFX7H3jjUbL9jlYLKzab4LatHdeKFN6o+yxpodzZYibB8z99KigIRgEk55NHtF2DlJP+CYn7afxY/a21D4hr48+G8egab4b8Y61olrrFvqdlJDCLS58uOyliileR5kViGmUeW23jBr68GSBxn3HIP9ce+K+W/2A/gn48/Zj+J/xa8J614Uhk8J+JPGuseMtG8UWuqW7JNFfXImFrLa8TpImSpYhlO3O7nFe4fGf4Tan8WtBtbPT/HHi3wTNbzGV7rRHgSacH+BjJG42j6Ue0XYfLLsdpjHr+R/woz9f++T/hXgP/DE/ir/AKOG+NH/AIEWH/yNS/8ADE/in/o4T40f+BFh/wDI1HtF2Dll2Pff8/dP+FGPvdcr1+U/4V4F/wAMT+Kf+jhPjR+NxYf/ACNSN+xB4kmGJv2hPjgyr08m9sI2H4/ZT/Kj2i7C5Zdj37P+9/3w3+FGf97/AL4b/CvAP+GGNaP/ADcH+0B/4N9P/wDkKl/4YX1r/o4P9oD/AMHGn/8AyFR7Rdg9nPse/Z/3v++G/wAKM/73/fDf4V4D/wAML61/0cH+0B/4ONP/APkKj/hhfWv+jg/2gP8Awcaf/wDIVHtF2D2c+x79n/e/74b/AAoz/vf98N/hXgP/AAwvrX/Rwf7QH/g40/8A+QqP+GF9b/6OD/aA/wDBxp//AMhUe0XYPZz6o9+6/wB7/vhv8KD8o54+oI/pXgJ/YY1v/o4P9oD/AMHGn/8AyFTT+wtrLjDftBftB49ta09T+f2KjnXYnTue/I+//wCtTq+eG/YE1R23f8NEftHD2HiOxA/9IqT/AIYD1T/o4j9o7/wo7H/5CqgPoignAr53/wCGA9U/6OI/aO/8KOx/+Qqy/Hf7EGteFvA2tapb/tDftFNcabYXF1EJPENiyM0cbMAw+xcjI5oA+mg/3R/Ewzx0A7fnjt6H0p1eZ/sa/EHVvi7+yZ8K/FmuzR3OteJvBukavqEyptWe5uLKGWVwvRcu7EAcDcfWvTKACjGaKKAGlcj+H8RXz3+2n+xLZftBaPJrGjLDZ+LrNMxyBflvVHWNuRgkZweeccV9DA4NJIeMqoz2wOnv+HWurBY6rg6qrUXZrU5MbgaWLpulWV09D8XNe0K88La3c6bqFrJZ3lmxjuLdx80TA8jkcg+tcH44+AHg34la2upa5oNreXYgFq5R3t0niByEkSNlWQem8HHbBwR+rX7an7Ftp+0DoraxpEcNr4ttEJVlGFvgOz4xyecHnnFfDp/Y++KayMjeAfEm5WK8W2VbHUg55/Sv2rJ+J8Fj8Oni5xjJH4/mHD+PwOIawsbwPB9T+AHg3WPC2i6LPoNv/Znh0bdNjinmheyXJJRJI3V9hJztJI+oqvYfs2+BNM0GTS4PC+mx6bcX8OqzW6mQLLdxY8uc4b74xnPfPORkH6B/4Y8+KX/Qg+Jv/AX/AOvR/wAMefFL/oQfE3/gKP8AGvR/tDKua8asDgeEzNqzjP7jyNPBulxeNZvEi2UI16azWxe9y3mPEuSqkZ24BOeAD71j6J8DPB/hiTQ203w/Z2n/AAjN1cXukgFm+wzT/wCuZcn+PJyD2P417n/wx78Uv+hB8Tf+Ao/xo/4Y9+KX/Qg+Jv8AwFH+Nayx+XPecf8AwJExwOPW0J/d5WPD/wDhSvhMeBdR8MDQrL/hH9Wllnu7P5ttw8kqzMzHOc+YoYdMYHWi7+CvhPULvWrifQrOSbxFDBb6k53FrpIFCwg5JwUABVhgqVBBBANe4f8ADHvxS/6EHxN/4Cj/ABo/4Y9+KX/Qg+Jv/AUf41P17LtueP8A4EvQPqOYXvyT+75ng+k/ALwdonhLWtDt9Btf7O8SBk1RZ5ZbmW+UrtCvLK7SMFHTLEqeRirGifBTwt4cu9BuLPSVW48LrMmlzTXM08tmsxzKqu7lsPhd2STlQQR0r3D/AIY9+KX/AEIPib/wFH+NH/DHvxS/6EHxN/4Cj/Gj69lyu+ePT7S6O6F/Z+YfyT69O+jPnvxf+zF4B8faxfahrHhmzvrnVF23gaWWOG7+TZukhR1jkk2/8tGUuCAQwIBGtr3wa8L+JNe0XVLvSY5NS8OoItNuVmlhktowVIizGy7owyJ8jZU/NkEnI9u/4Y9+KX/Qg+Jv/AUf40f8Me/FL/oQfE3/AICj/Gp/tDLm780f/AkX9TzFq3JP7jwy4+Bng+68K6locnh+xbSNXvX1K6tRuCtcvJ5rTKc7o28z5hsKgUnh74G+E/C3hvWNJsdFt4bHxDG8OqBpZZpL9HjETLJJI7OVCAhRuwoZuua91/4Y9+KX/Qg+Jv8AwFH+NJ/wx78Uv+hB8Tf+Ao/xqZY7LnvOP/gSJ/s/Mf5J/ceMyfC/w/Np3h+1k0m1a38KmNtJjy22xaOJoVZBn72xiOc9TVb4i/Bnwz8V7u3uNe0w31zaCRIZhdz28iqxBAZoXQsAR0JK+wr2/wD4Y9+KX/Qg+Jv/AAFH+NH/AAx78Uv+hB8Tf+Ao/wAa2/tXAarnjr/eRMctzCMlNQndbaHjOkfC/wAO+H9ch1Kx0ezs76207+yIZYQY2iswxYQrg8KCx56knnPIrHv/ANnHwRqOm6TZtoENvBoUBtbD7Hcz2cttCQAYxLC6yFflB2liu4kgAmvfv+GPfil/0IPib/wFH+NH/DHvxS/6EHxN/wCAo/xpfXsue84/+BI0+p5hfm5ZnhV/8CfCOrWk0N3osdyLjSF0GWSW4mklksVcyCBmdyWG7DFmyxYZ3Y4rq441iiVFVVVcbQowBwf8a9K/4Y9+KX/Qg+Jv/AUf40f8Me/FL/oQfE3/AICj/GnTzDLYfDVj/wCBIyqYDHT+KnL7jzeivSP+GPfil/0IPib/AMBR/jR/wx78Uv8AoQfE3/gKP8a2/tbBf8/I/wDgSM/7Kxf/AD6l9x5vRXpH/DHvxS/6EHxN/wCAo/xo/wCGPfil/wBCD4m/8BR/jR/a2C/5+R/8CQf2Vi/+fUvuPN6K9I/4Y9+KX/Qg+Jv/AAFH+NH/AAx78Uv+hB8Tf+Ao/wAaP7WwX/PyP/gSD+ysX/z6l9x5vQThW6fdI5z6e1ekf8Me/FL/AKEHxN/4Cj/Ghv2PvimFO3wH4mBxx/owH9aX9rYD/n9H/wACQnleLSv7KX3Hx78VPCVr8QP23vDmiasuoXWjr4Uu717WC/ntVaUToNx8l0J+XI59ea4f4ueItb+EWjfGT4f2uvaxeaTp/g4a9oUk91LNdaSrSoklsJkJcqu7I3dgTnjn6i+Jf/BN74+3P7RGj+O/DPgmFzY6LNpT2esQTRiZpXDZ3RhuBjGPx9qy/EX/AASV+MnjvwP8QJNc8O6reeNPH2mxaTNdxWB+wabBERsgiUfMyj+8VyTg8YzXzGIx1GdSTjUVv8SPqcPhasFCM6b/APAWeffsuT/DPUdN0ubwrqYvdek0iE3oOp3txICYl8wlJpCobdk9OBz2rI+MnxGufA/7bfgndD4k1K1vPCd6z2GmW8l6zMJ1AlaFTk4XPzfyr648LfsVfFnQ/Cek6ZN4K8RzSWOnw2szxW58tpI0VBwSDjAz0rjdZ/4Ju/F7Vf2kvD/joeD9cjsdH0K40ia2W1/fSvJIHznPQAcDHXBz2rsrZjQ9jBRqxumvtI4I4Wo603OnK1nb3X2PlzQP2irXQP2hvjV4o1SDxNZ6D4d8N6ZONPv7VoZAxB+5CxyrO2FHYlhkqMsOz8BftKalceOvCuh+JrXwnbL4yt5X0/8AsPWzfS2c8YVjb3S7QUJRh86ErkMCQATXpXj/AP4JI/E/4meO/idear4U17+yfiJodlpCxw2bfaLb7OQytJzj7wVu/THOat/Df/gmP8avDF5CNU+FvhfT1s7R7X+0vD/h0pfXZZNivkqptyMsSELbtxHFccc6hGo260bep6X9m0qlNXpyul2PML/9ojXvCHxJ8L6Vr2neFVsPFmqNo8cGn6q1zqekzGMsnnxopXDEbTsdiuQcennX7THxs8TfEr9mb4q6lonh3SpPBWnLc6MLqW8KX8phYLLcJGQVEayArywY46AmvWfC/wDwRp+OXh7UPAPm+B9FZfA+rDVJtVg0iU614jwrDNxcFQysd5yA5zxzxzoeKP8Agkd+0E/w38ZeAvDeg3GneDvFU91d21zd6fP/AGlYfaHEslthTtaMyAncW3EEiplnUWpKVRW9UVDK6KcXGDvddGcPZftCahHqGn+DfDFr4Zm1LQ/D1ld6lceIdT+wQ/voR5MMAVWLSFULEsAFDqec8V/+Gx9S8WQ/C1fCfhq1vrr4kRXkSm/uWhTS5rXbvL/KwaMnfhh/cHHzceoa1/wSS+LWmePpPFGl/C/R9evNS0mzstTtPE+k/aoVe1i8pJLaQLI5cxgAhl5Cjpiugb/gmD8X/wDhYvw11qPwXNar4Khvor22sNHayt7lp1jGYYl/dxqGGcH36ngmHzSErRlXil6hiMtioycaDbt+I7Smuv7Gt/7QS1jvvJV7j7M5kt/NwCWVsAsnOAcDJxxX1p+wp+whL8Srm28XeLrd4dBRhLZWTDb9tcfxsv8Ac7jr0q5+xj/wTv1TxDry678QNNu9P07TZALfTriPZLcuoA3SdiuQD0Ffeljp0OnQxxQLHDHGAiIq7RGoHCqOwryOJuLm4fVcE/Vm3DfCfPU+sYvTqkSWFnFp9lHDDGkMUa7VRBtUDtgVLx7UDgUce1fmDd22z9PjFRSitkHHtRRx7UUDNGiiigAqHUFDWUgPcYqaob7/AI9HoA+dviCcf8FTfhKf+qVeOSPbOseD6998w+9eA/EL/lKX8JP+yU+OP/Tx4Pr3ygB3mH3oMmBznHU89qb/APrqC8vobOzmmmljhhiQvJI7bVRO5J9utVGEpfCV7qXNJ2I/EGuWvh7Rbu8vpktrW2iZ5pXfaIlx1Pvjt68V8seIP+CtPhGy1i8t7Pwvr2oWsEpVLhXiVZgOAwDEcZHFeL/t3/tpS/GXW5vCvh24f/hFtPfbPNkr/acqkYbjGYxj15r5pwMAbVUDoFUDB9AeoX2zX6Zw7wXSr0fbYx77LY/NM/4xq0q3scKtup95N/wV38MuOfCPiTOMZM9sCPxzSN/wV48NMwJ8IeIDjjme36f99da+DgPr+dH4fqa+h/1Fy7+m/wDM+e/1yzD+kj7u/wCHuHhcr83g3xAx3bgTPb/K3qMMMH6Yp7f8FdvDLD/kT/EXT+K4tmyfU5NfB34fqaPw/U0v9RMu/pv/ADK/1xzHv+C/yPvBP+CuvhmNgR4P8QnAI+a6hOc9j8/I9j0psP8AwVw8LwIir4P8RYjBC/6RbrgE5xwwHb/9dfCP4fqaPw/U0f6i5d/Tf+Yf645j3/Bf5H3gn/BXTwzGVx4P8QHBzk3FuM857MOff3ob/grt4baLa3hHxIRgKf8ASoOmMEfe7ivg/wDD9TR+H6mj/UXLv6b/AMw/1wzHv+CPt/w3/wAFSfA/g3T3tNH8A6po9rI8srRWP2S3QySNud9qkDcWySQOScnJ5q//AMPcfDOTjwh4gA6qvn2+1DkEELuxwRnOM554r4R/D9TR+H6mj/UXLv6b/wAw/wBcMx7/AJH3h/w918Mg8eEfEQJxk/aYMnAAH8XtSR/8FcvC8abf+EO17ru/11tjPHPXrx+dfCH4fqaPw/U0f6i5d/Tf+Yf64Zj3/I+7k/4K3+GIz8vg/wAQdf8Anvbrx+DDP45HtS/8PcvC5VQfB/iE7dv/AC8W4yRnnhsfljOOcjivhD8P1NH4fqaP9Rcu/pv/ADD/AFwzHv8Agj7wH/BXbw0sYUeEfEQVemLi3GPT+Lp7dKU/8FdvDJOf+EQ8Rf8AgTB/8VXwd+H6mj8P1NH+ouXf03/mH+uGY9/yPvH/AIe7+Gf+hR8Rf+BMH/xVKP8Agrt4ZJ/5FDxF/wCBNv8A/FV8G/h+po27jjC/jn+lH+ouXef3v/MX+uOYrW595N/wV28Mgf8AIn+JP/Am3/8Aiqb/AMPefDP/AEKHiL/wKt//AIqvg3GYwQvrkgNtBz0B703H+z/Oq/1Dy1K7vftcX+uWZJXbR96f8PefDP8A0KHiL/wJt/8A4qj/AIe8eGP+hQ8R/wDgVb//ABVfBYGT93H4GnFcD/6xqf8AULAdn94f67Zh/Mj7y/4e8eGP+hQ8R/8AgVb/APxVH/D3jwx/0KHiP/wKt/8A4qvgssB7fUGgcjhc/QGj/ULAdn94f67Zh/Mj70/4e8eGP+hQ8R/+BVv/APFUf8PePDH/AEKHiP8A8Crf/wCKr4LAyfu4/A07Z9PyNH+oWA7P7w/11zD+ZH3mv/BXnwyD/wAif4k/8Crf/wCKrR8L/wDBWfwhrfiGzs7zw9r2l21zII3upZIXjgz0LBWzjOOnTrX59quD/hmnOhdSArepznBHfPtRU4BwLi1BO/TU0p8aY1STk1Y/abStYt9bsorm1lSe3uFEkUqNuSVD0YGrR+tfnr+wF+2u3wx1aPwj4ouvN8O3ThbK6yXXT3bgKep2k4GO2c9K/QOxuFuo/MX542G5GGMEev06fnX5PnWT1surunVTt07H6dk+b0sdQUlpInrnPjD/AMkh8Wf9gW9P/kB66Oub+Mn/ACR/xZjaGbRb0Dc21cmBwMntXknsHB/8E8UCf8E+/gSO4+HmgDPrjTbb/GvYK8c/4J3yeb+wB8Cim5o/+Fe6AVJwCQdNtsHHUdPzr2OgAooooAP88U0ybFXsXbbjvjvTm6cbs+1fIn/BQr/goN/wp2KTwJ4GmivvHl7CWublDuh0aFjt85j3kGcBcggkHtiuzA4OpiqipUlds5cbjKWFpOrVfTYf+3l/wUW/4UPeR+C/A66fqnjyYebOZl8220iMMCGmwDknBAXIOSK+Z0/4KX/tCGT/AJD/AIB3Y6jQXAPrx5leJ6XpP2Frqaa5kvtQvpvPvr2Rj515MfvO5ySc+mcCrg9+nbk8frX7DlPCOCpUF9YppyfU/H8y4pxdau3QnaPyPZP+Hl/7Q3/Qe+H/AP4In/8AjlH/AA8t/aF/6D3w/wD/AARP/wDHK8b+X0b/AL6NHy+jf99GvQXC+VL/AJdo4f8AWLMf+fj/AAPZP+Hl37Q3/Qe+H/8A4In/APjlH/Dy79ob/oPfD/8A8ET/APxyvG/l9G/76NHy+jf99Gn/AKs5V/z7X3B/rBmf8x7J/wAPLv2hv+g98P8A/wAET/8Axyj/AIeXftDf9B74f/8Agif/AOOV438vo3/fRo+X0b/vo0f6s5V/z7X3B/rFmf8AMeyf8PL/ANob/oPfD/8A8ET/APxyj/h5d+0N/wBB74f/APgif/45Xjfy+jf99Gj5fRv++jR/qzlX/PtfcH+seafzHsn/AA8u/aG/6D3w/wD/AARP/wDHKP8Ah5d+0N/0Hvh//wCCJ/8A45Xjfy+jf99Gj5fRv++jR/qzlX/PtfcH+sWZ/wAx7J/w8v8A2hv+g98P/wDwRP8A/HKP+Hl/7Q3/AEHvh/8A+CJ//jleN/L6N/30aPl9G/76NH+q+Vf8+0H+smafzHsn/Dy/9ob/AKD3w/8A/BE//wAco/4eXftDf9B74f8A/gif/wCOV438vo3/AH0aPl9G/wC+jT/1Zyr/AJ9r7g/1jzT+Y9k/4eXftDf9B74f/wDgif8A+OUf8PLv2hv+g98P/wDwRP8A/HK8b+X0b/vo0fL6N/30aX+rOVf8+19wf6xZn/Meyf8ADy/9ob/oPfD/AP8ABE//AMco/wCHl/7Q3/Qe+H//AIIn/wDjleN/L6N/30aPl9G/76NP/VnK/wDn2vuH/rJmn8x7J/w8v/aG/wCg98P/APwRP/8AHKP+Hl/7Q3/Qe+H/AP4In/8AjleN/L6N/wB9Gj5fRv8Avo0v9Wcq/wCfa+4P9ZM0/mPZP+Hl/wC0N/0Hvh//AOCJ/wD45R/w8v8A2hv+g98P/wDwRP8A/HK8b+X0b/vo0fL6N/30aP8AVnKv+fa+4P8AWTNP5j2T/h5f+0N/0Hvh/wD+CJ//AI5R/wAPL/2hv+g98P8A/wAET/8AxyvG/l9G/wC+jR8vo3/fRo/1Zyr/AJ9r7h/6xZp/P+R7J/w8v/aG/wCg98P/APwRP/8AHKP+Hl37Qx/5j/w/Hv8A2E//AMcrxv5fRv8Avo0q7d68N94fxH1+tV/qzlf/AD7X3C/1hzN6ObPQfiL/AMFjPjD8H7CyuvEnjb4caNb6hK8VuZNCl3XLIqswQCQljgnjAzjijwL/AMFhPjJ8SbC6vNF8cfDPULWwYi8eHRpVFmQMncHdXX5SPmIA5xz3+V/2kppI/wBoH4CCNv3n/CT3W3rv/wCPQ8seensKyfi1psWm/tk+DbrS41W+1jwtqiavtjCvPbxwfu5ZSAG3CTjc33ge1eJisowFKVRRorRq2h7+HzbG1YUnKo7tPqfUnhX/AILm/Ejx3rVrZaT8QPhjqVxeHbbxW3h+4k80gkFRIW28YJJz0B61tfET/gsT8YvhJBYz+KPG/wAN9HhvZmtYzdaHIq3Mo52ptckkLnp1PFfHX7AvjHxJN+z34J09vCc39jtFL5eqf2tBiQLPJlxB/rPw5+o6i7+2BPq8PxY+B39hNYjVF8VTm0+2FxbZEDHc23LdGIwPT3pVMlwCwntvYpP0COaY14v2XtG16n1x4B/4K8fGf4q6PNfaD4y+HOr2tpIYJzbaM+LaUZyhDOGGMdWAyOnOK3U/4KWftCPIu7XPASv3UeH3DAe4Z+o7geor84tX+JviL4CeLfjRcX9vpUfj7Uk0vUYbm1Ekmk29vcFLZJFVhuaSMjcxYjdzwK9K1/UNe/Z5+LXw5hfxZ4i8Vaf40muNN1G01uQzYaKDzlmgZUUpg5Vk5PzKc8c44fA5S4pzpIvEV8y5nyVLH1x8TP8Agrr8b/hN4Nm1rWvEHgiHToLiK3aSDw8zSJJJIsaAL5mDlnXPBwDnI6jctv8Agpf+0II1Zdc8ABJDyT4emXYc/wAQ3jBxzjkdua/M34mN4m+Kf7FsPxA1PxhrVzLrWp2hn0jCtp0Vq98ipEqMoKyxlBlwzE/3RXaeOvjt4l+Eln8T/DN1qN1c69dtZP4Lmk2rL5OpfuURCBkmCTzDz3jB46VcMvylzs6S+4csVjvZ6VXfqfoEP+Clv7QqLzrnw/O7n5tCkBb1/wCWg/IjNQ/8PJP2go4m/wCJx8PGYnIJ0FwST0HEoHJx1rxPwxp9xo/h2xtLy8uNQvrWFY7u5mcl7iYKA0jf7TFSePp71f3Z/wD1k17NLhzKZR5vZr8T56pxBmFOTj7Vv7j6T+Av/BWLxp4Q+IlrH8XP+EfvvC2oFbdtT0qxNvJokh/jmGWzHnAJB4BJ5xiv0S0bVrXXdLtr+xuIbyzvI1lgnjYMkqMMqysDyCOeO1fiy8Ed1F5Mi+dEwKFHAYbSMHj6E8nNezfsNftzX37IOs23hrxRcXWo/DC8yYbrmRvDrlscnr5PTK/w9QeMH5Pijg2NKP1jCLTsj6zh3i51H7LFu5+pgbJ6UvHtVPRNbs/EOmwXtjcR3VpcoskU0RDRyKw3AhhwQQc5q5x7V+ZWak4yVj9HjUjOCnAOPaijj2opFGjRRRQAVDff8ej1NUN9/wAej0AfOvxC/wCUpfwk/wCyU+OP/Tx4Pr3z8QB1JPavA/iF/wApS/hJ/wBkp8cf+njwfXvU3+qPDAMCvPB5qZS1tFXK91LmkxJZTDFvK7QF35JAxXwZ+31+3C3jC4uvBHhK6I0m3kMWqXkbY+0SA5MSn0GOcEgjIrof2/8A9uPyHvPA3hC6XzpRjVL+I/cUfK0CN6nufTI96+JFVYzxu6bF3Hdhc5xn69+tfqHB/C8p2xeIWi1SZ+Y8WcSavDYaW+jBRsVVGcKuxQeijrgelFFFfqKilsfm+oUUUUwCiiigAooooAKKKKACiiigAooooAKKKKACiiigAp0Y3SKMO2TgBTgk9h+ePwptATzWC7VbcQuD78fmP51UdyofEj6b/YF/4JxfDr9pX9l7w/4z8TSeJbjVtVnvVme21Z7WNRHdSwr8o5X/AFXYngmvaR/wRn+DTE/L4064H/FQTg+2e4/+uK+J/wBob4e6h8Zf+COf7N/gex8Ta34Vbx58ZrXw5LqWmXj2s1vHc3OrREsyYLICVYrkZ29R1r3wft3eLvi3/wAEovDulx3Emk/H74gauPgzPG25pdK8RrPNZ6ldsEJZPIgt7u/B3cRJEc8jP4Dm2dY+OMqqFWStJrc/cMtynBzwlOUqau0uh65D/wAEafgy8gX/AIrbPcHxDN8vcAjqCRz09qlb/gjH8GWGAvjLd3H/AAkU3y/WvFv+CYfjXxn8Dv8Agmi1roeseHby68OfEXxR4cPiD4ha88dlpdrb63exRtPMf3s5do44VQMCGlQ5KqQdSb/gsT4o0P8AY2+IHjVfB/hPxV42+GfxNs/h7eW2haz5mh6+Lm9sViurObLFFNrew4EnKypIpyEJrzf7czH/AJ/S+9nof2Pgv+fUfuPTL7/gjv8ABHSLN7q4m8X21tChlkmn8RSpHFGASXbcRgADknp1PFYPiL/gmJ+zl4V8K22vap4k1XTdEvlja21K58ZGGxuPMBKbZWbawIGcjPUYzVyX9rX4hWnxB8f/AAj+MPgrwPqV1ffCrUvHemR+H7yea21K0hlNpe6bcrLtYybp7UCRMI4kcDGOfk/xDqni/wDaH+Jn/BO218L+DPg9YeCfFHgLU9b0bwxqcF5daXp0yaFBvjkTB8xIoLkrbkgkMZCRnBqv7czH/n9L72H9j4L/AJ9R+4+xLH/gjj8Fb6BJ4m8aS28g3RyL4jlZJFzwwIOMEcg9xU6/8EZ/gqybv+Kz28HcfEEwAzj/ABrxbxL/AMFtpfDPgjxR8ULGP4Rw/B/wb4guNGbRZvEKx+MtQsLO7+xTajBa7hGsYmWV44GyzQwgg/vFx7Ba/t5eMvFX7eXjD4T6BD8OtPs/At9plrc6b4k1G4s/EPiGG9gSc3+nqR5clvEGkj2/M7tazDCHZmP7czH/AJ/S+9h/Y+C/59R+4tL/AMEZfgwx+542XI6/8JBPwepB7flkcGnN/wAEX/gyRw3jbpn/AJGCauL/AOCdPxj+PnxK/bB/aG0zxprXgfVPBvg3xx/ZZghN59p05W0ezmihst3yCLdIrSCQbi7SkYwAfuS2+dVZsDjGM5pf23mK19rL72P+ycH/AM+19yPkuX/gjD8HAWZm8ZO2MfNr0vT8K8t/4J2/tQ6f8HPiH4y+GGt3l42kW/izULXR768umuJI/KfyUgd27bI1A/2vrX6DXa5hb8DX4l+M2ZPjH8SAGZAvjTVj8nynJumwR6MOx9cV9fwzhqucxr0sVNycYpq72bZ81xDi4ZTyVaEbJvU/aaOXzC2Np24BIOefSkuIEu7eSGRVkjlUo6soZXUjBBB4II4xXx5/wT5/bcXXo7fwL4uuiupQBYtNu5Dn7QvZHP8Az098/hX2KG3HjJyCQR0wCAfxyelfHZpl9bBYh0ai07n0mWZhSxtBVab17EWmabbaLp1vZ2dvBa2lnEsFvBDGqR28ShVWNFAwqgKAAKmoorhPSCgcmijOKUtgPLf22/iLq3wj/ZK+IPiXQ5jbatoujy3FtKBkxN03D3AJI9xX5EeHLq2is3vLjUY7vUtWxe3l1NOGluZWHzO5J4JJ6dBX6s/8FKTj9gn4sN/1AZjj16V+TmnfDjQLrSrN5NHsmZoEckhslioyev6V+q+HtGPJWklqrW+Z+ZeIFR88It6Gymq2nyj7ZZ8f9NV/xp/9q2n/AD+Wn/f5f8ayR8MPDoP/ACBrH8m/xpf+FZ+Hf+gLY/k3+NfpF61rNH55ej9hmsNUs/8An8tP+/y/40f2pZ/8/tp/3+X/ABrJPwz8Okf8gax/Jv8AGk/4Vj4e/wCgPZfk3+NPmrfyoPdNc6pZ/wDP5af9/l/xpDqtmP8Al8tP+/y/41lD4ZeHQf8AkD2X5N/jR/wrbw6pyuj2Yx1IVjt/WmvbPRJEycUrmquq2bf8v1n/AN/lpTqlmBn7baY7fvl5/Wufv/B/g+x1WGxmt9Fiv7oZtoJblUluPXam/ccYPQdqTVfBXhHRdOmuryx0mytYSf3tzJ5MYIIGCzMACfnwPRDWH1p72Wmh0exkkk1qzf8A7Xs/+fy0/wC/y/40f2vZ/wDP5af9/l/xrH/4Vn4bZVZdK09gxKqd20NyQCCXAZTgcqT16U5fhb4edht0ezYE8YR2YjscKScdeTitVKo1zaGbUVpqa39r2f8Az+Wn/f5f8aBq1mf+Xy0/7/L/AI1yXi/RvA/gKwt7nWLfSdNivbuLT7dpxIBLcSHakYIzyWwPx5wMmqmoXnw50bx1b+Grj+yV165USR2QimZyhZlVmIBCglT97HGDyKznipRdrI0hRUlfU7k6rZj/AJfLT/v8v+NJ/a9n/wA/lp/3+X/Gss/DDw7JI0Y0ax3ZwMBuPqCQe46A9/So1+GPh3r/AGNZt6gK+fTpnIOegOM9vSqdaaXM0jOPLJ8qvc2TqtmP+Xy0x/12X/GkGrWZ/wCXy0/7/L/jWW/wx8P7mj/sexzGSGIV8HB6g55HTk4pq/C/w6rf8gey/Jv8apSq2ukhe5e19TXOq2Y/5fLT/v8AL/jSf2vZ/wDP5af9/l/xrLb4ZeHWX/kDWP5N/jTP+FXeHv8AoD2X5N/jT5qvYLxNf+17P/n8tP8Av8v+NH9r2f8Az+Wn/f5f8ayP+FXeHv8AoD2X5N/jSH4XeHgP+QPZfk3+NLmn0Dmj1NgatZn/AJfLT/v8v+NKdVsx/wAvlp/3+X/GshPhd4dHP9j2X0w3+NOb4ZeHWX/kDWP5N/jR/tHZD5qXRmoNWsz/AMvlp/3+X/Gl/tW0/wCfy0/7/L/jWQvwv8Oq3/IHsvyb/Gnf8Kz8O/8AQFsfyb/GnzVv5UK8TV/tW0/5/LT/AL/L/jR/atp/z+Wn/f5f8ayv+FZ+Hf8AoC2P5N/jR/wrPw7/ANAWx/Jv8aOat/Khe6av9q2n/P5af9/l/wAaQ6ra9ryzz1GZl4P51l/8Kz8O/wDQFsfyb/Gj/hWfh3/oC2P5N/jSbrW2BctzD+LPwl8O/GKbQZtT1a+s7jwzdPe6fcafqKW80MroEZt2Dn5c8e9Hgv4VeFfBd9qV+t9davq2sRNbXeranfpcX08RGPL8wgKqjggBeoBrcPwz8PY40axH4N/jTW+GHh5hj+x7Hb2G1uP1rleFu22t9/kdyxjjFRi9tvmV/hl4Q0D4S+A9O8O6PdKum6ZHsi8+9SSRssXOSCBgsc4A7VmfFX4V+Hfi9LoU+pate2F54Zu2vtMudN1BLeS2mZQu4Ehs9P1rcHww8Ogf8gex/wC+T/jSf8Kv8O/9Aax/Jv8AGtJUJSh7OUdDmp1nCr7WL1OW0z4AeB7Cw8RQX8k+vzeKYlt9UutX1IXV1dQDlY942gBTkjaAR+FP8E/Avwx4I8SWes/2vq2uahptsbTTp9Z1YXf9lxHGVhXChSwABY5YgDnsenHwx8PDH/EnscL93huP1pB8LvD5znR7Js+zf41isFBaJHTLHSbu5HnWtfsffDnXNNuLC6vdWbQZL9tUj0oa0FsbG4MwleWKPHDHGMEkYJwBniL4jfBSP4jftYeBPGF0ulyaP4Ksp5DcfbkMtzdSPmKNk7qis7A9i3Tjn0LVfhxoNjpV1NFo9h5kELyqGUkZVSecn2rl9E+GM3iLRrO+T/hG4VuoFZY3s87d2Tj72CeOvpXPPBR5lJR1OilmE1Fx5tHv89z0g6lZgDF5bbR0/eDpx7/X86P7Ssz/AMvlt/38H+NcDbfBi6lVP+RZxIeT/Z4+XgE9+cZxTf8AhTd0Y1P/ABTfzYP/ACDuxz/hXdTqVJe60kcDhCL5t7nfNqNoQVN5a8jAPmDg9u/rTZNVsZ0KSTWUqygNIryqQccYAzjn3zXDxfBm6Ei4bw2pyDn+zyuMe4I/nVr4b+DtG8UeDre8utJ0+S4cyhmjVtowxHr7UU5Ny5XsL2aj70dz7y/4Ir/EfVry++Ingt9VfUPDPhMafPpETtvNv9o88TIrZP7vcgIXnB79q++A+W+73xX53f8ABEbR7TRvi38Zrazt0t7eK20Ro0X+Hd9rJGe/Ir9EScM31zX4LxNFRzCaj3P27huTlgYuXYXj2opN3tRXhnuGlRRRQAVDff8AHo9TVDff8ej1MtgPnX4hlR/wVL+Ee5dy/wDCqvG5PGcf8Tjwfz+Fct/wUP8A2v774M2C+ENBUw69rEH2ia6PS1tizLuQ92OxlxxjOecc9T8RP+UpXwl/7JR44/H/AIm/hCvmX/gq8Nv7Tdh0/wCRdteB0H+kXYOPqK+m4VwtKvmMaVVXW9j5nivEVKGBdSk7M+ZzI0mWkd5ZJASzMf8AWZbO/wD3j0zTc4HtR/IcD2HpRX71GKjBU47I/Ebtv2j3YUUUVQBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFGcMpzjDA/rRRv8v5sbgnzEf3gOSPxFHoXtZo+p/wBmn9lPUP2rv+CfH7PFrY6xZaKPh78T4/G1z9piaQ30Fnf3++BNrDazeccMcgFBkEHj034d/wDBLVfBn/BUvxB8fv8AhJmn8L6laz6np/g8wssOleIrq3tLO+1NCCBvltrRF5UnM8pz8xB+Jfg7+3h8Rf2X/Adp4J8PeNvCtppeiyTCOGfR2uGjaSVpSpfOM7nbjjqPWuoj/wCCufxeIGPiJ4J24G4/2OjbvQ5DHqM9euD0xX47mHBePrYudWnKNpNuzZ+v5fxNhqWHhRqRd0j3pP8Agkp4w8PfDXwHZaX4p8F69qfgP4k+J/Gf9k+ItMln8O6/Bq8l8y293Cjlmltjch0b5gHQtgE8N03/AIJGeKJf2ffiZ4YvPF3g+z1z4hfFLQPiMX0jQG0/S9LFg+ktJYxQqc4LafIsTE5IdGbJLFvB1/4K3/F7cSfiF4HOTz/xI1+Yeh56c00/8Fafi5z/AMXE8EDPPGhJycYB+o7ewH1rn/1EzH+aH/gSO3/WrC/yv7j7s+Nn7GmofF/9rub4jWmuWVjb3Hwm1r4dize0kaRZtQu7W5iut2QNqLbOCoAJLfe4xXD/AAd/4Jq658ONX/Y/upvFOmXUf7MvhDUfDGoAWsinXGutMs7NZIvmwirJbMSCGyrrgqeT8mr/AMFc/i9H8w+IPgVe5A0MbRn0+bP69aD/AMFcPi88f/JQvBPA4xoi5/n0z2+nNH+ouY/zQ/8AA0L/AFqwv8r+4+j/AIS/8EvPEPwDuNS8I+F4fgbffDu512+1iwvte8Ird+J9HhvLlrqSz3n9zMElmmCPIMrGyrj5Frrf2wP2EfG37YHxT0mPVta+HFr4S0XxJpviDTNaXR5V8ZaMLOaO4Fpb3AYRrHJKjozEZ8q4kXBOGr5EH/BXL4vk/wDJQ/Bij20RR3J9T6gfhS/8Pcvi/t/5KF4IXkZxoa/41P8AqJmP80P/AAJB/rVhf5X9x90fA39lXxh8Bv2y/iv4x0vWPCt58O/i1q8HiHUNPubSZdY0+/i063siIpAfLaNjbo/zLkb3HOQa+joWYO24KPTAPFfkT/w9z+LwH/JQvBG3GOdEHHOeOf503/h7p8YCT/xcTwSc9ANEXj9ar/UTMe8P/AkT/rVhnpZ/cfr1NL8rZGFx1r8TfGfy/Gn4lDjP/CZ6zjkfdF265HPXOfpjNdwf+CuXxiddv/CxPBAz03aIMZ7dOa8o8OeIP+EsvNZ1SbUrfU9R1bU59Su5IYfLUSTEu/ykZXLMSPXNfXcGcP4vLqtWde1mrWT7HyvFmbYfG0o04XTT6o2bS6ksp45I5JEaJtysj7XBHQg/3vev0Y/4J7/tbXXxz0G48M65G3/CRaDbhzOE2reWwZUWTGeGyQDyc9eK/OMttH3Vb2NfVn/BI0Y+N3iVfmKx6FhdxyRm4jzz6V3cZ5fSq5fUxElrFqx4/B+MqUsZTpJ6Svc/QSiiivw0/agoPSig9KBrc8P/AOClIz+wL8Wf+xfm/pX5b6N/yBLL/r2j/wDQRX6k/wDBSj/kwX4tf9i/N/7LX5baNzotl/17R/8AoAr9a8O/4Vd+cT8q8QHevSXdP8BniHX7Hwlod5qep3SWen2ERnnmYEiNB1OBzXDL+1j8PXRWXxFuVgCCum3rdRkciHHT3q9+0u2PgD4sb/qHspA9MjNdV4UupF8L6SPMmVBYQ7VztUfu028D2zX3E5VJVXGLPi6caSpptHD/APDWHw+/6GCT/wAFd7/8Zo/4aw+Hv/QwSf8Agqvf/jNekfbZV/5aSf8AfRpwvZiP9dJ/30av2Vb+YrmofyP70ear+1f8PWYD/hIJTuOABpV717f8sa6rwX8QtJ+IentdaLdteW6SiGV/KkhIb6SKp/xroDeyY5mkP4mmb5LrdnEm4AfOBxzyR7+9OjTrX1ZliJUOX3D48/bb8JXmtftYaPrWjxldd8G+BZfEWnrH1kkh1AtLGQuSWeDzF78kUftu+OrT9qD4a3GmaXcJJ4e0PwlJ401Jg26M3Etu6WER2/xKHmkIPcJxzX0he/B+zvfjnZePJLu4kvLLRH0E2RUCKWIymXeSOc9unP6VwvgX9hvw18Ovg3438G6fqOofZfHLzme8ZFaS0R1CJHGp42oq4APY8YIzXz9fK8VzSUfhbufQ4fNsK4wlUfvR0RT8afFK98E+BvD9vb+PtN8ITyeH47i3tf7El1C+ldVADTptxHCTtIKgE5PTGaw9H/aH8cfFi8+Ddnol9puhf8J/oV1qOpzT6f8AaFtzGYHLQKwAP+sKYcEDduwMV3l5+y9JZeKJtZ0PxVrXh+41LRrbQtVMMEU7anbw7gGDOCYpNrt8y5GcccYp3w9/ZV0n4d3/AMP5rXWNUuP+Fe6Vc6VZJKiBb0T7N7yEDO7KDODgjjinDDY1Wj0NfrmAacupwOv/AB/8S6Z8PdUtdWl0jUNQ8M/Eew8KT30unRbNQglnikMpgGY1kEVxtBGOQDuzxXP2Pi7XPg3+0V+0V4sutcuNTtvC+m6bd3OnJYxI2p/8S9xBC0qHfGsZKKSn3xuJAGRXr3iH9lPTdetdehOsahD/AG54ttvFpdVUtbXFuIdkA6Bo/wBwvUZ/nWlcfsz6Fqvi74h6hqbXGpWvxMtYLTUrJmCLFHDbyQ5jcchtrlgexUdaqpluLm7/AKiWaYSMUl89PQ83+F/7Seuap8QvBNjeeKLXxja+MIpf7TtrTw7PYx6O4haZJIpWQJLb8eUc5bLqRz0k+D/xg8T/ABSsdW0/VvGlrofi6OxuJb7w7d6AsF3oUsb7Ue3PH2mMD5S5PzbgQFJBHp3gX4U+IfDCWltffEDxBrOmadaC3trSS1gtGOE8qJ5pIxumKAsQrcb2DHOAKpeGvgFcab8TtL8Ua94o1DxPfaDaXFhpa3FpBbtapMylzK8SqZztRAN/QgnvirlgcW48s9jKGPwUZc0Vqcj/AME84daP7KnhO+1jxDNrUd3p0b2tvLbxq1igkmBAlBLSFh5fLEdMY713N58cZLK8mh/4QL4lTeTIUEkOjxvHL7qfOyR+FSfAf4KSfAPwl/wjkGvXusaDYnbpNtdQoH06HfI/ll1/1mDJ1IHQcV3BORz0/H/HFeph6NSNFQT1PIxWIo1KznY8/wD+F9Sf9E9+KX/giT/49R/wvqT/AKJ78Uv/AARJ/wDHq77av90flRtX+6Pyq/Y1/wCYx9pQ/lOB/wCF9Sf9E9+KX/giT/49R/wvyRRn/hXvxS4/6gSf/Hq77av90flQAo/hHQjpVKniP5g9tR60/wAWec6j+0naaJHFLqXg34jaVazXMNn9outFVIY2mdY0LN5pwNzqOnevRyuGbuIz5J9QRzyO3615v+1W5Hwe3bUY/wBq6W3K/wDT5Af6V6XPzORklhnqfTH+NPD1JqThUdwxFOk4KdNWI6KUrikFdNjjsu4UUpHvSGjQNO4UUAn0o/BqLAFFFFVcjUKKBSkD1paF8r7iUUfitFHMwsUvEnPhzUPX7LL1/wBw1T+HLbPAGj8sqraxH5QPlxmrviP/AJF3UP8Ar1l/9ANUvhx/yImjcZ/0aLABHJ5wOazf8ZLoU9KLktzx/wDbL8SeMvBHxD+G+v8AhfR/EfiSHSLu6Oq6dpZCwzxSRhQXbsVypUY+YnGRjNbHws/ap134j+PLXR7v4U+NvDNvdr819qDJ5VrtUkKwU5+bpx3x+GR+2R8Q/EeleLPhz4L0HXb3wjD43ub2K81y3x58P2eHzY4EbIUMzMy8nlc4ryL9kP8AaL8Z6r4l+DdrqXirU9dj8VWGrxatZ3Em+SMW9w5huW6kFioQ5xj1Oa+Yq5goZj7K7PsKeEdXLudxWx9t/Mrr8zK3ORnpziuT+DTf8W7tSeTvmGf+BtXVFWSRVO9lVyAWB789a5P4N/8AJOrX/rrP/wChtX1GvtFY+RUWoNvufaH/AARVbd8afjR/16aF/wCg3lfoXn5yfWvz0/4Ip/8AJavjR/156F/6DeV+hfHtX4BxR/yMpn7lwz/uEfQXdRSce1FeCe8aNFFFABUN9/x6PU1Q33/Ho9TLYD51+If/AClK+Ev/AGSjxz/6d/CFfMv/AAVf/wCTnLD/ALFy1/8ASm7r6a+If/KUr4S/9ko8c/8Ap38IV8y/8FX/APk5yw/7Fy1/9KbuvrODf+RrH0Pk+Mv+Rez5looor92PxaGqCiiigYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAAOaEfa27cU2kfMO3PWgHFGP4f7xA/M0pNpXQpbHv/wCxh8btF/Z2/Y98c+I7zwrbeMvE2s/EmPw34Z0ZxFHNrOpXcVrHBbLMyNsX77s5X5UicgE8V9a/CTw/458G32rXXxk0P4Hw+GbbTzeJq+gW81lHprox8yO5W7LBo9mWEysqr5bbhhsj4t/Zv+A/ib41fsWa3rPgu1tNV8XfDD4y23jjTdHnufsy+ITaW0KzWBm6RvNbzzqjkYEmzOBkj6Q/atvPHn/BQz9k/wCJXgDw38LfGPgi+vNKt57d/G62thb6vOl3BcrYKtvLOWiuI4ZYZpGIEe5QFffx+CcUVZxzWvFSdlLu+x+95HRpvA024q9ux6J8FP2r/wBn/wDaLvNVtvBt/wCHdTutG0xNbuIJdCls5zp7lgLuKOeFGmhyjAvGGC5XOC6BuZ0b/gox+yrr86R2vi7wPcR3Gk/23ZzppUnk6nbDyci0fyNl3MGniTyLdpJQ5ZSoZSo4jxB4d8bftm/tHeDvGMPwo8bfDPTPhn4I8SWM3/CTJa297rd5qsFvDBYWqwzShoo/shlkkcqAywYByxXE+B37JvizQ/BP/BO+11DwS8Mnwh0YnxZE0UR/4R26bwrLb7nAbaWN2wQlNzFyG4OTXz/tp9z1vY0/5V9yPf4v2pP2fD8I9L8eyaz4Jt/COsam+h2uo3NkIFOpIZw9k8bxrJFcK0Ei+VIquWG0AsQpXwJ+1D8A/iP8L/FXjXTdW8Hw+F/BM3ka9e6jph006Q/kxTgTR3EUcibo5omUlcMHXaSTgfE/x2+GnjH4FeDVu9Z8DXGp3OsfthHxHoWiyywxjXbOWOaSKSHcWXMjCR1BAJfcxCn5h03xr/Zf+Jn7Tms/Gv4s6P8ADfWPDn9tav4AvbPwVr8sNjqPjaLw3qDaheLdLHJJEhnWf7NCrO4P2NS3ysoQ9tPuHsaf8q+5H1R4I/a1+AHxF8E+LvEGl32gf2d4D059Y8QC90KSwudMsljklNy0E8KSmLZDIQ6oVO0gHg4v/BX9o/4D/tFeOL7w14J1Lwnr+uWdl/aIto9LMS3VtuCefBI8QWeIOyqXiLqCy56gH5o/aT+Enj/9s7xF8XviBo/wx8V+CWHwL8SfD7S9O15ba01fxPqmotHPEgjimkQQQ/Z0RWaVgZb2T5BtYv1vxJ/ZR8ba98Zf2ZV0TSLvQtE8L/DPxN4b1m/iMUMPhua707TYrZHVWDcyQP8AKhKgxKcE/MH7afcPY0/5V9yPYfhZ+1V+z38a/ijN4N8Lap4U1fxAguGihj0llhvhbuY5vs0zRCK5KMrZEDv8qlhlQSKPg/8AbQ/Zt+InxC0nwroOv+DdU1vXbyfTrCOHS3EE93A0qzWv2gw+StwvkynyC/mFVBCkMufmX/gnv+xpqPha4+COg+Nvh78fYfFXwZhKPd6941M/g3TLm10+fTjPpsazMZlnEoSKF4o1EM8jFv3ZWWbwh+xz8RND/wCCe/wY8Nx+Cby38UaD8fovGGrWUf2eOa107/hNLu9N2+W2YFk0TEAlhHlRwAKPbT7sn6vS/lX3I94/Zm/bX+Dv7WHxm+IvgHR/DMNvqngXW5dGH2nw/PGmpxx2ttNJOryWypFte4aPY7biYty7lZSfif8AbB02HR/25vixa2tvb21tHeWGyOGMIi/6DF0A4HU/U19vfsf+G/FHwh/bA/aH03XvCeuR6R8QvFkXi7R/EcQifSLqH+x9Ns2g3eaZFuBJayHYUxsXO7GFr4p/bPj2/t3fFzb937dYZz3/ANCir7nw/qTljZRlJtWe7fkfI8Z04RwacYrfsefP92vq/wD4JGf8lx8Uf9gP/wBuI6+UH+7X1f8A8EjP+S4+KP8AsB/+3Edff8Xf8iuv6o/PeEf+RhR+Z+gVFFFfgR+7BQelFB6UDjueIf8ABSj/AJMF+LX/AGL83/stfltov/IFsv8Ar2j/APQBX6k/8FKP+TBfi1/2L83/ALLX5aaT/wAgGz9fsqYHqdgxX614d/wK/qj8p8QP49H/AAyK/jS30m78MXlvrrWa6TNiG4+1TCGM5PCliQOSPzqD/hMdB0LTLNp9a0ey0+aNEspZb2OGKUBRgAuRng449PwrM+MXgeT4hWeh2oksTb2uu295dxXW3ZdxRmX91tbjLEjHXG3P0534jfFb4U+EdZbw34gk0pbjQbdLpbFtImuhYwmMEOSsTKg9TuAAGSQK+4daMJyb/ma/A+Rjh3OKitdDvdQ8Z6HpF9BbXmtaPa3F0qtBDLexrJcBjgFBuywOeopZPF2kJro0v+2NJGpMdq2YvImuGPX/AFYYt054B4GeBzVK20Hw348tNN12Gz0nWLdoUlsL9F85fK6oYn7KMdAcZ4yc4q1P4P0lte/tg6TYvrLEFLwxKszMegUsQ+SDyB2PetlKbXMrHI6NJOzX4DtP8X6TqWrSWNvq2l3F5Cf31vHdxtJEoOCWVSSMe4/KorLxvoeqW1zNa65pM8Nmm+4aK7Rlg5P3iDheR3xUNhoHhvTPGM32O38Px65IhnmEaRJdywFyrOyqA5QsNuWxycc1jfCpvDfiTSNak0jwzNpEUd1LYXiXekmzN2yE5YDGJEJ7nI471MZ1eay3D2NJe9Zm7b/ELw/PpMmor4g0JtMtXXzLtdQhaFN2BguGKDrj71K3j/w9BodvqEmvaHDptxKYY7p9Qg+zuwAztk37W5VuAaxvidqfhP4JfCnVNU1PSbeHwzZGOW6gtbJGSRWnSBf3QwjfvHQnjpnrW1B4N0bVtHtdPk0bTpNPKie3tJLKPy4nbPSP7i5+ckgZGe+Kr2knU5XrZGnsafs1J31dthuo+PdD0aK0mutc0OzhvV3Whlv4U+1AgH92S/zdew7U698daLo+rW1jda1otve3Ch4LabUoY5pN3A2qWy3XsDXM/D7xn8O/2g9Lb/hHZ9B8VWug3C2G0WpkGmy4jGMOgMY+bhlyDg9gamuPG/gPXPjDF4YuLjRbrxtZ2SXcVnNbBrmKDgq28oSpAZGwpzyBXP8AWnpPpe25rLBKN4Wle19uh0Q8a6OPEn9kjWNI/tTODZm+h+0BiOSYw28DGeq0aV430PVdQktbLXNDvLy2LGWCO/ikePHGXUNuXB/vAVNH4V0+PxC+pjTbVdWZ12XTW6LdOTwMyYDcnK7S2ee1U7600H4f6dqviCPT7O2+yW0t3ez21snnywqpdxxh5GIDbVcjcVI44rolVlBXX5mMKfMrfoOsfiH4d1iyvLm117Q723sVE1zLBfRSLb5zjcQx29D1pV8f6D/YcupL4g0F9Mgk2yXg1GEwh+MKXDFB1/vVmfDUeGfFXw5s9V0XStP0/RfE2nxXYiNskLTRugdfMVMhvlfPPc45qv401fwn8PBoegX2j20dr4t1Qafa20Wno1q9z5bS/vE+VeEiPVevfjnOWI0Un+Zf1V3st15G5d/EHQLLSbfUJvEGhwWN5IYobqTUYBBKw3ZCSb9rHC9Ae9N1Dx/oukxWrXmt6PbLfIJLYTX0EZuAQD8mX+br2zTPEmj+GrDw2v8AbFjoEOi6aTNsvI4Y7OxJJyQjAIpw46DOeBk4BzvB+oeC/jb4M0vW9HXQ/Eui7XjsLoWnmJH5bGNthdQVw0fUY6/jWkajcuSL97cn2KcPate7sbF/420bTNai0241nRYNQm2mO1l1CGOeUMONsbMGOfpzRH420WbX30mPWNJbVI22tafbofPQ4zhk371OOeRU2oeFdL1XVo7+402xmvodojuHt0eaML02yMC4x/vcU2PwrpsGvPqken2KanI25rv7OnnucYy0mN7HHHJqubEdiP8AZ+5HpfjjQ9bvLi3s9a0e7uLYEyxQX0UrxAHB3hWO0A+tR2fxG8O6jpl1fW2v6LdWdkgeeeG/hkjhBzjcwfC9D1xVjS/CelaHez3FnptjaXFyCJZYIFjeUE5IcrjcCfWo7PwToumaXdWVrpGm2tneIEnghtkjjmAzjcoGG6nrmq/2jsL/AGfucn8ZDofxI+FrRp4q8O2Ompf2jtqT3sclshhnjk2llbblgpAwTgkZ45HV6j8RPD+naZDfXWu6Ha2t87JbXEuowLDcEAE7H37W+6w4OaWXwtoVl4fmt5tN0e30lS00sDwqlqOAC7J93hcngDnFF14J0e/0u3srnSNLms7HiG3e1R4oWYEgqpG1SRvPAGMjrWMacub3dy5So8tm9Buo+O9F0drZbzXNHt5LxQ9vHNfwRtcA9NgZxu/Cn3vjTRbHXE0uTWtFi1SYqsdnJqEKXL7un7tmDfpS6n4N0jWWtmvNL067ezUJbtPbJI0AHTYSPlx7YqS68LaXe65Hqcum2EmowsrR3T26POpXp+8YF/1rTlr9jPlw3cr2fjvQ9Q1x9Mt9c0a41KMsHs472JrlAv3i0QbeAME5IxgU3Q/iF4f8Ry3a6fr2hXzaerPdLbahFMbQL94y7WOzAz1+lXIvDmnQaq99Hp9jHeyEl7hbaMTSZ67pNu9vxNNtfC+l2Mszw6bp8LXCskzRwKjzA9QxHUdqf7/qh8uG7lOz+JvhrVNJutQtPEPh+60+zYJPcx6jE0ULHoGbdhfxof4meGY9ATVm8SeHY9JkcRrqDajF9lZs4wsgYgmrkPhfS7WxmtYdN0+G1uGDSQJaxrE7DoSoXB/4Fmg+FtLbT1szpumtZ7t5tzaReSW9o9uwfgoqf3nQq9DuVNQ+I3h3SbCzu7rxBoVrZ6gD9luZ9RgjhuSO0bs4D/8AAc0/U/Hug6HcW8N9rmi2NxeIHtorm/ihe6B6eWGYb8/7OasTeF9MurS3gm03T5IbUEQwtaxtFBnvGhUhD/u4zRd+F9Lv5Y5LjTNOuJIkCRvLaxsYwORt+Xgg9xT5a/Yn/Z+5Xk8d6HH4iGjNrmirrTEBbBr6JblsjIxGWDfpRY+O9D1PVpbC11zR7i/twxltIr6GS4h2/eLRqxZQPVgOKtzeH9PuNaXUpLGxk1CMqUunt0a4GBgfvSN/HpuFMi8O6ZYXk97Hp2nw3MqsZp47SNZph1O9wu5/oxNP9/1Qf7OtUyv4d8daL4uubmHSdb0jVpLMhZ0sr6K5MJzj5whO38cVrNwx+uPrXNaZqOk6R8Tbnw3a6Xa2upDS11aaeGBUV42uJLcDIHLb0J+ldL2X+8vyt/jRGTasOpTSmrbFPxH/AMi7qH/XrL/6Aao/Dk48B6Pg7W+yxYOAcHn1q94j/wCRd1D/AK9Zf/QDVL4cFh4D0fb977LHjjv83T3pu/tlbsZb0WmeFft1+PbWz1/wP4Huvh6vxBtvHDXJSwgmNvfxvbx/JJbydI3Ck7nI6AnBxtPlvwu+JfgX4K2nhu4+Dvw6MnjzxVeahpV3Ya5eN9o0tbRRNPCznKgNkFcAbmUHvivdv2xvBmg3EfhnxlfeN7X4d614NvJZtM1q5UTRv5qKjxPEQfN+gx97Pbn5m+HvwS0fxP8AEWxk8A/H7QtZ8XWs97qVjFLpSl57m6idbmSQ4AI8vO0dFKDnOBXxGZyrrGNwS5umx95lLw08Gozuklq9T7T/AGfPi9Y/Hv4S6D4tsLdrOLVoN8luXLeRMjbJUznBCvuGcDOOgqx8Ghn4d2v/AF1n/wDQ2qj+zb8GIP2fPg5oHhOG6a+fSodk9zt2rPM58yVgvYF8nHPWr3waOPh3a/8AXWf/ANCavssC6vLH2q1sfH4r2TlJUXeNz7R/4IqJj40/Gj/rz0L/ANBvK/Qrj2r89f8Agio+fjT8aP8Arz0L/wBBvK/QkkAdq/BeKP8AkZT9T9o4Z/3CPoLx7UUm72orwj3jSooooAKhvv8Aj0epqhvv+PR6mWwHzr8Q/wDlKV8Jf+yUeOf/AE7+EK+Zf+Cr/wDyc5Yf9i5a/wDpTd19NfEP/lKV8Jf+yUeOf/Tv4Qr5l/4Kv/8AJzlh/wBi5a/+lN3X1nBv/I1j6HyfGX/IvPmWiiiv3Y/FqewUUUUDCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKCcFT6MD+tFAXcyjpkgZpbxZMtj7M/wCCTnjGL4Z/se/GPxJPayXsPh3xHqWpSW8R2yTrBp9tKUB/2guO/XvXqX/BLj/go7pn/BTT9nmbxtZ+F9Q8E32nXyWV9od7drPPbpNawXdvMHCpmKa1uYJVO0DDMBkrmvCf2A7hYf8Agm7+0Y7FhH9r15nKDcyj+yIScD14r5f8KfFXxf8A8E5/2dP2d/iH4B0+4v7j9pr4FeGfhzaJbQCSGDxrbWdumiXk55Hlm1ubpWI5K2K7sYAr8A4p/wCRrX/xfof0BkGuAp+h+gP7Jv8AwVA0X9qr9s34nfCXR/CeoWtv8O7Y3Fv4la6jNn4gWK8nsLmSKMIuFS9tLiIHewcwORtAwfePhj+0J4C+OJvrfwX4y8I+MP7LCtdLoOsW2oNas5baWELsU5VsFgOQfQkfmw/gfw3/AME9f2k/iloEfhu8+IWi/DX9k/TIr3QoNwuvEgTVNXN1vZQSpnJdnJyf3jMc7jU/7KHxdh+IX/BXL4J3sfib4Capcap8MvERvl+FunXFvZQxCXS5orW7nM0sMzxMZWSP5HiDuzriaIH589Y/QHUviT8F/jp4s8I6HceJ/hx4q1qG6h8T+GtOh1q1ubtpIUk2XttEsm5wiCY71BAUP15Fbet/tAeA/BfxAs/CGseOPBum+LtU8sWeiXWr21vqF6srbU8u3MgdwSFVQFJwMZP3j+Sv7M/wo8K+Bf8Aggd+y34y0jQdL0zxVb/EPwfrS6yiBb5bl/EsVnO5nJ38wyyxbBlVjkK4IzUH/BXP9q61+I/7Pn7Vml2MHwV+HupeD/E8ulro2q6fc3Hj/XdQsvsNxb6xaGKVHgidRHJHL5MkaxwGRpFG4gA/XT4k/tG+AfgvqFlbeMPHPhPwjcaohksIdZ1m2sZLtEIDMiysNwBwMopHOcnORHrP7UXw28N/D/S/Fl9488E2HhbWpRFpms3Ou2kdhfud/wC7hnMmyRv3chwhPCtjODX5aft7fEWG6/bT/a28D3nhPw54jt/H/hTQvD1rq/iG11HUl8JBtPuUM8EFhp12xtw03nCN5IHaaGUglPLZeh8Y6tH8PP2z/AcsPxA+A8fwxsfgppGn+CPEvxIspbrw/qz/AGm4XUntGS5t7ZL6ZYrV5AzFmiVMYCzUAfp74g+MXg/wbplvfax4r8O6XZX1vJeW1xe6nBDFdQRQmWWVGZx5ipAPMZhlQo3ZAzWn4L8WaX4/0Ox1bQ9S0vXNF1G3S4tdR064S5tbxDna0ciEqy46Mpwc9eMH8p/DH7OGhQeNv2CfButeINB+JXhcfEHxlqmlSafY3FlpZhjs9QvLWGziuGkZ7G3YLHG+9kkijg2l42V2/WbSNEt9Ggit7WK3tre3yIooYwkcS9Nqr/CvfA/lxQBcaPHzZ+6hXqeR27/z5r8g/wBtL/k/L4tn1vbD/wBIYq/X7G5cbuoxX5Bftprj9vH4ue17Yf8ApBCf61914e/79P8Awv8ANHxvGv8AuS9Tz1/u19X/APBIz/kuPij/ALAf/txHXyg/3a+r/wDgkZ/yXHxR/wBgP/24jr9E4u/5Fldef6o/O+Ef9/o/M/QKiiivwE/dgoPSig9KBx3PEP8AgpR/yYL8Wv8AsX5v/Za/LbRU8zRbNf71sinnHVBX6k/8FKP+TBfi1/2L83/stflto+7+w7Py/wDWC2jK/XYMV+teHSvRrrziflHiB/Ho/wCGRgfE3QbXxOfDBvNSi08Wuv2l/GSP+PqZVkVIPberE98Feh7eLLrXii1/bo+KMfhfw7puvSX3hbSkmN1qj2ttbMVZQ8ibH81M/MV+Xhe9ezfFO30iefwr/a81xGkfiK1n03yhuMl2A4jUj+6VDfnVqw+Guk6J8S9V8XJbyLr2t20Fneyh2KSJAzFNqhQFxlc8nOa+vxmHjWert71/U+bwGMeHTsru33HiGj+Co/hH4R8I/DmTXPiFrniWz0yW+uNP8Ft5UkPmSkmdnZlItwzAKjPtyBwM8cZ4Y+L/AI1+KfgT9n+2bxVr+i3Hi7VdR0vVbuB1huNRtrcAAOT/AMtRswXGSpORnGa+jPH/AMB/DvxF8Vwa3fLq1pqsds1k9zp1/NZyXMDH5oZGjIJQ8jaCOtU/Cf7MPgzwba+E7fT9Puo4fA9zLdaOhu5V8hpV2vuOQH6nG715z1rgng6vtF76svM9D65QdPmcHzPyPKU+DUNr+31ptp/wkHjqaG38EpdJJNr9y0szJdv8hmfP7lhgMuQG3e+C7wt8Z2ufh94oXxJ4q8WtcXXj+80fTIdFcNqV4iTMVtbUkgQqOCWR0OFOSQSK9q8XfB3Q/FvjXSfE0s2qWeu6LD9njvdPvzZSSx+YriOUR4Eke5fukd+tZFx+zD4Nu9MuLNbXUbdrrWZPEC3FrqMkd1BeyDDyRzAl4wQWGF55PNKpQnFtwkr+o6OOhJJVIt/I+cfif421rWf2cvj94f1VvFS2Hh+90gWaeI236nZxz3FjI0csm52cDcSGZypyuME4H1T4c+Ic3/CVWOknwn4u8oGIHVBb27WCjy9wZm8/zMcMOEOC49K5kfsi+Cf+EX8UaW1nqlxbeMJLaXV5rjUZ5bi7kgZGV3kYlixZFJbgnLDocD02MrbqnlfKkRPlq5J2DouCe4HGc8/pWmFw9VPmlNXfmYYvGUJJKMHpqtOp8K/sb+JdL/Zm0Hwn4y1OYWPhTx1a6rZa1MXPl/bbO5uZ7eTJPG+3M0eByWiAzzxufDGHUPDvx78K/EDUrJv+Ek8YeF/EPii6spH+6GaBrW15yVVYEjUjnqeK+gdV/ZI+H+sfBSH4e3mkvceE7W6+2xW8t5maKXe7s6yDBDMXcE4xh245rrtQ+G2iav490vxNNEG1jRrGawsn84tHHDMyGRWjLEPkIBzwB2Ncn9n1Ph51y3vv1O6Oa0pLncXzWtt0Pnu98ReJvDX7KPhv4uHxn4nu/EV99h1W6sWuGbTL23vrlI5bNLTmFAq3IClR5geEHIzxf8R3uufHPQ/jlq03ivxFoKeDZrvRNKsrC5ZLKFLayM8k00JOJfNMjk7sYGwrkgCvS9D/AGVPBfhy9sVt4tYm03TtSOqWWjS6pM+l21wWZlZLUN5K4ZyRhMAgHHFTeNP2XfCXxA1jVbzVLfVFbxBEkGsWttqlzbWOqyRoFVpoVfazKipg8ZMacdq2qYWtNW51b1JjmFCL+B/ceC+AviZrVzovwg8C28PjptFh+GmneIbweEZFhvrqWQLaR7pS8TLboqhiFJzJJGCMZzqatL4wnv8A4O2vjTT9Yt9Qs/iHd2lm+rJGL/ULJbe68ie48t2XzNgVTuZjujkPOcV7Vf8A7NvhKbQvDNrbpqmnt4Rsl07SL3TtVks7+K3WHyvJM6MGKFQGK9GZQfarMXwC8Miy8PR/Z7iRvDN+dXsXa8Z3luzG6NLKeWkY+bKTn++eB1rOGCq3XNNW9TSeZYd8zjB3d+nc6Xxb4Q0vx5YNZ61ptrqtmZ0uPIuYjKhZHEittA5xJgjIIyF7CvJ/2AUW3/Ztt41jVSut6soC/LsUahcDBHAB7YUdBXqni/wzD4z0o6fNearp8czLJ5mm37WkvAAIEikOobAO0epGSM1z/wAGfgFofwLt5LfQLrxK1oxkdrK91ia4t0eR2d5Ajk/MWZiSc9fXmvWlCSxkasFdWtc8KNaCwUqE9JXukdtnmihF+ULnLKeaCcGvWPGuFFFFEpOxa3PPf2sXaD9mD4gsrMrL4fvWBBwQRC2K9H1BAl9NtG0NK5IHrnH8gK83/a3OP2XfiF/2L19/6IevSdR/4/pf+ur/AM644yar1EuljtqO+Epy73/BIhooorsuzh+zcKKKKLsAooop3YBRRRSuwClVtp/2v4fr2/XFJQH8vLFtu0E5HX8PeqV7g0nocuNeh/4XdJo7afCXj8PrerqODux9rlhaHOP76l+vQ9O9dRnPPU4wT61zqazqjfF2TTDa/wDEj/sOO5+0mPn7WLl1aIv2xHtbb6sa6IlSxZejdv7v41y09FKXmdVZ+9FeRT8R/wDIu6h/16y/+gGqPw5OPAWknDHbaRkY69G/zmr3iP8A5F3UP+vWX/0A1R+He4+ANJ2jLfZIyvHfDYz7Z6+1aT/ir0OeP8Jnlf7TvwT1L4mfGz4R6xbafHrmi+HNRuk1S0YjbHHPEIY7ra3DbG+c59K8V/ZK/Zv8c/D741eBrO68H3Gi2vgOLWrTVfEDqgg8QwT3DSW6QrjcMZVst2Bx6H039vXxnqem+KvhroX/AAll74J8G+KNUuYNX1SxuVgnQJGGSIOSPLVmO3PON1bnwg+C/hnwv8Q9PvLH4ueJfFV1b+ZGlldeKo7uO7ypA3RgktsUk/VQeMV8nWo05Y3bW/dn2dPFVKOXq8k01ouXY9xRmZ428zcvTk5wM5Ax7etcr8G/+SdWv/XWf/0Nq6qJmZl3Kgbec7fQHFcr8G/+SdWv/XWf/wBDavruVKovQ+O5nKm2+59of8EU/wDktXxo/wCvPQv/AEG8r9C8j2r89P8Agin/AMlq+NH/AF56F/6DeV+hfHtX8/8AFX/Iyn6n7lwz/wAi+DF3UUnHtRXgnvGjRRRQAVDff8ej1NUN9/x6PUy2A+dfiH/ylK+Ev/ZKPHP/AKd/CFfMv/BV/wD5OcsP+xctf/Sm7r6a+If/AClK+Ev/AGSjxz/6d/CFfMv/AAVf/wCTnLD/ALFy1/8ASm7r6zg3/kax9D5PjL/kXnzLRRRX7sfi1PYKKKKBhRRRQAUUUUAFAOR1B9cdBS7Nyn955Y6Fs42+tfSf7Gn7BU/x90qTXvEs19pugN+6sxCPLmuCP4+ei++Dn9a8zMs2oYGn7Sszty/L6+MqclKJ81kj+8v50m73X86/Q0f8EnfAP/QW8Tf+BCf/ABNO/wCHTPgMrn+1fE//AIER/wDxNfOLjzL33Pov9Ssw7H54bvdfzo3e6/nX6Hj/AIJNeAj/AMxfxN/4EJ/8TR/w6Z8Bf9BfxN/4ER//ABNP/XzL/MX+peZfyo/PDd7r+dG73X86/RD/AIdMeA/+gt4m/wDAhP8A4mj/AIdMeA/+gt4m/wDAhP8A4mp/18y/zD/UvMOx+d+73X86N3uv51+iH/DpnwF/0FvE3/gQn/xNJ/w6Z8Bf9BbxN/4EJ/8AE0f6+Zf5h/qXmHY/PDd7r+dG73X86/Q//h0z4C/6C3ib/wACE/8AiaP+HTPgL/oLeJv/AAIT/wCJpf6+Zf5h/qXj+x+eG7/d/OlG5j8q72X5gucZxz/Sv0O/4dM+Av8AoLeJ/wDwIT/4mh/+CTPgEr82qeJpF7q08bA/+OVUePcu2d7CfBePa2OV/wCCKUKr8FPiJBJ80beNbnAZD8y/ZbVc4PY4PqOO9fYzeHNPNlaW/wBltRDp7q9rH5A2WxX7pjHRCBwCMY7cZFfJZ/4I0fDRZ5pF1nxxC1w/mSCHVDEjNjGdqgDJ45I7Uf8ADmz4bscf2948/HWG/wAK/OM0qYLHYupiY1bKTvsfouXfXcLhYUZU7teZ9cSaNYNdSXDW1tJcSoIXlaDLtHuJ2Z67csTjpkk96p6V4K0Xw9MrWOm6ZY7XaX/RrWOLEjEbn+UD5m2ruPfavpXyjJ/wRu+GsR48Q+O1b1/tdyMd/wDCvn39sb/gnA37PUUOuaDfeIdQ8NyHy5XfUJTLZOf72D0PrkYzUZflODxddUI4lJva8XqzbHZlisLT9pKldfkfpzHoOmxaZHYx2tjFaQMjxQxwosUTK25Sq4wCGAYdcEZrP1D4d+H7/UJrqTR9GluriLyJJWsIWkePbs2FiuSNny4ORt4xX4mx+Erd4V/0zVtoOVH9qz8D1zu5/l70j+EINv8Ax96wf+4pP/8AFV9ZLwzxKXMqya9P+CfMvj6jfl5NT9N/Hv8AwT91Of4ufEPxX8P/AIyePPhfJ8VGgufEllpljpmoR3d3Fb/ZRcxveQSywsbdII9sTqo8kMoViTXqXwY/ZZ8B/Aj4JeF/hxoOg2q+DPB9lFY6XYXq/a/IVF2h98hZi7AtuYnkntzn8dl8I254+06v9f7TuP8A4unDwbbj/l81r8NTuP8A4us/+Ib1/wDn8vu/4Iv9fqH8p+4cWiadG9m32S1Y6f8A8ep8lR9m4I/d9k+U4+XGRVsSqAPmHAPOPfNfhj/wh9v/AM/uuf8Ag0n/APiqP+EPt/8An91z/wAGk/8A8VVf8Q3q/wDP5fd/wQ/4iBh/5D9zpLlbePcdzBR0UZJr8h/20JN/7eHxaO0qWu7Btp6gfYYQPY/d7V5S3gyB1K/a9abcMEHUpmBHfgsR0qxovh610J7iS3MzPeMHmeSVnMjKNq9T2XjnP4V7nDfCc8sryqzqXun0+Z4mf8VU8fQVKnGxebla+rv+CRvHxv8AE3+1of8A7cR18onpX1d/wSM/5Lb4m/7AX/txHXscW/8AIprvzX6M8fhXTM6EV5n6BUUUV+An7tLTRhQelFB5FBMW7niH/BSj/kwX4tf9i/N/7LX5a6QSNCs9v3vsqbfrsGP1r9Sf+ClJ/wCMB/iyP+pemP8AKvy10j/kB2Wd3/HvH93r90V+t+HOtGuvOJ+Xcefx6L/uyMD4qajpWl/8Iv8A2naNdJd+I7e2tCG/1FxiXZIcc4Xkds56ivtT/gnH8DfDfxtk1y18R2DXUOmxK0SxTPHtYuQfmByeAPTpXxh8RNcXw/d+Fz/Z1vqDX3iOzsAzjaYDKJWSXPIXhSCe2etfbX/BMj4r+HfhJ/bFx4i1SHS7a+tFjt/MVmMpWVsnCg88H8K6uMvbfU26V9+hxcH06X1m9a23U+mm/wCCfnwtWNs6DdbepP8AaE3/AMVTo/8Agn/8LR8v9h3a8441GbI79m9PStqT9sj4YTLt/wCEqtSMg4+zTN05/uV4z8Uvhh+x38bPHF74m8WeEfh/4g8QakQbvUL7QpJbi4wMDc3l5OPevyR1MX3k/mz9SjTwclaPL9yPTLr9gX4X5Vf7Dvjkgf8AITuBn83oT9gH4XqAn9hXyq2M7tSnP4ff9vTFeJSfst/sMFW/4tx8MBuBU48PSDg8H/ln3Fe3/D39o74L/Cnwdpvh/wAOato+i6Ho8KwWdjZWE0NvbIAQFRRHgDn61SqYvvL8TT2WHXRfcgl/4J+/C04X+w7nn1v5gP8A0Kmw/sBfCt8bdDujuG5SNQmG4dM53f1rck/bS+Gcn/M1WfBzzbXH/wAbrzP463X7MH7Tt7Y3HxC0zwb4yn0tSlpJqukTXDQKeoBaPvRzYvvL72L2eF7L7kdlL/wT++F/lt/xIr7p/wBBKf8A+OVHD+wN8Lw3/IDvNq4TjU7jOev9/wBMe/NeJj9mP9hkEf8AFt/hZ8pBGPDrjp/2yr074E+NP2cv2YdCvNL+HsPhXwbpuoXH2u4ttJ0uW2jmlxjewWPk7QB+FHtMXteX3sap4VdF9yOik/YE+F5zjQ7zPTnUp/6v1+tMb/gn98LIkLNoN7hRz/xMJs/X5Wzn6VgfHDxn+zj+0tolnpvxAh8LeMNO06Y3Frb6rpk1xHBIRgsoaPA44rzB/wBmD9hlv+ab/CvjkZ8NswyOnBioUsWusvvZPssL2X3I9xH7A3wtEvl/2HeK/BK/2lccdf8Ab77T0p3/AA7/APhenTQ7z5WyudRuML/4/XF/AK+/Zi/ZXutUm+HOm+DfBb60sa37aTo8tu12Iyxj3kR5bbvfr6+1elH9tH4ZyDC+KrPPX/j2uB05/wCedHPi+jl97H7PC9l9yPiX/gox8HNA+B/i7SdL8O2b2en3VlDdOjStI28yXIzljnGFX/vmvm/azgN8ue5J28V9Pf8ABSj4o6D8XfGui6h4d1CPUrOHT4oTIkbr8wkuSRhlHYivlXW9Ds/FOkT2eoWq3dncLsmgkTKuPfNfsvBsqv8AZzdV6+Z+PcWKl/aCjTV15F42kw3YjmjXG4ZjJyvqSMgfnUfr/E3sR/KvN0/ZP8Awhfs+gw2KKMIkE8se33HzcVN/wzrDZ4/sfxZ480eReY9muz3UUR9RFcO0fHpjFfSynWiuZq6PBVOhJ8qep6EpU/xDk8YP+fyGaUrgj3rzO8/4WV8O7aa4h1LS/H2mwgyPDcRf2bqz46lTDi3kOM4Doo9WH3h23g3xhp3xB8G6X4g0eZbjTdWtkvIJc/6yJs7T7EY2sP4WDLyVNTDFqW6FLDyT93U5L9rVN/7L/wAQF/vaDep/5BavRrmb7Rcuw6MS4/Enj9P1rz/9qSFpP2bfHi7Xbdod3zsODuiYfXv6V2ei3sepaRbyRSRyrjYzq+QrgKCh9GBzkGs4yX1lubSTNZxvhVB3urpfO3+RZFKR70mOVz8qswUNtPPrxjPA9cA9Aa674k/BDxB8J9E8N32tWzQxeJrIXdsFGdhznY3oQpVvxI7ZrqrYilSmqU5ay2Oanh6k6fPFaLc5Gil244zls42rzikUqXPzAKvVuy+ufoK3lHlXNJ6Ccbq0dwor1T4Y/sa+O/iz8OL3xNpOmA2Nupe2jlYpLqAHXygRz364zXl91aTWFxJDcQy280MnkyxyqVaOQdUI67h+XvXFhcfhq9R0qc02uhtUwOIpwU6kWkyOin29u93OsUavJJI2xERCzOx6AAAnk8dK6Nfgp41f7vg3xYx6HbpFw3PthMmtMRiqdH+K1Exw9KdWLdNN2ZzNCjcwHy5JwM9M9q6j/hSHjcdfBXjAD1Oh3X/xusfxB4P1bwuyR6tpOqaRJMpZFvrWS3Zh0yNw9aKeYYWrVVOjNMupg8TTXPUg0jkYbXWj8U5Ljc//AAjbaIuwEjH203cu52HXmIp+NbwGFAG73x0Nc3/Yt03xon1b7bC2nSaHHbJZl8SCUXMjmYpngbTt/rxiukZcevrgHt61FF3jK/cuprOPoU/Ef/Iu6h/16y/+gGqXw3/5EXReN3+jw8Zx61b8TOI/DWpMe1rL/wCgGqfw8Pl+A9L6NstFJAOOgPf09fQZro5rVVJmFNN02l36Hj/7bOseAdOh8Jaf4r8DyfEPXNWmlt9E0m2AE0zIqGVssdqgKQdxBz7da8m/Y8+Inwz8V/GnwuPDnwPk8H3urWl1c6brEl7H5bpC7QTlQB8zB90Zxg856V6/8Y9R+HfxE+JfgfxFD8UvANhqnga8lkVW1mzk+3200flTQsrTDaSuR3IK5rzz9nj9nrw34T+Nnhv7L8XPA/iTQfCMt/N4Y0XT7+1a7WS7ZmlSQxyM7bELcBcfKTxzXyGIVWWP56co2ufZ0ZU44HkqKV7dbn1zGm0x/NuwzDIGO9cr8G/+SdWv/XWf/wBDauqhdnf/AIEc8cdegNcr8G/+SdWv/XWf/wBCavsI61FfsfIcqVJ+p9of8EU/+S1fGj/rz0L/ANBvK/Qvj2r89P8Agip8vxs+NA/6c9C/9BvK/Qvr0wa/n7in/kZT9T9v4Z/3CKDj2oprSBT92ivCPeNOiiigAqG+/wCPR6mqG+/49HqZbAfOvxD/AOUpXwl/7JR45/8ATv4Qr5l/4Kv/APJzlh/2Llr/AOlN3X018Q/+UpXwl/7JR45/9O/hCvmX/gq//wAnOWH/AGLlr/6U3dfWcG/8jWPofJ8Zf8i8+ZaKKK/dj8Wp7BRRRQMKKKKACjOAcgng4x1zjjH40b1j+ZuVHXFe0fsa/sn3P7SfjmSS6cweGtJdTfSRt+8ckZWMdNpPrzj0NceMx9PCUJYmrsl+J0YXC1MVWjh6PxN/gdF+wv8AsYT/ALQGuR69rsLQ+E9PIw3IOoyjsnT5QcZPPTGOc1+kGl6Tb6HpsNpaRpBb26CKKNAAqIOgAqn4V8NWPg/Q7TTdOt4bSxs0EUMEYAWNQOg+vUnua0y3tX4Hnme1cxr3qfD0R+4ZHk9PAUUkvee7ELKv3vu+9NDZ/hKjOOVIB/P/APVXkP7W/wC1xo37MHgjzrjN34h1AmLTNMU/vLiT1cDlYwMknuBivzJ+IGp6n8ZvF154h8XXk19rV+xZws7pHapniCIA/dXrnrxXoZDwpicxTcPdj3sY51xNQy/3W+Z9j9lM5/u/n/8AXo2/7v8An8a/FH/hXumn/lnc/jdSf/FUn/CutL/55z/+BEn/AMVX0C8N67dvbL7j5v8A4iFT/wCfb+9n7X7f93/P40bf93/P41+KH/CutL/55z/+BEn/AMVR/wAK60v/AJ5z/wDgRJ/8VR/xDet/z+X3Ff8AEQqf/Pv8T9sAv+7+n+NLj2X9P8a/E7/hXWl/885//AiT/wCKo/4V1pf/ADzn/wDAiT/4qj/iG9b/AJ/L7g/4iFT/AOff4n7Y49l/T/Gg/RfzH+Nfid/wrrS/+ec//gRJ/wDFUo+Helg/6uf/AMCZP/iqP+Ib1v8An8vuF/xEKn/z7/E/a7P+yv5j/GgnPZT9D/8AXr8Uf+Fe6X/zzuP/AAJl/wDiqP8AhXumf3Lr/wACpP8A4qp/4hvW/wCfy+4X/EQaf/Pr8Wftdj+7Hz2zj/GjcN4G1XXrle474PPT3xX4pD4e6YOiXX/gVLx/49XQ/C/xBq3wL8Z23iTwjezWepWZGUmnZoLiP+KOQHPXJ+YdDjg9K563h3WhBtVL28joo+IFFzUZU9/M/YzyuzL8rDI5zkf41U17w7Z+KNJuLHUIY7i0ukMc0bjKyqeMN68cfjXm37Kf7Vmg/tReCHvtP/0TWLAhNV0yYbbixlx1I7o3VSBzkdK9WKqwxlWyMkDsP8a+JrRq4eq6c0049T7KhWp4ilzxd1LS3qfmT+2z+xtdfs5eKf7W0qN5fBuoO3lufmbTm6+Q3/TPuD64rwfquGEatt3Ff4gD0/MV+y/jbwrpfjbwteaXrNrFeabqETRzq6Z3A8Z+oHft1r8wP2vP2XLv9mXx5HaxyG60HUi76Zcsf3jKuN0bjn7m5QDnnOcCv1jhDib6xFYKs/fW3mfl/FnDv1Wp9aor3XujyXFFFFfoB8OFFFFTyonlQZI+6cUYA6Djt7UUU3saU9wPSvq3/gkju/4XV4n2jc39g8DOMn7RHgV8pHpX1Z/wSSz/AMLp8TY4YaCSD6EXCEV89xhf+ya6Xdfoe3wrK2Y0ZPpc+r/G/wC2z8J/hp4wvtB17x1oem6tpriO5tpZG3xMQCAQAf4WB/Gs3/h4l8D/APopXh3/AL6k/wDia/OL9sDTbe//AG6vjE00MMhXV7XG+MHANlDntn0/KuH/ALCsf+fS1/7918Rl/A9PE4eFadTlurn2OP40qUa0oKnzWZ+qn/DxL4H/APRSvDv/AH1J/wDE0o/4KJfBAn/kpPh/8DJ/8TX5Vf2FY/8APpa/9+6a2hWJX/j0tf8Av3Xb/wAQ8of8/mcsePqrelH8T9EP2y/2ofh/8e/2G/jJZ+DvFWleILrT/DMstzFasxaJC20McqO4/Wvz10T/AJA1j1x9njJx6bRXRfBy2jtfh5+00kSqi/8ACu42wq7R/wAfBrnNIONDs+Qo+zR5J7DaM/pXtcJYCOCq18PB8yTj+h5fEmPeMjQrVI8raZj/ABD1TVNK/sFdLhaZrrWbaC/dIhL5dq4mMrjPAYfJjjgMfrXTC6Z327im4tJtjJCpkjqOncduprnPHtnrN1N4bTRZfJ2+ILJtQw21WssTCYfX7gx7Vvq37qP5GjbZnH1xnJ/Ba+njTjNSjNXSdz5uNScKdOdN6yuXdEK3esQwzlnikJDAsR2OOnPWvtHTP+CTMOpaXbXS+LIVW4iSXBsJPl3KD2m7Z9Pyr4w8KOU8QWzL97Jxx1O08fjX7H6LbS3ngu0hhuZrWSewVEnjCloW8oAOoIZcgnIDZHHQivzDjms8Pi4xo+6rXskv8j9G4LpKtRk8Rv6nyQf+CRcOF2+LoBu6Y0+T/wCPUD/gkSpP/I4RfT+zpP8A49Xp837JPxYmundf2qvixCrMWVV8NeFCEHZedKOQPfJ96l039lX4qaXqtrc3H7UXxU1K3t5kkltJfDHhZY7pAwLRsU0pXAYZBKsCM8EGvhv7UxHd/cv8j7P+z8P/AE3/AJnlP/Do1CvHjK3PJAP2F8H/AMjdfYfnSp/wSKV1X/isIc9x/Z8nA+nnZ/Svs+ONiC25uSOG6gdx6/rXjPxF/Zm+I/jHxpe6po/7RXxI8I6dcvuh0iw0Hw5c21oPRHutNlmP/ApDR/atfu/uX+Q/7Pw/9Nni8n/BIhUjZh4wiOBnB06QZ/HzqaP+CR8Zl2/8JhDhuh+wOOPX/XfyzXp7/si/Fraf+MrPiwf+5X8J8e4/4lPUdR1Gex6V7X4E8Pah4W8HaXp2pa5qPibUbG3jhudVvoYIbjUXUfNLIlvHHErN6IiqPSj+1a/d/cv8g/s/D/02fIw/4JFozbf+Ewi4OONPkP8AKb+eKWT/AIJEKi5/4TCL/wAF0v8A8dr2f4g/szfEnxf4wvdS0n9o34keFdPuZN0Ok2Ph/wAN3FtZL/dR7jTZJj9XkasV/wBkT4sH737VnxaZcjp4X8JZ/D/iUHn04PPY0f2rX7v7l/kH9n4f+mzzAf8ABI6IqCfGMIVhu5sWzjt/y37nPtxSp/wSIC8/8JfGpxxtspBt+pE4P5H9K+sfD/hnWvDnw5tdNbxFca5r9nYpb/2xqtrGGvbhUA8+eK3EKcsCxSIRqQSBjrXjp8GftXM52/Ej9ntRuJG74c6uTjt/zHOuOuKP7Ur9G/uX+Qf2fh/6b/zPL5v+CRMfljd4uhaNTnb9hmf9POJ7n865P40/8E07X4N/DXVPEsmuQaguniPEMdi6lt8qRggmUg/fz68V9EaF4X/agt9esW1b4gfAe80pLmJryKy8Aarb3EsIcF1jd9ZdUYrkBijAHna2MHU/bruP7P8A2UvF11L5skcCQzOIIpJGwt1CxwiKSx4IyBnFdODzjGe0hDmdrr8zlxWU4RwlPlV7P8j8q5VYc/3hlsEY6njHbpTSNw7fjXAyftN+DA7BrrWlKEks3hjVIQvJ6lrcDv2NPg/ae+H7yBZPFuj2Lf8AT87WYH1MwQD8SPTk8V++YXE03Qhd9NT8SxWHqKtLlj1O7Z/l2s3AHG4fLkc9sfpz7jrXA63+ztoR1q41fQ77VvB+q6hIZri50W7MCzSHILNCq7JC2ed4bJ5PJYnovDvxN8OeK5F/snxFoOqbjtH2PUYJs59Buwfz/PpW/JE1sSkiyxsp5DfKxH0HI/HA962l9Xq9TKMa8FtZHgH7T/hLx9oH7PXjjd4w0jWtPTQbwyLqWgKl5JEIWLANbNEg+UH5ggI6nPOfh79mTxd+0JB+0j4om+G9re6tp91rl5/aUDxs2huWnbeWLMdqkkHKtkZr9H/2qxs/Zn8fKyhf+JBePtAbkeU3UN/Tj3ruNK0+G0021hhgjEUcQCxgbVYcY+6PlPXJA5zz05+fxeQSxGMUqc7W13PosvzuOGwUoygpc2l2euf8E6fgDq37Q/xM0VvE1hZWsGjRJe6vHZTtNAGQ5WGN2wWQuF4IOBz2r9BP2yv2dofj58EbzS4I4/7WsFN3pzD5B5qqf3ef4Vblc9sjg4xXiP7Evx9+D/7OnwjtdPuvF9q2uX2bzU5BZ3DMJGxtTIjwFVSBj1zXsb/8FBvhBLHsHjC3beduPsN13OP+edfnmfYzH1czVenB8tN2Wj6dT6zJcLgY5fKFSSvPW1+5+WdxFJZbknjaGSHKOjrtcEZBBH94EEY9Qa+sf2Ev2EbT4oWdn4w8XSRzaPvBs9MVwVmYd5cdOcHaR2615T+2lfeCvFHxfuPEPgXVINS07X83F2qQyxiC6HyuQHUcMOe2CWPOaz/2aP2qPEn7NXiZZtMla60i6cC40yR/3dwO+0nO1/QjqeO9foWYVsZjcpi8N7s7a3/rQ+LwNPC4bMX7f3o30P1ksdKt9I0+O2t444beFQixqNqooHCqB2r5z/bS/YX0n432V14g0fydJ8VQx+Y0mQsN3Gv8M3IA7ndyRjv0r034W/tL+Evi38Oj4p0/UYYtPt03Xn2g7HsePuuOxz3718Yfto/8FA7z4szXHhvwbPc2nhlfknvMlZr8g8geicYzk5Ffl3D2X5m8f+5i1JPVn6NneYZbHA3qNNNaI+d/ClhJovxM0q3uPL86y1e3jl2NuQyLMv3W/iXj73H0r9nIYFSJdwzwOOxr8VPDOoR6P4j067nLNDa3cMrY5ZY1kViAD1PHrX6GJ/wVn+G6R5k03xhuHA/4l8Y/HJlAx9a+m48y3F1qlN0IN2Wtr76HzPBeYYSlCoqskrvS6R9QyrGo5AH0GK/Pv/gr3BGvxa8Joy4RtIlVnGMrmUgsM+gzXsR/4K0fDaXI/s3xcfb7HB/8er5d/bz/AGl9D/aY8b6Jqmg2+qWsOmWTW8gvoRC7EuW+XazDjPr/AIV5nCWU42jmsKlWm+XzuetxRm2CqYCUaUk5eR8xpoVpJ8eJtQa8aTVpvDsdsNO2kyC3F3K/nkdCCzFOOeAfausNhJ2gkBHA/dMCB6V5b4y+DPw/+JfxxkbX9B0/W/EMegxSsl5bLLEtoZ2CyDP8Rk3DBz/UT/8ADInwt/6J74P+v9lxZ/lX6rSlWfOoxPzl/VfddRyi7djvfFFlNF4X1Jtsi/6LKMlDxlCP61m+CLXzfAGmRSxtJHJZABSu4tuVuxHOPUcjqOQK4vXv2TfhhD4fvmX4f+ElZLaQqw02MFSFOCOK634V6dDo/wAMNDtbG1hSO3s4xBbpGkabsNtXgLxnH8VbR9o5NVI6WM17HkToy1ufOusf8E5F+Hup3OoeBYfCfiW3nneV9E8YaXHfxSlvmYRXQzPHgbv9YCPp1qb9nT4sfC4fHSPwjcfDPw/4F+JVjE7QjTI7e8g4RgdlzF9wFc/Ky55xmvMvEusfHD4oatdxfETwN8Q9a8P/AGhmt9E8P6tZ6XYSIWO1ZGw0knQHluTivav2VtcuvCfiCx8PaR+z/qfw/wBLuVkMuqm5gl8pl5UyFV3MxbAwT1NfK0o3xf7uNlfsfWYiM1g71pXdu59EQqQ0a8sUGHYtuyc8kcDHpXL/AAa/5J3a/wDXWf8A9CauqCbZ03bgc9GPzA55/M81yvwa/wCSeWv/AF1m/wDQ2r7OOlReh8PGTdN37n2f/wAEVj/xev4zH1tdDH/jl5X6GbtvPFfnn/wRW5+NXxnH9220P/0C8r9DCQK/AOKv+RlM/cuGf9wj6CFgx5WijzKK8E940qKKKACob7/j0epqhvv+PR6mWwHzr8Q/+UpXwl/7JR45/wDTv4Qr5l/4Kv8A/Jzlh/2Llr/6U3dfTXxD/wCUpXwl/wCyUeOf/Tv4Qr5l/wCCr/8Ayc5Yf9i5a/8ApTd19Zwb/wAjWPofJ8Zf8i8+ZaKKK/dj8Wp7BRRRQMKKKKLtaoLX0FQ4dc8jPI9a+7f+CQsefAXjMnG77fbbjj7xEbD+v6V8Ig4NfeH/AASEOfh/4zb/AKiEH/otq+P46/5Fc4rpJH1fBMn/AGpB90z6+O1fmbauOp6YryX9rD9rTQ/2Z/Bvm3AW+13UAU07TgfnmfoGYdlHXPtXU/tE/FVvgd8DPFni5LX7dJ4d06W8jt87fNdR8oJwcDOMnB4r8qfFnjbV/i/4ru/FXiS8XU9Z1JixIJ8uziPSNR/CBkDivzfhnh95liOZ/BHc/Q+KM+jgado/ExfFvi3XPin41vvFHii7e/1y+O2RlP7u0jzxEgJ+UD1HX0qmOOnA/ujoP/r+9DHcRn5towpPUUV+7YXCww1FUaWiR+J16869Z1ZvcUtkdKSiitOVLVGIUUDmhgQOlEad1qwcr7IKKQHmlJwP8KOVgFFID/nvS/nT5UAUUUUuVAFDDIwpKjvjr+FFFO1lZBu9TR8AePNe+Efjm08UeF7prXVrPCvCP9Vex94mGeQck85+YA+1fpj+yx+1Pof7TvgVdQ051tdUgITUtPk4ntZehyP7p7Gvy9x+7Knb83HPb/6/p71e8G/EzxB8DvF0fizwveta6nZgG4jY/udRiXrHJ7kZAbBwcHB6V8bxVwtTxlP2tJe8j7DhniOphKns6j93ofsFJCt4rKf9VIChA6AHgjPuCa+Lf+Cva4sPAbcbpHvS+BgE4gA+nA/Wvq/4LfEEfFj4T+F/E4t/si+ItNt9UWDfu8rzo0kxnA3YDrzgda+Uf+CvvGneAf8Aevf/AGlX5hwtCSzekpb3t9x+hcUzTy2pKK0tdfM+JKKKK/fpaM/Efs3CiiigAoooqZbBe2qA9K+rv+CR7AfGvxNno2hbSfTNxGM/hmvlE9K+rv8Agkf/AMlr8Tf9gL/24jr5/i9/8JFd+a/Q+g4Wiv7VoR6Xl+R5h+1v+zv8Tb79sf4m6vpPw78Ta5pOtahbT2l5ZRAxSqtpEh2k88MGHTtXCH9nj4tgf8kl8c/9+lr6k/aE/wCCqvij4R/tFeM/Buj+B9H1e28LXUVqLy51B45J98CS5IxgcuRjP+FcoP8Agsp8QB/zTXwz/wCDc18jluYZ4sNCOHpc0baH02Y4HJpV5vEVeWVzwYfs9fFs/wDNJfHP/ftKa/7PnxcVW2/CTxzuwcfukr3z/h8t4/8A+iZ+Gf8AwcGmv/wWV+IC5Zfhp4Z3LyP+Jsx5ru/tLiFa+xX3I4/7NyGyarM8m8FfBHx58P8A4JftHa34q8I654b0+/8AAa2lvJfIAs0iyhiBj0B746V5npBA0OyLKGVbaMkHv8or6d8a/wDBQXW/2s/2X/j74a1rwvpegSaL4MOoCW1u2maYvJs2kEdsZzXzHov/ACBrHjd/o8eBjP8ACK9HhmriKlbESxS5Z3X6HDxFToU6NBYd80bMw/iNod1r3/CNm3vorMafr9rd3Akk8v7XEPNzCP8AeOD3xt6GvQvAXwz1r4nXLW+i2cuoXEe5zFDC8kpxwW2KCcYx0Brzf4oaJp+vjwwl/qEdl9l8QWk9ruJ3Xc6iZVt89vMDE55xt6HOR9m/8EsHDfHy4Zt277FccMQCVAjC7h79Rz3rr4gzKeCwtWpS3TRy5Dl8cZiKNKp8NmeTWP7LPxGsZlni8K+IlkU/KRpV1+PPl+lbKfBv4xb939h+IyxXaSNIujn84yf1r9EPjP8AHLXvg/JYjRvhN8RPiPHeZ3/8Iw2kxfYsZ/1n9oX1oeccbA3WuFk/bd8cBT/xiv8AtCL7/afCXH5a4TX5XiuLMVXnzVYpv0X+R+mYXhfDYfSlJper/wAz4qX4O/GIHd/YXiHI/wCoRdf/ABqj/hT/AMYt27+wfEWf+wRdf/Gq/Rz4E/GHWvi5p19PrXw38cfDea0mEUdr4ml0uSe7XGfMQ6fe3SBO3zspz2r0Dp61zx4irWtKC+5f5HX/AGHS/mf3s/KT/hUPxhBy2g+IP/BPdf8Axqj/AIU/8YS3Og+Iv/BRdf8Axqv1R1jUjpum3EyWtxeNDE0iwQlfMmIBIRdzBdxxgZIGTyQOa8CP7bHjeKaRR+y3+0FMFYqrpdeEdrgfxD/ie5AP+0Afaq/1iq/8+19y/wAhf2NS/nf3s+LG+DvxfA/5APiD8dJuv/jVA+D/AMYNzbdB8Qnb3GkXX/xqvtzR/wBsrxtrWsWdnJ+zL8eNLjuriOF727uPCht7RWYAyyBNbZ9igknYrNgHCscA+7W119o527WyV46NjuM847fX25o/1iq/8+19y/yD+xaf87+9n5Wj4P8AxgL/APIB8Rf+Ci6/+NUknwa+L7D/AJAPiL/wUXX/AMar9WmbYuew9e1cJ8cfjLq3wk0ezudH+HPjf4jTXcpja18NSaWs1soGfMf7deWqbT0+Vifap/1jq/8APtfcv8g/sWn/ADv72fm+Pg58XwP+QB4ib66Rdf8Axulb4SfGFdzNoXiL5uP+QVdAf+i6+0x+2746HP8Awyz+0Hj3ufCIH4n+3eld78C/jzrnxn/tJda+E/xC+Gf2ERtD/wAJRPo8n9obi4byv7Ov7vHllQG8zZgyLjdziv8AWKp1pr7l/kDyWnbSb+9n5q+NtD+IXw+sVm16DUNNjkY+WtzbSReZtK9Nyj1FchP8RtauPMWS+3JIm1kMalW5BBwR7V9sf8FdDjwv4Q4X5WvQCxG779qBjv6/nXwWWzI386/QuD6dDMMJKvXirp6HwfFlStgsRGlQk0mtRrr5rM0m2RnO47lBAPsO30FMaxhf70Fu3/bP/CpaK+59jBKyWx8P7ad277nL+Ifgl4O8Xy79W8L6DqcjfxXNjHIR+a5rnz+zXpXh9JD4X1rxR4PaE+Yi6dqZNtu7AW1xvt/w2fTnBr0ilBwe/vjvUexhJ2sV9aqR1ufO3x/+IWteCfhP448HeNr7SbqbWPDl9NoWtLE2njV5ViIkhkjPy+eFYMCpCMiyEKCoB+hLVlbT7cyfIskKkB8Kw6HnPy8ZHQnqMZ7ec/theH7PxH+zH46hvLW3uEXR7qdA8St5cqoWR1yMqUO7aRgjPXinWHwU13wpZRt4W8d+INKhZFYWGqbdWt4lwVCh5s3O0dgJgBnuOK8yMZ0sQ5HrVvZ18NFPRnpBJbBPzEchl+UZ5+g7n16j0pxLY/iUkYAIPP0wa87aL4r6eMb/AIf60o6SLb3di7f72ZZh+S/406PxL8TbaIrJ4L8GzHGM/wDCXXEefcL9g49fvV2/Wl/KvuOJ4WTlzKf49D0LY2PuzMyj7rJkgd8cZ/H0ry79qj9qbS/2UPh8viDVtI1rWLeSQwxNp6K0MD4482Qn5ASQPunrVpj8VNXjEav8P/DwfOSftGsyD0x8sIqpqv7N7fEzTZrXx54q1zxdZXBHm6ZCy6dpufeGEq8gzggSvJggHqM1jjMVVlS5aCtL9TXA0aEaylXneNzyf9hj/goh4u/bJ+LetafpPh638M+CdLsBNe/v5Z55mLbYY3dQsf3vmwwzhTzX1QrMONzYxjr0+noPavJf2Sf2QPD/AOyHoviKz0OSa4j1vU2uozMqs9vCFISIsBltuSAx7HGO9etAYNLI6WKpYdyrr943v5FZ5iMLVxKjh3+7tt5h/npzSKNqYHHoR1I9D6/pS0V6ydjyRpXcOf8AH+eRTkYRfNtCqvzHYMdOpx3+lFAdkyy7iygsoHcjpRu7k8uljmUvdNT43T2K6ev9tQ+Ho7ia93/8uxunVIgO5Dbm+jdO9dN15H3ex9fwrmF8QrH8bZNHOn222PQI70X5Q+YT9pkh8rPT+ANjPRvxrpzg4P3m/iPr+Fc1HSMmjqrt8yV+hT8R/wDIu6h/16y/+gGqPw5GfAWkZwP9FjOSSMfe545q74kOPDmof9esv/oBqn8OSU8B6OQGbbaxk4XdxhiePpWkYr2qfkZ81qF33KXxntNYuPg/4oj8P/b01ttLuG05rZ9kyT+SSoVtwIYE5GPyqH4Dx6tB8G/CsfiT7U3iWHTLVdVa6/fXHnKgMnmNndu3kDJA6d815z+134X8WXXjf4c+JvDug3ni7TfCt9dXGpaHazKj3ckkIFtI53bSgkAHzYK4Bw33T558H/2bfFXws/aS+HmufZ9cm1rVtNv9R8f6q8pNnPJMfkgBPG6JiB8owcA57V87UxMoYzkUd2fQ0cGp4G8p67n1vE2Wj+ZPmBcBT23CuW+DP/JPLX/rrN/6G1dTFhCqxspjBOACX2jPAzjHvXLfBn/knlr/ANdZ/wD0Jq+jX8RHz8bKm0+59n/8EVU/4vV8aT/066Gf/Hbyv0LJAr89v+CKv/JaPjT/ANeehf8AoN5X6EkgV/P/ABT/AMjOfqfuPDP+4R9BPMoo8yivCPeNKiiigAqG+/49Hqaob7/j0eplsB86/EP/AJSlfCX/ALJR45/9O/hCvmX/AIKv/wDJzlh/2Llr/wClN3X018Q/+UpXwl/7JR45/wDTv4Qr5l/4Kv8A/Jzlh/2Llr/6U3dfWcG/8jWPofJ8Zf8AIvPmWiiiv3Y/FqewUUUUDCiiilLYAr7w/wCCQf8AyTvxl/2EYP8A0Wa+D6+8P+CQIz8PPGX/AGEYP/RZr5Ljj/kXT/xR/NH1HBf/ACMqfoz1z/goUcfsTfE7/sBzn9BX5l2CqNPg4ztiTBPUZUGv00/4KEjd+xL8UP8AsBT/AMq/MuyOLKH/AK5p/wCgCvF8N9KVRLuet4gfxookooor9MWh+dhRQTgUE4XPzHHUAZOO9J7FDkgmuJlht4/OnkO2NMffbsPx6V6l+0D+y7efAvQ9Evv7Vt9Xh1ZzDN5Vr5RspgoZo2+duRnHao/2QPBdr4v+ONleakYU0fwyj6zevKrMqJD8yFgPVgpx7Y7165Novh34o/DL4iaJpnxCtvGmsahNJ4itrT+yJ9N+yzID5mC7MCCuAACOnfNfHZzncqWPhCjflVr6frbQ+my3K6dbCSnJ+90PlPzFES/cbcDyCTgg85wDgDqT2FIS2dqgu5+6qq3zcZx93qeoHpzxX1l+z94zuNY+Gfhfwn4fktfC/iJrZ2bTdY0PzLHxSrAlT56qSilQSSCSMY5qt+zN4wk07wBpfhPSbqDwt4outQu3h/tDw+8um+KtzOQgkbMkYXayhjjgdDnFTX4slB1Eqb0aS1Wz+X+ZpHhyUmruysfK7OuBhoQpwxaQ8BT0J9zzwfTrW58LvAF98XPHWm+HdL+xrqGqO8cbSsFjiZYzJ85BLKCqtghTyB65H1B8HNDt/gp8B77VptYs/A+u3mvXUGoamdBfWI7dkmx9nBQFY4x8wG7GeeRwa0PD/wAR7eD9r7wKfDt7HLb+L9LMes3H9iyacmqSRR3DCaFJhu52g5i3LxySM1w1uLq0nKFKFrJ2fnb0NIcOxjBTnLqfGsyeVMyq6SKpKlhkAkMRwCM446nFNrrvjN8SvEHxS8VNqHiS6a8u4Wkt4pTaxwAIrsNmEVfmDZGSDnb1rka+2y+vKthoVJ/E1qfOYyjGlXcI7BRRRXYcgf55qrrYzo91/wBcm47dKtVV1r/kEXX/AFyb+VZ1NIP0Kp/GvU/VL9i1c/sh/CxmYsx8I6T9B/osJOPz/Svnb/gr/wD8eHgH/evf/aVfRf7Fv/Jn/wAK/wDsUdJ/9JIK+dP+Cv3/AB4eAf8Aevf/AGlX4Tw//wAjyD82ft2fa5JL0X5HxJRRRX7tufislaKsFFFFBIUUUUpbAB6V9Xf8Ejz/AMXr8T/9gE/+lEdfKJ6V9Xf8Ej2C/GzxNkA/8SPv/wBfMdfP8X6ZTWt3X6Hu8M65nQ+Z4J+1qfL/AG5/jJllUrq1qMBgCR9ihOev4VxX2j/a/wDH/wD69fdnx1/4JNR/Gf46eKPGkHxF1jQpvFFxHPNaw2EcqR7IkjA3MwJ+5nPHXFcv/wAOVJM/8le17/wVw/8AxdfOZTxjgMNg4Uq7akj38w4QxmIxU6lJJxfc+PBPn+JvwbP9aGclTlm6fxZx+ua+wz/wRSkI/wCSva9+OlQn/wBnoH/BFB15/wCFu670OMaTAD+jA16P+vmWdZs41wVmDsuRHy38Jtp8A/tMH5d3/Cuo88AH/j4PtXL6Sf8AiRWeGVWa1RQT0BKACvrf4sf8E74/2Qf2Tfjt4jPjLUvFF1rng9rKRbmzWHywkm8MCGbPXGOK+StGDNotiF+8baPHGedoxWvDWNp4zEYmtRd4tr9DHiDAzwtHD0qys7M5/wCLH9jg+F/7We6jWPxHbHTPL27TdDzPKyT2I3V7x+zJ+0Jcfs2+KTq1rYpeXjRPbxRzQGVCjcAja6kdOme1fPfxzt9FvdJ8O2er299JDqXiK0tbWSyv5rG4s7g+biUSwssi7eR8pXO7GQMg3NT+EOm6l4Y0/Spr/wAWRW+nk4lg8RX0N0WYn5ZLlJRLMBuJG8ke1epmWBhjFVozV1dep5uW4x4ZUa8HaSufdX/D3TxGvP8AYfh/92djboZV2/8AfU459v50H/grl4juBtOg+H2Xvi1nbHpkecSPxFfDHiP4Y2viCfTPM1bxRY/2YoihW18QXloJgvOZdsp81jjBLdRS6r8ObXVvF1vrT6t4jW4t9qi2g1u6hsn7fNAr+W3XqymvB/1EwSd/Zz+9HuR40xt9akP/AAFn3Mv/AAVu8SQDH9g+H49vzNm2nUMfb99/Snf8Pd/E2FP9g6CFbubebB+n7/8Awr4b074dWlh4zuNcXUvEkjzOyNbPrV01nCSpX5Lbd5S4znKqDnn3qDw98MbPw3f6nPDq3iW6fVFaKQ3+tXN1HDuBAMKSkiMgnjaaX+pOAb1hL72D40xv/P2H/gLPulv+CuviR22nRPDox1BjlVl57/v+9In/AAV18SOVK6DoODjC/ZpiRwOwnPqenpXwto3woj0Pw7qWkrr3i66XUJFJubzXLiae3AH/ACzlLbo8/wCzj0pr/Ca2/wCEJ/sRfEXi4QrKZTdLrM/28/MTtN1nzSvIHLHgGtP9Rsv/AJJfiT/rrjv+fkP/AAFn3Y3/AAV18SjYDofh9N43DMEy7ucYH78E03/h7h4ljk3f2DoKquQD5MuO5xjz+D+vvXwnrHwlTV/Cmm6b/bniq1TTwVWTT9cngnusn/lpMrB5sdcSFsYqbxJ8Mx4h1XTblde8SWK6bGkG2w1KWGO5KnI89VI8xjjljmo/1FwPWMvvK/1zxv8Az8h9zPuhv+Cu/iZrff8A2H4f2nJXEUvJHPaf270i/wDBW7xIh2jQNA8ticH7PMocjGTxPj9K+HNQ+HRvfHsPiBtc8SQyR7Q1hHqsgspew3IzYPr7HBpmjfDtdK8a3euf274guZbwyxtYy6islqpbnKRnj5eoPqAe1Z/6k5f/ACS+8P8AXLH/AM8fwPuZv+CufiRom/4kPh0Ljq1vLj8cz0z/AIe3+JFZC2h6JuQ4P7qX5uSByJ8nA+vDc5xmvhjw78Mv+EdOrH/hI/FF8dYSSMveak90bLcpwYiwOz6Lj0pNO+GEul+DtS0tfFXiq6/tCTzBdyajm4svucRuVAXlD17MR9dHwTl9l7kvvYf65Y7rOP4H0z+01+2fqH7T2jabZ6lY2Fo2mPKIzZxuiuXKZyGkYnHl/wCcV4enz/KuGYZJCkHPOOO/54rlbr4VzXPgiHRR4q8WRtHMZ31JL52vJMux2+aF28bh25A96XxJ8MJPEOhaXY/8JN4qtDpo8s3Vpf7Li9yf+WzMuCPwr3styungKfsqK0PBzLMq2Oqe1qvU6lHVyQGXcpwQT0PoT0z7ZpSfbB/usQDn8yP1rmfEfw/m13XtOvIfFHiaxj02NIWs7S4h+z3GwgkuCn3jj5m54zxT38FSz/EOPXv+En8QCASL/wASuK7gOnN2+6UDE9+o5A69K9P2lT+U8/2VP+Y6LcCeD16ZBz7+35E0qDfIq7lXLAHuR+Wf1xXN6D8P7nRvFV7qUnibxJqEd4koWwnmWW0tdx4KIiZUjsdx5AzxUHhn4dXegWOrRt4u8U6k2oROI5Lu4hk+wMQceXtj2rg/380vaT/lD2VP+YvfFDwQvxH+Gut6DPK1nHrNlJZmbaX8rejDPy8HHBxkZ6cda3/s/lIpQthflUnhgoLDBPC9v734Vydh8O76y8HXmn/8Jl4muLi8nDw6rIbVbxFwMhCsXl8YI5j6E0aj8O76fwhDpv8Awl3iS3ureUs+qxzWS3s2SxAkLR+WRk4+VAfxxU3le/IaOMWuVz0OqcqoDYyrd2Dc01ZFi43Rjd2yoP8AMH8s+/Fcz4i+H97rNlpccfjDxPpM1kAstxa/Zo5NRI7S74SSD7IB7jqJtX8G6hqfiO0vIPF3iDTLW3VVewtBYtDOV67wYWPPfY4PpWnNP+QiNKC2mdIxdY8r5iBugXeMn3Iyv60zzlMm5XjLJ3DKT+P8Q/EDNc8nhK9Xxw2rf8JRrX2FX8w6QFs/sfT+LNt9oz3G+TGcdqND8GappGuXlxc+LvEWqQXCSeXY3a2cdvZluR5ZSJW4HTMjZxyO1Suda8pbpxtrI6JG3vjpu/uqefwGSaCVGBuXceMZ7+mOo/ECuT0DwLqOlaPqEM/jTxLqk16rCGa6Ww3WB6gxhbdFPp+8WT+tTQeB9a/4RO60v/hNvEEt/JMsg1T7Pp8l0o2/c8pbUQ49/KH1NN1qjd+Uzjh6SVlL+vuOmPyHDfKfQnDD3KnB/IGjrtx8wboy8hh7d/0rl7rwHrV14atNOh8a+J7G8tdxlvobPTxcXOQfvI1s0C/8AVSfrin6z4H1jVxpv2fxnr2nvZxKtw1vZ2Ep1AAgnzhJbyFM4/hEf1pe0qfyl/V4fznSnbnhs7evH+cf8CxSqvKMf9XuGWAO089AQMH8K5nVvCOsal4ttdRt/F2o2enW5G7ToILN7aQjrl2iZwT/ALLdfSn2fhPVv+E5fVJPFGo3Gl3DlV0l7W1SHJBGPNWAT89sy8njvVKpUv8ACL2MbaSCK+1j/hbMun+S3/CProcdx5zJw959pkUoH/2YVT5eDkk4FdESrNuUH5h09Pxrh/CPg7xV4e+K15dX3iPUNZ8N3GlKlql5BBbfYbjz5GaPZFGmV8tlAZ97ZXlvTt1KkDbltowSv3azw7vCV+5piElOKfYpeJjjw1qR9LWU/wDjhqn8PCV8BaSyqHaO2QgGMvkrnsAf5HGKu+JRu8NakPW1lH/jhqn8Omx4B0s9/sqkc9CQcfyraX8RLyOeH8J37nzX8ffDnx+1L9pvwLqWh6J4NvtJ0G6v1sJmub1bVlZNjNfnA2FgF2AZG44HWux8H/Cb4veNP2gfDPi7xvc+B9L0vwrZ3FrHB4bubmSXUGmAj2StNHt2jjGO/OT0rn/+Ch+t6fp/i34Yad4n8QT6N4B1XVbqPXUt702lxdbEC27NgqzRq+MsOOcnGK0vgV4D/Z70P4p6dN4H8QaPd+KI/NW0ih8T3F65G1gx8uS4KOwQsxG3AAJHIFfJ8j+uu/c+0c28EpKOtrf1qfRh4nQFS204DAY79Dg446dOfauV+DRx8O7X/rrP/wChNXVx5BX5AmSeAG455PIwc9eK5T4N/wDJOrX/AK6z/wDoTV9av4iPjXrB37n2j/wRUfPxp+NH/XnoX/oN5X6FZHtX56f8EVPl+NnxoH/TnoX/AKDeV+hfHtX8/wDFP/Izn6n7hwz/ALhH0F3UUnHtRXhHvGjRRRQAVFe82rdun86lqK95tz1GSBkduRUy2A+dPiHg/wDBUn4TfMvHwp8cj/yr+EK+Zf8Agq//AMnOWH/YuWv/AKU3dfXniz4Wa1q/7dfgHxxDHE3h3QPAXinQbuXzRvS7vdR8PzQIF6kGPTrk57bR618h/wDBV/8A5OcsP+xctf8A0pu6+s4N/wCRrH0Pk+Mv+RefMtFFFfux+LU9gooooGFFFFKWwBX3j/wSA/5J74y/7CMH/os18HV94/8ABID/AJJ74y/7CMH/AKLNfIcdf8i2p6x/Q+q4JV80pLyZ65/wUH5/Yk+KJ/u6FP8AyFfmVZc2UP8A1zT/ANAFfpr/AMFBRn9iP4pf9gKf+lfmVZHFlD/1zT/0AV5Ph2rU61u6/E9XjvWtSv1uSKMn+L8Bmhef4l3dCAc4PpQeQfpXoH7Ofwm0/wCMXje80vUJr63gt7E3K/ZXVW3K8a/xKw539x2/EfoGPxkMJRqVqu0bP5dT4TAYWeKnTpU/ildf5HAAY/8A1GlH7twx7fXrX1pZfsDeE51G7UPEnP8A03t//jNaH/DvHwg7L/xMfEhB/wCm8H/xmvkf+IhZP3l9x9Z/qHmq15UfKvhr4gax4R0fVrHTbyS2t9etktb/APcBjMg6gMfu5/Go/Avj7Vvhb4oj1jQ7hrTUreNolkMazB1bghw4YMp4yMDpX13F/wAE3vB7Q5bU/FCcdDcwYP8A5BqxD/wTT8FqVDal4oVMfKftNspyeO8VcsuNciaalGWu+iNI8H5zFWjy/Js+bNA/a4+IXhvwoug2PiK4t9PiiMSxpbQBowzEsIpBFlRzwBjbjqaj8GftXfED4feFF0XTfEE9vp6hl2m1ieQBs5xIylwecghuDz7V9Maj/wAE2vh7o9r5914g8R2sIOEaW+tYY898M0IXp1wTxniuQ1j9lj4H6KVWbxp4mkkbkCGRJlIzjOVtiOvr9a5f9aOGtf3b11ei3Nv9V89ve54L8Ov2g/GXwpfUDoeuXNrJqjLLco8MdzG8gGPMKzLJ8xGASMZAHuSmvfHnxd4k+IFr4sutcuJdc08KLedgEjt8buAihRtO77pJX0GcY+gNK/ZK+C+uX728PjLxMJo5lhkMskMa8syDB+zf3lxXQr/wTr+H9xAzWWveKJpEB3JHeW5ZenXEXufyo/1s4d5nLl1as35BV4Wz1xjFSja99z5O+Jfxd1740a5HqXiC/wD7SvLdDFHIIIodiFi23EYGRkk8gn3rndp9G/KvqzUf2EPDMEjH+0PEG1fWeJmH/kLH6Vlah+xd4eso9yXevMx6fv4R/KIH9a7qPH2TUYKFPRLZI56nA+bTk5yWrPmjcufvL+dGPdfwNe86v+yzpWnplbvWG9mlQ/8AslcZ8Qfg1aeEvDFzfxXF8zw7cLI6lTl1XnCj1rqwvHmVYitGhTcuaTSWnVnJiOC8zoUpVqi0im36I85qrrX/ACCLr/rk38qtVV1r/kEXX/XJv5V9jU1iz5am/eXqfqp+xb/yZ/8ACv8A7FHSf/SSGvnT/gr9/wAeHgH/AHr3/wBpV9F/sXf8mf8Awr/7FHSf/SSGvnT/AIK/f8eHgH/evf8A2lX4Nw//AMjmD/vM/bM9f/CJL0R8SUUUV+8H4vL4UFFFFBIUUUUFR1aA9K+rv+CR43fGzxN2/wCJF/7cR18oscLX1d/wSNOfjf4m/wBnQ/8A24jr53ir3sor37Rf4nucK/8AIyov1P0C+bLZYsG7Gk2jP3V/Klor8CvpY/dHFPUNq/3VowF/hFFB6UtOw4x1/wCCeH/8FKdx/YH+LJJ/5l6Yfyr8tdK/5AFp/wBeqf8AoAr9S/8AgpR/yYL8Wv8AsX5v/Za/LbRW2aNYN3SCJh9QoIr9Y8PJWo135o/LOO42r0Yrszmfjb4q1DwppmiNpGi6drupX2v21hBBdSeRCjy+YRK0m19gXBG7aeT2p+o6/wCLrbw1ptxZ+GdDk1m6bdNZS6/JBbwLgD5bj7M287hjGwfeqz4/vtW02PQV0eEyCbWrWDUNw/1Fk3nGVi25dpGVwc/xY6dfm/4ifEHQ4v2gfjJaeKPiFrPht9Ls7STQ7Kw8U3dkRM1tkiG1hlCTszCP5MPnoeuR9fjsS8O5S/nlb8ND5nL8JGvGMV9mN/XX9T6N1/V/Flp/Z7aR4b0XUI7lVe8aXVprc27H+FB9lcy4AJz8nTtUmp634ni8Z29ta6Ho91oZC+fevrXl3EB7jyEgccdt0i59q4T4f+O/iUvwU8O3lx4Pt9U8SLopu9WfV9QXS280rvWEJFDMwuGUAgPHCMEZf5sVnS/tj3GrwfDWPwz4RudY1D4jW88llaXF+tr/AGfLEF3+a2HbC5YFlBKlV4OeJeOoqSXM72Nv7OrrVRVj1Cw1XxRceL3im0bRF0OR2ig1GLWJXupxhdq/Z/syxhjuBwLgnAPU8GLRtX8WXd5dR6l4d8P2caxFrHyNZnmkuW5KiVXtoxFn5QdhlwT7Zryvw/8AFn4man+15eeFZtL8Mf2V/wAI/bXz2aaxLLGgkmdPtIlNiJHk2rtMblBhfvjPFz9nDxjDP8D2n8BeCYLfzfEeoWv2G41oC3gdJ3Ek0twVkkCsUYhIo5SNwBGAWojjVKT959evmgngaqSSgtUvxTfc9B0fWvGVx4e1Jrrw/wCHYdTgKvbWkGvTzw3IK7j5sv2MNDjj/lm+Txx1p7av4zk8IeZHovhceJPM2jTxr88lmqc/MZ1sy2ePumLv1rwT9oT4yN8R/gNr2m6hpf8AY+ueDfF+l6RfWsV3HdW+5r23lRonEcZZXRwcNEjAkqQduT9L3TSN4dkbLSeVakB0JXe4QYUEMdjDGenHv3dHGXUpOTdlfdjqYOdNR54LV/5eZz+rah40/wCEX02TT9D8NXGpyHdew3GqXEUFsvO1o2S1d2ztPVFxxng5E3iDUfF0Gr6d/ZWj+Hri18pGvzdavLDLbM3BMapbSbxjd97Z0Ocda+df+CbfxS8RLaR6D4016+8RSeJNNTxhpN/q9y8pWDPkXMJd2OFjlToMDEmSMZBq/BP4663rP7UupeK9e8Qanb+A9a8H6j4j03Trm4ZbOz062uEiiuEhDbEkaCFpWZVGd7rtO7Nc/wDa0bJ3evm9DollE41XDdJfffb7j6Uu7vxUfHNrHBp/h+TwvIVEt1NeSpeDIG4JGsRViCcD94M47U7Qb7xY3ji4TULHQYfDce5oLiC8knvVVTnJgMYG3aCWbfxz9a89sf2oNUi0Xw54o1bwauk+D/Fl9DY214mp+ZqVmLqRktZLm2FvGkSvlcmOVyjPGDu3Ejnv2gPj3q3jX4N/GCz8P+E01Tw/4d07U9D1G+/tDZcrcJbOkslvbNEQ0ERYGR3lQ/JIVDMqhuypmNJQv7R/ezkp5VXlPlcFb5Hrfha58aSG/XWNL8M28kcaR2i2eoyzF3AbiVTDHt4Kk7Q+PejR5/G7eFL3+0NP8KWOveaq2cceqTfZJl+ViXkaONwdpPAQ5IAzzXnfww+L+pWvhvwT4P8AC+h2PiDXE8I2WtXjajqTafY2FpKojRmkEUzbnaN/k2ZUKx3cDPM+I/ixafFv4h/AHWLW2uNNb/hItVsb6zlkWR7Ke3sriOWEuM7irocHJBwTgDaTi8wjKyi397NI5TJczklZJvbsrns0k/jiTwNBJHZ+EV8SzS7XWW5l+wKpzwsmwybxg8BCMg8kDk1+58bro+lDTLbwtJqrqo1KO7uptsJJwAhVd+ThiNyqcBTj5uNL4i+Dv+Ez0hbe41DXNNtYpTLcJp2ovYS3yqhKwvOhEkcXAJKMmAoUnBYnzn9lbXNSm8T/ABI0dNZ1jX/CPhzxC2naHfaldNdTFvLV7qASuzSSIkpIRnz8qEB2KsB2Sr2qqHc4aeH5qMqnb8jvvEsvjKDX9NXSbTw9NpZCrfG5urqOaOT+Lyvkw3GepFLNP4sh+IS+Svh1vDIcKwlaY6gD9M7cZx68V0ZVV+6qj+f50KdoUcsFOQCx+U+3euz2L7nB7WPY5vQp/FyeJLtdSXw7/YJ3tYmETte7uceYC23GcZyOmcc4qv4dm8avban/AG2vhv7X8x0s2TzMo9PNzyABydpFdWi7R77dpIJ+bnPPNLtz19Dg5OQfzo9i+5Htl2OT0t/HTeDrx7pvB8fiAShbeS2FzJYBMZO751JJGeBjninXg8eJ4CtVtZPCS+JNxNxI1vcHTSCCf3f7zdux7jmrHxi8fXHw1+E/iXxHaxx3F5oeny6hGsp+QyRRlkyOn3gO1dHNF5MjRrtAjYYwx4G0e+Opbt/FjtzjvLlRpqlzNaHKeJI/G/2LS/7Jk8KpdNGDqDXkU5WQ9zGI5c/TeWHSpdebxkfFNidNn8NjQ/LUXJu4pTO8n8XlmKUAe2QPfNdMG29Plx024X88Yz+NJk+u1d27CgLz+GK29jLuHOjm418Vt4/WQ3nhxvC6MB9nNncf2gOOcv5wVQT6LyOD1pmgW3jKPXL7+1L7w5JpX7xbBLWzlS4Vs5VpGa4KkAcEBVJHeunySfxyME8f596QDlvu/N1+UUvq77lfWPI5bw8vjj+zNT/tbUPCtxeMCLJ7SxnhhT085WmJb/gBFJY2fjSXwNJDdah4VOvGbfFcJp11JYAdMeUbhXzjPLvjPT0rq+SeWJ9O5H0znH4UcEHduJPU7jlv94/xfjT9i+5n7W2pyuoaf4yl8K2cdrqvhMa5G2buS40eaW1f08uFLlCmPUu1P8RWfjGdNLOl6p4bh4X+0PtWm3U/mOPvGIrcoUGM4DmQD3rpyWOORwCOBzg8HmgHaeNy/Ls4Y9Pzpewfcr615fgc/rVv4sufF8Ellqvh1dBUKJop9PnmvJfXbIJkRP8Av2SPenW2n+KF8avPcapoT+HmJC20WlzjUGjx9w3LXTIecHJh+mDgjeZi2P73rk00RfKFXd1478040XfVlfWNNEcL4P8ACviaw+Nuoa1rfiDQLmGXRksobCws3tZY/wDSXdXcPNKJGA3AuAn04rvGXa2STuY4xnrXJppGnn47yakuof8AE4HhtbP7AR923N5JIJ/clsp06L15wOsAC/lg1jh9IyRWMd6kGyn4j/5F3UP+vWX/ANANUfh2dvgDSTtLYtYztH8XDcfj0q94j/5F3UP+vWX/ANANUvhwceBdG/vC2iK+55x+tbS/ir0MbL2Mjyz9sHxvpei6h4S8Or4F0H4geLvE81xDo1rq6J9ngSKPzZJZGdWIRVP3RgnGM815t+y58cPDPifxX8OriT4X+DfCt1460/UDbahpNjGslpd20jRSQgeRkI0Z38sOCRk4yfSv2zPBfh2+8M6D4j1TxxafD/WvC9076NrU0IuVDyR+XNC0GMyIylQQPujJ5xXin7DvgXwD4X+Jnhq3b4vaL4+1bw7b3sfhzSrKyNpHam4LzXMowSzsV3gbyMLxivka/to5lyxeh9lhYUf7O5pLW3mfbCSM8vzfeVgp+Yt049SB69q5b4M/8k7tf+uk/wD6E1dPEWJi4wByf9ok5zwB+ua5j4M/8k7tf+uk/wD6E1fYae0S62Pj3/Ddu59nf8EVj/xez4ze9pof/oN5X6FkgDtX56/8EVU/4vT8aP8AZtNC/wDQbyv0LyPav5+4q/5Gc/U/cOGf9wj6CbvainbqK8I940KKKKACo7w4tmx7dvepKivf+PZvw/nUy2Aztigs2APlYYAAH/6xwM/X1r86/wDgq/8A8nOWH/YuWv8A6U3dfot/C30P8q/On/gq/wD8nOWH/YuWv/pTd19bwb/yNY+h8nxl/wAi8+ZaKKK/dT8Wp7BRRRQMKKKKUtgCvvH/AIJAf8k98Zf9hGD/ANFmvg6vvH/gkB/yT3xl/wBhGD/0Wa+Q47/5FlT1j+h9XwT/AMjSl6M9c/4KCnH7EfxS/wCwFP8A0r8yrLmyh/65p/6AK/TX/goKM/sR/FL/ALAU/wDSvzKsjiyh/wCuaf8AoAryfD3+FX9Uepxz/HofMk27uOma9y/4J/wi5+Mmoqef+JNK3/ka3FeGgZNe9/8ABOeLzfjXqS+mhyn/AMj29fVcXpPLMQ32/Q+a4TV8xoLzZ9jWejqu01s2GlK4H8/Si2gV1C/d7Zq4ZIdP06a5nuI7WC3BZ5pW2JEByWJzwB1z7V/Nux/QrvYbfeTomnTXV1NHFDaxmZ3kO1RGOSwJ6/TqT2r5v/aI/wCCglj8NNSh03SIbySa8kMdvJa2Ivr+8xtJkhhyAIgrK292GQfug5x4r+3V+1/4l8ceJ7vRvDV5o2l+GdNt/OvLq7iLfYWJ2xzuHZQ0zSD5YDyQMkqcgfKEnxun8N2+oaf4VjudNivIma41G4RJNV1CMxu0jO4G6JG2thQAOeuOBjUrW2MuVnp/xB+KPxE+IOoQ6h4s8Yaf4D0fUJTKUuJ/tmovEVjc4GCkMuyQnasRC7TyaraLa/DjVr2MeI/EnjDWLpvLjupNTvJYbK7KTqVYiHbghUkBYIeFzt5xXjOkX1v4hhu9QnntVulWVUeWX76qsgCk5OGySMEjp1OMUut+dYGZ5WWS0LsFlkYrG/8Ax8KpV92052N0cdicbuMfbsPZ92fXHgP9jvwlqWnw32ivd3NvsaSO6s9SmbaQtqSzlZA6EZkbBYMGkClcZJ7q8+APibwHDHqHhfxprkLRyNGkd4EvfOfkt+8+Vto3AcFiBkngEVz/AOyhokfwG/ZouPF2t3EluuoXb30Vq8qpGELxiMMVPzSyFl7nJKDccc8v48/4KWXGn+II9N8LeF7FtI6NcalIVuLwFSVYrCUZSpJPzNJnA6V1LWOxi5K9keveEf2t9S8CapbaX8StP+y293I8NtrdrIkljJsXLMx4dR2OV4r3K4sIbqzjntZIpoZArq6NuR0Zcqynvkc/SvhXwx+2lo3jrXrjR/F3huzksLqNxPNbzGSGBSekgfOQGG4kFeBivcv2avFd58IfGkfgu8vpNQ8I6vAZvDl5LhhbSfea1d1ZhnHKEkfLxipdPQfM+7PVtZ0TzY2Vlz715F+0Xov2T4WatJtx5Zh/9HIK+gdVsNxPucYxj6/ka8n/AGqNKW3+B+uyY+79n/8ASiKu7IYtZph/8cfzRxZzrl1f/BL8j4/qrrX/ACCLr/rk38qtVV1r/kEXX/XJv5V/U1T4WfzrTfvI/VT9i7/kz/4V/wDYo6T/AOkkNfOn/BX7/jw8A/717/7Sr6L/AGLv+TP/AIV/9ijpP/pJDXzp/wAFfv8Ajw8A/wC9e/8AtKvwXh//AJHMP8TP2rPf+RJL0X6HxJRRRX7wfjMvhQUUUUEhRRRQF7aiP92vq7/gkacfHHxP76H/AO3EdfKL/dr6t/4JHf8AJcvE3/YE/wDbhK+d4o/5FFf0j+Z9BwurZlTXb9T9BKKKK/AT90Cg9KKD0oHHc8Q/4KUf8mC/Fr/sX5v/AGWvy20UbtGsV/vW8Y/8dFfqT/wUo/5MF+LX/Yvzf+y1+WukMy6FZlfvLaoQT2Owc1+teHa/c1/VH5Vx/wD7xR/wsyPHen6zqM3h1dGuHgaPXbSXUiJdhksgJvMXp8xIC4HGCtc74C+FeoeGvjn498VXU2ny2XiwWYtFSZmnQwRgPvJUcglMbt3P0rf+Jmgz67N4a+z3sNg2n+ILW/ZZX2i7RFl/c9R948+2Ohro0AfC72bpg5yQMDn/AMe6e1fcyowqTel9b/M+PjWlSpx1tfT5Hi/xm/Zr134nfFttaTRfBnjjSG0kWFrpfid5mt9DmLlnuo4VikWQtkAqNjEKAHXqKnwp/Y18XfD5PhHHeR2s0PgO11C0v44FuFEjTY8oRKYSQAFYfMx4x0IzX2z+wZptr4g/aN0GzvbW3u7O5lxLbzoJYpv3bkBkbKnBAPI646da+8fjTqfwJ/Zy0aHUviFJ8JfAmlahK0EN74gksNNgnc5JjDzMoL5ycDPWvzriTPI4HMJw9le1rH6FkOUzxuXQn7Xe9z8aNV+BvjCx/ani8caPp+n31pqWjxaNqNpeSy2k9uyTGRZoQsUgkwDtCPtGedw7eer+xL43t/hRoOiyxaPrS6X4s1PW9R0DUJbuPTNet7id3iS4dYW/1blG2GNwWUdsmv2Qh/bY/YnP7tfi1+y83mDy8f8ACSaE24HjHD967r4HfEL9nD9pu8vrX4ba98E/iBcabGsl7H4bvdM1R7RGBVGkFuzFehAzivElxg223R38311PXXC7io2qbW/DT8j8KLL9hDxjD8P/ABdp8On+FtBm8TeJdK120stHint7CyS2eEyxj9yBuDRSKCFCsedo3ce4/wDDOOhafrk+uQ+B9Lt/ETrIJNSXRfLvnLxlGfzBGWTIYgspyVJGOcV+1Nz8CvBKq27wb4TZclmzpNv0/FPTP59q8P139sH9jfwfrd5purfEz9mnStRsJzbXVreeINFgmtZF6xujSblYdwavD8Yumnah+LIrcLzqtP2ux+J3i/8A4J+eNtX/AGcfAPhvT9Qj0XxV4VE1jd3tukvkzWN0nlXsSNs3EldjAFAA2eR1r0DxR+x1qWufF2O6gsZbHwi3gC78DPZQQML6Lz33KY1WN14QfK2T82MgAkV+sEn7b37EsbAr8X/2Wc4wAfFOhqp+p8zP15r3rR/gf4Du41aPwf4PdSoKNHpNvwDhvvKgHQgjHYg85rNcWJNv2G/mzRcN1Fb97tfoup+B0P7NvxH8Y+BvCfgvxL/wjqeHvDN3aTy6tp9xdSXeuR2km+CNLaSJEtw7rF5h8xjujYDO4FYvE37JvxK03wZ8TPCPhWPQ10L4gXWpXi3+pi6+06O17CVlt2gWEpIhYlRK02I1YNscph/3q8b/AA9+GPw08KX2veItD8B6JommRede39/Y2tta2sYOA7yPhUVQSMk9/Xg+Lf8ADcf7Esm1m+LX7LZGBtLeJ9CJIPcfvc/19RWb4tjJcvsvxLjw3OLuqn4H45ah+xDqll4g8O63J4N8I+NJrfw5Z6Df2HiGKRIle2G0XVvO9tMEdsldohG4iN/lCsrdEv7KniBNb+FV5baD4Z0O38E6peanqdhpNlPZ2xSaGeJY4EVGVmCyIGfCFtrNgAhV/YX4f/tJ/sm/GPxrZeG/B3jz9njxZ4g1ZmNtpWj6vpF9eXjJGXYrDC7O5VEdiVHyqGJGATXsa/APwSyfN4O8JttOcHSbdlT2GEFVHixwal7HbzZEuG6klb2u+m3c/D/9or4c/EnxV8Pv7K8EmPS9S1C4WLULy6eW1uY7QnfL5EiQzeXI+1Qr7Mx9QCcEWPgr8O/EPw38LW/h+68GaJ4V0HQ7cQafb6Xqst8oG5yxczWtu4bgEsxdnd3YnLGv28/4Z+8ChZAvg3wp+86j+yLce3ZK+f8A/go/8N/DngP4AR3miaDouk3MmpeXJLZWEdvI6m2uGIygGcsqnnI46GvSwvGlStjIc1Lstzza/CcaODlHnPzuBCoxB3cA5Pyd/wDawDS71yfmXj3H884/WuIvfhL4ja5Pk/E/xjaxbmYQCy0iRYuSMKfsQY/8CJPvVb/hVHjK3LNH8UvEJLdPN0jTj+qwrX6lHE1JWkoWVj8zqYeEG4+0u7noB+X09uRj8+lA4bDfLnpk5z+I4/WvPV+H3xBtT+5+IsM3/Xz4cikY/wDfuWM/kRU0ugfE61UeV4u8DXBx92TwvdRF/rtv2/lVSxFRK/IH1VdyH9rUeX+y/wDELjP/ABILwtjB3fuWxXpFySk8y4C/Nzkcnt/Svn39p9fiVD+zf46h1CPwLeWMmh3YnKTXtpLbp5TZdUKyI+BzgsOB1ziu+ufH3j+xvnW8+HdrO+dzJpfiSGQgZYdLiODJyDxn39q4/rXLXndbWO6th28PCz3cvwWh31FefS/HufSpdureAviFpkfaRdMjv1P0+yyyk/lS2/7UvgE3gt77xFDoM5/5Za1bTaXJ/wB83CIT+Ga744ilLVM8yOFrPdHoHWiqWieJNP8AE9jHdabeWmoW0hwktpMJo3HXO7gH1+XdVxnUD5WSTPQqc7j6VpG09mZzjKK11FopQjMRtGVb5ge4Xux+hpB/n2NXyy2IjB25mFFFFABQQWBxjoetFAfy/n+b92N5wOcDk/yojuO5yq/2OfjtMV+0f8JF/wAI5FvIx5RsPtDeX+Pm766quaXUtPT433Gmrp6/2vH4fjuXvc8/ZjdyosIHchgzdejdO9dKfvdtvbP3j+Fc9H4ZM6a+s437FPxH/wAi7qH/AF6y/wDoBql8OP8AkQ9H7/6LH3x2arviP/kXdQ/69Zf/AEA1R+HOD4C0jPH+ixjOOnDVpJXqpeRhGT9kzwD9vvSb2w+Ivwp8T2fgnxF4/j8K6hcPe6Pp+jSX0UsMkSoJThWVZEYZUOvzMRyOtdb8H/2mNO+I/jSy0+D4Q/FPwz9qEjDVNZ8KpY2MWOeZg7ANxswoGSwGOTVX9rnxx4mk8c/DP4f+GdYHheTx/qFzHdavGiyzQRQRq7JAJMqjljwy4PGcHpWT4f1XxV+zb+1T4P8ACGqeLtW8caD4+sbiaJdZtYo7/TLq3UMZN6qGKMu5cNwTzmvlalWpDH+6+tj7CnTVXL17SOqWmr/4Y+jgu2WMbu27GOnOK5X4NHHw7tf+us//AKE1dYsbI6t1+YqT/eGa5P4NDPw7tf8ArrP/AOhtX1X/AC9TPklpTaXc+0f+CKj5+NPxo/689C/9BvK/Qrj2r89f+CKiY+NPxo/689C/9BvK/Qrj2r8A4p/5Gc/U/cOGf9wj6Bx7UUce1FeEe8aNFFFABUV7/wAezfh/Opaivf8Aj2b8P51MtgKH8LfQ/wAq/On/AIKv/wDJzlh/2Llr/wClN3X6Lfwt9D/Kvzp/4Kv/APJzlh/2Llr/AOlN3X1vB3/I1j6HyfGX/IvPmWiiiv3U/FqewUUUUDCiiilLYAr7x/4JAf8AJPfGX/YRg/8ARZr4Or7x/wCCQH/JPfGX/YRg/wDRZr5Djv8A5FlT1j+h9XwT/wAjSl6M9c/4KCnH7EfxS/7AU/8ASvzKsubKH/rmn/oAr9Nf+Cgoz+xH8Uv+wFP/AEr8yrI4sof+uaf+gCvJ8Pv4Vf5Hqcdfx6HzJU+9X0B/wTdi3/HLVP8AsAy/+j7evn9Thq+hP+Cawz8dNU/7AMv/AKPt6+q4v/5FeI9D5vhL/kZUPVn3FZ2e6VV68ivAP26/jJN4a0K18K2PlrqGrFUVJD96Ryp+ZeN0cSHzZPmHyqBkb8r9CLPHbW0txIyRpChkYuflAXnn24r4c8OaXH8afj94m8YXbX93b2l4bSx+0TLJDkiOWUqqncoZpIozkAlY8cV/Nm+h/Qktj4z/AGuPEFzb+PbrwzFJ9rtdJ2SXkkjLNJqd2YUeW4kK4DOytwFDAKFAACCvMNK1ZdLnubVVjjhkd0LSRJLtBW4AUcEA4IIBEbLgHkivrL9uH9jPXPHPjF/GfhGK81O71GOKO8sXlKyzAQsCyb8hty4UIwOFjODkjHyb4S8PXl3q0jalbzWtxHI0bW9wpEkPlsybSCWK4I+7u288AVFDB89XXYwrVOWB03h6O81LV7u/kgjaW7BADF90QLyPkPu37syt1bGOMV6V8EvDFrrnxU0Oz1y6tdO0e+vRDfzSDysxMtwuzzIwH5Nwyjdv/hGO9U/CegB41O3lTnOO3pXYWPhRZ4vmXCtnec4+UjB57cZ5r2o5dCx50cRK+5oftcftLXHxO8XWmj6PDGvh7QQLe2hjcBjMuVNyyeYsq5WNFA5GRuAP3a8f1DQpJE/cNI0kw8gcE7sJBtLELnO5jzJH34IOCHTXSahDr2itO0cmnzyzxRJkQBYFuW25KvBkrtzkrz6EZq9pcazDwbCzL50d3NHEzpH13Wqh1UlgOvVJAD05ziuOovZ+6zoi09TJ0mGO31DUbjMcjC6aGKSR/MUkySxlRuchuT0V1JxjBztP018A9VvPiD+z9caLNeyzal4bmh1HT1lkk3W7RqksQZgFAJP7v5lJAbpxXzxp1s8mjatMF82RdTRZgGwQPOuN28lNwBx1kRo/9rvX0j+wzb/Z9a1iNVZreLRrdYyGyjhvKXgruiwOT+7O32rMq7PrzwB4rh+JHw90vWoTvXUraOdmB/iIzn2yOcdjxXE/tbWPk/s9+IG/u/Zv/SmKt74AIh8HXVuGh2Wt5OkXlHKBRIRgcD0z7Disv9r+BV/Z08RH0+zf+lUNdmS6Zph/8cfzRyZw/wDhOr/4Jfkz4fqrrX/IIuv+uTfyq1VXWv8AkEXX/XJv5V/T1T4WfzvTfvI/VT9i7/kz/wCFf/Yo6T/6SQ186f8ABX7/AI8PAP8AvXv/ALSr6L/Yu/5M/wDhX/2KOk/+kkNfOn/BX7/jw8A/717/AO0q/BeH/wDkcw/xM/as9/5EkvRfofElFFFfvB+My+FBRRRQSFFFFACP92vq3/gkd/yXLxN/2BP/AG4SvlJ/u19W/wDBI7/kuXib/sCf+3CV87xR/wAiiv6R/M+g4Y/5GUPVH6CUUUV+An7oFB6UUHpQOO54h/wUo/5MF+LX/Yvzf+y1+W2jMV0Wx2qGb7PHgHv8or9Sf+ClH/Jgvxa/7F+b/wBlr8ttHz/YljggN9njC59dox+tfrXh3/Br+sT8q4+/3ij/AIWc78U9C0zWJfC6aldNarZ+JLKeyHJN3cKswWDPGA+c55xjoa6pZPLnYNt8zcR1Vd+CMEDPcc+2K5X4sPo6L4VOsQ3UgXxJAumeVwRefvPJyfTG7mvsT9gb9m/w7+0N/bVrry3kMemxRvF9k8tWJMjoM7kfPTr7V9Jm2cwyui8VOPMpOx81lWW1MydOnF20f4HmP7JHxH0/4Q/GXS9e1Vm+yac+6RImQyMNjrxuIH8Xrx25xX20n/BUr4dIfltfEEiKcK2LXp+Nxn8cVNH/AMExvhrMvyya+xPG4S2xIPpxBTv+HX3w3Mm4ya9nGCf9F/8AkfNfkubZtgMwruvVU02fquV5djMDh40KfK0vUiP/AAVP+HR/5c9fP/AbT/4/TIv+CpHw4hxts/EHAC/dtOgzgf6/3NWV/wCCYHw4LEeb4g9vntf/AJHxSt/wS/8Ahuo/12vf992v/wAYrh5cu/v/AHo9K+N7w+5ld/8Agqb8OWH/AB5+IB74tf8A4/TU/wCCpHw5jJ22fiDk5+5Z/wDx+rLf8Ewvhqq5Nxro+slr/wDGKRf+CYXw3bd++8QcHH3rb/5Hotl39/70F8b3h9zK9x/wVK+HVxEyfZfEShhjKi0DD6Hz+D70lv8A8FRvhxbH5bHXlXH3VW1AB9h9owB7euT3qxP/AMExfhtBEztNr+1eSd9qAo7kkwAYHU+wpqf8EyPhuz7TJ4gU9/ntTtOAcHFvwef5UcuXf3/vQXxveH3Mjk/4KlfDmQEfY/EGCCD8tpz/AOR6an/BUf4cpIX+yeINzfewtphj0/575/WrR/4JhfDUDm417qB9+1/+R6Qf8Ew/hu3/AC28Qdx9626j/t3/AFo/4Tv7/wD5KHNje8PuZCf+Cpfw4b/lz171+7af/H6c3/BU/wCHP8Vr4g2j/ZtM5/7/ANSS/wDBMT4awxM7Ta+FUFid1twB/wBu9Qv/AMEzvhvEOJNe3Mv3vOtV2MeAD+5Vvf3wfYGXHLkvt/eio/Xb7x/EH/4KmfDlB81rr/uB9jOB/wCBHsePavJf2z/21PCn7QXwpj0PR01G1vobxrrN2kQVo/s8yfLskbcT5mfbFeb/ALf3wG8P/s8+KtP0vQ1u1t760F2xl8tpDI0k4P8AAPl45JwMV89j5kzGv7pyMtEWZGYDoCPlFfZcO8M4TGcuKjUa5dd10Pjc94gxeFcsO6V09BiyrIyyDcBICVGeQck/1pxdmHzMWpFQpu/h3dQQc0oUk9/++Sf6V+sRjaCUXzWPy2Ur1HKS5biZoxx7HqODn8waCdjYYgHsPX86CcD/APVVc0ev5j1eibPPf2r4I5/2W/iBE0cYjbQbzKqow37puoOQfyr0B5pJYTIeWkIblurEBQBz3wOB3PvXn/7Wcv2X9ln4hzPtEcPh69dyWHAELE9SMn2zz9eKsfs3/tM+A/2krOzm8L65a6iwkjS6s0JhvbcFgCDG2GAP3Qw9c15eIx2Ho15OTWqvbvbY9ing8RWwseVPR79r7nrfhL4OeKvG+nyXmg+F/EGsWiStEbiy06WRAy4yDsXg/XNacn7MvxBmgkST4f8AjCRZMAq2hzup57jy/wCtfrB8Lvhvo/ww8J2ej6Fptvp1jar/AKmNf4iMlix+YuT1JJ4rqJLZSn3QDj61+ZYrj+t7Vxp01ZPQ+5w3AsXTjKdR3aPwZ8dfspeEbTxNdW+s+C9O0PW7eQGVoLM6bqCk85Lx4kHpkuDzWPL8Gdc0QtN4Y8feJtPKn/jz1ZzrVsMdMtKRcFfYTce4GD+kn/BWj4XaHo2ieHfEltYwwa1qWpCyubpBtaWPyncbguA2NvcGvifw9otz4r1uysbSPzLjUJkihtx13O20c4Oecdq+9ynMsPj8F9bn7ltz4zM8DLBYz6mpczex8F/t4/8ABRLxl+zpKvgeCHwzN4udkkl1DS55GSKAsDsaCRF8mR8YwHk+Uk5r7A+Cfxa0/wCOfwr0PxZpj7rfW7RbhkyA8T4CsrDIwQynpX3T40/4N0f2b/jJbC68YeHL6/1e7jH2u4ge3tZp5MDcxkihV8jOAc8Djmui+Bv/AAQY+C/7O/hG48P+F9W8fWujzXTXaWc+rQ3Edq7cER74CQDxwc18XgeMaWFxM5VZOUL6H2GM4VlicFD2MOWfU+HiPk3DnPTg4z2BPbPSgHJbhvl68dPrXt37b3wD8Jfs3/EPTtC8N3Wq394YPtN419LG7Q5PyAFETGRk59sc5r7I/Yt+AngfxR+y94LvtS8IeGNRvLjTkea4utLgmmkYlskuykmvrcy4sp4XCQxsKfNGe19LHyuX8N1MTjJYScuVxR+ZOf8AOR/jSM6qufTkDI5PbvX7E/8ADMvw5P8AzIfg3/wS23/xFZvi/wDZN+G/iDw3eWLeCfDNqt1EYzLaaZBBMgPdXVAyn6V8/HxIhJqPsbedz3JcBzhFz9pex+MsfiKVfjXNov8AZ9v5EehperfKh37vtMsRg3eoHlvjPRj+PSNt3L8w8zvkcms3xJb6xpPx71XSVt2HhOz01lilKhkN4l5KrKXH8XlKhIOOv56ZZWJZWA3AfLuGBX39DEU5qUk9LL8T4zEYepGUFbXX8Cl4j/5F3UP+vWX/ANANU/hsM+BtG5C/6NEcnoOvWrniNf8AimtQPX/RZeB8x+4ewqh8Pdw+HulEfL/okfVh6N79frit1JOurdjm9m1h3zaHk37c918Pl+Hui2/jaLXrq+ur0SaBD4dVjrDXCoCDaYBwwUjdnA55Irhv2RW+HcX7QU0eof8AC3I/iVJp5FofiQwa7NkrruFuy/I3zA98lVY+1dt+2V4O8bXvxG+HHizwJ4T/AOEo1nwjqN1LKkmpQ6epguIhG0ZErK25gAyuoOzZyGBNebeN7n48fET9ofwn44vPgZaRWfg+0uYbbTV8bWPmNNLlDKZv7ixnaE8vqSd3PHx2MrNY29up9rgMKpYDlv07n2FGcyLuJPzHH51y3wZ/5J5a/wDXWf8A9Carfwu1/X/FPgvT9Q8TeH/+EZ1i4D+fp4vUvRb4f5R5qAA5HPQVU+DJx8O7X/rrP/6E1fZUpc0ovyPjZx9mnF66n2j/AMEVjj40fGj/AK9NC/8AQbyv0J/iI9K/PT/gis3/ABer40L/ANOmhf8AoN5X6FE/MzevavwDin/kZT9T9u4Z/wBwj6C8e1FJu9qK8I940qKKKACor3/j2b8P51LUN9/x7N+FHqCKJ6H6Gvzp/wCCr5/4ya0//sXrYf8Akxd1+irttQ9M4wMnGT2r4O/4KU/Brxf4/wDj9ZX2h+GNc1qzGh28RnsrGadFcT3LFcqpH3XU9e9fTcI1IUcyVSrJJeZ8vxdTnVwLhSV2fINFd1/wzB8SD/zIXjD/AMFM/wD8TR/wy/8AEr/oQfF//gpn/wDia/bf7VwP/P6H3n47HLcYv+XbOForuv8Ahl/4lf8AQg+L/wDwUz//ABNH/DL/AMSv+hB8X/8Agpn/APiaX9qYH/n5/wCTRK/s7Gf8+2cLRXdf8Mv/ABK/6EHxf/4KZ/8A4mj/AIZf+JX/AEIPi/8A8FM//wATR/amB61F/wCBRD+z8Zv7NnCk4FfeH/BIFgPh34y/7CMH/os18kt+y98SSP8AkQvF3tnS5hk9hkrivs//AIJd/DHxD8NfBviuHXtD1rRWuL+J4V1C0a3aZRGQSo54ycda+P40zHDVctdKnNSk2np5H1HB+DxNLMFOrBqy08rnon/BQhtn7EnxR/2tCn/kK/Mqy5sof+uaf+gCv01/4KFLn9iP4ne+hT/yr8yrI4sof+uaf+gCufw+/g1/kdvHf+8U12/UkHWvob/gmv8AL8ddU/7AMv8A6Pt6+eR1r6H/AOCao3/HbVPbQZf/AEfb19Vxh/yK8R6HzXCP/IzoerPsr4jX39n/AAz1yVbpbFlspFE7fdhJUjcfYZ5HpmvjH9k7R5tH+EGki60xbHVPEtxJq88VlH5YJnBfeBnAkkUnAXHCHr0r6/8Aj1YTX3wM8XR2qo1w2jXXlK3Rm8psDp69u/Svl39lvxT/AGx8CvDb3i2y3X2FAzSSMXVoi6OikhSzDc4GFYYcgqwUhv5rW5/QNTseiO1j4it2W4tP7RtoiIA8LyedDIrOiMcfMm1W2ltpQZzuyAp/Pf4vfCT/AIVT8cfEGm+XdLZtdtc2b3D5kkhkaRt7sevzccEkEHI4r179o39qTxHb/EzWLPw/eTaTb6DeNp0jxAiSRlUL5h2jIbcJBnywuF5wpOPD/jF4y8YfEPTLTVtW8basNQjVWgYx27Ryl5brduyBG/NuMhZFJ8xuBmijiowqWSMq+Hc47na+EdHaRF+X5cZJHzKR6gjPHvxW74z8Xab8L/CMmoX0ke4KTFD5gR7kjkrFu++wXLEICQFOASK+dZvi/wDECwuI4bebQ4TlTcGLQWa6KhyGcK0h2ZCnBEUigkHJxVH9mvTL34t/HnT7jxIdX8QXU1zYfb5vNW7eRl+wuhCKTDGRIHdl8mI7ZCpzj5vbjiouOh5ssJKLvc1vhLb+d8Q/EWoQzS3M2qNqN6syKEmIFjqLMc4Sfy2VkYMEkHIABALDrtCjezt/D7rKgtW1i4AbzFWOdhNadSFMTk4xiRFc5xnOK7bxf8N7eHxa2q2Fm1sunaFdWUVpb5a3WH+y2RI1tx+8QxtLJtMWCMNk4OVy9MZrXStGuY2Zja3l1cSN53RfMtTtklTDKTnbi4R/TdzXBiJO51U4oo+GNPZ7mW1aN9y6us0UamVSuLi6GUjlbenTkwyYAzhD0P0b+yRo8mneBNZ8RCN7iGaC3jLoyu7SQiN3UMFzkqwH7wKx5HNeKeA/C32/xPo+mwWqzTahK0qWe1cSFr25zsj/ANW2AfvwtuH3iAAa+vLTws/w8+G2l+EoZFmumt0tGuI2Lb5fLAklQnJKkklSTkgLz1Axjq0i+VHdfs22skfw1W4kVo2vpPtHlsmwxb9zlSOzAtj8Pwqj+2HFt/Zv8SHd/wA+3b/p6hr0Lw34fXw/4ZtbVWJ8mMIdw+Y85yT3PavP/wBsJT/wzd4k/wC3b/0qhruyT/ka0P8AHH80cmcL/hOr/wCCX5M+F6q60f8AiUXX/XNv5Vaqrrf/ACCLn/rm38q/p6Xws/nWn8SP1S/Yyl2fse/C3j7vhDSj+VnCa+dv+CwHFl4CH92S9H/omvof9jM/8Yf/AAs/2vCGlj6Zs4RXif8AwVI+GXiT4jQeC18P6Dq2tm3a8km+xW5m8rcIMcLk889u1fgeR1IQziMqjSXM9z9uz2nOeUunTV9EfBNFd1/wzB8SD/zIfi//AMFM/wD8TR/wy/8AEr/oQfF//gpn/wDia/bf7WwP/P6H3n4+8DjFo6TOForuv+GX/iV/0IPi/wD8FM//AMTR/wAMv/Er/oQfF/8A4KZ//iaX9qYH/n5/5NEP7Oxn/PtnC0V3X/DL/wASv+hB8X/+Cmf/AOJo/wCGX/iV/wBCD4v/APBTP/8AE0f2pgf+fi/8CiL+z8Z/z7ZwpGRX1Z/wSP8A+S4+Jf8Aa0P/ANuI68NH7L3xJzz4B8Yc8Z/smf8A+Jr6U/4JffCPxX8Pfi/r11r/AIb1vRbebR/JSS8sZYY3fzlbCsygHgV83xNmeFnllSnSqJt/psfQcN4DE08whOpBpaH3FRRRX4iftIUHpRQelA47niH/AAUo/wCTBfi1/wBi/N/7LX5aaSM6HZ87f9Gj59PlFfqX/wAFKP8AkwX4tf8AYvzf+y1+W2j/APIDs88L9mQscZwNgycfSv1zw4lalWb/AJon5Zx47Yqg/JnPfFLX9P0JvDEmoafHeJd+IbW3ty5wbWQiXbN6fJyO2c9R0P3/AP8ABI1FhvvE6syKI7OJAyt+7ZfOZgM9D94/nXwP8RvEV14efw/9ls7e8lv9cgs5fN3N9lWQSnzQQOAmACf9r8+wsvE99psHkw3JW3WRimEBZevBJ69O/qK9riDJ6uY4OWHpys73PC4dzKnga1OrUV1Zn65/Gz4a6l8UtAt7PR/iR4u+HFxbymRr/wANrpUlxMP+ebC/s7qPb/uoD79K80X9jfx0f+bsvj99BZ+DOf8AygV+cdt4o1rUp1it5Jp5G6IkasT+G2rC6l4hESFY7rbIpJJg4yD0HyV+f1uC8RQkoVasFp1Z9/R4up1Ic8KMnr2P1S+B3wW1z4R6nfXGufGD4hfEqO7jCRQ+JoNDhjsSDndGdP0+0ck9P3jOPoea9IN3C3SSP8Hr8ZRqHiJj/q7r/vwf/iKDqfiRTj/Svp9n/wDsK5/9Ul/z/gaf62Q/58z+4/ZWW4Q5UTJyMcOM14Tr/wCyV4w1rXby8tv2nPjho0d1O0sdpZ2fhFobRD0ijMuiSSbB23Ox461+b39peIz/AAXX4wf/AGFB1DxD/wA8rjd6/Zz/APEUf6p/9P4B/rZD/nzP7j9FH/Y58dH5V/aw/aCZj/05eDOf/KDn8sH3Fe/ad5cMMaNKHaJAnmPsDsR3O0Ac9eABkn6D8bkv/EZb7t1n/rgf/iKH1DxEH+7dbv8Argf/AIij/VNf8/4B/rZD/nzP7j9lZ7hSCFmX8JBmvCdb/ZJ8Z6xq91cw/tQfHPS47iZpY7W1svCBitFP/LKMyaI7lB2Dsx4HNfnANS8R5+5df9+f/sKQ3/iLOfLus/8AXHP/ALLR/qn/ANP4B/rZD/nzP7j9FH/Y38cP8v8Aw1d+0E2f+nLwZ/8AKGvfIAsUQRZFwq7QvyjOOf4cdOgx75z2/HBL/wARlvu3Wf8Argf/AIilGoeIlPC3e7t/o/8AimKHwjppWgVHiuDdvYz+49S/4Lg/so/D/wCPPxp0PUPFWk3mszQ6TFBGy65dxQQnzbglRCkwQHGMkLznt1r478N/seeBfBOnrZaFb+IdDs1O7yNP8T6lDGW9SvnkV7Zqa69rMYjuILySMc4aLJHfjAHv+dZ7+Hr9UObG5GO5ixX33D+DwmAoclWUG/J6nw+eYzE4qvzUqU0vNHmNz+zTosr/AC6148jVey+LdR/+PVG37MejEf8AIe8ff+FXqB/nLXo2B5jcMCPWivrJYOimpLZruz5OOMraxlun2R5yP2atPAx/wlXxCVfQeJLj+ZJNH/DNOn9vFfxC/wDCkuK9Go/FqlYKj1v97L+tVP6SPn39qH9ney0n9m3x5cx+JPHlxJDoV44iuPEM8kUuIWyrKeGB6YPBzyQOa+af2Lf+CP8A4ksPEek+KfHfia48HLbzJcR2mkXIXUYhwMvPykQIYcRlyQxBwOn21+1SM/s0ePs9P7AvT2/54t6g13tjMY4o5PmVyisWjYoWPAOSDkgjAwa8HFZDhsXXvNv8T38Hn+JwuEtFdT9n/htqFje+EdPfS9S/tixjhWKG8M4nadUG3czjhnyOT9a6AzhF3NgfU1+Qfwz/AGqviF8GfDn9i+GfEtxpemq7Si3FtDMEZjliGkRjyfet+X9v74vvGd3ja+B7FbG0OD9PKr4OtwHjXVl7JpxvufX4fjjD+wXMvesfSP8AwV98TWcvw+8K6al1b/b49VM7w7x5iJ5Ei7iB/vZ5xXhv/BNz4Xx+Pv2jrPVryLGneHbdr9zKpVJHJ2xhGPBIbafoK8V8deN9Y+JPi648Qa5fPfaxeBVkuCiISB6KqjGe+OoyKxzBHvZhHGNxyflH88Zr7jL+HatDJpYHmtKXX1PjsdnkKubRxyjpFH7ZR6taRfN58PTH3l655796r6n4js7GyknaaFY7dTITvT5QOSfvV+KvkoR9xfyFHlKPuqq/TKn8wQa+YXhvNO/tV9x9BLj5ONvZnbftCfE6X4y/G/xD4geRniurt44SvzbYoztUAY5wMntX6W/sJSf8YkeAfur/AMSxM89eWr8njkh/VhtHHbHQ+tdNo/xp8ZeHdNistN8XeKNNsoFEcVta6tcQwxKOgVFcAV9Ln3DE8bgaWFoNRcLb7Hh5PxJHCYueKrK/MfswZFHcVDe3AWBj8p9Oetfjqf2gfH5H/I9eNP8AweXX/wAXTo/j94/ldU/4TrxpliF/5Dt0Ov8A20r5D/iHeLWvtIn08uPsNKLiobnjvxp+C0fxB/ad13V9Qu/EC+HjbTQxW+neI73T41vPtkxeRkt5UxmMoM9yKqv+zV4XO1XuPGe5R/D451v/AOS61v7Mmu/jjNrz6mrNcaCtp9jkkZ5i/wBqkladgxJ5EgTOe3XtXTA4Xb/D71+k4PLaUaXJNXen4HwmKzSt7Tmg7Lp8zzbxJ+zb4XXw3f4uPGmVt5CN3jTWXHCk8hrog/iK6r4WWS6b8NNCtofMKQ2cSoXdpJOjYy7EsfxNaXiTnw5qH/XrL/6AapfD3LeANJ27g32SPGPo1dlOjCGIXKcdfEVKtD9476nhX/BQTW7jSLv4cx6j4k1rwp8OtS1qSDxDe6TePbzxs8Ya38xkYEJk4Zhnb6GrPwS8GfBvSvibYXHhb4nXniPXIg6wae/js6p5wKMH/ciQ7lVctkqCDztGM1h/8FDLRbf4gfCfXZPBuqePbDQ9Ru5L3QrXTGvoLmGZFUOVAZdyMoIDg/hXQfA/42eCvFnxK0vS9J+DPijwjeMHaPUbzwpDYxW+Qwb5l+ZGPTGeRx3r5dWlmLVRrfsz6ic3DLF7K+x9CpvMrM27czjPTGO3v+tcr8Gefh3a/wDXWf8A9CaurJLXMe7O4qc7TwMMBz9etcp8Gf8Aknlr/wBdZ/8A0Jq+spyvM+TjpDQ+z/8AgiuuPjZ8aD/06aF/6DeV+hROGb/Zr89/+CK/Pxp+NH/XpoX8ryv0Jz+9b6V+A8U/8jKfqfuHDP8AuEfQTzKKduorwT3jQooooAKivf8Aj2b8P51LUV7/AMezfh/OgChkj7p2n1pqRLGqqFXaoIHHPXPX2p1FTyrm5uouVWsCqAe35U7HuKaDg07d7VV2O0ey+5Bj3FGPcUbvajd7U7sXLHsvuQY9xRj3FG72o3e1J6qwuWPZfcIVwP4fbimqgT+meSPWnFsjpSY3UepWl7pK547/AMFCTj9iH4nf9gKf+VfmTZHNhC3T92n/AKCK/TT/AIKGnb+xF8Te/wDxIp84HTgV+ZNhMhsINkiOuxRuH0wOPcDNfq/hy37Ore1m+uh+V8fL9/F638kTIQzcMK+iP+CaKH/heuq/9gGX/wBH29fOzThVJ3L8oz90/wBM19Df8Ey5gfj1qY3D/kBT9eN22e3Bx36kdQK+n4rm5ZXWd1qu587wvFQzKlvuunc+7ZLBb2zkhkXfHKjK6/3lI5H1Izj3r4j8B2Nz8JPF3ijwPrU0k2oeGdS+0aHHawSA3em3AlmjYMy43PuuEOHHzLtw2Np+5oGXap46gcgH+YP8q8F/bO+DGrapLo/j7wrYtqXiXwesqT6bAwVtVtHIZ414x5kbfvYuGO4MgBMmR/OPqf0BJX3Pgv8AaQ+GbeEfifrVtGz3UeqXkl9ZOylvMUElsD5fusxUspyCuSCGIrzjx3bq/hi0vI5IjFHb7ZZGkG1g1xfsuWwQo25/1qYwevevr3xz4N0T9pXwRZX2i3gj1K3uHOnxxn5VVjsfzY5BlX3GNXwQVkYjAKnHyrqsWq+C7xtNnsLxfuobSaOVZosIY0aMk7ipadyGjMgGOV25xj7NxlfoT0seYam0d9c21qkO+SY7Y4vLDEqWxlIy/KHfjfbyD1Cg9PTf2LfCE2jeOV1yTHnJYz5dSJHgaBrHapMiefGSCABcJJndw+cEUvCGhaHqM1rNHZ3l4l/MAIGt9yzN5kDEYKmGR2jcncRFIOD16fQth8OJvgr4D0+5154bW8vo43Ns8+57UQxWqmNQHZlMgiYlMEDB5Nd0JOxm1fcqeHfCmqat4QmvIXvJpL8tcRQpEziWARtFIrbTgZZWPVcZ9q7T4h/sXajqMVpL4dnX7Ve6FMYraeZrQwyu0Hyrc7iysQGGx1Of9ocH0f8AY38X60/gLWI5rgJpNjqEdzY2wiT/AIl8LwneGdcFQXDsGbvjvzXqniPV03NNarFHfQwuVjyFEqkuQ7545wMAhSTg4aplJy3JjFI8m+DfwEsfgpYWesX9xJfa1arLp0yWynybfzJy8TBAAokYzBS+EDDI4zx3Pwy8M/8ACa+KW1yVkk0+zBjsfkKA8BWZR/dyvA7EyHoRiPwt4OufiL4juJms303R7i3VZYGlyJh0wEDBVBUqCwUHB7da9VSwj0ezS3i3eWoHXGSQMBiQBzjg9M4HHqJ23Hy3ehWun28e/J9a8v8A2xMH9mrxJ2/49f8A0qhr0q6lw/X8K8z/AGxWx+zN4kPT/j15/wC3qGvQyH/kZ0JP+eP5o486j/wn10v5Jfkz4W+X1P5VV1sf8Se65/5ZN/KpfOH98flVXXbhY9EvGLr8sDt8zBQcKT1OBX9MVqiUG7rbufzvRo1HUiuV7n6rfsXDb+yF8K8H/mUNL/8ASOGvS1QIB6Dt/n8PyrzT9i8sf2Qfhb8rbf8AhEdKwcg5H2SLnjPoPzr0yv5nxUV9YnPzf4n9D4KXNhYRmui/AcMHsBRj3H5U0HBp272rG7OlRiui+4Me4ox7ijd7Ubvandhyx7L7kGPcUFc+n5Ubvajd7UXYcsey+5DWQFTna3tim+WoI+UfL90Y4X1xTy2R0pKWtrXHZX5rBRRRQAUHpRQelA47niH/AAUo/wCTBfi1/wBi/N/7LX5aaTj+wrMt91baNj+Cg1+pf/BSj/kwX4tf9i/N/wCy1+W2jL5miWS9mto1P4qBX614d/wa/qj8p8QP49H/AAyMf4jXus2J0FdIjmmWbWra31Ly1D7bDEvn4OOG3FcN2rorgszuzMGeTLOe+7nPHbgJXP8Aj/TdX1d/Do0m6+yFdetXvgJNgktD5vmL7k4HFb0kglt/l+9IWfkcgdgfrkfl7197TivauTPhqjapQa6bfM7T9n60jvvjHoNvNHHNFJeQIyOqsr/vUXBDZBznH/16/VS7+Gvw/wBNnWO68O+D7dmBZVmsLaPA6EhWAPXvivyn+BuqRaN8UdJvppvs8FpcRTSSZ5QCVHPHfhenevu34x/FT9mH9oiWxPxA8M+C/Hf9mZWz/t/weuqC1BHzeX58Dbc/7NfkXG1GrUxqdNNo/V+DakI4N+0a+bPZ28CfDgKduj+B+Bniyticd+MVPpXwu8B615n2fwz4RuBE21zHp9s2DjOOAcfQ818uN8OP2GHGP+FL/BUe/wDwq+zOP/JSvQPgz8a/2bf2ctJu9P8Ah7o/hnwLp9/N9ourXw94TOlwXMuMeY6QwIrNjjJr4/6viP5X9x9d9aw/dHtknwV8GRKW/wCEP8M8f9QuA/8AstZ8vw/+HdrIyzaD4JhZG2Or2VsCjYzg5HpXLt+3z8LSmP7euPr/AGbcf/G68i+IC/sa/Fnxhd+IfFfw0+FnibX9QIa61LV/h9BfXlyQMAvLJbM7fiaPq+I/lf3D+tYfuj6Bn8FfDeNlVdH8CeY/C5tLXBP5VesPhL4G1JVaLwr4VmjkRXV49Nt2VlbkHgHgjnJ4r5YHw4/YXC/u/gv8FFZgR/yS61z0/wCvTvXr/gz9sP4K/DbwnYaH4fvLfQ9D0iFbWy0+x0Oe1tbOJeFjjjWIIij0AFH1fEfyv7hfWqHdHp0/wV8Fwxlv+EQ8M/Lz/wAguD/4is9/h98O7d2WbQvBMMkb7HR7K1BU4yAfl+9gZxXKv+3v8LmTb/b1zzyCNNuDj/yHXkXju0/Y1+Kfi+88QeKPhj8LfEmualJ5t3qOqfDyC8u7p8YDSSyWzOxx6mj6viP5X9w/rVDuj6El8E/DhXjRdG8DF5iFT/Q7Xk+nTv0q7p/wm8D6lFFJF4V8KXEMyhlkTTLdkYEbhg7ecjnjsQa+WT8Nf2F0Py/Bf4LZbrj4X2nI9P8Aj0717B4P/bH+DPw+8L6bomh3kOj6No1slnYWFhoVxb29nCihVijjWMKiAAAKAAAB6Unh8Rb4WH1qh/Mj1D/hSHgsf8yf4X/8FMH/AMRXlv7Znwm8MeHP2cPEl1p/h3QrC8UWyx3Ftp8MMsW65iU4ZVBHBI46gkd61T+318LgM/29dY99Luv/AI3XAftUftdeA/id8DNc0XRdYkutSuvs5jjeynhU7LiJz8zIF6Kep/wrTC4Wu68Lxe6/M58ViKPsZpSWz/I/ORuRnnLHcSff/wDXSUc7V46KuefVRQeK/ovCpuhBPoj8CxUX7WbvfUKKKGOBXUpK+xy6vQ4H9qk/8Y0+Pv8AsAXv/olq7u24tY/+uYFcT+03Yzar+zt44trWKS4nn0S6ijjjXczu0TBQB7kiu1tW32cLL910Vk3DDMCM9O3ORj2rjoyftnJo76iSoKMX1JDyAP4V6UAlTxwaKBXVzK1rHHZ73AADoPqTRS496Rfm/wDr1N7u7QbKyYUUBlb7rA0Yyaq67E8zCignBoIxRa4czCjG75Wxtbg59O/40DlVbs3SjOD79vXNEYq+xMpNI5VNN01vjrJqA1Bm1pvDaQNaY4Nr9rdkmJ9S25cY/hHPauqrlVn0dvjrMixz/wDCRHw7G8kn8BsvtTrGv137zXVDld3bOB71z4feUjqxX2UUvEhx4c1D/r1l/wDQDVL4dA/8IJo+CQfs0WCDjHWrviX/AJFzUP8Ar1l/9ANU/h223wHo5+Xi1Tk9BjIz29c/hVSk+b2i6BOnzU+RdTyj9rT4h+KLfx/8N/h54U1b/hF7r4hXtxBeasLZZ5reGKNZTHFE3yM78qCwODyOcEc/4f8AEfjT9nX9qTwf4L1jxxeeOvD3xAsLtrd720ihu9PubcE7x5QAKMnG5lGeR1Ga6CPTvCP/AAUN+EiagbHxBo9rpGpTR6JrUdwlpfJKhKtc27Rs5UBl7jAx3rE8DfDHwl8CP2uNHt9SvvHPijxj4i0uf+zNd8QXsVzBbwRMRLbRhQhSTaUONrfKWOea+bxEZut9YhJ2bVtfPU+owtRPD+watyxaku7to7n0eP8AWheixnZwepB5+tcn8Gjj4d2v/XWf/wBCauqiTLxtz8uUH03d65X4N/8AJOrX/rrP/wChtX00PiR8tH4WvM+0P+CKrbvjT8aP+vTQv/Qbyv0KJ+Zm9e1fnr/wRT/5LV8aP+vPQv8A0G8r9C8j2r8A4p/5Gc/U/ceGf9wj6CbvainbqK8I940KKKKACo7zm2b8P51JTZEEqbW6GgDOK8daTB9vzq8LGMfw0v2KP+7QBQwfb86MH2/Or/2KP+7R9ij/ALtAFDB9vzowfb86v/Yo/wC7R9ij/u0AUAOe3507Z71dNlGf4aT7DH/doApFCBQo57fnV37FH6Upsoz/AA0A9dDmviH4C0n4o+CdS8O65aR3+kaxAba8t3dkWaJvvLlCGGR3BrxUf8EvvgPlR/wr+3+UBQBqd7woGAP9d+tfRx0+Ij7tAsIgMba2o4irRVqUmvRmNbDUqrvUin6nzk//AAS7+BLrj/hX0Y9f+Jrff/Hq2/Af7G3w1/Zy1ybXvB/hePRdWu4zYz3K3txMZYTtcqRJIw+8inOO3417i1hEFPyL0rmPil5dr4dhkxszcKPxKsf6VNXGV5wcJTbXqwo4LDwmpwgk/Qq2F1vAG4/UGrk0y3MWyTcF/vDG4fjj9e1cnpOtqjKv8zW7FqsZi5K/nXlnpHjnxq/ZCXXtfvPFHg28Tw34ku4yLpgu601DG3b5kZOA3y/eBDHgZ2gCvG/Ftjf2aWtj498CrdW1sVijaGI3UUKKQQyMw3xlWAYbGHIFfZVrqEbv94H68ik1OOzvYysqiRWGGDEEEVb10ZmfLHwt8Q+APBF08lpb+G9FtZvLt5pZ4PLuGBwAsr4+bAc4J5GxBu4zXm/7TXxS0Hxd4rtbWYx6isUKQAInmyK4yCcrvBAyMZAPIr7Oufhh4b1uOZZtPs/37HzSibCQSecqQeFPY84/CvkzxppsfiT4xawbDUtcstPjka3js7TUZYIMDgn5CGycA/e7d60ppzfLEzLP7N9r4gP9qR2VpqDG8MBilubaRC6KGUqVlAKjqQyZ5YdMZr2PSf2crq4lhutcaGLT4ZzcW2nRIVjjkyzBydxZiGIbBO3Kg4zXnP7Gz2fgj4/XNuu5Y9T0mQb5ZXmklZHiYZd2JzgMa+j/ABl47t7a22s69cg5GRUSlyysXGPNsU9K0+00KGVYI1UynfI+BukfpuJ+mBgYHFQ3uoYyN2R6VympfFOzhdl84fmK57V/jDZwE/v1+u4VDmnuWopbHZ3V2Hn+9VXW/BegfGGe18H+JtPXVtE1wkXNqZnh8zygZk+ZCrcPGp4I6dxxXm83xts2m/4+E4/2hS/Bz452Pif9rbwLoayeZJfPe/Lnj5bK4f8A9lpU63LUTjvcJU+aDUtj0H/h138B/wDon8P/AINL3/49Sr/wS8+BKt8vgGJT6jVb3/49X0Z/Z0P/ADzWgafCDxGBXt/X8T/O/vZ5H9nYb+RHPeEPCFj4F8L6boul28drpmj20dnZQhi3kxIu1V3MSxwoUde1aeD7fnV/7FH/AHaPsUf92uTv56nWopJJdChg+350YPt+dX/sUf8Ado+xR/3aCihg+350YPt+dX/sUf8Ado+xR/3aAKGD7fnRg+351f8AsUf92j7FH/doAoYPt+dGD7fnV/7FH/do+xR/3aAKGD7fnRg+351f+xR/3aPsUf8AdoAoYPt+dBB9vzq/9ij/ALtIbSNR92gL21PA/wDgpWNn7A/xYB/i0CYH26V+Weivu0KyK9fsy8jsdo2n6d/wr9qvif8AC3Q/jD4C1fwv4hs/t2i65Aba8t/NeLzYzgkbkIYdOxFeUwf8E1Pgzb28ca+ENqQxCGMf2rffKo6D/Xdq+04U4mo5ZCUa0XLmavby+aPiuKuG6+ZVISoyS5V1/wCGZ+QfxojsbfQ9H1LUtbsfD2maDrdtqVzcXVx5MUkaBwYy2OjM4/HjvkWtU+OvgvSfDFnr174r0O30fVZGS0upblFjumA6KQSOAMdec1+vC/8ABN/4NqQf+ERPByP+JtfDYcYyv77j8Kcn/BOP4O/xeE5JG/vPrF+7fmZya+m/1/wSm5KM7f4V/wDJHz/+o+MdNRk4/wDgT/8AkT8ide+MXhPw1Ppseo+JNEsZNXjV7Pzr2NftCscLtHzFiSRwB+XWnar8WPDei+MIPD95rulWutXCgQ2U14qTSg8jETNu59lr9cZv+CbHwZuCu/wcW28c6vfdPT/XUg/4JsfBdNpHgyNdnI/4md5x+Hm4qZceZfJ8zpyv/hj/APJFw4Kx0I8sZxS/xP8A+RPyPg+K/hi78Z3HhuPxBpL6/agmXT1mQ3CYG45QfNwoJ6fpRoHxS8NeKr/ULbTtc0y8m0lGe9hjnWSS1ABJLhSwUcdzX63xf8E2vgvFnHg9fmJY/wDE0vRknqeJsVFF/wAEyvgfEW2+BbYM/wB4jUbzL/U+bz+NT/r1l/8Az6l/4DH/AOSK/wBS8d0qr/wJ/wDyJ+SOj/GDwlr/AIfvtW0/xFot5p2msFubqG4Qw2/b52IG3k4570H4u+E28Hp4ibX9H/4R6STyl1JrhVtmfOMCQAqecd/av1uh/wCCZvwTg8xV8DwqkhBZRqN5hseo87FIP+CZHwPWHy/+EFt1j3byBqN4Mn3/AH3P40/9esu/59y/8Bj/APJB/qXmH/PyP/gT/wDkT8ldS+LPhfTdAsdWuvEGkw2epn/RrmScLFPg9FIyPzqXXPid4c8OXljDeeINFt5tSIe1SadQZw3ACjnPXviv1hu/+CX/AMC9Qt4YrjwHY3Edvnyklvrt1iz125l+X8Kfef8ABMT4G6jPDJN4DtZpLdQsTPqN4zRAdNpM3H4Uv9esv/59S/8AAY//ACQf6l4//n6v/An/APIn5O3fxC8PWPipdBk1jTIdam/1djJdQrNJxkYUZOPpmjS/iN4d1XxRLotrrWl3GsW+/wA2zinSSaML947ODxyT6AE1+sT/APBMX4Hyait5/wAIHa/bUIZLg3935yEdMP5u4fgaIv8AgmL8D4NTlvU8CWsd1OSZZ11C7EkuSCdzebk5I9aP9esu/wCfcv8AwGP/AMkH+peY/wDPyP8A4E//AJE/JzQPiL4e8Qm8+xatpV0umrvvvImSX7MoBJLYbjGKTTviP4b1bRLvUodY0qbT9PYJdXEd1G0dsx4w53fLyVHPrX6t23/BK/4B2S3Ah+HelwfbF2XPlXV1H9oXBBDbZRuzk9c0sH/BLD4C2+myWcfw70qO1nYPNDHcXKxzH/aUSYboOuelV/rzl3/PqX/gMf8A5IP9S8f/AM/V/wCBP/5E/Kd/iT4btvDUOsNrWlJpcz+Ul4ZlMDN0Kh92OuR07UXXxB0DRrDT7ybWLC2tb4iS0le6RVuQDztO7nnjp3r9V2/4JXfAWTSo7FvhzpTWMT+Ytt9puvIRj1ITzdo6nt3puo/8EpvgDrNpa2958NtKu7exG22imubl0twTn5QZMDnmp/14y3/n3L/wGP8A8kT/AKk5h/z8j/4FL/5E/K7UfGmlaJqNra3mp6dZ3V0qNbRzXAVpgQFG0HG7Pt609fGOkJ4j/sb+0LWPVpDtFiZN1wzdfuDJx3zX6n6j/wAEp/gBrF9b3V58NdHurm0CrBJNcXMjQhSCNpMny49qJP8AglT8A5tfGrP8OdLbVFIYXhubkXGR/tiUH2xW68RMItoz/wDAV/8AJGP+oOL/AJo/+BP/AORPyxs/F+l6jqU1nb6jYTXVtnzoEuY2lixwdyhsjB9aba+L9L1BLpodQ0+RLJS87LcowhAGTu546V+p2n/8Eof2fdK1abULX4Z6Ra31xuEtzBc3Mc0u7725lkBOcnOeopulf8EnP2etBhvY7H4X6HYx6kpS8W2muIlugevmBZAG/wCBZo/4iJhP5Z/+Ax/+SD/UHF94/wDgT/8AkT8tbfxlpFxpk1/HqNjJp9u4Wa4iuY5IUORty4JUdRncRUieLNPk0uO8/tKzazmJC3JuUNuzjJO2TO04+fgE9K/UK3/4JJfs8WmiTaZD8LtCh025fzJrSKa5SCY8YLoJdrdO4PODTb3/AIJG/s66pocWl3fws0G60uBi8dlNJcPbRsecrGZNg5JPA70v+IiYT+Wf/gK/+SK/1Cxj0co/+BP/AORPy/u/E2m2MdvJPfWcMd1zC7zoqzD+8nPzL706816ysNQjs572yhvZgClu9wgkbPAIBPQnIBHX05r9P9X/AOCR37OfiG0s7fUfhXoGow6cAtpHdtNOtqB2jDudg9lxTtW/4JLfs869qttqF78MNFu9Qstotrqaa5ea3CnKhHMu5AD2Uij/AIiJhP5Z/wDgK/8Akg/4h/if54/e/wDI/L3+37M6kLNby1e83bXg8wCRCfVT8wGCDkgdalg1a1mZvJure427iTHKpAxwc9xzxyK/UBf+CTn7Pa+Kv7e/4Vjo39u5z/afnXIvOm3/AFwk39OOvSo9H/4JH/s6+HtYutRsfhXoNnqN8rpdXcElxHcXSt94SSCTfID/ALZNP/iI2F/ln/4DH/5If/EPq/8APH73/kfmFDrNtdxyTLd20iwLukKTKyxj3Izj8cUsWp27WP2lbq2a33+W0gmQqjYzjOdp49Ca/TjSP+CQ/wCzf4fsLy10/wCFHh+xtdSBW8ht5J4o7wHtIFkAf/gWaYv/AASA/Ztg8NS6LF8J/D9votxIJZdPhkuIrWZx0LRLIEb8QeeaX/ERMJ/LP/wFf/JC/wCIf4n+eP4/5H5lNqUIRWMtvtkBMbeeuWAGT3xwATwTT5NQgjELNMsazLuj3fLvHqM4+U+tfphf/wDBH/8AZt1Xw5a6PdfCnQrjSLElrexeW4+ywH1WLzNin3AFO1z/AIJCfs3+Jv7P/tL4V6DqA0kBbL7TJcS/ZQOgTdIdoBwRjoRR/wARCwn8s/8AwFf/ACQf6g4v+aP3v/I/Mz7fb/aFga4txPKcRwrOu7/6/wDwEGnG9iS5aBZl8+M8xhl8wEc9yD2z056V+m2p/wDBJL9nXWvEsOtXnwx0q81i2AEV7PdXUlxGBwAHMpIA9OlMg/4JGfs7WfjJ/EVv8NNNh15zk3y3t4spOCOSJh2OMdxR/wARCwn8s/8AwFf/ACQf6gYv+aP3v/I/KO28TabP8cJNLhs7eTUo9Ahu5L9JA2YfPkj+zjODkSBmJ9H6cZPV7gfzzj0/Gv008Mf8Ejv2d/B2t3mpaV8NdO0/UNQBFzcQX15HJOCckMRLyM4OPXmt3/h298FwoX/hD22r0H9rX3/x6nS8QMBFO8J6+S/+SCtwJjp2tKOnm/8AI/KPxGc+HNQ/69Zf/QDVL4eKG8BaN5isI5LRckHscluhzwAfrX6zXP8AwTX+Cl3bSQyeDC0cyGNx/a19yCMEf670JqGw/wCCZ3wS0axgt7fwYY4bdFiRRq198qjoP9dQ/EHLnFx5J/8Akv8A8kH+ouYdJx+9/wCR+CPwv1Tx5+xD4fvvBtx8OfE3jzwfHdXF1o2qeF1S5mNvNKXMNxCWU4BY85PrxitrwL4c8bftJ/tMeHPiH4n8K3ngbwz4OtZ49FstSaNtSv55gVd5Qn3AI+AD/d6npX7tH/gm98Gjhl8IyK399dXvlb6ZEwNLH/wTf+DMcpP/AAiBDOu1sarejcO2f33P1ryY8YYBOKXPyxd0rR/zuepU4Zx0252gqjVnK8tvS1vwPy2H3/MzzI5LfTOf0rk/g183w+tFHOZJiT2Hzt/+uv14/wCHbvwX24/4Q8/+Da+/+PVV0b/gmL8EfD2nJa2fg3yYY23qv9rXxweT/wA9vevXj4h4BNNQl+H+Z5P+oeOtbnj+P+R8v/8ABFVsfGv4zY+YPZ6GQT8uRtvMYBwTkc9OK/Q4Lk9BXBfBH9kT4f8A7Omt6xqXg/QW0m+8QJBFqMv2+5uPtKwhhECJZHA2726Y616OLNAelfmec46GNxcsRBWTP0bKcDLB4WNGTuyr5ftRVz7KnpRXmnpElFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABQTiignFJ7ABPFeNftofFix+EHwusdS1CTyYZNWitlbP8Rhlb/2U17IwyK/PL/g5O8W6h4L/Ye8JXOmxyyXEnjy0iYRg7th0/UT29wKxrSUabbNKSvKxrN+3t4Zij3JeBtnuKtWf/BQzw60f/HwOOnIr8TNB+I3jXVtqw6desrf7J5ruNGt/iNqoXydLul9yMV5EcdRXxTO72M+x+t+p/8ABRDSbOYeTIJM+vSs++/4KQ2LRNt8rd2ye/v7e9fmVpHws+J2rbWaFoVP95sYrQj/AGdPiVrOoCzjvIY7h8b/ADJtqRA8Dcfc8Y96qGZYec+WnK5NTDygryR+ifhf9vW88d+ITpumgM0kTSsyH/VpgjJ44yeB65q54DuW07V/t0m1pWdmbcPvE9a8o/Zb+AUXwC+HAt7y8XVPEGphbjU70LtDtg7YUBJwox0zycdK9LtdTt50T7PNBMki71eKVWVgDgtwc7ffHY9MV6+FXK+ZHFUkkc58RvF158O9Zt9Y01v9IswwBBwGBQqePfrXg3jX/gpbda7+7jvlyM8A8nBwfpz2r3H4gQfb7b5lxsZXKMOeeVz+GM+lfHvi79nDwhaeONUNxHNG81wZlVXwql+SPzry80xCoPnsdeBp+0fKmXfEf7fuqWxZt1y465AJFcH4k/4KG6pKGIaZfXIIruJPhXoGmWvkx2qyKAPvc1xvjj4F6Hr8LL9lSJuzIMYr52jxJhqk+STserPKa0I81rnD6l/wUY1LT0aQyTevQ8V9lf8ABEz4nL+0L+1R4N8SXkjNdWMt+IAT13WFwp/QmvgL4ifshzX4kj0243FgQE7819w/8EFfgnqXwR/aW8F2OpeZ5kj3zqM8D/QLmvZo1qFScXTlfVHmVrwi1LQ/byiiivojzwooooAKKKKACiiigAooooAKKKKACiiigAooooAbto2dPanUUrK1gExnrSkZFFFMBuyjaadRQA3afagKQe1OooAKDyKKKAG7T7UBSD2p1FABQeRRRQA3afagKQe1OooAKKKKACiiigAooooAKR13LS0UAR+T9KPJ+lSUU7snlXYj8n6UeT9Kkoouw5Y9iPyfpR5P0qSildhyrsM8r2FHlewp9FFw5V2GeV7CjyvYU+ii7DlXYjNupp3lCnUUahyxXQb5Qo8oU6igfKuwww5NKIuKdRQHKhvlChYwpp1FAuVAaKKKCgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACkb7tLSP92gBJfmRl6ZGM+lfHP8AwWxit5v2XfD63EMcy/8ACV27AOMgH7Jec/rivsY/eb6V8X/8Fw7kWv7LPhxm6N4st1/Ozvf8K8nOpNYKcl2Z2YC31mF+6Pzv8OSWsJVVtLePd0worstNn3ShVSPB9sV5foeq4Zc7iF713nh2/wDtJjO3C71yS2McivyFTlJas+691a2NnXPF6+G9KjmxCklxIsUeRzkgknr2ANSeDPH2n2OvaXZ+dthmulaWYnLSv1AJ9M44rxL9uf4h3fwz+FGmeIraPfDpeqQ/be6pFKjRhvwZlH41w3gn4123iayhmX92JAJFZW5BPQj+ea+24Vo05UnLqfLZ1WndJ7H3l8U/AGqfGHw7q+jR61qGiWd9ZLDHeWRHnws4kVgB/ujr33Y4618YfHz/AIJs/GTwVb+MNW+EPxG1l9W1TRtL8I6VZXs3ktaaajCefy5g7Bd0kf3dowrMuTuBHq3w2/bN1LwjYw2t3Z2+sW9sqrGzOY5RjGMsM7uh/Ouy1P8Ab+gFmfsPhllkxkNdXf7uN85BwIxuAPY1+gKKUEfOTk7nrHiOea30RTfSW63FvAPtTJxEH2qZGB92Ld+2O9fI3xC8axa14n1CaHc0MkmEY9wvf86Z8Vv2nNc+IitDeXiw2Xa2tR5aHvgnvXjPi/4jNp9rM3y2sUcZyx/hUdx6n271x4qNOUbz2NKPMn7m57R4L8XJr1pcQ+dG01owWVc5YZ6VoXX79tpXb7g15D+zMt5feG9W1y6j2f23drLbh+G8pVxu/E84rvLvVJkfHmHPavxnM3D6xJw2ufoGBlJ0I8+51fg6LT9O1tZLzYyufl39uK+tf+CfhtLr9r3wTLC0bEC9wVP/AE43Ffn3ruty3SSL5jIyj5D6V65/wR3+KetXf/BTL4a6JcXjzWc7apuB77dLvGH6gV7GQZ1GnXhh2t2kefmmXSqxdbsr/cfu9RRRX6wfIhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUj/dpaCcCj0Ab97NfDf8AwXv1D+z/ANkbwzJ/e8ZWqf8Aklf19y9V44rwT/goV+xKf27vg5pfhJfE3/CKnTNbi1j7X/Z327zNkFxF5ezzY8Z8/O7cfu4xzkebmuHnWwsqdNatP8jpwlSMK0Zy2TPxP8PeJ9xx5mOPSu08P+IZHcKsg49q+zNN/wCDeuSwbn4vCT/uVsf+3ldJpP8AwQoGljn4neZ/3Lm3/wBuq/NY8N5lt7P8Y/5n1X9q4TufE/ibw9Y/ETwnd6NqUa32n6jE0FzCy/K6H09COoPrivk6X9mbxR+z3qz2+nR3Gt+GVcm0aPLT2ydlcd8dM1+1uk/8EaY9Li2j4gRyf72g/wD3TVi8/wCCPMl0rKPiMqp2/wCKfBYfj9p/pXqZXlea4Kfu09O14/5nBjsXhK6s2fj/AOGfEsM9qVkDJJjkOrAqRz0x/Kumv7jT7S3tXa+LRzJuf90xKHsBn3xX6Za//wAEJrLxA5af4hq/p5nhxWx/5MCsWf8A4N9rGUAL8SYY9vTHhdeP/Jqvro5hmPLrh/8AyZHhywtFv4/wPy81zWGuH8u1huLhm4ChcVBonwIm8YajHdeIpGW1jYPFaA/exyMn/wCtX6o2X/BAmGzbd/wtCNj7+Gf/ALqrQT/ghT5S7V+KPHp/wjn/AN1V8/mMs7xKcYUeVesf8z08HHL6TUpSba8j8947e3srVIYo1ijiG1VXgADsBWZqc3DKK/RZ/wDghE7vu/4WoP8Awm//ALrqCf8A4IKtcAj/AIWovP8A1LX/AN118t/qvmn/AD7/ABj/AJnu/wBsYPa5+Y2vTFo5Fzhcc16d/wAEbYin/BVf4X9xu1Xt/wBQm9r7S1P/AIN6H1Hd/wAXc8vd/wBStn/28rrv2M/+CHDfsk/tT+F/iYfid/wkH/CNm7P9nf8ACOfZPtHn2k1t/rftT7dvnbvuHO3HGcjoy3hnMaWLp1akNFJN6x7rzM8VnGFlQnTg9WmvwPv6iiiv1s+LCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAopHfYpbBOPQZqK2uvtH8O0qBu9iRnHr+BAPNAE1FFFABRRRQAUUjtsQn0qIXZ/uMDnHfnpyOM45PJx09OaAJqKhe7KLuKcZ4ycEjA/+v7cZzQl6GC/K3zD0I59MHBz1PT8qAJqKhjuxLIVA5GemSOD64x+Gc06W4ESFvvY5wvJx9P6D/61AElIwyKZDdrO+1eeN31HY/Q8/XBqSgAUYFNK5NOooAbt/wA4o206igBNtIVzTqKAGhMUbfenUUWQDdp9qNtOooANtG2iigBNv+cUAYP/ANalooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDkvj5rPijw78DPGWoeB9Jtde8aafod7c+H9NupfKg1DUEgdraF3yNqvMEUtkYBJzXxB+yh+3bDpHxQWHxB+0R4h8QR+GfCM/iL4h+D/AIreCo/Bvibw9Gls1wt9pNpFplnLcW8ZiuEnQm6VE8spNuGJvuj4xfDdfjF8KfEXhVtb8R+Gh4h06bTxq+gX5sdV0syIVFxbTgHy5oyQysQy7lG5WXKn5t8Y/wDBN/xX+09BpNj8ffiV4e8eaP4d0nVNN0638MeDpPDM00mo6VdaRdXF1JJf3iyMbO8uAqQxwRh5CxRgEVAC1f8A/BWfwv4Q8KapqfjH4b/FjwFJb+GT4x0my13TrFbjxJpS3Nvbyz2whu5Vjkhe8s/Ntrtre5jF1H+6Pzbem+Pn/BSLwj+z/wCP/E3he88N+NNe1/w2fDcS2ekW1q7arca/eX1lp1vbmaeNfMaexdXMpjjQSxtvKiQp5n47/wCCUnij9oHwZqOn/FL4u2fiPUNO8BXvgPwjqGi+Do9GOjLdvZyT6jeRNczpeXTyabYZWMW1uEjmUQqJcpbuf+CYPi/x98XdY8deOfivo2seINb1nwRqs0Oj+DW0zTrdPDWp318kEMUl9cSAXK3mxmklkaN0ZxuRlgjAPT/hn+3ha/E74xp4Pg+GfxSsPs90NI1bWZrCzuNL8Pat/Z6ag+m3cltcyssiQyRhrmNHsjK6xLdNKRGcf4Qf8FLvDPxn8ZeGbHT/AAX4+0/Q/iEl+/gXxJqENjFpfjhrSJp2js9t01xG8kEcs8X2uG3WWGGR1Yha0fBf7H/i74aftB+Itc8O/Eiz0v4d+MPEb+Lda8MnwxHPqF3fvYx2ksKahJOUjspGhinaMWvnmQOBciN/LHj37Hv/AARf0X9jX4meHdU8Oz/CGHTfAtpfWvh28sfhLp9l4tmM0TQQHU9a855LvyoJJEdreG0kuDtMsjDzVlAPoD9p/wDaU1P4FfseeJPiLbeGZ/8AhILHR47iw0HUp4wyX8/lx29tcyQNJGFW4lRJHheRQoZlZxjPiWq+NNe/Zy/aA+H+h+KP2uPBeteNvFN1aRax4C8ZT6DoMOoW92xhM2hQW1tHqKy/aU2W0d1PeLKivE7PIBcJ9I/Ef4F2vx1/Z81PwH45ni1CPxJo503WbrSo5NNEkrxgSXFqDLLJbMJMyR/vXaNgp3uy7j4n4i/YW+KnxjuvBekfEz44ab4i8E+BvEul+KIIdG8DR6Tr2u3Ol3kd3YrqN893cW7J5sUbzCzs7QyMvyGBC0ZAPmX4/wD/AAVq8fWXwT+IK/DnS/GDadpvwV1rx3pHjbWrPQ/t1hqFte3NtE88MU/leQrQmNUFmzFtpYlQ7j6ak/4Kg+F/D2oaxY+KPAPxM8Fa9peoeGraPSNXsLE3d3b+INU/s3T75BDdyosJug4kSR47mMRNuiBKIfOPFn/BF3UNa+B9z4H0/wCKFjZWusfDjXPh1q91ceFpLiSeG/vJryC4gAvkELQSTupV/N8xCQGizmvTP2rf+CbTftL/ABQ8YeLYfG39gapr2geFNN0wNpBu49MvfD+v3et211KBPH9oikluEieEeU2xH2ygyAoAcZ+2J/wUR1TwB8c/BnhnwLo/jDVdS8O/FrT/AAT4p0rT7Gxmn8TQXfhTU9Xit7R5pVVFEgsy8sr2wQwSeY4hDsfevhj+1Fo/xq+B/ijxNDpfirw3ceFZ7/Ttc0fUrW3XVtGvLYb5ICA8ttI+xkdHjklgkWRGWRlOa8JvP+CX3xCv/iDJ4+k+NGir8RZfiFZ/EI3sfgZl0kT23hm60BbIWf8AaBk+zslwHYm4MuxGQSBmEy+rfCX9jnXvhr8PfE2kXXjTSdX1L4kajq2s+NdRPh02/wDaN5e26wR/Yo1uSLWG3jjhjVJjcu8cKhpTIWlYA860D/gqv4R0D4UaPrlr4V+Mvjzw5onhHRfE/jDxTFpenM3hiz1C0W6jutRijnhM04tt1zPDpVvceUrfLGA8St9c2eqQ38cUkTrJHModHU5VwRuBU9wRzx7V8T2f/BIrxN4T+DupfD3wz8YLPR/CPj7wdong3x+k/g2O7v8AVIrDTI9JuLnTJzdKlhNdWMaxt9oivkjZI3RchxJ9peH/AA7beGNJs7GyjWCzsYFt4IlHEaKMKMnJwAAP55PNAF6iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP/2Q==)

Obr. 9: Štruktúra AAS všeobecne

* + 1. AAS Submodel

AAS obvykle obsahuje viacero submodelov. Submodely definujú vlastnosti a služby (metódy, funkcie). Submodely môžu obsahovať vlastnosti, funkcie, eventy, referencie, vzťahy. Toto umožň1uje poskytovanie veľké množstvo údajov pre submodely. AAS používa striktný for mát ktorý organizuje dáta ako strom vlasností. Rovnaký formát je použitý pre štruktúru vlastností submodelov. AAS a submodely definujú API pre získanie AAS informácii ako aj informácii v AAS submodeloch.



Obr. 10: AAS Submodel príklad

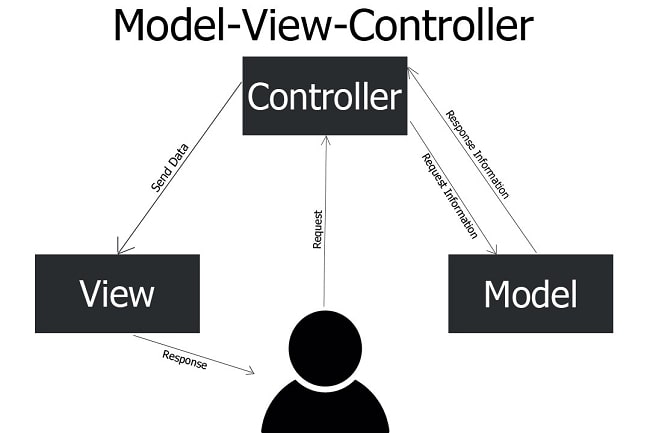
* 1. MVC

Model-view-controller je architektonický vzor, ktorý rozdeľuje aplikáciu do troch hlavných skupín komponentov:

* Model
* View
* Controller

Tento vzor pomáha dosiahnúť separáciu záujmov pri tvorbe web aplikácie. Použitím tohto vzoru použivateľské requesty su presmerované do controllera, ktorý je zodpovedný za prácu s modelom aby urobil danú operáciu pre používateľa a vrátil výsledky. Controller následne používa View na zobrazenie výsledkov pre používateľa s výsledkami operácie.

ZDROJ - <https://www.geeksforgeeks.org/mvc-design-pattern/>



Obr. 11: Model-View-Controller komunikácia

* + 1. MODEL

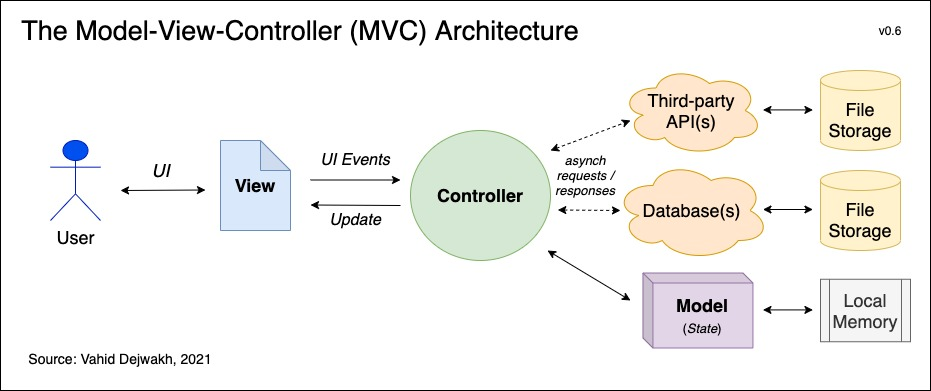
Model v MVC aplikácii reprezentuje spracované dáta a údaje, ktoré aplikácia potrebuje na spustenie, najmä ako in-memory, čiastočná alebo lokálna reprezentácia údajov, ktoré sa nachádzajú v databázach. Metódy, ktoré potrebuje aplikácia na vytvorenie, čítanie, aktualizácie alebo vymazanie (CRUD), by mali byť implementované v modeli, čím je umožnené aplikácii pristupovať k týmto údajom.

* + 1. VIEW

View je časť aplikácie, ktorú používateľ vidí a interaguje s ňou. Pre front-end aplikácie je to DOM. V prípade rozhrania API alebo inej mikroslužby na strane servera by sme mohli považovať zobrazenie za výstup systému, t. j. odpoveď zo serveraView je zodpovedný za náhľad dát z modelu pre používatela. View vie ako pristúpiť k dátam, ale nevie načo dáta sú ani s nimi nevie manipulovať, view iba reprezentuje zobrazuje dané dáta pre použivateľa.

* + 1. CONTROLLER

Controller je mozgom aplikácie, kde je zabudovaná väčšina logiky aplikácie. Controller je spostredkovateľ, ktorý ťahá dáta z modelu a nasledne ich posielana na zobrazenie (View), aby sa vykreslili na stránke. V opačnom smere Controller prijíma udalosti z používateľského prostredia, spracováva ich a v prípade potreby odosiela údaje do modelu (pridanie údajov z používateľského vstupu do modelu).



Obr. 12: MVC komunikácia

OBR, texty - https://vahid.blog/post/2021-04-16-understanding-the-model-view-controller-mvc-pattern/

* 1. DOM vs. Virtual DOM

Zdroj - https://www.keitaro.com/insights/2023/07/12/dom-vs-virtual-dom-understanding-the-differences/

* + 1. Document Object Model

Document Object Model alebo skrátene DOM je programovacie rozhranie pre webové dokumenty. DOM predstavuje štruktúru HTML webovej stránky, ku ktorej je možné pristupovať a manipulovať s ňou pomocou JavaScriptu. Keď sa webová stránka načíta prehliadač vytvorí DOM, ktorý pozostáva zo všetkých prvok HTML komponentov na stránke.

Pomocou JavaScriptu je možné DOM upravovať a aktualizovať webovú stránku. Pre príklad pokiaľ chce developer zmeniť textový obsah tlačidla, pomocou JavaScriptu vie prvok vybrať a následne pomocou DOM jeho textový obsah aktualizovať.

A diagram of a computer system

Description automatically generated

Obr. 13: Reprezentácia DOM

* + 1. Virtual Document Object Model

Virtual DOM je kľúčový koncept pri využívaní fremeworkoch, ako je React.js, ktorý výrazne zlepšuje výkon aktualizácie skutočného DOM. Keď nastane zmena stavu v komponente, React namiesto priamej aktualizácie skutočného DOM vytvorí “ľahkú” repliku DOM ako Virtu DOM.

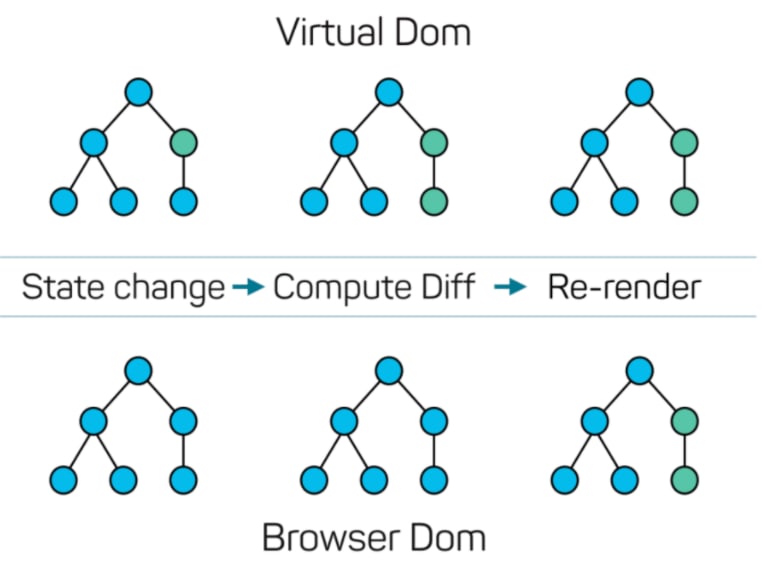
React potom porovná aktualizovaný Virtual DOM s predchádzajúcim, aby detekoval zmeny, ktoré nastali, ktoré je potrebné použiť na skutočný DOM. Akonáhle sú zmeny určené, React aktualizuje skutočný DOM optimalizovaným a efektívnym spôsobom bez zbytočného opätovného vykreslovania.

* + 1. Rozdiely medzi DOM a Virtual DOM

Najzásadnejší rozdiel je, že DOM reprezentuje aktuálnu HTML štruktúru webovej stránky, zatiaľ čo Virtual DOM je “ľahká” replica DOM.

Tab. 1: Rozdiely medzi DOM a Virtual DOM

|  |  |
| --- | --- |
| DOM | Virtual DOM |
| Reprezentuje webovú štruktúru HTML kódu. | Slúži ako zjednodušená reprezentácia DOM. |
| Je možná manipulácia so zobrazenými elementami. | Nie je možná manipulácia elementami zobrazeného na obrazovke. |
| Modifíkacia v DOM spôsobí aktualizáciu celého DOM stromu. | Modifikácia aktualizuje iba relevantný uzol v strome. |
| Aktualizácia stránky je pomalá a neefektívna. | Proces aktualizácie je rýchly a efektívny. |



Obr. 14: Priebeh od zmeny po vykreslenie

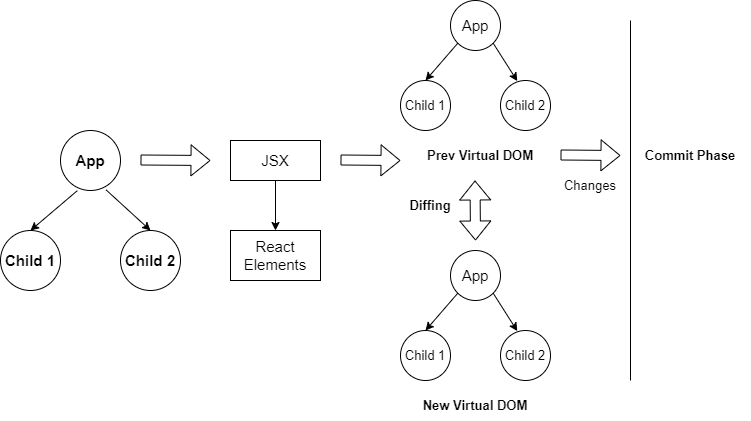
OBR - <https://dev.to/adityasharan01/react-virtual-dom-explained-in-simple-english-10j6>

1. **Použité technológie**
   1. React.js

React alebo React.js je open-source JavaScript knižnica, vytvorená spoločnosťou Facebook, ktorej cieľom je zjednodušiť proces vytvárania interaktívnych použivateľských rozhraní. Použivateľské rozhranie je vytvorené pomocou React komponentov, pričom každý zodpovedá za výstup časti HTML kódu, ktorý môže byť opätovane použitý.

Pri vyvíjaní frontendu aplikácie React používa znovu použitelné komponenty, ktoré môžu byť považované za nezávislé Lego bloky. Tieto komponenty sú jednotlivé časti finálneho UI, pričom pri použití viacerých tvoria celkovú frontend aplikáciu.

Hlavnou úlohou Reactu v aplikáciach je spracovať zobrazenie aplikácie ako View pri vzore MVC, tým že poskytuje najlepšie a najefektívnejšie prevedenia vykresľovania na web stránke. Namiesto toho aby sa celé použivateľské rozhranie bralo ako jeden celok, React.js umožňuje vývojárom toto UI rozdeliť na viacero jednotlivých používateľských komponentov, ktoré formujú celé používateľské rozhranie. React.js kombinuje rychlosť a efektivitu JavaScriptu s efektívnou metódou manipulácie s DOM objektami na rýchlejšie vykreslovanie webových stránok a vytváranie vysoko dynamických a responzívnych webových aplikácii.



Obr. 15: Priebeh vykreslenia pri React.js

* 1. ASP .NET

Microsoft .NET je open-source cross-platformová iterácia .NET Frameworku. .NET može byť použitý na vytvorenie rôzneho druhu aplikácia ako sú desktopové aplikácie, mobilné aplikácie, webové aplikácie a IoT zariadenia, Keďže .NET je open-source má výhodu veľkého počtu knižníc, jazykov a editorov. Programátor môže písať .NET aplikácie použitím C#, Visual Basic alebo F#.

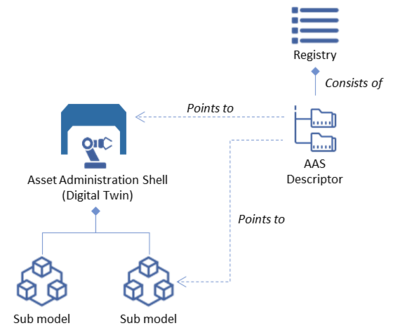
* 1. Eclipse BaSyx

Eclipse BaSyx je platforma s otvoreným zdrojom pre automatizáciu novej generácie. Eclipse BaSyx preto poskytuje bežné a opakovane použiteľné komponenty Industrie 4.0. Eclipse BaSyx umožňuje jednoduché vytváranie nových funkcií okolo oficiálneho HTTP REST rozhrania AAS. Medzi hlavné komponenty patri AAS ako hlavný pilier pre vývoj Industry 4.0 aplikácia.

* + 1. Eclipse BaSyx AAS Server

AAS server komponent poskytuje prázdny AAS server ktorý môže byť použitý ako host pre viacero AAS alebo Submodelov. BaSyx AAS server je spusti pomocou docker-compose file. Pri spustení AAS servera bez konfigurácie bude vrátený prázdny JSON []. Na konfiguráciu AAS Server pri použití docker kontajnerov slúži aas.properties súbor, kde sú nakonfigurované nastavenia ako napríklad cesta k súboru, ktorý ma byť použitý ako zdroj pre AAS Server.

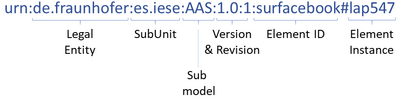
* + 1. Eclipse BaSyx AAS Registry

AAS Registry je centrálny komponent Asset administration shell (AAS) infraštruktúry, ktorý slúži na zobrazenie všetkých dostupných AAS serverov a ich submodelov pomocou jedinečných ID a ukladá dodatočné meta-data pre AAS. BaSyx AAS Registry registruje AAS deskriptory ktoré popisuje Asset Administration Shell a aj submodely AAS. Registry komponent je dostupný ako docker kontajner ako súčasť open-source BaSyx middleware. 

Obr. 16: Registry komponent v Eclipse BaSyx

AAS musia byť registrované v Registry komponente aby sa zapezpečilo, že ich je možné nájsť podľa ich ID. Za jeho registráciu je zodpovedný komponent, ktorý pridáva nový AAS komponent.

Registry komponent v Eclipse BaSyx nemá stanovený pevný formát pre ID pre AAS alebo submodel, avšak je doležité aby každé ID bolo jedinečné.



Obr. 17: Príklad pre ID pre AAS v Registry komponente

Eclipse BaSyx navrhuje formát a časti ako by malo ID vyzerať:

* Legal Entity – jedinečný identifikátor entity, ktorý využíva AAS
* SubUnit – odpovedá časti entity, napríklad divízii ktorá zodpovedá za aktívum
* SubModel – definuje submodel, ktorý je referovaný URN, ukazuje na AAS v tomto prípade alebo je to typ submodelu
* Version – definuje verziu AAS
* Revision – mala by byť inkrementovaná každou zmenou AAS alebo submodelu
* Element ID – definuje typ aktíva, ktorý je referovaný AAS alebo submodel
* Element Instance – indentifikuje konkrétne aktívum
  1. Docker

Docker je open-source platforma pre vývoj a spúšťanie aplikácii. Docker vám umožňuje oddeliť aplikácie od štruktúry aby ste mohli rýchlejšie dodávať softvér. Docker poskytuje možnosť zabaliť aplikáciu a spustiť ju v izolovanom prostredí nazývanom Docker Container. Izolácia a bezpečnosť vám umožnia súčasne spúšťať viacero aplikácii cez kontajnery na danom hostiteľovi. Kontajnery nie sú veľkostne náročné a obsahujú všetko čo je potrebné pre spustenie aplikácie, takže sa používateľ nemusí spoliehať na to čo je nainštalovane na hosťujúcom zariadení. Docker klient komunikuje cez Docker daemon, ktorý zabezpečuje build a následne beh Docker kontajneru. Medzi najzákladnejšie prvky Dockeru patrí Docker Image a Docker Container. Docker Image je read-only template (predloha/recept) s inštrukciami pre vytvorenie Docker kontajneru. Docker kontajner je bežiaca inštancia Docker image-u. Jednotlivé kontajnery sú izolované od iných a takisto aj od hosťujúceho zariadenia avšak dokážu aj medzi sebou komunikovať.

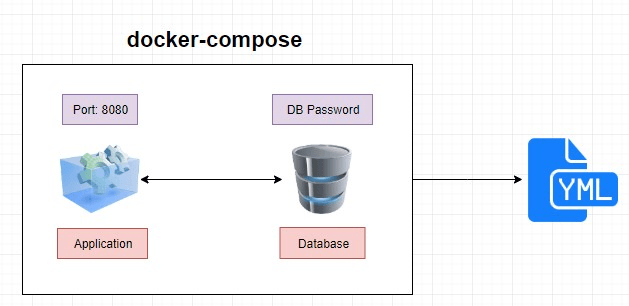
**A screenshot of a computer

Description automatically generated**

Obr. 19: Docker

* + 1. Docker compose

Docker compose je nástroj, ktorý nám umožňuje definovať a zároveň spustiť viacero Rocker kontajnerov naraz z jedného súboru. Docker-compose využíva YAML súbor na konfiguráciu jednotlivých aplikácii bežiacich v docker kontajneroch.

****

Obr. 20

* 1. MySQL
  2. MongoDB

1. Návrh aplikácie

V danej časti je zobrazený návrh a štruktúra aplikácie, ktorá sa odvíja z teoretickej časti a použitých technológií. V danej téme ide o vytvorenie web aplikácie, ktorá pozostáva z klientskej a serverovej časti. Pri návrhu aplikácie je potrebná špecifikácia požiadaviek, aby boli splnené všetky funkcionality, ktoré musí aplikácia poskytovať. Pri klientskej časti je dôležité vytvoriť priateľské užívateľské rozhranie, ktoré nebude náročné na obsluhu, pri vývoji serverovej časti treba vytvoriť API komunikáciu a následne nasadiť aplikáciu v IIS.

* 1. Špecifikácia požiadaviek

Špecifikácia požiadaviek je určená na presné definovanie a opísanie funkcionálnych a nefunkciaonálnych požiadaviek, ktoré budú následne implementované v aplikácií. Cieľom špecifikácie požiadaviek je poskytnutie požiadaviek, ktoré budú jednoznačne opisovať cieľové správanie aplikácie a poskytovať potreby a očakávania použivateľa.

* + 1. Funkcionálne požiadavky
* Aplikácia umožní použivateľovi nahrať súbor s AAS serverom za behu aplikácie
* Aplikácia poskytuje používateľovi zoznam AAS serverov
* Používateľ má prístup k detailným údajom AAS servera a takisto aj prístup k jednolivým submodelom
* Systém využíva stromovú štrukutúru na prehladné zobrazenie údajov ohľadom jednotlivých serverov
* Aplikácia umožňuje použivateľovi vymazať AAS server z databázy
* Pokiaľ AAS server obsahuje stiahnuteľný súbor s AAS serverom, aplikácia umožňuje používateľovi stiahnúť tento súbor, ktorý sa nachádza v submodely
* V zozname serverov je umožnená funkcionalita pre vyhľadávanie konkrétneho servera podľa názvu pomocou vyhľadávacieho poľa
* V zozname serverov je možnosť prepínania medzi zobrazením AAS serverov a OPC UA serverov
* Pri zobrazení OPC UA serverov je možné aplikovať filter pre zobrazenie všetkých/online/offline serverov
* Používateľ môže z zoznamu jednotlivé OPC UA servery spustiť, pozastaviť alebo vymazať
* Aplikácia pri stiahnutí OPC UA servera zabezpečí rozipovanie .zip súboru a obsah súbor uloží do ankonfigurovaného priečinka kde bude server uložený a pridá server do databázy dostupných OPC UA server, pokiaľ je už daný subor v databáze prebehne iba stiahnutie súboru bez rozipovania
* Aplikácia umožnuje prístup k informáciam o jednotlivých OPC UA serveroch, ktoré používateľovi zobrazí základné informácie
* Aplikácia umožňuje spustenie OPC UA serverov za behu aplikácie a ich manažovanie
  + 1. Nefunkcionálne požiadavky
* Systém musí zabezpečiť perzistenciu dát po vypnutí aplikácie pre OPC UA servery aj pre AAS servery
* Pri vypnutí aplikácie, systém musí zabezpečit vypnutie všetkých bežiacich OPC UA serverov
* Pri vymazaní OPC UA servera, systém musí zabezpečiť že daný server je vypnutý, v prípade že je aktívny tak bude vypnutý
* Systém musí byť navrhnutý tak, aby podporoval multiplatformovosť a bol plne kompatibilný s inými platformami
  1. Architektúra aplikácie

Pri návrhu architektúry pre webovú aplikáciu na správu OPC UA serverov, sme sa sústredili na multiplatformovosť a spoľahlivosť a efektívne spracovanie dát s dôrazom na jednoduchosť použitia. Ako bolo spomenuté aplikácia bude pozostávať z frontendu a backendu, pričom budú musieť byť zakomponované v návrhu aj databázy na perzistenciu údajov o OPC UA serveroch ale aj AAS serveroch. Vzhľadom na požiadavku kompatibility s rôznymi platformami bude pre beh aplikácia a ostatných komponentov využitý Docker, vďaka ktorému vieme zabezpečiť multiplatformovosť a takisto komunikáciu medzi komponentami. Aplikácia bude pozostávať zo 4 hlavných komponentov pričom sa jedná o samotnú aplikáciu s frontendom a backendom, ďalej databázou pričom využijeme dva typy databáz pre uchovanie údajov, komponentov Eclipse BaSyx AAS Server a AAS registry, pre prácu s AAS a nakoniec nástrojami pre prípadnu prácu priamo s databázou. Aplikácia bude medzi jednotlivými komponentami komunikovať prostredníctvom REST API, ktoré bude poskytovať prístupu k dátam.

A diagram of a software company

Description automatically generated with medium confidence

Obr. 2 Návrh architektúry pre webovú aplikáciu

* 1. Štruktúra dátového modelu

Štruktúra dátového modelu je hlavným prvkom pre organizáciu a správu dát v systéme. Poskytuje jednoznačné definovanie jednotlívých dátových modelov pre správne fungovanie systému. Pri definovaní dátového modelu vo webovej aplikácií sme zakladali na jednoduchosti pre nami definovaný dátový model. Pre správu OPC UA serverov sme použili databázu MySQL kde sme definovali jeden dátový model pre OPC UA server. Komponenty Eclispe BaSyx využívajú NoSQL databázu MongoDB, ktorá nemá preddefinovanú schému, čo nám umožňuje flexibilitu pri práci s údajmi.

A screenshot of a computer

Description automatically generated

Obr. 3 Dátový model pre OPCUA Server

A screen shot of a computer code

Description automatically generated

Obr. 4 Dátový model v JSON formáte pre Eclipse BaSyx AAS Registry

A screen shot of a computer screen

Description automatically generated

Obr. 5 Dátový model v JSON formáte pre Eclipse BaSyx AAS Server

A screen shot of a computer code

Description automatically generated

Obr. 6 Dátový model v JSON formáte pre Eclipse BaSyx AAS Submode

* 1. Grafické rozhranie

Grafické rozhranie je kľúčovým aspektom medzi interakciou používateľa a aplikácie, ktorá umožňuje používaťelovi ľahko a efektívne ovládať a spravovať aplikáciu. Pri návrhu GUI sme vychádzali z 3 hlavným komponentov, s ktorými bude uživateľ interagovať. Ide o Server List, kde bude mat dostupne všetky serveri odkiaľ ich bude možné spúsťať, zastaviť a podobne. Filtre pre filtrovanie požiadaviek pre rýchlejšie hladanie v liste. Ďaľšie dva komponenty budú niesť informáciu o zvolenom AAS serveri po uživateľovej interakcií s AAS Serverom z listu položiek, jeden o jednotlivých submodeloch AAS servera a druhý všeobecné informácie o AAS serveri.

A screenshot of a computer

Description automatically generated

Obr. 7 Návrh GUI pre hlavnú stránku webovej aplikácie

Aby mal možnosť užívateľ zistiť detailnejšie informácie o jednotlivých OPC UA serveroch, po kliknutí na server v OPC UA liste sa zobrazí modal, kde budu informácie o danom serveri.

A white rectangular box with black text

Description automatically generated

Obr. 8 Návrh modalu pre detailné zobrazenie informácií o OPC UA serveri

* 1. REST API

1. Implementácia aplikácie
   1. dasda
3. Popis šablóny

V šablóne sú použité viaceré druhy polí. Pevné polia nedovoľujú prepisovať ich obsah. Naopak polia, ktorých text je vyznačený červeným písmom musí byť zmenený, alebo vymazaný. V šablóne sa nachádzajú selektívne polia, ktoré umožňujú výber z viacerých variant. S poľami sa dá pracovať na karte vývojár, ktorú je možné vložiť v nastaveniach.

* 1. Popis nastavenia strany

OKRAJE: hore 3cm, dole 3cm, vľavo 3cm, vpravo 2,5cm, orientácia: na výšku

PAPIER: typ: A4, šírka: 21cm, výška:29,7cm,

ROZLOŽENIE: hlavička: 1,5cm, päta: 1,5cm, zvislé zarovnanie: hore

* 1. Popis nastavenia štýlov

NADPIS 1.ÚROVNE: založiť na: žiadnom, štýl nasledujúceho odseku: základný, Písmo: Times New Roman, 22 b, Tučné, Vľavo, Riadkovanie: jednoduché, Medzera Za: 16b, Kontrola osamotených riadkov, Zlom strany pred odsekom, Zviazať s nasledujúcim, Zviazať riadky dohromady, Viacúrovňové + Úroveň: 1 + Štýl číslovania: 1, 2, 3, … + Číslovať od: 1 + Zarovnanie: Vľavo + Zarovnať na: 0 cm + Zarážka: 1,27 cm, Štýl: Prepojené, Automaticky aktualizovať, Zobraziť v galérii štýlov

NADPIS 2.ÚROVNE: založiť na: žiadnom, štýl nasledujúceho odseku: základný, Písmo: Times New Roman, 16 b, Tučné, Zarážka: Vľavo: 0 cm, Opakovaná zarážka: 0,6 cm, Vľavo, Riadkovanie: jednoduché, Medzera Pred: 16 b, Za: 14 b, Kontrola osamotených riadkov, Zviazať s nasledujúcim, Zviazať riadky dohromady, Viacúrovňové + Úroveň: 2 + Štýl číslovania: 1, 2, 3, … + Číslovať od: 1 + Zarovnanie: Vľavo + Zarovnať na: 0 cm + Zarážka: 0,6 cm, Štýl: Prepojené, Automaticky aktualizovať, Zobraziť v galérii štýlov

NADPIS 3.ÚROVNE: založiť na: žiadnom, štýl nasledujúceho odseku: základný, Písmo: Times New Roman, 14 b, Tučné, Zarážka: Vľavo: 0 cm Opakovaná zarážka: 0,6 cm, Vľavo, Riadkovanie: jednoduché, Medzera Pred: 14 b Za:14 b, Kontrola osamotených riadkov, Zviazať s nasledujúcim, Zviazať riadky dohromady, Viacúrovňové + Úroveň: 3 + Štýl číslovania: 1, 2, 3, … + Číslovať od: 1 + Zarovnanie: Vľavo + Zarovnať na: 0 cm + Zarážka: 0,6 cm, Štýl: Prepojené, Zobraziť v galérii štýlov

ZÁKLADNÝ: založiť na: žiadnom, štýl nasledujúceho odseku: základný, Písmo: Times New Roman, 12 b, Zarážka: Prvý riadok: 0,8 cm, Podľa okraja, Riadkovanie: 1,5 riadka, Kontrola osamotených riadkov, Štýl: Prepojené, Automaticky aktualizovať, Zobraziť v galérii štýlov

POPIS: Písmo: 9 b, Kurzíva, Farba písma: Text, Riadkovanie: jednoduché, Medzera

Za: 10 b, Štýl: Skryť, kým nie je použité, Zobraziť v galérii štýlov, Priorita: 36, Podľa: Normálny

Použitie: na popis obrázkov, tabuliek a grafov

NADPIS NEČÍSLOVANÝ: Bez odrážok a číslovania, Štýl: Prepojené, Zobraziť v galérii štýlov Podľa: Nadpis 1.úrovne

**Záver**

V závere je potrebné v stručnosti zhrnúť dosiahnuté výsledky vo vzťahu k stanoveným cieľom.

**Zoznam použitej literatúry**

1. **Prata, Stephen.** *Mistrovství v C++.* [prekl.] Vozák David, Beroun Libor, Dokoupil Petr, Ptáček Lubomír Sokol Boris. 3. Praha : Computer Press, 2007. s. 1119. ISBN: 8025117491.

**Prílohy**

Príloha A: Štruktúra elektronického nosiča . . . . . . . . . . . . . . . . . . . . . . . . . II

Prílohy sú „číslované“ písmenami A, B, C...

Príloha A: Štruktúra elektronického nosiča

Štruktúra elektronického nosiča (CD, DVD, atď.) s kompletnou digitálnou verziou tlačenej formy práce, vrátane príloh, funkčných zdrojových kódov, programov (aplikácií) pripravených na inštalovanie a iných, vo všeobecnosti ťažko opísateľných ale potrebných častí. Elektronický nosič musí mať obal, pomocou ktorého sa pevne pripevní do práce. Nosič musí mať popis obsahu a meno autora.