# **CA-670 Concurrent Programming**

|  |  |
| --- | --- |
| Name | Nikhil Mittal |
| Student no. | 19210509 |
| Programme | MSc. Data Analytics |
| Module Code | CA670 |
| Assignment title | Efficient Large Matrix Multiplication in OpenMP |
| Submission Date | 20th April, 2020 |
| Module Coordinator | David Sinclair |

I declare that this material, which I now submit for assessment, is entirely my own work and has not been taken from the work of others, save and to the extent that such work has been cited and acknowledged within the text of my work. I understand that plagiarism, collusion, and copying are grave and serious offences in the university and accept the penalties that would be imposed should I engage in plagiarism, collusion or copying. I have read and understood the Assignment Regulations set out in the module documentation. I have identified and included the source of all facts, ideas, opinions, and viewpoints of others in the assignment references. Direct quotations from books, journal articles, internet sources, module text, or any other source whatsoever are acknowledged, and the source cited are identified in the assignment references. This assignment, or any part of it, has not been previously submitted by me or any other person for assessment on this or any other course of study.

I have read and understood the referencing guidelines found recommended in the assignment guidelines.

Name: Nikhil Mittal Date: 20th April 2020

# **Assignment 2**

Efficient Large Matrix Multiplication in OpenMP

# **Introduction:**

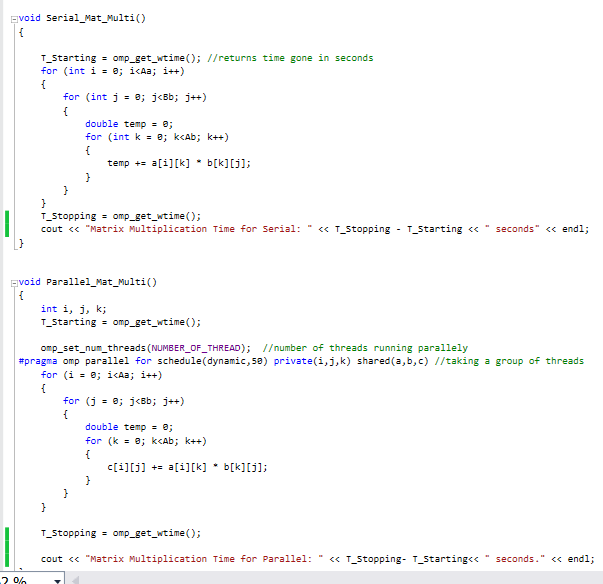
OpenMP is a library that supports shared memory multiprocessing. The OpenMP programming model is SMP (symmetric multi-processors, or shared-memory processors): that means when programming with OpenMP all threads share memory and data.

OpenMP has directives that allow the programmer to:

* specify the parallel region (create threads)
* specify how to parallelize loops
* specify the scope of the variables in the parallel section (private and shared)
* specify if the threads are to be synchronized
* specify how the works are divided between threads (scheduling)[1]

OpenMP consists of a set of compiler#pragmas that control how the program works. The pragmas are designed so that even if the compiler does not support them, the program will still yield correct behavior, but without any parallelism.[2]

**The Design of the Program:**



The program was compiled and run on Microsoft Visual Studio 13.

The programs consist of 2 blocks Serial\_Mat\_Multi() & Parallel\_Mat\_Multi() and in which serial function is being used to multiply normally matrix multiplication and get the result using the omp\_get\_wtime( ) while the parallel block is being multiplied using pragma and threads so that matrix is multiplied parallelly and get the efficiency of the matrix using omp\_get\_wtime.

The program has three function blocks: -

 Matrix\_Get is used to get the matrix size from the user.

Serial\_Mat\_Multi() is used to multiply the matrix normally serially with one thread and get the matrix multiplication time in seconds.

Parallel\_Mat\_Multi() is used to multiply the matrix parallelly with the different number of threads and the matrix multiplication time in seconds.

The program has two blocks. In the serial block, only one thread is performing the task. For measuring the time taken to perform this task, the timer used is provided by <omp.h>. So, at the start of the function to sum up the values of the array, started the timer i.e.

*T\_Starting = omp\_get\_wtime();*

Once the function calculates the sum of the large array, the time is noted again i.e.

*T\_Stopping = omp\_get\_wtime()*

Now the actual time taken to perform the task would be printed

*cout << "Matrix Multiplication Time for Serial: " << T\_Stopping - T\_Starting << " seconds" << endl;*

The second block performs the same task but with multiple threads. In the second block

*#pragma omp parallel for schedule(dynamic,50) private(i,j,k) shared(a,b,c)*

is used to tell the compiler that the parallel block starts from here. The above statement will create a private copy of the variable for each thread and will divide the loop in each thread equally. Each thread will get a part of the array and they will calculate the sum of that part and will store the result in their private variable (i,j,k). Once all the threads have finished their task, the master thread will sum up all the values given by the threads and the result will be stored in i,j,k variable. The header <omp.h> must be included to have multiple threads.

The number of threads can be changed by calling the OMP\_NUM\_THREADS variable inside the parallel block function by

*omp\_set\_num\_threads(NUMBER\_OF\_THREAD)*

It can be set manually outside the code by running the following command.

*#define NUMBER\_OF\_THREAD 4*

In the above example, the number of threads is set to 4.

The program is compiled and executed by pressing thisA picture containing food

Description automatically generated

**Efficiency Proof of the program**

The program was run with a different number of threads. Below are the outputs for the different number of threads.

1. Number of threads =1

**![A screenshot of a cell phone

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAeAB4AAD/4RD0RXhpZgAATU0AKgAAAAgABAE7AAIAAAAOAAAISodpAAQAAAABAAAIWJydAAEAAAAcAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG5pa2hpbCBtaXR0YWwAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzQ0AACSkgACAAAAAzQ0AADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA0OjE5IDIwOjM0OjU1ADIwMjA6MDQ6MTkgMjA6MzQ6NTUAAABuAGkAawBoAGkAbAAgAG0AaQB0AHQAYQBsAAAA/+ELIGh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjAtMDQtMTlUMjA6MzQ6NTUuNDQxPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm5pa2hpbCBtaXR0YWw8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgBnwJEAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A94PhTSz1+3f+DG4/+LpP+ET0r0vf/Bjcf/F1tVgyeJTG2JI7KMkBgst+qNg8jII4p2bC9gt/BWiWsCw28V5HGucKuoXHc5P8fqc0Q+CtEt/M8mK8TzXMjkahcfMx6k/P7Cpl1e+lhWS3sbWVW5VhfDafxCmrOkamdTt5JCkSGOTbmKYSqwwCCGAGeDStYWhU/wCET0r0vf8AwY3H/wAXUS+CdDW6e5WK7E7oEaT+0LjJUEkD7/ufzrQ1bXtI0CGObXdVsdNikbaj3lykKu2M4BYjJqVNTsJILSeO9t3ivSBayLKpWfKlhsOfmyoJ4zwCaNxmW/grRJZ4ppIrxpIc+Wx1C4+XIwcfP6cUkPgnQ4HmaGG7Rp33yEahcfO2AMn5/QAfhW09zBHcxW8k8azzBjHEzgM4XG4gdTjIz6ZFCXUD3Ulsk8bTxKrSRBwWQNnaSOoBwceuDSshWRi23gnQ7K2S3tYbuKGMYVF1C4AH/j9RXvgDw7qOz7da3NwI87RJf3BHIwRjfyCO1dJRQ0mrMLK1jmU+HvhuPTzYR2dwtmc5t1v7gR4JyRt34x7dKda/D/w5Y28kFjaXFtDIctFDf3CLnGM4D4H4Vv3F1b2cPm3c8cEe5U3yuFG5iFUZPckgAdyQKlo5ULlS6HMWXw68Maa0jadYTWfmABxb3s8YbHTIVwM89aZb/DTwna3i3ltpjxXSknz0vJw5J6ktvyc+9dVRRyrsHJHscuvw48LpffbksJhebtxuRfT+ae3L78kY4xnpTbj4aeFbqZpbnT5ppGfzNz31wSrYA3D5+D8o5GDwK6a4uIbS2luLqWOCCFC8ksjBVRQMkkngADvT1YOoZSGUjIIPBFLlj2Dkj2Mb/hEtK9L3/wAGNx/8XWfffDTwnqc6zajpbXUq4Aklu5mbA6DJfpz06V0puYBdi1M8f2goZBDvG8oDgtt64yQM+9S02k9xtJqzOWl+GvhOewSxl0otaxklIDdTbEJzkgb8A8nketXU8H6RHGqIt4FUYAGo3HA/77rcoosgUUtkc9F4G0KCyFpDDeRwKu0Imo3AAHpxJUVl8O/DOmFzptjNaeYAHFvezxhsdMgOAT7101FFle4cq002OYtPhz4WsLhp7LTngnYENLHdzB2B5OW35PPrV3/hE9K9L3/wY3H/AMXW1RQkkrIEktjlbv4Z+E9QnM99pklzMcfvZrydnGOgDF8gewp978OvDGpSLJqFhNdOowhmvZ32f7uX+X8K6K4urezh827njgj3Km+Vwo3MQqjJ7kkADuSBUtLlj2FyR103ObvPAHh3UIUiv7W5uokORHPf3Drn1IL4J9zTx4E8PrYGxS1uEtShj8hL6dU2nqMB8YramvrS2ure2uLqGKe6YrBFJIFaYgZIUHliAMnHap6fKh2V7nPy+CNCntDazQXTwFdpibULgqV9CN/I9qrw/Djwvb2c1pb2E0NtP/rIY76dUbjB+UPiuoqK5uYLO3ae7mjghXG6SVwqjJwMk8dTihpN3YuVdjnrX4eeGrK5kuLSzuIZpRiSRL+4DSc5yx3/ADH3PNMg+G3hW2uXuLbTpIZpAVkkjvJ1aQHruIf5s++a6milyx7Byx7HJW3wt8G2dwLi10ZYZlbcsiXEoZT6g7uPwqwvw98NJqR1BLGZLxgQ1wt7OHYHHU78noOtdLUVzcwWds9xeTxwQRjLyyuFVR6kngUKKWyDkiuhzl78OPC2pSiTUdPlunA2q097O+wf7OX+X8KLr4c+GL9lN9Yz3W1dgE9/cOCPQgvz+NdDHfWk17PZw3UMl1bqrTQLIC8QbO0svUA4OM9cGp6OWPYOWLvdGDb+CtEtLaO3to7yOKNQqIuo3GFA6AfPUn/CJ6V6Xv8A4Mbj/wCLqxqniPRNDmgi1rWNP06S4z5KXd0kRlxgHaGIz1HT1p+q69pGhLE2t6rZacszbIjd3CRCRvRdxGT9Koq1tCp/wielel7/AODG4/8Ai6P+ET0r0vf/AAY3H/xdatxdW9pAZrqeOCIEAySOFXJIAGT6kgfU1T1LxDoujXFvBrGr2FhNcnEEd1cpE0pyB8oYgtyR09RQBW/4RPSvS9/8GNx/8XR/wielel7/AODG4/8Ai61Yrq3nmmihnjkkt2CTIjgmNiAwDDscEHB7EGs9PFXh6TWjo8eu6Y2phihsReRmbcBkjy87s45xigCL/hE9K9L3/wAGNx/8XR/wielel7/4Mbj/AOLrapssscELyzOsccalndzgKByST2FAGP8A8InpXpe/+DG4/wDi6P8AhE9K9L3/AMGNx/8AF1q21zBe2sVzZzR3FvMgeKWJwyOpGQwI4II7ipaAMX/hE9K9L3/wY3H/AMXR/wAInpXpe/8AgxuP/i62qie6t0uo7Z541uJVZ44i4Duq43EDqQNy5PbI9aAMr/hE9K9L3/wY3H/xdH/CJ6V6Xv8A4Mbj/wCLraooAxf+ET0r0vf/AAY3H/xdH/CJ6V6Xv/gxuP8A4utqigDF/wCET0r0vf8AwY3H/wAXR/wielel7/4Mbj/4utqigDF/4RPSvS9/8GNx/wDF0f8ACJ6V6Xv/AIMbj/4utqigDF/4RPSvS9/8GNx/8XR/wielel7/AODG4/8Ai62qKAMX/hE9K9L3/wAGNx/8XR/wielel7/4Mbj/AOLraooAxf8AhE9K9L3/AMGNx/8AF0f8InpXpe/+DG4/+LqxrWv2Hh+G2k1Jrj/SpvIgjtrSW5kkfYz4CRKzfdRjnGMCs3/hPNI/58/EH/hOah/8YoAtf8InpXpe/wDgxuP/AIuj/hE9K9L3/wAGNx/8XWjpuoWur6Vaalp8vnWl5Ck8Em0rvR1DKcEAjII4IzVmgDF/4RPSvS9/8GNx/wDF0f8ACJ6V6Xv/AIMbj/4utqigDF/4RPSvS9/8GNx/8XR/wielel7/AODG4/8Ai62qKAMX/hE9K9L3/wAGNx/8XR/wielel7/4Mbj/AOLq9pWq2WtadHfaZOJ7eQkBtpUqwOGVlIBVgQQVIBBBBANFrqtle6jeWNrOJbixKC5VVJEbMMhS2Mbsclc5AKkgBhkAo/8ACJ6V6Xv/AIMbj/4uj/hE9K9L3/wY3H/xdbVFAGN/wiml/wDT9/4Mbj/4uitmigArw7xijP4k4AH7iLnHJ+QV7jWJJ4Zgkfc0qtxgF7eJiAOgyVyaqMnHYwr0nVjyp2M3wioHhOwVuuxh/wCPGr3hK0awsbm1fG6KVVO3p/qkqzHojxRhIr50ReirDGAP0q5YWP2JZszPM8z72ZgBztC9vYCp1NIxsl5HMeGEjvPH/iy9vlR9QtLmKztywG6G1MEcgC9wGdpCfUj/AGRix4m0HULjT72XTLmP/R4orjTrIW6qIrqJ2k3bxyd+QpGOBn1NaGreFNI1q/jvryK4ivI4zCt1ZXk1rKYyc7C8TqzLnnaSQDzU+n+H9M0u8a6sbcxztbx2zSNK7lo0LFQdxOTl2JbqSeSaXReX9X+/X1NOr/r5f16HPy6nbat4v8G6naMWtr2yu3hcjruSNgPY4B49jVDVpdXXxV4rbw0rSXy2empiHyzIq+ZN5mzzCE8wISVD8ZxnIrfi8GWD6VJp2otJc2630l3aNG7wS2m9i21JEYMuCzgFSPlO3p1mj8G6LFpE2nRQ3KRTzCeWYX04uJJBjDmff5pIwBnd0AHTin6COLm8W6ndf2PpHh+913VHuhdTXN3Ha2kF9EIXRTEUnEcSsGkAOUzgDA53C5b3vi+7utA0nUr250ae6+2+fL5Vs9xJFEyeU5C+ZErlT82Mry2AOAOmm8E6DPp1tZvaTKtrK00M8d3MlwkjZ3P56uJNzZO47snvmrdp4d0yyeyeCGQyWKyrBJLPJI48wguWZmJckgElsmn/AF/X9a7sDj0XUdZ1jVfD/inUr+1nvY7kWlk9rD9kkhDYjmhlVS3mKNrMrPuBJOwLg1eh8T39zpvhKQSrFcXepGx1NFUEGSOGfzU5HAEkXUYOB6Gt3T/C2k6Zqj6haxXBuG37TPeTTLFvOWEaOxWME9QgHQVVm8G2N5Nqa6gzz2l9dRXscKO8T2s6qFLxyowZSdqn5cEHdydxpLS3y/B/5bjdtfn+K/R7HP6lrfiO4l1xNNnu2trDW1gnfToIZLm3tfskch8pHBVz5jcgq7bWIUE4qjP4p1nWNQt9M8NXWtahbQ6XDePqWmQ2KTXDSs6rvW6KqoAjOVVAdxwduMHrU8A+HorR7e2t7u2Elz9qkkttRuIZXlKBC7SJIHJKgbsn5jyck5qW68E6DdpZj7JNatZQmCCWxu5rWRYzglN8TqxXIBwSRnnrR0t6flZ/jqF/6+d/y0MCwn8Sa5r9npeu3R01Ro8NzqNlDFC/mymR0dCxDgIwHIUk9MMOSY116+0PwDNp0U6DVdN1CHRhNKhcRiSVEilYcZ/dSI3oTxXZ2mi6fY3aXNrb+XMlqlorb2OIkJKrgnHBJ56+9Ubzwta6hq2oT3pWex1KyS1urJ0O2QoxKuDng4YjgZ4U5G2j/g/m2vw08ri8/T8kn+OvnY4zVbvUPBvizUtSvNTn137D4ZuLqIXMUSS5WVTtJiVFKkgY+XI+bk8Y2GuNc8N6joU2oa/PrUWqSvBc2720KLG3kPKHh2KrAAxkYdn4brkZO3p/g3Q9MvJLuC1lmuZrc2ss95dS3TyRE52M0rMSuRwD0ycdTRpPg7RNEu0uNPt5g8SGOBZryaZLdD1WJJHKxDAAwgAwAOgo+yl/W7f6i6t/1sl+hysGpeIZ/hndeNW8QTLNcaRPfRaelvAbe2JiLxhSU3ll+XJZiCd3ABAGlrviDUbPVLeC2ugiv4evb1l2Kcyx+Tsfkdt7cdDnkVr2fgvQbC5mltbSRUmEga1a6la2HmHL7YCxiXdk5wo6n1NQ2PgDw5p0hkt7KZpDaPY+ZPeTTMLd9uYgzuSE+UYUcLzjGTlS1Ttpp+j/AM1qXFpNX7/5f5PTzOasn8VTar4fs5/Fc+zW9Lku7l0s7cNbPGIjiAmMgAmXB8wScDggnIqDxf4jvLPQtItxqFzfXAvTd3umRWizuttMIQVW4YRKWJDNwcchQM5X0WPRdPiurG4jt8S6fbtbWzb2/dxts3LjPP8Aq05OTx7mqFz4M0K6sYLR7SSNLaeS4gkguZYpYZJCxcpKjB13F2yA2CDjpxVyab0/rV2/r5ERulrucxb3vjG6uvD+k6je3GjTXX237TK0Ns9xJFGV8p/l3xLIQwzjK8t8o4xlxyar4hu/B8t3r15Dc22sX1jJLbw26+aYUuE80ho2AZlTBA+X5jgA4I9FtPDumWT2TwQyGSxWVYJJZ5JHHmEFyzMxLkkAktk1Wl8G6HLaQ2/2WSNILyS+iaG6likjmcsXYOrBhne2RnGCRjHFJbg9Y2/rr+tjmFGoa1rOq+H/ABRqV9az3qXIs7FrWH7JJCGxHNDKqlvMUbWZXfcCSdoGDV1PE99/YPh3V551ijW9FhrUQUbRId0J5IyNs4Xpjg1vaf4W0nTNUfULWK4Nw2/aZ7yaZYt5ywjR2KxgnqEA6CoX8J2lyuu2uoN9q03WXWSS0O5fLbYFchg2Rnap4wQcnPNTql/XT/Nbsp2b/rr/AJdDC0bxDrF/f6FcPdZtdalvZ4YTGgAt1UeQMgZ5XDk5zlyOgArJh8S67ZaRcrqurX8Wvxz2IutPu7OBY4FlukRmt3RMSRMGZQSzsOMlWr0OTRdPlks5Htl3WMbRW+GIEasoVhgHB4AHNZsPgbw/Dp93ZPaTXMN5EIZftl5NcP5Y5VVeR2ZADyApGDyOeaa0lfoLpqZWteJpbDX/ABBa3GpS2lrbafZGA29sJpY5p5Zo/kXaSzMVQAEEA4OMZrmbzWNZufDvirSdb/tA/YxZTQnVFtRcASS4Ib7MTGRlMjgNyc9jXcR+AfDkcN7H9ilka/WJbmea8mkml8ti0bGVnL7lLcNncMKAcKMPg8D+H7eC9iSykf7eIxdyTXUssk/lklC7sxYkZ6k5wAOgABpqEtXp/WiJ/Fb6xH4buG8OI7325ABEIzIELjzDGJCELhNxXd8uQM56Vw03m67qPg24s/FesSgalcxO81nbwzxusEpZZEaAbXGCh+UDBzjOGr0bVNKtdZsTaXwm8osrgwXEkDqwOQVeNlZTn0IrPfwboj6faWZtplSzuDcwypdzLMspBDOZg/mMSGYEljkE5zRHR6hLVWRzz+JtUXwpJeG8AuB4m+wK5jT/AFP9oCHZjGP9Xxnr3znmsTxNc6xr/wAP/EGt/wBuPBbR3U9qmmfZ4vJ8qKfyvmJXzPMO0sCHABIG0jr20/gPw5c6m1/PYO0rXSXmz7VKIluFKkTCINsV8qMsFBIyCSGOUv8AwB4b1O5upr2xlkF44kuIBdzLBJJx+8MIcJv+UHft3ZAOc047K/8AWi/yf3hPW9v63/zX3GPrvirVNNu/EMNtKm6O60+zsjJEGS3a4KoZGAwWALbsE9scVoWEmq6L40tNGvdaudZtr+xmuFe7hhSWB4njHBiRAUYS9CCQV684rZufD2k3g1EXljHcLqaql4kuWWYKMLlTwMD0xUekeGdM0OaSexS5eeRAjT3l5NdSbByFDyuzBc87QQM84pR0ev8AWn+eoPYoeLL2HyZtGsdPj1LWNVtWhW2YAL5XKl5m/hiUufUnJCgk4rI0HSIbbxffaVqj/bfsHh2ys1edeJI2MwkODkfMUXP+6Aelb+p+DtI1bVm1O5+3w3jQrA0tlqdza70UkqCIpFBwWbr60l/4K0PU4beO9hupDbwm3WUX86yyRHrHJIHDyKccq5YGlbRrv/wf8/xY3/X4P9Dzu/0q0v8A4H+GdUv4WuLyyFgtpNMzMY1a6hG4A8bigA3YzgkA4Jz3vja31KbQL6LSdNsroXVnLBdSzS4kWPacBE27ZT8zfK0kYz/FySNe/wBG0/U9LXTry2V7NWjZYVJQKY2V0xtIwAVXjpxjpVTWfCela9cebqa3j7ovJkjhv54Y5UyflkjRwrj5jwwPBI6UT95Nd2/xHF2szn9EurSz1fw/qOmyyNpPiDTIreN5h87yxx74Wb/aaLzASf7iisRbTUfEEOt6FaaLMYm8SNM2qyywrDAElRyVG4yFxtwPkAyfvAc13+t6GuqaMljayixeCSKW2ljjyIWjcMuFBHHy4IyOCRVyy061077R9ji8v7TO1xL8xO6RvvHk8dOg4qr3nzev5p/5/gZ2tFR9Pya/y/E4GXX9fttK1fVW1ZnY6w2kWVu1vH5NuHuliWZ8KHYru6bgCAMjJ3Vcvr3WvDOpT2EmuXOrJc6Pd3kUt3BAsttLBswR5UaKUPmDhlJyvXBxXUt4d0l9LvNOlsY5bO+kkluYJcusjOdzEg56nn27YrD1Dwg1lpN3b+F7eOa71CE2k13q+p3E7wwkEZUv5jMATny9yAnuKzafJbrb8bW/PW/+Rqmue72v+v8Al0/zMG98TeI9U1O00rSo9YzDpFte3FxpKWPmSSzbgN32pgoQbCcKuST1UDm9YX/ijxFq0WjX19L4curLSoLq+NnHBJJLPKzrtHmCRAi+USQMnLAbsDnfuPBekXsFgLpLkXFhbC2iu7W7ltZjHgZUvCysVJUHaTjPOKdf+DNE1EWhmt54ZLOD7PDNaXk1tKsXH7syROrMvAOCSMjPWtZWu7d/8zON7K/Zfpf8n95yyafrtt468V3GlaxcXmoR6RbNb208cCwyykThFbCBgoYZHzD7xySMYiW/l/sM61LqmpXl/wCHL1Jr2HVbSKG4tYigE8eIkVXXy2Lqy7gSowxxx2N34Q0a9vHupbeZJpLUWchgu5og8QztDBGAYrubaxGVzkEVPpvh7TtJs7i2tIpXW5JM73NxJcSS8bfmkkZmbjgAngcCpb7f1r/V/uHp1/rT+rGkrB0DIQVYZBHcUtcxYeA9Lh06CDUw2oXEUVvCblndGdLeQyQZAbqpPJ/iPXjitzTdLs9ItpINOh8mKSaSdl3FsvI5dzyT1ZicdPSnoHQt0UUUgCsjVbbxHNdK2h6rpdnb7AGjvNMkuHLZOSGWeMAYxxg9Dzzga9FAHP21n4xW6ia813Q5bcODLHFosyOy55CsbpgpI6Eg49D0roKKKACiiigAooooA5vxR/yMXgz/ALDUn/pvvK6Ss3WtAsPEENtHqS3H+izefBJbXcttJG+xkyHiZW+67DGcYNZv/CB6R/z+eIP/AAo9Q/8Aj9AB8OP+SWeFP+wLZ/8AohK6Sq2m6fa6RpVppunxeTaWcKQQR7i2xEUKoySScADknNWaACiiigAooooA828Uf2p/wk15/wAK43/btg/t7ytvl7do2+Xu+X7Ztxtz8u3b5nHl12HhL+xv+EZtv+Eb/wCPH5vvbvM8zcfM8zd83mbt2/d827Oec1d0rSrLRdOjsdMgEFvGSQu4sWYnLMzEksxJJLEkkkkkmi10qystRvL61gEVxfFDcsrECRlGAxXON2OC2MkBQSQowAXKKKKACiiigDm/+Fj+CP8AocvD/wD4NIP/AIqj/hY/gj/ocvD/AP4NIP8A4qvjfVvBenWdnqU9rdXBCzRGyaQggws4Qlwq5JDbhwP4G4NRf8K8ubHXdItdavI7e11KfyllMNxExIZQVCyRBgSGGCV2+/Boj71rdQeh9m/8LH8Ef9Dl4f8A/BpB/wDFUf8ACx/BH/Q5eH//AAaQf/FV8RP4Ujl1y8srDWbCWG1jkmlnfzlWJEbBDZjBLc5+UHPbnip9C8PWkniKS0mu9M1NBavLEiXEyLOfKZvlZY8qy4yVcLyMd6Saav8AMdtbH2t/wsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXw1pPhe81qyN1Yz2xSOXbch3Km1TBPmycYEfB5GeRjGSAceRQkrKrrIFYgOucN7jIBx9RTEffv8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXx5feBdNto76SO5umjisS8O4qCbhFzIrcfdHy8cH5159ecu/Dt1pQv57k20yaZfLZzx7mxI53njAB2/uzzkHkUbOz/roC1V0fc3/AAsfwR/0OXh//wAGkH/xVH/Cx/BH/Q5eH/8AwaQf/FV8Y3Wg6Xf+M9Fso/J0m11C1tZZFVpWAaQDcqE72BOeM8DuarWfh/Tk8c22mnUrC/tzcbCjNcRq537REzCLcGP94DA9aaV3b1X3B0v6fifa/wDwsfwR/wBDl4f/APBpB/8AFUf8LH8Ef9Dl4f8A/BpB/wDFV8PW/hs30mpztfWOmWtjcrC5uZJCAXL7Qu1GZvuHtnv0yRdsNFitf+Ek0rV9PgkvNOtZJUuVkk3I6uijGGClSGJ5Unmpvpfyv+Fx21t8j7U/4WP4I/6HLw//AODSD/4qj/hY/gj/AKHLw/8A+DSD/wCKr4etdMtn8D6hqGLae5inhXPmyrLbqSwxs2bGDY67sjHTmq93oJsNNiub3ULOG4mhWeOxPmGZkb7rZCFBkfNgsDjtyKYj7p/4WP4I/wChy8P/APg0g/8AiqP+Fj+CP+hy8P8A/g0g/wDiq+J77wLe6dptrqN3eQR2NxKkZuJLe5jVCyllOHiBYYB5QN+oo8R+GtN0XxU2nwa3ayQLNsbzRNuhAAP7wiLnPT5A1O2tg6XPtj/hY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqvifVfDJk8V6xb24tNKsrBt0rvPJLDApICjdt3vkkAfLnnpgGmr4Jud1w1xqmm29tCYNtzJJIUmEwYxlAqFjnaeCAR3AwcJapMHofbX/Cx/BH/AEOXh/8A8GkH/wAVR/wsfwR/0OXh/wD8GkH/AMVXwTqVhNpWqXWn3e3z7WZoZNpyNynBwfTiuu07wdZXnhq0vZrXU41uLKe4k1TzVFpbujyKqMDHyTsUffzlxgdqPs8w7a2Psj/hY/gj/ocvD/8A4NIP/iqP+Fj+CP8AocvD/wD4NIP/AIqvh6TwpLFYwytqmnfaZ7dLmGx8x/OkRyAAPk27ufu7s8HAPGZZfBN8sohtbyxvLlbqO0nggkbdbyucKrFlCnkEZUsAR16UdbC6XPtz/hY/gj/ocvD/AP4NIP8A4qj/AIWP4I/6HLw//wCDSD/4qvic+BrhpbJLTV9Muvts0sMbIZkCtEu59xeNcAcc+/1NV7bwo19qtvZafq1jem4iaRZLWO4lwVOCpRYjIDxn7mMc5oWuwPQ+4P8AhY/gj/ocvD//AINIP/iqP+Fj+CP+hy8P/wDg0g/+Kr4wT4aat9subee7sLZ7dwn795E3kxGbgbMj5AT8wGMYODgVzer6ZLo2qzWFxJHK8JGXiJKsCAQRkA9COoFHkB95/wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVfAFFAH3//AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV8AUUAff/8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXwBRQB9//wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVfAFFAH3//AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV8AUUAff/8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXwBRQB9//wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVfAFFAH3//AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV8AUUAff/8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXwBRQB9//wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVfAFFAH3//AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV8AUUAff/8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXwBRQB9//wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVfAFFAH3//AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV8AUUAff/8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXwBRQB9//wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVfAFFAH3//AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV8AUUAff/8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXwBRQB9//wDCx/BH/Q5eH/8AwaQf/FUf8LH8Ef8AQ5eH/wDwaQf/ABVfAFFAH3//AMLH8Ef9Dl4f/wDBpB/8VR/wsfwR/wBDl4f/APBpB/8AFV8AUUAff/8AwsfwR/0OXh//AMGkH/xVH/Cx/BH/AEOXh/8A8GkH/wAVXwBRQB9//wDCx/BH/Q5eH/8AwaQf/FVJbePvB95dRWtn4s0Oe4mcRxRRalCzyMTgKoDZJJOABX5+V0nw4/5Kn4U/7DVn/wCj0oA+/fMT++v50eYn99fzqhVXT9TstWt2n026juYlkaMvG2QGU4I/r7ggjgigDZ8xP76/nRVCigD4G0zxRfaTqFzeWqQGW4lSZt6EhWSUSjAz/eUdc8fnUt94tursWAtrKz09bC5e6hFqr/6xipJJdmJ5Qd/bpgVg0ULS1ugbtvubVx4kaW8vLi20yxsmvYHhnWDzSG3sGLfO7YOR249qi8P68fD1813Fp1peTbSqG5Mv7sFSrYCOvUMRzn2xWVRSSSA37HxbcaXvXTdPsbaGWUvPCFkdZ0KlfKfc5JjwTxnOTnOQMYUjB5WdUWNWYkIucL7DJJx9TTaKYGvJ4ku5davdTMUCzXsMkMihW2qrpsOOc5x6k1c1Pxncaray28+l6dGlxdpeXJiSQNcSKGGWO/IB3HIXA9Mc1zlFAG7qXiqXULywu4dNsbC408RrDJbGUnbHjYCHkYcY9M+pNKnidI/EUesx6FpiTxv5oiDXHlmTduEmPNznPbO32rBoo2dw6WOsg8U2H9marJcaPpzz3V5bzJZN9o8o7RLufIkznLjgtj5unpVtfGM8NzqVzeaZYahcanuW4luPOBKMQSgEcigDKjtkeuK52igdzcs/EqWeiXWmLomnSxXbBpZJGn3kqSUxiUAbdxxxz3zUd34ha/0+GC806yluYIUgjviJBKqJ90EBwhwPlyUJx+dY9FAjoda8ZXWt2Vzby2Fjbfa7lbu4lt1ffLKoYZJZzjhjwAB6Ac1Bf+JF1TUYr6+0bT5bheZ23Tr9qO0DLgScdM/Jt5rFoo2A6W68azXeqXd5LpGm7b6PZeWw87y7jBBDHMm5SCBgqV/nVS98UXt7FLC8NtHDJJAyRxoQIhCrKiLz0w5znJPr1zi0ULQC1quoy6vq93qNyqLNdzNM6xghQWOTjJJxzRd6jLe2ljbyqgSyhMMZUHJBkZ+eeuXPpxiqtFHSw7l271a5vLi0mbbHJaQxwxNGCMBPunk9a6LT/GaT6/aSajaWlhbS38VzqM9pExecq2dzBiwHJJwgAyenTHIUU+tyWrqx3fiHxVbGax1C2u7fUNWheVPMilvJYlgZNoU/aW3bssx+XA9c1y2ja1Joz3W21t7uG7gME0NwH2su4N1RlYcqOhrNoqUrFN3Opk+IOqSTO4tbFN5HypGwVcW5twAN3A2Nn6+3FYOqalNq+pSXtyqLJIFBEYIHyqFHUnsKqUU+txdLBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXSfDj/kqfhT/sNWf/o9K5uuk+HH/JU/Cn/Yas//AEelAH2v4k0i51zTY7C3vWs4JZQLto/vvDg5RfQk7R9M9ehpWnhGLRvENtf+H5PsVq0fk3tmCSkyhCEYZz8wOMnvyc5J3aH9s/8ATD/x/wD+tR/bP/TD/wAf/wDrUAalFQWd19rhL7NmGxjOaKAPz0or0PXodK1HxhZ+H4ZBFHJfwQyRQaRbW/lq2Ads6ku5+b+JcHqelVdP0jw4mpeHr6K2vprS61J7SSC5uIzuKNHhz+7xtO/lMH03d6aV3YV9L/11/wAjhqK7S30TQdW8R6uSlxptjpscksyS3O4sfNCfKUgJRRuz9xsYxkZyIG0fwzGurXsVzeajY2Yt/KW3lERZpMhlLvFkhSPvbBnHQZ4lO6T7lNWbXY5Kip777J9um/s3z/sm8+T9ox5gXsGxxn3H6V1eki21nw2ulaMLO11OOCZ7lLuwjkN0AGYtHOVZo2CgDb8q8ZDZNPpcXWxxtFdPetHJ8NNPNu1yiR6jIjwySI6F/LQl1wgZc8DBZulTLoWi313ounWsV7YX+pTxh/tF4k6xQvwGKiJCGbOQM9Mf3hTtrb0/FCvpc5Kiuh8T6d4fsUh/sK/eafzHSe3ZpJNgGMNuaGLBzkbdpxjrzioNA0u0vbXUr7URcS2+nQLK1vbOEkl3OEHzEMFA3ZJ2n075Ep3G9DFor0bQbPStA1+8mig1IyDRnv7ZxdJFLbhoclc+WfnGThxjsdtcFqN4+oalPdSSXEplctuupvNkI7bnwNxx3wPpTe9v63t+gLVX/ruVqK9L0uDQftWgWlxZWpvZLJE8owbhcecpbzGOMblwRk8/MuPu8ZUnhDTYvCU99M00eo2lrBdzQC5L7kkdQMjyAqZVsj945HcdcHfy0Ba28ziaK7fX7HQLnWNAsrHTrq0a9t7PdKLqMqUcAHKiIZf1bPJHSsfUB4dstTSOzt9VJtbl0mElzH+9VeFZWEfyHIOVIcY70dbebX3B00/q5gUV3Gp6PBrHxN1nTr+5uWlkMjR3rsgWNgu7fNtQDZgclQuOvOMHmvEWnwaTrk+n2y3A+ykRSNcYzI4+84AAwp6gc8Y55pJ6J9w7mZRXdeC9AhuNHaa+TTimqTtZxteTwxvEoQ5kjEhBJDtH93J+UjvXETwyW9xJBMpSSNijqexBwRTejsC1VxlFdPeGOX4bad9na6RE1KRJIZJEdC/loS64QMueBgs3SrHibw5oun2OqPpBvxJpepLZO11KjLKGEhyAqjbgx46nPXjpQ9L/ANdv8wWtv67/AORyFFbHhJbGTxdpkeqW7XNvJdRoYxIqgkuB825WBX1GOR3FdBbHRE1DxUkdjfW9pFZMs0P2lGdmF1FgKfLUIOg5DY9+lHb5/gC1f3ficPRXe/8ACHaDbz6hdX17NFp0CWhjSWYq4M8XmfM6QSdMY+4AfUYweM1OG0t9UuYtNuTd2iSEQzlChkXPBweRQ9HYOlyrRXcaVqlppXwyu57BNUtbua9SCWe21ARbz5TkZxHny+eUzz/eFV73wvplvb39pH9uN/Y6fHfNdl1NvKG2HaE25AxIAG3HJHQZ4Ho35f5XBa28/wDOxx9FdyPDfhmXxgnh1P7Wjn89Ua4M0bK6lCzYXYCpBxg5OcHgZ4q+KvDekaXoVrf6Ub0PKYS63MqOAJYRIANqr06Z7+g7j0VwWrschRW1oGl2l7a6lfaiLiW306BZWt7Zwkku5wg+YhgoG7JO0+nfI6zQbPStA1+8mig1IyDRnv7ZxdJFLbhoclc+WfnGThxjsdtGyu/63/yFu7f10/zPOaKs6jePqGpT3UklxKZXLbrqbzZCO258Dccd8D6VtLYaBZ+HdPu9TTUpLm/jmIa3ljVISjFVO0qS4Jxkbl7884C6D6nOUV3EfhLRRdy6fcHURPaWsF3PerInkyI5jyFXZleJMBixyR054TUfAlpo1leXWo30ojhmWEbFGYWMuCHH8X7rDjGOT7cvZpCTurnEUVv+J9JsbD7Nc6LHI+nXBdYrprxZxMVxngRo0ZG4ZVhnnjjkxeGNJttUvbg6iGFla25mnlE5iEYyFBJEUhPLAYCnr2ANC1G9DForutQ8J6Fo15qf25tQuIbeWySBIJVjYieNnO5njz8uOuwE45AzxqeHvC1hofjawLpfX0v9uy2lr5LqixLCykvJ8jbvvZwNvCk59H/X5f5ieiv/AF3/AEPMaKfN/wAfEn+8f510OoaNpmnRadYyJdvqF/bQXC3bTqkEYlwceXsJYAcE7xyDxxyld2Kl7ra7HN0V1usaDYabbanLpf8AaVtd6Jex27zXEi7ZmJYbkCqDGcpkDLcHrxzc1u1bxB4m09dQnnllk0BbhpN+53dLZpBknOclRnvSvpdf1o3+gJa2/rexw1Feg6J4E0u7t9Ok1NtQQ3dtbylI3VDumumhBGVPy7drd8+vPEN54X8OafDLdzDVJbfNqsUSXEauTKZQ25vLIGPKyMA+nuKs/wAbE/8ADnCUV2kXhXSBrOr6QJZ73U7e+e2s7QXS2rSqpI3bmjZGbP8ADlSccZJxXOwWdu3h28upLbUGuYp40SaOMfZkBzkSHqGOOB9am+lyutjNoorvoLPT9Z1DwULiwtLWK9Z0lit08tZAJiqqW+8cgBdzEnnrVW2JbsrnA0V61b6RpOpraXMkenSajA92gItEt7SaRId+3YoAdI2PLEZbkHIxTP7L0Sa1GsWzWSXK6YZGmubCNIWUXAja5FsF2n5dwVdvPBIBziR/1+Njyiiuk8dWtjb+IIn02EwR3NnDcPCyKhRmQE5ReFyMNtHA3YHFc3TAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuk+HH/ACVPwp/2GrP/ANHpXN10nw4/5Kn4U/7DVn/6PSgD7GooooA2dI/482/66H+Qoo0j/jzb/rof5CigD4Pn8Ta9dRwpc63qMyQOskKyXcjCNl+6ygngjsR0qibq4aFIWnlMUbmRELnarHGWA7E4HPsK9MmsdRe48E3fiuwnhto5GjuHurUxQw5mPlqw2hVXp8uANvbFbG0Nd6dDrUl7HravdrY3mpKzTyN5XEixnlU3/wCqX1HByeDz9fwDrY8ofxJrkuoRX0ms6g95CpSO4a6cyIp6gNnIHJ4qvc6pqF7JPJeX1zcPcFTM0szMZdv3dxJ5x2z0r1391NdL/wAhSz8QrpZwWzLqTxicfiJmjzj+6h7gc8B8Q3hk8Uh0h+z3DWsJu4jJvZJto3Bm7v03Hruznml2/rv/AJfeNdf67f5nL1oDxBrI0v8As0atfCw27fsv2l/KxnONmcYz7Vn0UxGk3iPXH03+z21nUGstgj+zG6fy9o6LtzjHtReeI9b1G2W31DWdQuoFYMsU907qCOhAJxkVm0UAXdR1rVNX8v8AtbUry+8rPl/aZ2k2Z643E46CorK/vNMuludNu57S4UELLBIY2APXkc1XooAsNqN691PcveXDT3AZZpTKxaUN94Mc5Oe+etV6KKALA1C8FxDcC7n86BVWKTzDujC8AKeoA7YqaTXdWl09bCXVL17NV2LbNcOYwuQcBc4xkDj2FUaKALw1vVRYw2Q1O8FrA4khg+0P5cbA5DKucA5JORUFvf3lpfC9tLueC6ViwnikKuCep3DnPJqCijzA0bvxFrV/v+3axf3PmR+U/nXTvuTOdpyeRkA49aqXN5c3ro15cS3DRoI0MrliqDooz0A7CoaKAJWu7ho4UaeUpb58lS5xHk5O30554702eea6uJJ7mV5ppWLySSMWZ2PUknkmmUUAaTeI9cbTf7PbWdQNlsEf2Y3T+XtHRducY9qqS395Osyz3U8gnkEsweQnzH5+Zs9TyeTzyagooAASrAqSCDkEdqvXmu6tqLM2oape3TNH5TGe4dyUyG2nJ6ZAOOmRmqNFAF+213V7K6N1Z6re29w0YiM0Vw6uUAAC5BzgADA9hVOaaW5nea4keWWRizyOxZmJ5JJPU0yigCT7RP8AZTbedJ5BfzDFuO0tjG7HTODjNWJNY1ObTI9Om1G7ksYzlLVp2MSH2TOB1PbvVOigCwNQvBffbRdzi7znzxIfMzjGd2c9KJtQvLmFYbi7nliXbtSSQso2rtXgnsOB6Diq9FAFiyv7zTLpbnTbue0uFBCywSGNgD15HNDajevdT3L3lw09wGWaUysWlDfeDHOTnvnrVeigAp7zzSQxxSSu8cQIjRmJCZOTgdsnmmUUAXJNY1ObTY9Ol1G7exiOY7Vp2MSH1CZwOp/OlfWtUkkZ5NSvHdplnZmnYkyKMK55+8B0PUVSooAuajq+pavIkmrahdXzxjajXM7SFR6AsTimWGpX2l3P2jTLy4s59pXzbeVo2weoyCDiq1FAFqfU7+6Zzc31zMZGRnMkrNuKAhScnkgEgemanh8Q61bGc2+r38RuJPNmKXLr5r5zubB5Oecnms6igAJJOTyTV0a1qi6UdMXUrwaeetoJ28o85+5nHXnp1qlRQBfn13V7pbYXOq3swsyDbCS4dvIIxjZk/L0HT0qWfxRr91NBLda5qU0lu2+F5LuRmib1Uk8H3FZdFAGhJ4g1mafzpdXvnl+U+Y1y5b5W3rzns3zD0PNQSalfTR+XNeXEiZU7WlYj5c7eM9tzY9Mn1qtRQBpQ+I9ct0uEg1nUIlumZ51S6dRMx6lsH5ie5NU0vLmOzktEuJVtpWDyQhyEdh0JXoSMmoaKACtO98S67qNuLfUNa1G7hDBhHPdu6gjocE4yKzKKAL9zrur3l7DeXeq3s91b48meW4dnjwcjaxORzzxQde1c6oNTOq3v28DAu/tD+bjGMb856cdaoUUASXFzPd3MlxdzSTzSMWeWVizOfUk8k1HRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFdJ8OP8AkqfhT/sNWf8A6PSubrpPhx/yVPwp/wBhqz/9HpQB9jUV1FFAFDSP+PNv+uh/kKKv0UAfn7e+H9Z0y0S61HSb60t3IVZp7Z0RiRkAEjB4FUoopJ5khgjaWWRgqIiksxPAAA6mvQ9Y+wT+N9Pu57XQTp8mo2/m3ceorK8qcbvMjMzBVwDn5FHH51LbxBYwzeHtVMOlW9xFqcqXCwWcPyW4MRUlNvbL4c/Nweciqiruwul/66/5HCujRyMkilHU4ZWGCD6Gkr0WCS2bxfqMmuDRbiUwSNpwt5rGOGQ+YPvOEaINs3Y81SfocGqN3qdhaNrt1baZpNtdgWywRO1veqDz5jptXyznuFXaM9BgYzT0TfUprV2OIq7BouqXWnS39rpt5NZQ58y5jgZo0wMnLAYGBUN9dfbr6a68iG381y5it02Rrnsq9h7V1thHBqvhmCHxI1jDbWVtL9jvIdRiFxH95ljaDcWcFz02q3Od2KrpcXWxyz6XeR6RFqjw4s5ZmgSXcOXUAkYznoRzjFVK668s/P8Ah1aSO2jC7guGfEM9qlwYCi7dwUh2O7PDZb1rRuhbo2hxa4dClsBcxSX89j9iWTB6x4g/ebFH3jjk59Fy7e9b0/r+vQV9L+pwFFdd43mtHS1jg02xt5Fd/wDSLS+tJ/MTjAK2yIFA6gsNxyeeOKfhMWp/tHP2H+0hAPsH9omPyd24b8+Z+73bM438fjiktRvQx9N0y61a9FrYRq8pVnO+RUVVUEsxZiAoABOSRUV1bPZ3T28rRM8ZwTDKsqn6MpKn8DXf2uuWml65qi2jaOnmaO/nFLaB4muvKwyxllIKlv4V+QnOARXn08zXFxJNIEDSMWIjjVFBPoqgAD2AApdbf1uwWxYTStRlaER2F05njaWILCx8xFzll45AwckccGqlekad4ntrXUNAsHlhMaWkKG7NwAturrmRD2+8FPJGMEd+GXCaLB4BlXzNMuLqOyt5raYPaeY0xdC6eWsYl+UFgfMYhsE4PZvr5O35gtbLuefTW89sUFxDJEXQSIJFK7lPIYZ6g+tMRS7qijLMcAe9egaxqf8Aa1x4duppNFfTdtolwFjtI5UdTh1ZQBIqcHjGzGKxLvV5tR15baws9Dh8i6kNtJ9mt4o9nQK7PhHXAyC+TnvzT+1bzf4B0v5IwtS0660jUp7DUIvJubd9kke4NtPpkEg1Wr0C8tdKtPHWqy3R0d9BnidmFrPbuwTGB5AQnZJuxgAD3G3Ncz4rWFdfkWyNibMIotTZFdpix8u7HO/H3t3zZzntUp6IfcqWehavqNnJd6fpV7dW0RIkmgt3dEIGTlgMDA5qhXoXgu8trbRNMkk/ssNa6rNNLNdXwimtEKQjzI03jeflbA2PyuMevATFDPIYyxTcdpbqRnvTejsJbX/rqWH0u8j0iLVHhxZyzNAku4cuoBIxnPQjnGKqV193Zif4eWckjaMLuC5L4intUnNuUXbuCkOx3Z4OW9aseK77Sr3T9aS0g0mE2urIlj9ihjjZoCsu4gry6khDkkgEjGBgUS0b/rt/n+ALVL+u5xcUUk8yQwRtLLIwVERSWYngAAdTUsWn3Uy3bRwn/Q4/MnDEKY13BOQf9pgMdeaveFtTGkeKdOvZPKEUdxGZWlhWQKm4ZIDA4OO45HauouNUlsNU8Q3F6+hzNJYsLQW4tXjl/wBJjIysXyu2AWw4J45BFD6fP8AWrt6ficDRXpltL4fOpajPbW2mTXkkNm8cXn2lvDgwgzbPPjeINvIyoAI5x/EK4DWXhl1u8e1tY7OFpmKW8UwlWMZ6Bxww9xxQ9HYN1cfp+h32pWk91bLCtvbkLJLcXMcK7iCQoLsNxwp4GTxWfXWw+IXj+GcliDp3m/b1QRtZwGQxmJsvyu7OeN/3h0zV/Uf7KXRLsRf2N/ZZsI/sPl+Ubz7T8u7dj97nPmZ3fJjGP4aJaX8v8rgtbf11scHRXoK6xpMvj6PTprLQv7FW4UrKLaJQAEOcyDBYEnkMSM4xjAqr4wu9Ju/Ddm1lHpcd0DbtJ9iiijYlrcGTIQD+PjHQHjjmh7XBauxxFWtN0y61a9FrYRq8pVnO+RUVVUEsxZiAoABOSRWx4TFqf7Rz9h/tIQD7B/aJj8nduG/Pmfu92zON/H44rorXXLTS9c1RbRtHTzNHfziltA8TXXlYZYyykFS38K/ITnAIoei/rz/yFu/68v8AM4C6tns7p7eVomeM4JhlWVT9GUlT+BqKnzzNcXEk0gQNIxYiONUUE+iqAAPYACukOsW+m+F9KitLPSriWaOcXnnWscshy5C5YjchAOQQQenUAUug+pzFFei+dotrbmZo9Dl0ZLaB7RNsLXbTgoWDgfvevmZ3/Jjp/DRqtp4Wsba+/sz+z7y5N5Hb7DcJtkBl83ejE4Rdv7ssMAY6881s7CWquedUV1fjhLdpLS5glsI2l37rG0W1b7MARjMtthZAecbgGGOnc1/BMdq2rXEl3LagxWzNFBctbos75UbQ9wjRqcEnJGeMDrSWo3oc5U9hY3Gp6hBZWUfm3FxII4k3AbmJwBk8D8a73V77RNMvtWm0mDRpnknsBFvjhuFQGJzMUBULjdgHCgDPRTjGno0mi2HicXGkXOhW8EevSm6lumhJS2DL5Xk78kL975o+QcZIAyD+vy/zFK6Wn9aP/I8pYFWKngg4NJT5iDM5HILH+dddfi2XRdP/ALPOkHSDbwG8x9m+2+bkeb9/99ndnG35duO2aFqipWUmkchHGZZUjUqGdgoLMFHPqTwB7mrWqaTeaNdrbagkaSNGsqmOZJVZGGQQyEggj0Ndd4jisZdPvIEOhBXvI10c2Lwq4h5B81l5A27MmY7s596nvrK1bxFpX2y70mWBtH+x7vt0EqJOLZlXdhjtw5XDHAzzml0v/W1/+AC3/ruefUV6jpEXh7S/7Ohvm0G4nW2tUuGZoZlDNeMJcnkFhEcE84ABBwAapahquj2trLd2Ftob3Ups1C/ZoZFjGZ/M2oQR0CAkg9QTzg1VvzsLv6XPO6K9GtItJfVtftbX+yLOzfUJfJ1GSSzmEUQJwqwzfMyYPDRkH/ewBXI2vHhHUOdJP+kxcy/8fn8X+q/2P734VN9L+n4j62Meiti4/wCRNs/+QV/x9yf6v/j8+6Pv/wDTP+775rNsjOL6A2cvk3AkXypfNEWxs8HeSAuD3JGKfWwulyWXSNSg1COwn0+6jvJNuy3eFhI27phSMnPapDoOrjVBph0q9+3kZFp9nfzcYznZjPTnpXfBrS18VabNqOo2hjm0YWJuLXUIJWin8gqclXO3kld7fLznOKtf2roktqNHuFsYbgaYYlhtb+MRFRcCRbZrkttyVGWbPcgYOADrb1/X/K/z9Ln/AAP0/r5Hm9voWr3d/NY2ulXs93BnzbeO3dpI8HB3KBkc+tUWVkYq4KspwQRgg16xc6vpOpJdWiHTX1CAWbNF9rSC0neONlx5jMN6RlhwGy2BgkZNcB4xvrbU/GWp3liyvDNOWWRVwJD3YD0JyfxpdbB0uYtFFFMAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/yVPwp/2GrP/wBHpXN10nw4/wCSp+FP+w1Z/wDo9KAPu6iiigAooooA+Ab3w1q+nz2UF3ZOk19/x7xBlZ2O7btKgkq2eNpwc9qll8I61FfW9p9ljlluWdYzBcxSplOXBdWKqVHJyRgcnArpINT0fRz4WuF1i1vzpMji5ht4pw5V5S25C8ag4B7kc1pReL9CskttJkntrnT3NwhNpFLHHaxPFsUEsgkZicl2AJweM8AHT7w6nEDwpq5vxaC3iLeQbjzRdRGHygcF/O3eXtzxnd1468Vn3+n3OmXr2l9H5cyYJAYMCCMghgSCCCCCCQQa9GPjLSJYxpV7PY3KCyKLcC3ljs0kEwkSPYE8wxAKB93JPXgk1yPjPWY9b1yOaGf7UILWK3a5EfliZlX5mC4GFySAMDgDgdKX9fmC/r8Dn6KKKYBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/5Kn4U/7DVn/wCj0rm66T4cf8lT8Kf9hqz/APR6UAfd1FFFABRRRQB8H33gnVLFNQLtbymxuEgKwszNMXxgxjHI+ZeuD8w461Xt/CGvz61a6U+k3ttdXRGxJ7aRMLnBcjbnaO5xxWpaeMLeWe7i1yOe8sJJIvKgVVXEa3AkZWPHJXcO/YZwBixq3jHTZG0M6bFJJ/Zl+922bGCzVwTGQoSIkZGwjJyTwfYENbcwS3aX9f1sc/deFtds9UOny6RffauSsYtn3SKG27lGMlc8Z96n0zwpf3eq3FnqFrqFj9lhaWc/YJZWh+Usu5AMqGwBk8DOasnWdKsdT1e40ue/lTUbSaIGW3WJo2kcHHyyNlcAgnj6VH4V1ixsNaS/127v2EEDQwpBCsxKtGyYy0i7QN2QBn8KlXt52/HUbtf+vIxo9NvpooJYbK4kjuJfJhdYmIlk4+RTjluRwOeagkjeGVo5UZJEYqyMMFSOoI7Gut8P+JNJ8PW91aRPqF1DeylJJDEkbQR7GUSxDe2JvnPOQAARk7sjkpAglYRMzRhjtZl2kjsSMnB9smq6i6HRXPgbVLVroSy2uLWyW8YrISHVhnavHLDDZHA+U89M4p0+4hdzeW9zBFBMIbh/JOYmOflIOPmwG+UkdDXS3XjRZ9V1HBnOmTwTpbwGNQyu8YUE4PTIB6nHOOpy/XfEWg6jY6jFaHUll1TVI76dpYI9sKgOGVQH+cgvwTtz7dx+X9a/5Attf60/zKFx4Pnl8SWOk6FJNqBvoIZ43a2KFFkAOXVS+AueTk1HB4N1b/hJodH1Cwv7Znf53WxlkYRhsGVUA3Mo9qu6pr2kDW9E1LSZL6dtNS3jeK5tkiDCHHIKyN1x0xx6mobe+8P23jaDVUvNTa0juBdkGxjEm4SbgmPOxjH8Wf8AgNNW5l2u/u6fgJ35fOy/4JkwaFqN9eTwaTYXl/5MhQmC2dj3xlQCQSFJwfQ+lWdM0OG/sdVM9zPbX2nQNObdrYFWCsqkFi4Ktlum09K6C3n0aXQ/EMv9o6pFYXGo2jl47NPNYkTtsKedjAIznceQOKhh8S6Leat4h1HVJL+2fVo5IUit7VJhGrMrBizSJlvl5GOc5z2qdbW62/Gyt+JbtzeV/wADBi0KRvC8+szC5iRJkjh/0RzFNnO4+b90EYHB5Ofaq66Nqb6W2prpt21gpw12IG8oc4+/jHXjrWxp19oNv4V1PTri71EXF7JG6mOxjZF8sttyTMDzuGeOPeo9Y1LSdYsbKdpb6G+tbOG1+yiBGhbZxkSbwVyPmxsPzE885p/8D8iSjL4a12CS3SfRdRja6bbAr2jgzHGcLkfNx6Vb1TwXr2ka0mm3em3TSSSeXE8VtIyzEDJ8v5QXwPStfxJ4p0S+8OT6ZotvLCsl5FcRobGCBYURHXYWQlpD8w+ZuTz075uv3+h634g/tL7VqEAu233Uf2NG8k7Rwh80b+R328U1v/Xl/wAEOhSvtAuI/E1xo+lRXeoyxOVRVs3SVwBknyiNy/Q1FD4e1q5u5rW30i/luIGCSwx2zs8bEE4ZQMg4B4Poa6bUPEug3es628c2pJaa1EFkl+yxiW3ZXVgAvm4dTtwfmX9Oa2o+LbaewuLO0+2BC1kiSSEBpY7dXBLgHgkspC8gY68A0o7K4PqcnJG8MrRyoySIxVkYYKkdQR2NaqeHyukxX9/qVlYLcIz20M/mNJOqkjICIwA3AgFiuSD25qLxHqMWr+JtS1G2V1iu7qSZBIAGAZiRnBPPPrWhd6npGsaHp8epTXtrf6dbNbJ5FsksUyBiyEkyKUOWIPDcAH2pK/LcenNYy20LVl006i2l3oslAJuTbv5YBxg7sY5yPzFE+h6taxW0lzpd7DHdkC3eS3dRMT02Ej5s5HSrmp6+11NYNaPOqW9hFaSI7YDhfvLgHlSecV0GseMtN1O/SZzNJZXN9HdXunDTLaDcASSvnod8hG5gCwGc5ODVdfn+pPT5HP2/hDX59atdKfSb22urojYk9tImFzguRtztHc44qK68L65aauNMl0i+N424xwi2fdKozllGMkcHnFdDq3jHTZG0M6bFJJ/Zl+922bGCzVwTGQoSIkZGwjJyTwfYQ2PiDRNM1zVJbWS7mtdThdGkuNNgkeBjIHGIndkkHygHJX1GMUu3z/4BX9fj/TOUubW4srmS2vIJLeeM7XilQqyH0IPIrQ0vQpNQ0rUdQcXMdvZxblljtHljeTI+RnXhODnJ9PemeINTOq6u1x9pe5RUSOOR7SO2O1VAA8uMlVAxgYPQVoeGdQ0bT7PU11W5vo5b21a1UW1okqqCytuJaVeflxjH40tbMXVGVBo2qXOnS6hbabdzWUOfMuY4GaNMdcsBgdRVIAswVRkk4AHeuntdX0ZfDMlhqbXF80aSizhNikfkO2dridZd2O5Qqy9Rj+Kuctp3tbqK4ixvicOuemQciqVubXYWtjT1Xw+dHzDc6lZSX6OElsIfMaWJu4LbPLJHQgMeePWopfDeuwXkdpNouoR3Mq7khe1cO65xkLjJGa3ZfEOiReMIvE9l9ua5a7F1NYywIEQty4SYOScEnaSg7Z6VPa+K9J0nS7jTtPl1O7jmiuiJ7iNI2V5YwgXaHbjjJbOTnpxSW2o+tuhzh8Na6Llbc6LqInddyxfZH3MN23IGM43ED6nFWtF8OC/1qbSdVlutMvUjdkja03HcqFyrhmUpwPQ9eldjN4p07xGNekE2oWcAs7hpJViV5AklzBhQvmAHgYI3AYPesa08T6KfF0ep3cmoR21pZLZ24S2SSSYCExb3zIoU85wN3pnjNLW3nb/MPP8Arp/mctZaPqepwzS6bp13dxwDMrwQNIIx1yxA46Hr6VoR+Ddem8OprcOmXUto7soKW8hIUKGMn3cbO27PUGtjR/FWnaVpS2Fvc3Fu1pePc214dHtrl33BRkrI/wC6YFByrHP4CsqHVdPuvC02m6pNdQzreNeQyQW6yLIzIFKtl128gcjPU8U3s7eX6AulzMfR9Tj0tNSk067Swc4W6aBhExzjAfGDyD3q/N4V1C08Kvrd/b3NpH9oiihWa3ZBOrq7b1Y4yBtHQH71bN/4zt7nSEW1ka3nNrBbT2g0q3KyrHtBH2nPm7TsBwQcdM45qPxJ4l0fUtN1RNP/ALQe51PUY75zcoirEAsg8sEMScb+Dxkdhjkl1t/Wq/S4Lpf+tP8AM4+irmqf2Z9qT+xftZg8pN5uwu7zMfNjbxtz074qnQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfDOp+Bm0+21KZNRSVbWeOO3LR7FuEYgb9xbCAFgOcj73PFVLPwZqVxrGn2U8lnFHfS+Wlyl7BLHwQGAZX2lhuB2Z3HIwOadp/jCS0vbma6tft0UssbpbzzEpGqziXYBjoTuHb7xPtVzWvHsuqS6TJFBdl9Mu3ukkv743TuWKHaTtXCgpwAOh9eSQ6c3zCW7sZsvhDUxrM2nWv2W6khR5WaK9gZVjVsFmYOQmOpBIIHWrGleEp5NclstViLCO2afbaXtvukBjLIyFn2yLxk7STjPeoZtfsEvtSuNN024gXULaSGRJ7sS7Gdw24ERrwMYwc/WovC+s2Wg6ob68sbi8dUZI1iulhA3KytnMbZ4bjpj3qVe2vb8df+AN2v/Xl/wAEr2Ph7VNSt4Z7G28+Oa4+zKUkXiTGcMM5UYBOWwMA88Gs+RDFK0bFSVYqSrBhx6EcEe4rpNI8V2mhxXVvp+lytbXzGO8Se73NLblSPKDKi7Tkk7sdQvAAIPNyFDKxiVljLHarNuIHYE4GT74FV1/r+v6+bXT+v6/r5LrrvwA1qt441JZI7exFyjiA4kkwS0XXjbg88/w8DPGBNol7Ym5kv7VhDY3S210FlUFXO75QeecI3IBHFaU/i+afWL+7MUn2e7hmjS1aclYjIgQt0wT8qnoM4HpVjWPF2n6pZ3cCaNNA1/fpfXcn23cWYBgVQbMKDvJGdxHfPYfdf1r/AJfoC21/rT/MS58K2134r0vTNIla2h1C3t5s3txGWj8wAkbjsDEZ4AAJ7VBa+E5F8YQaReSQTxtNhvsmoW290DbSFJk2hz2UnPtS6n4nsrjVNK1DS9NuLWfTVhRftF2syusWNvAjTB45OfwFNi13RoPFkWsxaTfBI5vtH2c6ghJlD7h83k/d7Yxn/apq3Mu1393QTvy+dl/wStbeGdQ1K4vv7NgUQWcwile5uYohGWLBQzMwXJ2kcHGeO4qzp2g27Qa7aarb3cGp6ZbvMCsyhFKsqlGTYSfvHkMKvw6voEuka1Nc2N35Vxf20yWY1FFlLbZizbvK5UbgMBcjI5qC38XWT6hrN7q2l3FxcasjxP8AZrxYUjjYqcAGNySNo5J6du9Tra3l+Nl+pbtzX8/wM+DRUfwfeatIsjSRzRpG0VxCVQHcD5ke7zATgbTjHWq0ugX8GlJqFwsEMEiCRFluokldScBliLbyCe4XHfpV+x1zSLTw7faZLpd7I166u0y36KFKFimF8k/3ueeccYqPUtbsNVsbc3WmzDUre3itlnjugIXWPAUtEUJztABw4Gecdqf/AAPyJIn8L6lHDDMfsTQzSCISx6hbuiMQSA7ByEyAfvY6Gret+D7jRPEX9mPd2U6mXy1kF7AhOACSwMh8v/gZFXvEvjz+39Fl05LO6hSS6juFE18Zo4NqsvlxJsARPm4HbHU8YztX1vStZ1hNRutMvEllO68WO+UCQ7QMpmI7ORnnd6e9Nb/15f8ABDoGoeGZz4q1DTNJtpkjtGJb7bPEpiQY5kkDeWOSBnOCSBTYvBmuyz3MQtI0NqYxK8t1EkY8wExkOzBSGxwQSDx6itG+8Yadfarqc7aPci01ZALuA3yl9ysGVo38obcEdCrZ5/Cnf+KlvLSW1isfJg8y18lfO3FEgV1Ck4+YnfkngcdPRR2VwfUw7u0nsL2a0vIzFPBI0ckbdVYHBH51s2ejaLP4bm1OfVb+OS3kjikhTT0cb3DlcMZhkfuzk4B5HBrO1vUv7Z1++1LyvJ+2XDzeXu3bNzE4zgZ6+lEOpeToF3pvlZ+03EM3mbvu+WsgxjHOfM657e9JX5ddx6X0L8vh/b4Z068ijke6vbswqyXMLxEbVKrhWLo+TyGA4Ip954F8R2EKy3GncNIIlWOeORixfZt2qxOdw2njg8HBqa28SaVa+H7TT10q8aa2uxeCY367WkwoPyeVnbhem7Iz1NaDfEiVZUmttNVJY5vNQvNuGftTT4I2j+/t6jpn2qnbm+f4WX63J15fP/h/+AczqWh32kxxy3aQtFKxVZbe5jnTcMZXdGzAMMg4JzyKt+EvDx8S+IbaxaaOGFnHnM08cbbO+wORubHYA+uKf4l8SHX2ixLq7JGzNs1HUzdqucfcyi7f1zxVLQNW/sPXrXUvJ8/7O5by9+3dwR1wcdfSkr9RvyNC48NTXupXEei2qQ29uEEj3GrW8sYZug88bIyT2UZPB9DiK18Ha5dvKqWkcRhuPsri5uYoMTf3PnYZbngDr2pmla1aW+kT6Xq9hLeWck63CiC5EDpIoK/eKMCCCQRj0wRT9Z8TSazazxTWyRPNfNd7kY7VBQIEAPPAHXND02/rb/ghv/Xr/wAAxZI3ikaORSroSrKRyCO1b2s+HINF0mznnurqS5vIUmh8uzH2ZwcEhZi+SVBAICcHj3rn66S18T2mmaDd6fpVleI94iLN9qvlmh3BlbesQjXDZXgknAJ60dNQ6lOfwprFuI/Mtoy0kyQFI7mJ2ikb7qSKrExk4Iw+Oh9DTrjwnqllcW6X0dvGJpjCT9ugwjqMsjtvxGwB6ORWvq/j6XVr62u5P7VLx3cd1JbTaqZbUlTkhIimU56fM2BxzXNfa7afWZLu+t5ZLeWVpHhhmEbcknAcqwHJ/umhbr+u3/BDp/Xn/wAA0NU0Ax+LL3StPH2dYHIVdRu4ImAGPvPuEZPPY1Z0Tw7C/iSXRdfguUnMLvG9tcoFUiIyBvusHUgDG0jg5yaunxxYp4ovtZtdLvraS+gaNzFqIWWFiVO6KQRfJwuDkHIJ5FJ/wm9nP4yl8QX2lXU0jQLDHGt+BjEPlMzM0bFiRz2565pK9vl+I+r/AK7HNWWk3uo295PZw+ZHYxedcNvUbEyBnk88kdM1TrRju9LiOoD+y5JVmj22hlujutmyDuJVQH4yMYA5rOpiOi1DwlJpfh2PUbv7cZJI45B5ViWtkDgFVecsMPtIO0KeoGc5xk6Rpk2s6xa6dbFVluZRGrP91c9SfYDmtu58Xx3GmyqbGU6jNYR6fJcPdbovKQrjbFt4bCL/ABEZycZNUbTXbfTL7SL7SdOW3u9Pw07yTNIt0+7OSp+6MfLgdqenN5C15fM15PAkbHS7i21Gb+z9RkkjSa6tVhkJVdw2oZCGD4whLLk8cdaafBVv/biWC391vNobhrZrJReKwbHleR5mC5Hz7d+dvOOgM3/CwEi1GGa20+48nzZpp/Ovd80jyR+XlZAihNq8LhTj37RDxragC1/su4/s8acdPA+2j7TsMnmf67y8YzxjZjbxS/r8P8x/1+P+Q6LwLA+oXER1K4kgSWG3i+z2YkneaRN5jMfmAKUAbd85wR35w8/DyS2s9RmvZtQlaxu3tnGm6d9qXCoH8xm8xdqkN15of4gi5N9b3lhcNYXaQoY4bwJORGmz55Sh3bl4b5RnjoODTtPF8EXiWbxFc6dLLqnnma38u68uCLjCqybCzAf74yBih/1+H/BD+vzOXrRn0K+tdMiv7gW8cUyh0Q3UXmspPB8rdvwfXb056Vnu5kkZ2xliScDFdE3iiD/hGV0wWdzPOioIp726SdbYqwY+SvlhowcYI3kYPIPBAvMOuhSu/C+r2UKyTWqtmRYmSGeOWSORvuo6IxZGOCMMAcgjqKdJ4V1aPUIrHyreS5lLDyobyGRo9vLeZtc+XjuXxjB9DWzq3xButRvra/jbU1uIbtLswXOptPaB1OcJCVBUZ6DccDiqUfiLS7TWJLzT9IuY4rpJory3mvg4dJBgiNhGChGTgnd2znnJ/X9fMCuvg7W3umgS2iYrb/avNW7iMRiDBS4l3bCATgnPHOehoh8H6u+pz2k1vFCbbyzPJLdRRxqHwUxIzBDuByME57dKmuPFEB06XTrDT2gszZG1iEtx5kikzJKzswUBuUxgBcA+3Nt/GlrdJLFqOkNPA32R0RLrYVkgi8sEnacqwzlRg+jd6cbX1/rX/IT2/ry/4JV1TwjcQa1q8OnmIWWn3klss15dwwltpOAC7LubAyQo/DkVzldfb+N7dNW1S+utOup11C6e5axN4htW3HIEkTRNvIP8QKn0wea5A8npj2qVe2pTsFFFFMQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfEmreC9Os7PUp7W6uCFmiNk0hBBhZwhLhVySG3DgfwNwai/4V5c2Ou6Ra61eR29rqU/lLKYbiJiQygqFkiDAkMMErt9+DWNpnii+0nULm8tUgMtxKkzb0JCskolGBn+8o654/Opb7xbdXYsBbWVnp62Fy91CLVX/1jFSSS7MTyg7+3TAohpbm+YS1bsSP4Ujl1y8srDWbCWG1jkmlnfzlWJEbBDZjBLc5+UHPbnip9C8PWkniKS0mu9M1NBavLEiXEyLOfKZvlZY8qy4yVcLyMd6oXHiRpby8uLbTLGya9geGdYPNIbewYt87tg5Hbj2qLw/rx8PXzXcWnWl5NtKobky/uwVKtgI69QxHOfbFSr2s+346/wDAG7Xv/XT/AIJLpPhe81qyN1Yz2xSOXbch3Km1TBPmycYEfB5GeRjGSAceRQkrKrrIFYgOucN7jIBx9RW7Y+LbjS966bp9jbQyyl54QsjrOhUr5T7nJMeCeM5yc5yBjCkYPKzqixqzEhFzhfYZJOPqarqLod1feBdNto76SO5umjisS8O4qCbhFzIrcfdHy8cH5159ecu/Dt1pQv57k20yaZfLZzx7mxI53njAB2/uzzkHkU2TxJdy61e6mYoFmvYZIZFCttVXTYcc5zj1Jq5qfjO41W1lt59L06NLi7S8uTEkga4kUMMsd+QDuOQuB6Y5ofdf1r/l+gLaz/rQvXWg6Xf+M9Fso/J0m11C1tZZFVpWAaQDcqE72BOeM8DuarWfh/Tk8c22mnUrC/tzcbCjNcRq537REzCLcGP94DA9aqal4ql1C8sLuHTbGwuNPEawyWxlJ2x42Ah5GHGPTPqTSp4nSPxFHrMehaYk8b+aIg1x5Zk3bhJjzc5z2zt9qatzJ9Lv7ugn8NvJf8ELfw2b6TU52vrHTLWxuVhc3MkhALl9oXajM33D2z36ZIu2GixWv/CSaVq+nwSXmnWskqXKySbkdXRRjDBSpDE8qTzSweKbD+zNVkuNH0557q8t5ksm+0eUdol3PkSZzlxwWx83T0q2vjGeG51K5vNMsNQuNT3LcS3HnAlGIJQCORQBlR2yPXFTZ2t5fjZfqW7c1/MjtdMtn8D6hqGLae5inhXPmyrLbqSwxs2bGDY67sjHTmq93oJsNNiub3ULOG4mhWeOxPmGZkb7rZCFBkfNgsDjtyKms/EqWeiXWmLomnSxXbBpZJGn3kqSUxiUAbdxxxz3zUd34ha/0+GC806yluYIUgjviJBKqJ90EBwhwPlyUJx+dP8A4H5El++8C3unaba6jd3kEdjcSpGbiS3uY1QspZTh4gWGAeUDfqKPEfhrTdF8VNp8Gt2skCzbG80TboQAD+8Ii5z0+QNUOteMrrW7K5t5bCxtvtdyt3cS26vvllUMMks5xwx4AA9AOagv/Ei6pqMV9faNp8twvM7bp1+1HaBlwJOOmfk2801vf+un/BDoXdV8MmTxXrFvbi00qysG3Su88ksMCkgKN23e+SQB8ueemAaavgm53XDXGqabb20Jg23MkkhSYTBjGUCoWOdp4IBHcDBwXXjWa71S7vJdI03bfR7Ly2HneXcYIIY5k3KQQMFSv86qXvii9vYpYXhto4ZJIGSONCBEIVZUReemHOc5J9euVHRJP+u4PqZ2pWE2lapdafd7fPtZmhk2nI3KcHB9OK2rK18PyeFLnULmx1Jrm2migby7+NUdpFkO4AwkgDy+mTnPUVjarqMur6vd6jcqizXczTOsYIUFjk4yScc0RajLFpFxpyqhhuJo5nYg7gUDgY5xj94c/hSV+XXcel9DZbRIJfCelzWv2SS5u78wNcJNLuQlVxG6MgUYzncpbOfarl38NtWt408q80+7lkmWFYYJHLFjKYj95QMBwRnPuMjms+DxX9n0W306PRdOC284uEmJn8zzQAN5/e7ckKOMY9AKsv8AEDWGYNEltDIsnmK6I2Vbz2n7kj7zEYI6ce9U7c3z/Cy/X+rk68vn/wAP/wAAreI/B2peGILee+2tDcMyI4hmiO5cEjbKiN0I5AI96PBWi2Wu+KbSz1K6hhgMgLRSeZmcDkopRTjp1JHsc1n6pqUGoyK8Gk2WnEEl/shlw5PqHdsY9sdabo+qT6Lq9vqNqsbzW7blWQEqeMc4I9aSv1G7dDYuNEg1O4uLy2utH0zTYWSH7TG115DyMMhVDq0pOAc5AAx7jLV8F3MZn/tLU9N01Ybs2Za5kchpMA8FEb5SDnceB3xxVHS9efTrKaynsbTUbOWRZTBdh9qyLkBgUZWBwSOuCDyOlJqXiG91W3livfKbzrtrtnVNp3lQuABwFwBxih+X9bf8H8A33/rf/gGbIhjkZCVJUkEqcg/QjrXa6h4Osrbw7Je/ZdTtPL0+3uo7+5lU29zJIqExIvlqc/M2MM33TkenEVb1DUptRuoriZY1eKGKFQg42xoqKTnPOFGaOlg63N278A6paWNjd+bE8F7cRW6OYZ4gGkGVP72Ndw4PK7v1Ga0vhRk1G3sodX066nmuGt3S286RonHYqI9zAngFAwJHWrN748vb1i407T7eR76O/meJJMzTJnBbc54O48DA9Mc1ladr1xpuvNqscMEsrmTfFKpKMJFKsOCCOGPQg+9HX+vL/gh0/rz/AOAbcHhd/D3jbSdN1+ygvodQaMBZBPF8jybC2D5cisMH7wx3wRiovD1jp0/jK80u80+G5t3+0CMvJIGh2I7KVKsM/dH3s1B/wmMn9radfHSNNI0yIRWluBMI48OXDcSbiQSepOe+etJZ+LRY69Nq0GhaZ58oYBGa4KIWBDkfvc5YMc5Jx2xSf+f/AAB/8D/gknh3wJq/iawN3YKBEZTDGWhmfe4AJGY0YIPmHLlRz14OGW1naSeCdWefT4UvtPuIUW5WSTeQ7OGUjds42jGFFQx+JVFm9nPounXNn5zTQQSmfFszABtjLKGwdo4Yt0pLHxItjoNzpX9jafPHdENLNK0/mMVJKn5ZAoxuOMD65pvyEihJp3l6NDqH2y1bzZmi+zLLmZMAHcy44U54PsabpltHe6taWs7yJHNMkbtFGXYAsASFHLH2HWnSaj5mjQ6f9jtV8qZpftKxYmfIA2s2eVGOB7mmabqE+lapbahZlRPbSrLGWGRuByMimviE78pv+L/D1lodvataxXUEsssyMktylyhVCAGEiIgDZ3Apyy4GcZxWZ4ZstP1LxDaWWqtciG4lSIC22hizMFHzNkKBknOD0xjnIl1DxLJfwW1tHp1lZ2cE7XP2WASFJJGxktvdm5CgYBAxSW/iP7P4nbWxpGmmTzBLFbBJI4IXBBBVUdTxjoSRz0oho1cctVoaeg+GLPUb3Vo5Y7m4+xTrFFGlylsGDOVy0roy54ACYBbJxyMG5beE9HuF1COzjvNRvIdQlt4LT+0IbOcxKoKt5UiF3YnIwADx0B4rIXxcRJeq+iaZJa3kqTyWjef5YlXdhwfN35+ZuN2OelJB4wuotYuNXksbK41WWZp0vZVk3QuRwVUOE46jcp5qVflSfb/L/g/1s3u2izpfha1m8NX9/qc80V4to9zZ28ZAyiMql3yCdpLEAcE7WPbnlq6Gw8d+JdOtp7eHWL1opYDAqPdSEQgkHKANhSMYz6E1z2ecnmn1/rzF0Ogv/B19Y6jY6cbi3m1G+MYjtEWVWG/7p3OioRnjKsRVq/8Ah3rVheWUDeWwvHdEkeOWAJsXc5YTIjYC87gCODg54qv/AMJneQWdpa6XZ2unRWl0t5GIGlf96owDiV3A6nIGM984FQL4mNvrEGpaZpOn6fNEX3rCJWSYMMMrLI7DBBIwuOCfbA/IF5hD4bW5nm+zazp8tpbQiW4vgJlihBbaFIaMOSTjAVT19ji0vgm53XDXGqabb20Jg23MkkhSYTBjGUCoWOdp4IBHcDBxVh8SrbTz/ZtF06O0uYRFcWWZ2ilw24MS0hcMCBgqw6e5yl74ovb2KWF4baOGSSBkjjQgRCFWVEXnphznOSfXrlq39ev9WDubXh/wMT4ntrfxDcWcFuNTNi0MjybrpkYB1j2KeOR8xKjkc9cYz+GpY/D39tT3dvb20krxwRukrNKy/wAIZUKA9eGYHjPTmtCD4g6hFqBvZNP064nW+kv4Gmic/Z5HIL7QHAwcD72cdQQeaz9P8Ty6Xp13bWdhaJLdwvBNdb5i7o/UFfM8s9eMpxwevNTrb5D0v/Xn/wAAxKKuS6j5mjQaf9itE8mVpftKRYmkyANrNnlRjgYqnTEFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFdJ8OP+Sp+FP+w1Z/+j0rm66T4cf8lT8Kf9hqz/8AR6UAfd1FFFABRRRQB8X+I/DmjJfT6dFBp+m3J1RLWy+x3rXEkkRYqzSoZH2kfKcHYckjHpjw+E9OvtaXTdM1tpZY3mF0Z7UQiNI1LF1YybWBwQNxTnGcA5GBJql5NrLarJNm9af7QZdo/wBZu3ZxjHXtjFLa6re2WrDUracx3Ydn8zaDktndkEYIOSCCMEHFJef9bW/4If1+Z0DeD7Aa9DZL4gtmglt2m8xXgaQMCR5eBMY9x6geZ0PrxUNh4ThutY1CxuLm+tXtQvl20lki3k5P8KwNKuTjnAYk8YBzxmf8JBef2gL3ydO83y/L2/2ZbeXjOf8AV+Xsz/tYz71IvifUxqE185s5riYKGa4sIJQoUYUIrIQgAwMKBwB6U1vqD8jMuYTb3c0JWRTG7IRKmxxg4+ZecH1Haum0nwWNV8OvqH217ecQTTxQyrCFlWIEnbmbzD90jIjIyMZ4JHNXV1Ne3ct1dyNLPM5kkkY8sxOSTWpbeLdas9MWwt7pFgWGSBSbeNnEb53IJCu4Kdx4zjPNLXl8x6c3kaNx4RsYdMmnXWJHubaytr6eEWeFWOXZwH38sPMBxjBHcHgVdY8LjRre+mnvQ6xXSwWhWPi7UrvLjn5QEKHv98D3qiut3srSpcXTLFcwRWs5WJSTDHt2gDjkbF7gnHJ5NWfEeuR6oun2dkZjY6bbiCFp1CySHqzsASBngAZOAqjJxTfl/X9fqJef9f07kvgaziv/ABdbW08UUySRT/JMF258lyCd3AwcHJ6YzV2DwRFJrV3p8mp+WdOh338jxJEsb7lXYhlkQNyw5YoODjPGeasNQudMvFurGTyplVlDbQ2AylTweOhNaEfivWY5IZPtSO0Nv9lHm28cm+L+44ZT5gGBgNnGBjGKf9fn/X9ahoXHg1TJdxaTqcWoz28tuqxw7G3pLwDuR2XcrlVIBYZYYY1hapa29jq1za2d19shhkKLcBNokxxkDJ49OelbOj+Jo9MuL/VmLDVZoWggit7WKGBdwA8w7cAEYyFCfeAOa5up/r+v66j6f1/X/DHUrpXh7/hX8OpTXV8l8148RZLRWBIjUhOZgNuTnfjPJ44pl34St7a3u4f7TZtVsrRbue2+zYiCHadqy7slgHUkFQOuCe+TZ65fWOnTWMDQtbTtuaOe2jmAbGNy71O04PVcH8qmn8UavcaZ9glulMJjWJmEEYleNfuo0oXeyjA+Ukjgegpvd2/rT/MS6X/rUo6dYy6nqlrYW23zrqZIY9xwNzEAZPpzW3H4d0y71Z7PT9WuJEtY5ZbyeayCKiRjJMYEhL5wcA7O2cc45+GaS3mSaCRo5Y2DI6HDKRyCD2Na0nizV5NRiv8AzbaO6jLHzYbKGMybuG8zag8wHuGznJ9TQBox+EtOlha+Gsyrpn2FrsTNZfvTtmWIxmMPgHLcHdg8ZI5xes/Cmh2t7rVtql9dTC301by3litBwriNg5Hmj5gHxtyR1OeBXN3XiPVLzzRNcKElgFsYooUjjWPeH2qiqFX5lB+UDJ+poi8SapFqX29bhGnNuLZvMgjdHiCBAjIylWG1R1B6Z60dH8/1/wCAH9fl/wAE09DtNPm0/wARfZpfPkis2eL7Xp6n92HT5lYS/u5OccBhjPNLZeErS70i2nOrOl9dWNxexWwtcoFhL5DSbxjIjOMKffHBNCx8V6ppxujZixT7WT5wOm27BgcZXBjOF4HyjA9qrpr+pRvE0dwEMVvLbRhYkAWOQsXUDGOfMb6Z4xgUP9P8/wDgDVvx/wAjQPhRsXuy73Na6fbXoXyvvmbyvk68Y83r3x0GeLHiTwdB4fspHGs21xdQTCGa2EkO7POSgSV2IBGDvVDyOOoGfJ4t1qXR30x7pPsskSQuBbxh3RCCis4Xc23Axk8dBUGp+INQ1iJV1FreVgQxmFpEkzkDGWkVQ7f8CJz1ofkJba/1p/mZtFOileCZJYzh42DKSAcEcjg1Y1LUrvWNSn1DUZfOurh98sm0LuPrgAAfhQBVoq5per3ui3bXOmzeTM0TxFtit8rDDD5geoPXrVOgAoq5Fq97Do0+lRTbbK4lWWWLYvzMudp3Yzxk8ZxVOgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuk+HH/ACVPwp/2GrP/ANHpXN10nw4/5Kn4U/7DVn/6PSgD7uooooAKKKKAPztooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK6T4cf8AJU/Cn/Yas/8A0elc3XSfDj/kqfhT/sNWf/o9KAPu6iiigAooooA/O2iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/wAlT8Kf9hqz/wDR6VzddJ8OP+Sp+FP+w1Z/+j0oA+7qKKKACiiigD87aKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuk+HH/ACVPwp/2GrP/ANHpXN10nw4/5Kn4U/7DVn/6PSgD7uooooAKKKKAPztooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK6T4cf8AJU/Cn/Yas/8A0elc3XSfDj/kqfhT/sNWf/o9KAPu6iiigAooooA/O2iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/wAlT8Kf9hqz/wDR6VzddJ8OP+Sp+FP+w1Z/+j0oA+7qKKKACiiigD87aKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuk+HH/ACVPwp/2GrP/ANHpXN10nw4/5Kn4U/7DVn/6PSgD7uooooAKKKKAPztooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK6T4cf8AJU/Cn/Yas/8A0elc3XSfDj/kqfhT/sNWf/o9KAPu6iiigAooooA/O2iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/wAlT8Kf9hqz/wDR6VzddJ8OP+Sp+FP+w1Z/+j0oA+7qKKKACiiigD87aKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuk+HH/ACVPwp/2GrP/ANHpXN10nw4/5Kn4U/7DVn/6PSgD7uooooAKKKKAPztooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK6T4cf8AJU/Cn/Yas/8A0elc3XSfDj/kqfhT/sNWf/o9KAPu6iiigAooooA/O2iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/wAlT8Kf9hqz/wDR6VzddJ8OP+Sp+FP+w1Z/+j0oA+7qKKKACiiigD87aKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuk+HH/ACVPwp/2GrP/ANHpXN10nw4/5Kn4U/7DVn/6PSgD7uooooAKKKKAPztooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK6T4cf8AJU/Cn/Yas/8A0elc3XSfDj/kqfhT/sNWf/o9KAPu6iiigAooooA/O2iug/4QbxF/0Dv/ACPH/wDFUf8ACDeIv+gd/wCR4/8A4qgDn6K6D/hBvEX/AEDv/I8f/wAVR/wg3iL/AKB3/keP/wCKoA5+iug/4QbxF/0Dv/I8f/xVH/CDeIv+gd/5Hj/+KoA5+iug/wCEG8Rf9A7/AMjx/wDxVH/CDeIv+gd/5Hj/APiqAOforoP+EG8Rf9A7/wAjx/8AxVH/AAg3iL/oHf8AkeP/AOKoA5+iug/4QbxF/wBA7/yPH/8AFUf8IN4i/wCgd/5Hj/8AiqAOforoP+EG8Rf9A7/yPH/8VR/wg3iL/oHf+R4//iqAOforoP8AhBvEX/QO/wDI8f8A8VR/wg3iL/oHf+R4/wD4qgDn6K6D/hBvEX/QO/8AI8f/AMVR/wAIN4i/6B3/AJHj/wDiqAOforoP+EG8Rf8AQO/8jx//ABVH/CDeIv8AoHf+R4//AIqgDn6K6D/hBvEX/QO/8jx//FUf8IN4i/6B3/keP/4qgDn6K6D/AIQbxF/0Dv8AyPH/APFUf8IN4i/6B3/keP8A+KoA5+iug/4QbxF/0Dv/ACPH/wDFUf8ACDeIv+gd/wCR4/8A4qgDn6K6D/hBvEX/AEDv/I8f/wAVR/wg3iL/AKB3/keP/wCKoA5+iug/4QbxF/0Dv/I8f/xVH/CDeIv+gd/5Hj/+KoA5+iug/wCEG8Rf9A7/AMjx/wDxVH/CDeIv+gd/5Hj/APiqAOforoP+EG8Rf9A7/wAjx/8AxVH/AAg3iL/oHf8AkeP/AOKoA5+iug/4QbxF/wBA7/yPH/8AFUf8IN4i/wCgd/5Hj/8AiqAOforoP+EG8Rf9A7/yPH/8VR/wg3iL/oHf+R4//iqAOforoP8AhBvEX/QO/wDI8f8A8VR/wg3iL/oHf+R4/wD4qgDn6K6D/hBvEX/QO/8AI8f/AMVR/wAIN4i/6B3/AJHj/wDiqAOforoP+EG8Rf8AQO/8jx//ABVH/CDeIv8AoHf+R4//AIqgDn6K6D/hBvEX/QO/8jx//FUf8IN4i/6B3/keP/4qgDn6K6D/AIQbxF/0Dv8AyPH/APFUf8IN4i/6B3/keP8A+KoA5+iug/4QbxF/0Dv/ACPH/wDFUf8ACDeIv+gd/wCR4/8A4qgDn6K6D/hBvEX/AEDv/I8f/wAVR/wg3iL/AKB3/keP/wCKoA5+iug/4QbxF/0Dv/I8f/xVH/CDeIv+gd/5Hj/+KoA5+iug/wCEG8Rf9A7/AMjx/wDxVH/CDeIv+gd/5Hj/APiqAOforoP+EG8Rf9A7/wAjx/8AxVH/AAg3iL/oHf8AkeP/AOKoA5+iug/4QbxF/wBA7/yPH/8AFUf8IN4i/wCgd/5Hj/8AiqAOforoP+EG8Rf9A7/yPH/8VR/wg3iL/oHf+R4//iqAOforoP8AhBvEX/QO/wDI8f8A8VR/wg3iL/oHf+R4/wD4qgDn6K6D/hBvEX/QO/8AI8f/AMVR/wAIN4i/6B3/AJHj/wDiqAOforoP+EG8Rf8AQO/8jx//ABVH/CDeIv8AoHf+R4//AIqgDn66T4cf8lT8Kf8AYas//R6VH/wg3iL/AKB3/keP/wCKrb8FeFtZ0jx94f1LULPybSz1O2nnk81G2IkqsxwCScAHgDNAH2B4k0i51fTYxpt61lfWsouLaYfd3gEYb1UhiD9ehHByNDtvEGt6zBq/iRP7OisNyW9hEeJJdpR5W68ctt9jwccvZ/4WF4Y/6Cf/AJLy/wDxNH/CwvDH/QT/APJeX/4mgDpaK5r/AIWF4Y/6Cf8A5Ly//E0UAf/Z)**

It can be seen, when the number of threads= 1, the parallel block and serial block are not the same as the parallel block has only one thread which makes the multiplication more by a second

2. Number of threads = 2

![A screenshot of a cell phone

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAeAB4AAD/4RD0RXhpZgAATU0AKgAAAAgABAE7AAIAAAAOAAAISodpAAQAAAABAAAIWJydAAEAAAAcAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG5pa2hpbCBtaXR0YWwAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzc2AACSkgACAAAAAzc2AADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA0OjE5IDE4OjQ4OjU1ADIwMjA6MDQ6MTkgMTg6NDg6NTUAAABuAGkAawBoAGkAbAAgAG0AaQB0AHQAYQBsAAAA/+ELIGh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjAtMDQtMTlUMTg6NDg6NTUuNzU2PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm5pa2hpbCBtaXR0YWw8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgBqAJKAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A9TbTria6uYrB/EV2LeQRvJHfxqu4qrYG5wejDtTDomrHpB4k/wDBjB/8crZ8Dfb/ALLqp1aS2kumvwXNtGyIP3EPA3MScevGeuB0rqKuV07XFZHnv9h6v/zw8R/+DGD/AOOUf2Hq/wDzw8R/+DGD/wCOV6FRU8zCyPPf7D1f/nh4j/8ABjB/8co/sPV/+eHiP/wYwf8AxyvQqKOZhZHnv9h6v/zw8R/+DGD/AOOUf2Hq/wDzw8R/+DGD/wCOV6FRRzMLI89/sPV/+eHiP/wYwf8Axyj+w9X/AOeHiP8A8GMH/wAcr0KijmYWR57/AGHq/wDzw8R/+DGD/wCOUf2Hq/8Azw8R/wDgxg/+OV6FRRzMLI89/sPV/wDnh4j/APBjB/8AHKP7D1f/AJ4eI/8AwYwf/HK9Coo5mFkee/2Hq/8Azw8R/wDgxg/+OUf2Hq//ADw8R/8Agxg/+OV6FRRzMLI89/sPV/8Anh4j/wDBjB/8co/sPV/+eHiP/wAGMH/xyvQqKOZhZHnv9h6v/wA8PEf/AIMYP/jlH9h6v/zw8R/+DGD/AOOV6FRRzMLI89/sPV/+eHiP/wAGMH/xyj+w9X/54eI//BjB/wDHK9Coo5mFkee/2Hq//PDxH/4MYP8A45R/Yer/APPDxH/4MYP/AI5XoVFHMwsjz3+w9X/54eI//BjB/wDHKP7D1f8A54eI/wDwYwf/AByvQqKOZhZHnv8AYer/APPDxH/4MYP/AI5R/Yer/wDPDxH/AODGD/45XoVFHMwsjz3+w9X/AOeHiP8A8GMH/wAco/sPV/8Anh4j/wDBjB/8cr0KijmYWR57/Yer/wDPDxH/AODGD/45R/Yer/8APDxH/wCDGD/45XoVFHMwsjz3+w9X/wCeHiP/AMGMH/xyj+w9X/54eI//AAYwf/HK9Coo5mFkee/2Hq//ADw8R/8Agxg/+OUf2Hq//PDxH/4MYP8A45XoVFHMwsjz3+w9X/54eI//AAYwf/HKP7D1f/nh4j/8GMH/AMcr0KijmYWR57/Yer/88PEf/gxg/wDjlH9h6v8A88PEf/gxg/8AjlehUUczCyPPf7D1f/nh4j/8GMH/AMco/sPV/wDnh4j/APBjB/8AHK9Coo5mFkee/wBh6v8A88PEf/gxg/8AjlH9h6v/AM8PEf8A4MYP/jlehUUczCyPPf7D1f8A54eI/wDwYwf/AByj+w9X/wCeHiP/AMGMH/xyvQqKOZhZHnv9h6v/AM8PEf8A4MYP/jlH9h6v/wA8PEf/AIMYP/jlehUUczCyPOJvDN9cspudP12cqCF829t32564zJ7CnReHdSgjEcFn4gijBJCR38CqMnJ4EnrXotFPmYWR57/Yer/88PEf/gxg/wDjlH9h6v8A88PEf/gxg/8AjlehUUuZhZHnv9h6v/zw8R/+DGD/AOOUf2Hq/wDzw8R/+DGD/wCOV6FRRzMLI89/sPV/+eHiP/wYwf8Axyj+w9X/AOeHiP8A8GMH/wAcr0KijmYWR57/AGHq/wDzw8R/+DGD/wCOUf2Hq/8Azw8R/wDgxg/+OV6FRRzMLI89/sPV/wDnh4j/APBjB/8AHKP7D1f/AJ4eI/8AwYwf/HK9Coo5mFkee/2Hq/8Azw8R/wDgxg/+OUf2Hq//ADw8R/8Agxg/+OV6FRRzMLI89/sPV/8Anh4j/wDBjB/8co/sPV/+eHiP/wAGMH/xyvQqKOZhZHnv9h6v/wA8PEf/AIMYP/jlH9h6v/zw8R/+DGD/AOOV6FRRzMLI89/sPV/+eHiP/wAGMH/xyj+w9X/54eI//BjB/wDHK9Coo5mFkee/2Hq//PDxH/4MYP8A45R/Yer/APPDxH/4MYP/AI5XoVFHMwsjz3+w9X/54eI//BjB/wDHKP7D1f8A54eI/wDwYwf/AByvQqKOZhZHn66Jqw62/iT/AMGMH/xypLPT4b2xguo9X1lUnjWRQ14cgEZGfzrvK880SUjQNPGf+XWP/wBBFHMwsja8Cadb6VaaraWfmiGO/wAIJZ3lIHkQ8bnJOPbPFTeMrhbTTGuWginMMTuqTZ2k7kHOPYmpPCv3tY/6/wD/ANoQ03xhZNf6W1sp2+bGyb9jMAdynnaCexquZylzS1FK6i+U4zwx4hj1zW4rKfSbBEdWJaNXzwpPc10OoW1tZatpq21hbRmWUO0qod6kSIBg59GOaxPDnhx9E1iK8luFkVAwISCXPII7rXU3MsV2YAkTvMs8W0+QwwPMUnkjjgfpScru6RhR9o4e/vc0fEeuR+HdCm1CSFrhwyRQW6nDTSuwSNAe2WYDPbr2rOivPEGjWs2q+LtQ0cabBbvNcx2dlMr22Bu4kMjeaAAR/q0J64H3as+L9Dn1/wAPNa2MscV5DPDd2zTA7DLDIsiBsc7SVAJHQHOD0qtD4g8Qz2Uzf8IZeW91DbtII7i+thHNKBxGjo7Hk/xMqjHJ54qVs+/6f1f8Dq6ot6DrUuo3WqWl35QuLK4+XylIDwON8T4J6lSVP+0rdOlZX/CW33/CpJPFHlW/25bBrkR7W8rcM8YznHHrU+qMdK8YaRqzL5UepJ/Zl4oAOHOXgYn2bzE9zKK59tI8RDwVL4GXRJSj7rRdYNxD9mFuzk7yu8S7whxt8vG8ddvzUL+v6+5/MXm/X+l96Ow/4SnSv7cGjiWeS83Kj+VaSvFG5XcEeVVMaMRztZgcEccjMdr4x0O91ddNt7qRppHeOKRrWVYZnTO5Y5iojkYYbIViflb0OMK40nVx46abRbHUNMhnm/4mN011C9nexeVtDCPeZEmBCgFVUHb8xYYrL8GeDZdJOj6fq2gaw8+knA1GTXXlsmKKyrLHAZyQWB+6YlC7m54GRaq/9f1+fyB6HUR/EHw5NZfa4Lq5mhLrHG0Wn3Dmd2BO2IBMyMArFgmSuDuxiptH8RnUteubNtogktorywYwvE7wn5XDq/IZXHIwMB1BGc1zq+Hry1+HWg6fdaJqNxfWR3A6VeQw3FnLtcCRWeRUb7xBBJB3cqwyKtXy6npGieHfEGvSo+paayw6lLGi/PDNhJM4wBtby5Djj92cDFC3/r+t/wAAfl/X9L8Toz4k0kWJvDdf6Ot79gL+W/8Ar/N8nZjGf9Zxnp3zjmorXxZo97qk9hbXErSW+8STG1lW3ynDgTlfLYqeCAxIIOehxx11o3iRbWXQ7fQ2lh/4SNNSOofaohE1ubxZztXdv8xckFSoGFJDE4BS78La3qja7pemW1/oOmalaXkdxHd3UU1vJPITtmg2O0ibiWLKdi4b7u7Jo+zf+tk/zuirLmt5/hd/8A6u18c+H7xbhoruZFt7ZrstNZzRCSFfvSRF0HmoMj5k3D5l9RmHT/GEOpeJLe3tDv0y9gcWs720sRkmjILgFwA6FGBVlGDsfk9uYtfC091pF8reGNZs9TXSLi2il1HX2vIjJIgUpCGnf5SR95lQ4A45OOi8Q6fPbeCbO7t4sX+hpFeRIihiTGuJIx2+aMyJ/wACo0Tu9lb8b3+7Rkq7SS3f/At97LPiDxtpGg/a4Jrhzd29uZnCWssscAIJUzOilYgcdXK8AmmQeNbC30PR7jVmlN9qNkl19lsLOa5fBVSzCOJXYICwG48cgZyaxJItZhfxG2kaO2s2viRFurK8S4hSKPdbrFslDsG2/IGBRXyG6DFGlaZrvha+s9QXRrjVkm0SzsJ7e1nhE1rLAHP/AC0dEZD5hyQ2QVHBByBXV7+X63X5Cdna3n+n/BZ0s/jDQ4NIs9S+2me3vzttRawSTyTnBJCxIpckAHIC5XBzjBqxYeItM1KUxWk8hlW2W6aOSCSNljZmUEhlBBzG42nkY5FcZZ+HNc0C/wBJ11dNOpyo2ofatOtp4w9v9qmEwMZkKoxUqEOWXIJIz0N+6XxBD4lk1m18OzT/ANp6THaGD7VCps5UkkYecS2CpEvJj3kbTgNxlS0Wnn+v9X+RSSv/AF3/AA06GnceP/DltBayteTyi8sxfQJb2U8zvAf+WmxELADjORxkZxU2meN/D+sajBZabfmeS5jaW2kEEghuFUAt5cpXZIRnkKxIwcjg4w/BnhzVNKn0R9RtBEbXw1BYTHzFbZMrAsnBOenUce9R6T4X1W38P+BbSW2MEmlqwvdsiZgJtZI88Hn5mH3c9c1T0v8AP82v0X3i3/D8k/8AM6K18Y6He6uum291I00jvHFI1rKsMzpncscxURyMMNkKxPyt6HEGn+P/AA3qlxFDp99LM08bvAy2cwSbYMuqOU2u685RSWGDxxXK+DPBsuknR9P1bQNYefSTgajJrry2TFFZVljgM5ILA/dMShdzc8DN7TvDOrW2i+BbdrTZJpV4Zb1RIn7pTBMpPB+b5nUcZ6/Wl1/r+vkHc0NH+JGkajoJ1O6gvrP/AEt7VIGsLlpJmV3UCNfLDSHahYhQdnIbGDWho/iM6lr1zZttEEltFeWDGF4neE/K4dX5DK45GBgOoIzmuWXRtSj8Nf2dfeGtWluLPVbm4tbvTL63ilTzJJmSaItKoICvtZZMZ3YKsM1o3y6npGieHfEGvSo+paayw6lLGi/PDNhJM4wBtby5Djj92cDFC3/rqv8APfyD/g/g/wDLY6KPxLpMtha3kd0Whu7n7JAfJfc8u5lK7cZGCrZyMAAk8c1nR+M9MstHs7nUtQN6955rQnT9MuGZ0RiC3kr5jgLwCx4zjpkCs/TvC+owfEKeaeNRoVtNLqFkdwJNzOgVxjORt/fNkjnzuOhrHm8O63aeFdHhs9I1JNctIZ1t7/T7yBfsjvJnbKsjhZI2wpI2v93gBsGlfbz/AK/ruPrY7mTxNpEVnqd3Jd4g0ld16/lP+6HliXpjLfIwPGeuOvFQ6l4w0XSL1bbUJ7iInZumFlM0EW84XzJlQxx54+8w6j1rjvEWj+Kf7O8X6dZaINRm8QWytFdxXMUcEcn2ZYnRg7Bwcx5XCsDuUEryRB408PeJ9bXXLMWGp3wmiVdLaDVVtbOFPLXesiLIrSOXD8Orpyoyo3VVldf16i+yv67f8E7vTdXnvPE2tadKkYh08weUyg7m3puO7n16YxTZ/FukQay+lmW5luo+JBBZTTJG23cEaREKK5XkKTuORxyMx6Ppt3a+K9evJ4tlvd/ZvIfcDv2R7W4ByMH1rIfTtXj+IQu9G0+/0+Ca4DajcPcwvZX0QiChhHvMiSjCgFVUHb8xYYqVvYPs3Lnhvx9pviCxgneG6sZLi+ksoY7i0mQSOpkxhnjUHKxMT/dPynmtK78VaNYw3slzeFRZXK2kyrC7OZmVWWNFALOxDqQFB6+xrj4NH1+z0mxUaHNNNouvzXojS4hH22GV5xmIlwAQswJEmzoQD3qNNE8Sm/uNfk0Zlli8QjUo9MFzEZJ4DZrb/e3bBIuWOCwXKkBiMMaVn/Xp/m/uH/X5/wCS+81ofHceoSeIfsl3DZW+mx2wjnu7CYvFJIWBEsJKP2XA+U4YHoa2dW8Y6Lol49pf3E7TxRCacWtlNcCBDnDSGNGEYODguRwD6GuUvNE1/WU8V3MmitZNqa2ItIJLiJpGETHfv2sVDD2YjGMEnIGmIdc8O6/r8lpoU2tQaxOtzBNDcQoIW8lIjHKJHUhR5YIKBzgngEDMu6Ylqtf6/r/gnWmc3Fh5+nPDOZIt8D78xvkZU7hn5TxyM8Vx9x4r1fwzf6jb+J3sdRS30mTU45dOtntziNtrRsjyScnK7WyP4hjjNa2n6dqXhj4c2+n6dGmo6np2miKGMtsWeVI8AZJGASO5HFc1aaFfar4a1nSrzQtXstV1iydLrWtRltHEku0hRiKZyqAk7UVdoGe5JNOyk7bf8P8A8P8Ah1Gtlf8Arb+v+GNnS9b8Q2niGz0zxNHYzHUrKS5tzYQvH5EkZXfC+92D8SDDjbnaflFO8LeJNb1y41+21PS7XTrvTpY44bYXBlxvgWQCRwMZy+DtBA5wW6mPTbbWda8Vadqus6RJpEelWcsQSWaKX7RNLsDMhRmwihDgttY7/ujFT6Vp2o6Z4g8X6i1kZVvJ4prNBKgNxsto0I6/L8ykfNj16Un+j/P/AC/q4o+ZnXHiPxNpd1qthcnTNUurGwj1ES2lrJCoTzCHiaMyud7IjFG3AEg5XjnV8Sa7eQ6RpM/h2e0D6peQQRT3MDTRhJATu2q6E8AfxCs3wxotxB4oku7Dw8/hfRRZtFJprtAFuZ2cESiKB3jXaoILZDNuwRhRWYdEm1HTovCirMyaFrcTEwzm3dLIhniKurKw2q3l5UgkxmjsvNf+la/hb5XYbXt5/l/n+OhsWXjU6XJqVn4ymt0uLC7jtkubK2l2XRki81AsWXZXxkbdzZIGDlgK0L3xzoWnsq3M15v8hbmRI9OuJGt42yQ0wWMmHof9Zt6H0NU77whBZLokOg2X7qDWFvbt5JjJI/7twZHeRi0jZKjJJOMdhxAIdc8O6/r8lpoU2tQaxOtzBNDcQoIW8lIjHKJHUhR5YIKBzgngEDKu7P8Arovzu9fIf9fi/wCvmby6xBJraRRalaNbGw+1mMRMSyFsCUTbtmzGeMEng5x1h0vxjoesXDwWd1IHWE3Cm4tZYFliBwZI2kVRIgyPmQkfMvPIzxP/AAiU8izeEI75ftSeDlsHuFztR2ZlBPcKcHHsD6U+LwVLrWi31lNoes6PqEmlTWiXuo6697CjyKFKxKZ5DtOOWKocAcc4D6ff+b/yQdben5L/ADZvap8TNGs/Dd/q1hFf3y2sHnIBp1yiXC9mSQxbWQ/31yoBBzgitJvG2ipLawu96JrpFcRf2bcl4lZtqtKvl5hBIODJtBwT0BrI1Jde8R+ANW0d/DU2l3jac0UYmuoGill242xlHJ28dXCdRx1xX1W11y+1uy1LRdC1XSdTdIElu2u7ZoDEshLQ3MQlbdgFiGjVmG8YZfmFPS9v66/1/SJ1tf8ArodP4Z1afVtJZr8RJf2s8lrdpCCEWVGwSoJJAIwwyTwwrXrkL64ufDvi+9bTrP7Y2s2TT29oHWIS3kCgFd54BeMpyeB5RNayalrbagsT6BttzdCIz/bUOIfJ3GXbjPEn7vb1/i6Ulr/Xy/ryG/6/P+vM2aKKKACo7m5gs7WW6vJo4LeFDJLLK4VI1AyWYngAAZJNSUUAc3/wsfwR/wBDl4f/APBpB/8AFVraVrela9atdaHqdnqVujmNpbO4WZFYAEqSpIzgg49xV6igAooooAKKKKACuJ0Kx1vxBaXl/L4x1i0/4md9AkFtBZeXGkV3LEgG+3ZvuovJJOa7auJ0K+1vw/aXlhL4O1i7/wCJnfTpPbT2XlyJLdyyoRvuFb7rrwQDmgCzZR6rpHj7T9NufEWoataXmmXk7R3sVsux4pbZVKmKFD0mfIJI6eldbXJWUmq6v4+0/Urnw7qGk2lnpl5A0l7LbNveWW2ZQoimc9IXySAOnrXW0AFFFFABRRRQBj+IG1q2WC/0PF0LYsbjTSFH2tDj7jn7si4yuTtbJDYyGXHPit/FjJYeCbgqSAb7Umi/5B47x7HHNx22MPk6uPuq+x4gGtXKwWGh4tRclhcakSp+yIMfcQ/ekbOFyNq4JbOArY58KP4TZL/wTbliABfaa0v/ACEB3k3ueLjvvY/P0c/dZADsKKKKACvM9HP/ABI7D/r2j/8AQRXpleZ6P/yA7D/r2j/9BFAHW+Ffvax/1/8A/tCGt+vnPx38YfFnw/8AFd/ZeHtJsbmwkaKaSe7tpX2yugULuR1AyI+B161zVz+1D4/s7l7e80TQ4J4zteKW0nVlPoQZcigD6xor5NP7UXj4WouTomh+QXMYl+yT7SwGSufNxnBBxUf/AA1X43/6BXh//wAB5/8A49QB9bUV8qXf7S/xDsbOzurrRfD6Q3qGS3byZTvUMVJwJsjkHriqn/DVfjf/AKBXh/8A8B5//j1AH1tRXydD+1B8QLiKaS30PRJUgXfKyWlwwjXOMsRLwMkDJ9aW4/ag+IFm6pd6HokDOgkVZbS4UspGQwzL0I6GgD6wor5Ys/2kfiLqGn3V7aaR4aeG0XfMDvV1Xj5ghn3EcjkAiqh/ai8fC1FydE0PyC5jEv2SfaWAyVz5uM4IOKAPrKivlR/2l/iHHpEWqPovh8WcszQJL5MvLqASMednoRzjFVo/2p/HMsqRrpfh0M7BQWhmUc+pM2APc0dbB5n1pRXyvqX7SXxF0m+S0vdG8OLNIiyJ5aySq6typDJOVIP1qPUv2mfiFpGpT2GoaL4fhubd9kkfkyttPpkTEGgD6sor5J/4ar8b/wDQK8P/APgPP/8AHqkT9qLx9JbyTx6JobQxECSQWk5VCemT5uBnBx9KAPrKivlSL9pf4hz6VcalFovh9rS2dI5ZPJlG1nztGPOyc4PQVU/4ar8b/wDQK8P/APgPP/8AHqAPraivkn/hqvxv/wBArw//AOA8/wD8eqez/ae+IWo3aWun6Dot1cSZ2QwWdw7tgZOAJcngZoA+r6K+Ub79pr4iaZdG21Lw/o9nOACYriyuI2APQ4Muar/8NV+N/wDoFeH/APwHn/8Aj1AH1tRXyT/w1X43/wCgV4f/APAef/49R/w1X43/AOgV4f8A/Aef/wCPUAfW1FfJP/DVfjf/AKBXh/8A8B5//j1H/DVfjf8A6BXh/wD8B5//AI9QB9bUV8k/8NV+N/8AoFeH/wDwHn/+PUf8NV+N/wDoFeH/APwHn/8Aj1AH1tRXyT/w1X43/wCgV4f/APAef/49R/w1X43/AOgV4f8A/Aef/wCPUAfW1FfJP/DVfjf/AKBXh/8A8B5//j1H/DVfjf8A6BXh/wD8B5//AI9QB9bUV8k/8NV+N/8AoFeH/wDwHn/+PUf8NV+N/wDoFeH/APwHn/8Aj1AH1tRXyT/w1X43/wCgV4f/APAef/49R/w1X43/AOgV4f8A/Aef/wCPUAfW1FfJP/DVfjf/AKBXh/8A8B5//j1H/DVfjf8A6BXh/wD8B5//AI9QB9bUV8k/8NV+N/8AoFeH/wDwHn/+PUf8NV+N/wDoFeH/APwHn/8Aj1AH1tRXyT/w1X43/wCgV4f/APAef/49R/w1X43/AOgV4f8A/Aef/wCPUAfW1FfJP/DVfjf/AKBXh/8A8B5//j1H/DVfjf8A6BXh/wD8B5//AI9QB9VWGkabpRuDpen2tkbmUzTm3gWPzXPV22gbmPqeauV8k/8ADVfjf/oFeH//AAHn/wDj1H/DVfjf/oFeH/8AwHn/APj1AH1tRXyT/wANV+N/+gV4f/8AAef/AOPUf8NV+N/+gV4f/wDAef8A+PUAfW1FfJP/AA1X43/6BXh//wAB5/8A49R/w1X43/6BXh//AMB5/wD49QB9bUV8k/8ADVfjf/oFeH//AAHn/wDj1H/DVfjf/oFeH/8AwHn/APj1AH1tRXyT/wANV+N/+gV4f/8AAef/AOPUf8NV+N/+gV4f/wDAef8A+PUAfW1FfJP/AA1X43/6BXh//wAB5/8A49R/w1X43/6BXh//AMB5/wD49QB9bUV8k/8ADVfjf/oFeH//AAHn/wDj1H/DVfjf/oFeH/8AwHn/APj1AH1tRXyT/wANV+N/+gV4f/8AAef/AOPUf8NV+N/+gV4f/wDAef8A+PUAfW1FfJP/AA1X43/6BXh//wAB5/8A49R/w1X43/6BXh//AMB5/wD49QB9bUV8k/8ADVfjf/oFeH//AAHn/wDj1H/DVfjf/oFeH/8AwHn/APj1AH1tRXyT/wANV+N/+gV4f/8AAef/AOPUf8NV+N/+gV4f/wDAef8A+PUAfW1FfJP/AA1X43/6BXh//wAB5/8A49R/w1X43/6BXh//AMB5/wD49QB9bUV8k/8ADVfjf/oFeH//AAHn/wDj1H/DVfjf/oFeH/8AwHn/APj1AH1tRXmvwb+IurfEPwXc6vrVvZQXEOoSWqraI6oVWONgSGZjnLnv6V3/ANqf0X8qALdeZ6P/AMgOw/69o/8A0EV6D9qf0X8q850ecDQ7H5W/49o+3+yKAPEPHnikWiJPcXEupXF35LyxXSiCQMIlZH2BFO1X6HGGAIzzmoNNk0G81qW71K70u7hurmFbhbie0XyY/Ijy26SNpHyxZcRlcFSSR1GR8cLT7B8Qo7Pf5n2fT7eLfjG7auM47dK86q6jTnJrqD8vM7e01Wa5+Hsmn2T6OJbW8kZ47qK0RzCYwAymQAu2QRlcv09qz9Z1i3g0600+xs9Kkhl02ETSLaxmVZsAs3mD5gwxgjOOuRya5iis3r+H5W/4PqO+v9d7nc6rZyG08O3ULeHPt0eUuVjnsghYyHZ5iIdpG3GSQffmqfjL+xza27eGvsQsmmkMwUr54mzzjPz+TjGzt6/NXJUU3qJHT+FtVg0jRdYln2SiXyYntTMEa4jJbeo6npjkA44rcvZLLxPpsLvd6ZHfGO0kc3NxGnlIHnEigse2YyUHJGODivPKKdxdz0C3s7WXxB4xfTrrSoLOeO4trQG+ggVyZVZQgZh8u0cEccdarWep3M/w8fTbaTRhcWl45kjuI7RWaIxgbkaQfO2QRuUlunPSuIoqbaW8kvudyr638/8AgHX3VkLj4eWUkjaMLuC5LYhntUuDAUXbuCkOx3Z4OW9a1vGltaRjVbKS30S2mOprHpkdk1ujxxgsH81kOVH3eJCMHoAAcedA4ORU97eT6jfT3l4/mXFxIZJH2gbmJyTgcCnLX+vT/IS0R13iC0nTWtElsbrR53Swgg+e+tJo1kSPDBwzFQPduCelW7uy0uDx5q8kT6KVmt5H0oefA9r5vy4DAExrxvwHwucV5/RR1v6/iH/A/A77w6kK6nqdxrcmivco0K/ZkfT44WQ53OrNG8fygDKxjcSfUVZg1KGL/hK9I0GTRVj+3LJYi6jtfLkiEj5xJMNrYBUgEnAzjvXnFFG/9f12A7CwszeeA9SjuG0RbgTRvalp7SKfAZ/N5yHx0wDweNoq7f8A9kro10I/7G/so2MX2HZ5RvPtPy7t+P3vXzM7vkxjH8NcFRQtA63O38V32lXun60lpBpMJtdWRLH7FDHGzQFZdxBXl1JCHJJAJGMDArE8H3Fra+IPN1Bttv8AY7pXHmiMtm3kAUMQQCScDg8kcGsOihaX/rpYDsrPxFYXJdRYW0NtpmlSx2MWoOtyxkMgbJLKFZss2AFAxxg85fpN/Hqdjd3Ntb6Bb635sK7byG3ihaAKQzKkv7oOWC5wAcdB1riqKOt/63uHQ9a0ez0VWnvNNs7CeCXVZVhimgtWW7RVTESNdOpRdzHmMMeRkdM8jd6vHpmh2EKafpUl1L9pW/jms42kUmRgATjdGQDkbdp6dgBWVpvinVtJs47aymhEUUpmi821ilaFzjLIzqSh+UcqR0BrJd2kkZ5GLuxyzMckn1NKw1t/Xmem20Ph+PwrFFdy6VO6wWskU5ltFdpDKnmIUWMSjapYEyOcgE49IPFl3oE/hy7jsItGSZSxiNpFEsnF26qAV5P7oKfcEE5615xRTlr94lorBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9W/sv/APJLL/8A7DU3/oiCuy1PxRrdzqlwvhXTftdppMhF80gINy44aGPvkAk5HcDtgPxv7L//ACSy/wD+w1N/6Igr2KOKOFSsKLGpYsQowCSSSfqSST7mgCrpGq22uaTb6jYljBOuV3rhgQcEEeoII9OOM1yOj/8AIDsP+vaP/wBBFdxHFHCpWFFjUsWIUYBJJJP1JJJ9zXDaOf8AiR2H/XtH/wCgigD51+P6hPipMF6fZYv5GvM69i+Neif2p8TNSupNQtLC3tLW3EklyJCCX3AACNGPY9q8vh8P6neGZtKsrnUreJmU3NpbSPGwXGTnaCBgg8gEZGQKAM2ityPwbr03h1Nbh0y6ltHdlBS3kJChQxk+7jZ23Z6g1nvo+px6WmpSaddpYOcLdNAwiY5xgPjB5B70bAU6KvXehatYWa3d9pd7bWzNsWaa3dELc8BiMZ4PHtRo+k3Gt6ktnaGNXKs7PIcKiKpZmOMnAAJwAT6A0AUaK2rDw6NR8RW+mWN7/aEUmGludOtJ5vKTOGbyyiucdeB361Wt9A1PULy5g0fT73UPs7lXNvauxUZIBZQCVzjoaAM6itCHQNYuWult9JvpWsyRchLZ2MBGch8D5eh6+hrPoAKKvf2Jqv8AZ8V9/Zl59jmYJHcfZ38t2JwAGxgnPGK2Nb8G3Ph7QLS91SLUobq5UN5b6eVhjyzAI0pYEPhc7dveh6BuczRWloWhXXiHUGs7F4klWJ5cysVBCjp0PJ4A9zVl/COr+Tp72tq99JfwtNHBaI0siKpGdygccMp4zwRQBiUVu6Z4M1/VXv0tdMuvMsELTRtbybtwI/dgBT8/OdpxwDVSDw3rt1NLDa6LqE0sLFJUjtXZo2GMggDgjI4PrQBm0VrR6DKfDFxrE4uoUSZIoQbNzFNnIb9790FSBweTn2qo2k6ijuj6fdK0cIuHUwsCsRxiQ8cLyOenIoAqUUVqa7oF14fuIYbySGQzR7w0LEhSGKshyB8yspB/maAMuitHQdHl1zWYLGJbgq7DzXt7Z52iTPL7E5IHtSQaFqN9eTwaTYXl/wCTIUJgtnY98ZUAkEhScH0PpQBn0U6SN4ZWjlRkkRirIwwVI6gjsa2o/BuvTeHU1uHTLqW0d2UFLeQkKFDGT7uNnbdnqDR0uHWxh0Vsat4Zv9MgS6FvczWLQQSG7FuwiVpI1fZu5GRvx159Kp3ej6np9rDc3+nXdtBcDMMs0DIsgxn5SRg8c8UbAU6Kt6XpV7rOoR2WmW0tzPIeEiQsQO5IHYdzWxr3hC50vxAujadb6re3nzfu5NNMRkCkjdGoZi6HBO7A6UAc5RWhDoGsXF7LZ2+k30t1C22WBLZ2eM88FQMg8Hr6U+Lwzr07OINE1GQxuY3CWkh2tnG04HByMY9aAMyildGjkZJFKOpwysMEH0NXf7E1X+z4r7+zLz7HMwSO4+zv5bsTgANjBOeMUAUaK6bW/Btz4e0C0vdUi1KG6uVDeW+nlYY8swCNKWBD4XO3b3rnbe3nu51htYZJpWztjjUsxwMnAHtR1sHS5HRWk/hzW49Rj0+TR9QS9lTfHbNauJHXnkLjJHB59jVa602+st/22yuLfZIYm82Jk2uBkqcjg4IOOvNAFaitGDw9rV0ZRbaPfzGFVeXy7V28tWG5S2BwCORnqKzqACir0uh6tb6amoT6ZeRWUmNly9u4jbPTDEYOaLzQtW06GOXUNLvbWORyiPPbugdh1AJHJ46UAUaK2tW8L3+h6HZX2qQXFpNdzSxi2uLdo2UIEO75uSDv9O1ZVraXN9dJbWNvLczyHCRQoXZj7AcmgOlyKitKPw5rcuoy6fFo2oPewqHktltXMiKcYJXGQOR+dT6XokGoWGqtNdT297p8DT+QbYFXVWVSC28FWy3TaelHS4dbGNRVhLC8k2eXaTv5kbSptjJ3IudzD1A2tk9Bg+lWZPDutw2jXUuj36W6rvMzWrhAucZzjGMnrQBnUVevNC1bToY5dQ0u9tY5HKI89u6B2HUAkcnjpSX+i6ppcsUWp6beWck3+rS4gaMv9AQM0AUqKlubW4srmS2vIJLeeM7XilQqyH0IPIq/oWgT6/cSw21zawPGjOBcSYMhCltqqASThTzjA7kZGTpcDLore0Xwjea3bwyw3NrA11Mbe0imL77mQAEqgVSBjI5YqvPXriS28Fajc2IlEtul08MtxHYNv8+SKMkM/ClQMq3DMCdvAPGR6bgtTnaK6Cfwdfw6TNeefbSS29vHc3FmhcywRPjazfLs53KcBiQDyODjn6Otg6XCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+mf2eP+SWXP/Yan/8ARFvXqNeXfs8f8ksuf+w1P/6It69RoAltf+PyH/rov86w9HgQ6HY8f8u0ff8A2RW5a/8AH5D/ANdF/nWPo/8AyA7D/r2j/wDQRQB418V9fh0b4kazbvqWp6ZLd2lr5d1pyBnXaWJB/eJwc+teeaZ4tt9PutLMk9/dR2etSahNI4AedSIwGI3n5/lfOT/F1OTXcfF3Q7fXvjJdWs+oC0k+wI0SiEyNIVR39QAMLySc8jAPOOC8OeCjr1rbPJdywS3sskdqkdt5q4QDdJI25fLjBZRn5j149Xrf+u4na2v9aFSDU9MuPC02l6hJdwSJeNdwPBAsquWQLtbLrt+6ORu6nitLVfF9vfaD5NpM9pcSWcNpNbLpVuVdUCj/AI+c+btOwNgg4PGcc0tp8PLi5tGR7iVNT+zSXItltw0SIrMoDy7htZijBQFOeORniO48ByRaHd3cV1LJdWFvHcXURttsKBwG2LLuyzhWDFdoAGeeBmXaz/ry/QrXm8/+DcyfEWuPq+uX11bS3C210yExyNjcFUBdwBI47elVNInjttUinlvrvT/LJZbiyj3yo2OMDen57hVKimtBHZS+ItDufFek6jO13iw2yXF5HYRJNeyiTflo1kCjjjduYnGTmqlrfeHYfEV9fvdajh8vZyf2fGzRysclinnAfL/D83XBI4weYoo/4P4h/X3Ha6R4ssNN0sWUd1cQSWt691b3raRbXTybgvJWV/3bAoDlWOc+wNcZJI0sryOdzOxYnGMk02igPI7C+8UaZcW97dw/bvt1/p8di9oyKLeEKEG5X3EsP3YIXaME9eOcTXNUh1OPS1gWRTZ2CW0m8AZZWYkjB6fMKyqKHr/Xr/mwWn9en+SNXQtVj0lr+R/MEs1o0MDRgHbIWUgnJ4HB5Ga37Hxfp1xBEfEEcs14q3JW4+xQ3CRPI0ZVhC5CNgK4wcAbhjoMcXRR1v8AIP8AhztLvxZpV94p1K5dLqGwv9NSxLJBH5kZVIxuEYZUxuj6AgYPbpWNJrENt4e/szTZ7vMeom7jmZRFkBAqkgMcMCD3OPWsSij+vxuH9fhb8jpdO1LRk8K6nZaheaj9uv5I5GMdokiKULEZYygndu5OOPerF14m0648HjQB9tAgiR4roou+SQMzGJxu4hBYleSQRux82ByVFAdbmhoN3Z2GvWd5qcLz21vIJWiQA7yvIU5I4JAz7ZrS1vxJa67okcMmnxWV5DdvMn2bzGjdZBl9xkkYg7gpAHHJ6d+dooeobO5q+GrqwsPENne6pLcRw2syTAW0KyM5VgduGdQAcdcnHoa0bjXrCC31W30ye+eO/voLrdJCsXyoZCysA7d3UjnnGeOK5mind6eX/A/yQdGu5peI9Ri1fxNqWo2yusV3dSTIJAAwDMSM4J559at2mo6bL4RfSdRkuoJYrtrqB4IFlVyUClWy67eVHIz1PFYVFSlaPKO93c6yXxbbyRXyMtxIs2k2ljCkgBVWiMRbPzcKSj4x/e6DJp/izxZBrlvc/YLiWNby4FxPZnS7eEKwyeZ4zvkwWIBZRnOTzXIUU3ruJaf15WLGn3C2mqWtzIGKQzJIwXqQGB4rfh8QafLqniIXf2qCz1pnImgjVpYh5vmAFSwDA4wRuH1455iij+vvD+vuOq1TxTa3WnajZ2ou9s0FpbRSS43SJDnJfB4zwQBuxgDPGav6R48htNGhtr5r6a4WOZZJMhtxeaF+pbJ+WJgfqB06cNRQtHcTV9C1ql0l9rF5dxBhHPO8ihhyAzEjPvzXTX3ijTLi3vbuH7d9uv8AT47F7RkUW8IUINyvuJYfuwQu0YJ68c8fRSSSjylXvLmNXXNUh1OPS1gWRTZ2CW0m8AZZWYkjB6fMKTw3qqaL4gt9Ql83bCHwYvvAlGUEcjuRWXRTF0sb2h65Db2F/pmrT3i2l5AIlltwJHgxIH4RmUFWI5GR69q6KHx9psMLwta3VwkPkRW7TKpMkYjMUpcZ4LRnAAzjpnjJ8/oo3Vg2dzuP+Er0S81HUG1b7VcabNceZFp7WUbFlVAiHzhKrxNhQDt3DjncOK4c4zx0oooA7aTxVoUXhG602xtpoprmyhgKCxgXbIrozuZwfMcMVJwcAcDHTEiePLRdavr6SG6nE2uQajGsmMiKMSDaTk4YBlx1HHXiuFop31v/AFun+gdLf1tY6LX9W0q50Ky03SXvpjBdXFxJPeRqhk8wJjhWbGNhzyc9e+BW8N6ra6bNfxX4nWC+s3tWmtwGki3FTuCkgN93BGRkE81jUUloNu/9edzprTUtDi0u80aW71JLOS5iuoruG0QSsVUgo8fm4x8xIIc4I6c8XYPEeiXeq+IL/U5NQtn1aJ4Ejgtkn2KxU72YyJlvl5GO+c1xlFG+/wDXT8hbHZab4j0O0063M/8AaDXlrp11YRIkKeW/mmUrIzF8jHmYKgH1z2N/UPH+n3djdwLHe/vlkChlXA3W0MS5+bsY2/Aj3FefUU7vX+vMOqZ2Go+MIL6fVXWW8je81mG+hlKK7RRoJAOC3LAMuBnHGMiqPiHVNHv7iznsEn+1B2e8uxbLambJGCIld0Vhg8rtBz0zyedopLS39eX6B0L+uXUF7rl3c2c97cQSSFklv3DTuPVyOCa0PCGo6VpOsfbtXmvE8uN0jS1tll370ZDktIuMbge+fasCihaKwPVndaH4x0zSNOhsTLfBLK6aWGaG2RZLqJirGFz5n7oFkGSu/IOD0wZ4fiNCbGKeYXEWoQxSo0MEK+VdMS5jMkm7cFTzCdgUgkZzk8efUUPVWYLTY7vUPHltd6JOkX2lLu6sltZbVYVWDfhVecuGLOxVMAFRtycHjnhKKKOtwWisFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9M/s8f8ksuf8AsNT/APoi3r1GvOP2bLL7Z8LLz95s261P/DnOYIK9b/sb/pv/AOOf/XoAoWv/AB+Q/wDXRf51j6P/AMgOw/69o/8A0EV1UWk+XMj+dnawONnX9a5XR/8AkB2H/XtH/wCgigDxD4s61Y6D8aLi9vbC4vJFskSIRXSwhQyOrZzG2eG4xjGO9cLpnja303T0sBp1zLaW139rtIjehcNwQsxEf7xAyhsDZzn2x6J8V9CstW+JGs3N8jyG0tLXZGNRhslO8sDmSVSvbp1rzSx8GS6u4e0vrGzSe+ksrWC5uTK8kihTtDxoVbhh8/C/TIy9RaFqP4hXB063W7tpZr+0SVbecXAWIGTcN7x7cu6h2CncAOOOuY7/AMdyX+lNE9rL9ueyWxac3AMSx/LuKxBRh2CKGYsc88DjEA8MWH/CFx6vJrdrDdNcvE0LrMR8qBtnER+fJ6524I560tz4A1q18NnWZUAhWBLhkMUoKxtjB3lBGT8w+UOW56cHEu2v9f1uVrdf11/zOYorb1nww2ixzCfVtNmuYHVZbSGR/MXcMg/MgVh0ztJIyMgVX8PWNlqWtw22qXQtbdgxLl1TcQpITe3ypuIA3HgZyaYjMorq4PD9unjmx06706XToZHTFtql07C5y2MLLDF91ugYKR1O6s6z0JNU125sFvrPTpFmKRxz+c4bk8BkjbgY5LY459aO39bAYtFdTo3w+1bXo5pdNkhmhS4a3imSKd0ncY6FYzsHI+aTYOfY45iSNopWjkGGRirD0IoAbRXQS+ELqG1keW/sVuYYUuLiy3v5sMTYw7fJtOAykhWLAHp1q94n0nSdF8PaZFZS6bd3VzbpO9whuvObcz/MoYLGEwoHI3e3eh6AtTkaK2/Cmj2WtapNBqU0sFvHbPKZIsZVhgKTkHjJGfb0rWuPAmZNLsrSaRL+dJhdJJFJMFkjI3Kqwxs3GcHg8qeRR1sBx1Fdja+BEhv9Zsdd1S3srjT7Tz0BWbnOwhyPKJC4flSA+SOOtZln4WF3bPdNrml21oLr7KlxO0yrI+AQQBGWC4PVgAO+OKP6/QP6/UwaK6CHSbceC9SvT9kuLqC5iQsk8gktwSw+7t8tw2OoYkY96jn8KXVvpH9qvd2h09oRJHchm2yuTjyV+XPmDByCAABnOCCQPIw6K0NAsItV8Sabp9wzrFdXUULlCAwVmAOCcjPNa3irw/Y6Vp9jd2CzJ58ksciNexXiLt24ImiULk5OU6jAJ6ijZXBanM0VreFrG31HxNY2t41v5UkygxXDyIs2WA8vdGrMpOcZxx61ZtfDLajNqUv22x022s7pYGNzJIQGcuFVdqMzfcPb36ZIdv6+7/MO5gUVZ1Kwm0rVLrT7vb59rM0Mm05G5Tg4PpxW4nhrT28Exaw2t2sVy9y8RidZiOEDBOIj8+T1ztwRz1qb+7zDtrY5qius1nwiqWhvdMuLTEOn2lzNZiR2mAkSMF+QV5d/u7s85xjFQ694C1jw7pf26/VfLWRYpV8qVPLYg4GXRVfoeULD3wQS3puJanM0Vf0XT4dU1i3s7m8is45XCmWUORyQMDarHJ7cY9SK6PX/AA9Z3HiK/tdIfSrGw03f9ouke6KxjzNiiTzAzF84H7tSOfQHBtYDjaK6L/hDrhHu2udT0+3tbWOKU3bvIY5ElzsZQqFjnHTbkdxwcXLT4d3t5C00Wr6SItzhJPOdlkVHVC6lUPGXT3O7pkEAWoHI0VLd20llez2s2PMgkaN9pyMg4OPyrbl8IXUNrI8t/YrcwwpcXFlvfzYYmxh2+TacBlJCsWAPTrQndXDZ2OforrvE+k6Tovh7TIrKXTbu6ubdJ3uEN15zbmf5lDBYwmFA5G7271z2j6VNrWrQ6favFHLNu2tM21BhSxye3Ao62DpcpUVvp4UMrNJBrWlzWUcPnT3qPL5cA3bQrKYxJuJxgBTnOemSJLjwNq0UPm2xt71GJKG2kJ3p5Xm+YNwHylc8HByMYzRsrh1sc5RXSyeCLy3tb25vL+zt4LMxpJKVmddzoHC5SNsH5gMtgZ4BNc1R1sHS4UV0TeCtR/4RU6/G6SWioruPInTaCwXh3jEbYJAwrH9DU154B1G2nNvb3lhf3CXyWEsNrIxMUr5KgllC4O08gnGOcU7B0ucvRXS67oVjpXhbTbi2u7W+uJry5ilubUy7CEWPC4dV6Fm5Awc9TWRpOkzavcSpFLDBFBE08885ISJBgFjgEnkgYAJJI4pB0/r0KNFbkHhoTi4n/tnTo7CCRIvt8nnCKSRhkIo8vfnAOcqAMdemb2naNDbp4j0zV9PgkvNPtHmjuVlfcjqyKMbW2FSGJ5U9aHon94bs5Wite28NXl0LUxyQD7TZTXqbmPCReZuB4+9+6bHbkcita7+Heo2emzXkmoac3koztCkjl+EWQj7mM7HU9cc468U7MDkqK6XU/BF7ppdVv9Pu5Yr1LGaO3kcmKV87QSygYO09CcdDg1Q1rQG0PVhp099bS3AbbKFSaPyTx97zI1PfORkYpeQdLmTRWm2i48Sf2P8A2lp5/fCL7aJ/9G/3vMx933xWfNH5M8kW9JNjFd6HKtg9Qe4oAZRW7oelabqWkas9w919ttLVriIR7VjAVlHzZyWzuPA24x1OeN7SvAdtfaNbNMbhLu7tGuY7kzIkCP8AP5cIQqWkZghJww2g5I45Hpv/AFv/AJMFr/X9dzhKK9Ak+HcDaZNHCbiPUIbeOUTTzoIrlyELpHHt3YQSDL7iMjGBnir4k8FWel6JeXdmbmKSxuFiYXUyM1zGSU85YwoMa714DFtwJweOR6bgtdjiaKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD6t/Zf/wCSWX//AGGpv/REFey141+y/wD8ksv/APsNTf8AoiCvZaACuE0f/kB2H/XtH/6CK7uuE0f/AJAdh/17R/8AoIoA8K+Net/2X8TNStZNPtL+3u7W3MkdyZAAU3EEGN1Pc9683tPE9zYXFjJZ2trEljfPfQRAOVDNs+U5YkqPLXHOevJr1X4nWum3/wAcLiy1OxN0ZtPBjYzMix7YpGzhcEnKrjnHXIORjjvCfhrSrnQ9Pu9Wt4JYtQvHt5J5ZZA0QG1VSFUYbpWLE/MGUAAkAZy7O9l/WonZLX+tDlrbXmh0efTbiwtLy3kmM6ef5gaGQrtLKUde2OGyOBxTr/xAdTsUivdNspLtIkiF+PNExVAAuQH2E7QFyVzj35rt7fwPpMNvb2F6tuXu7ed479pZPOeZTJgRorbQiiMFmYH7xAOcYr6j4Q0m10S9t2iggu7bTkvLecSyNPcHajO7Lu2LGS5VflDEgHJwczdWb/rS/wDkVrf+utjhNV1KbV9Unv7lUWWZssIwQo4xxkn0pllcxWl0ss9lBeoAQYZ2cKf++GVv1qvRTEdCni+VNT0+6Glaf5Wmpts7T995UJ379w/ebyd2T8zEc9KbD4pSHUb67XQtNJvozHJGXuAqgnLbSJQw3d+enHAJBwKKP6+/cDbi8SKtk9lcaNp91Z+c00EEpnAtmYAMEZZA2DheGLdPrWJRRQBvXPi67urKWNrOzS6ngW2nv1R/OmjXGFOWKDhVBIUE45PXOdqOqT6mtms6xqLO2W2j2AjKqSQTk9fmNUqKNw2LlhqUunLdrCkbfa7drdy4PyqSCSMEc/L3zWjpniy503TRp5s7O7tDHLG8U6v86yMjHJRlIwY1xgjvnNYVFAHQP4wu5dcn1KaysnFzai0mtdjrC8QRVAwrBh9xTww5FZ1zq7z6c1hHbQW9sbprlUi3nYxULtBZicYHfJ96oUUb/wBfMP6/Q2rDxGtjoNxpX9jafPHdFTLNK0/mMVJ2n5ZAoxuPQfXNOl8VXM2kNpb2dn9g8pUjgCNiF1JPnKd2fMOTkkkEHGMAAYdFG4FnTL+XStWtNQt1RpbWZJkWQEqWUggHBBxxVvVdcbUrWG1hsbWwtYZHlENr5hDO2AWJdmYnCgdcDHTrWXRQBf0XVf7F1WG/Wyt7ySFg8aXJfargghvkZSSMdzj2qzd+I5LlbtYbG0tI7u4iuZEh8wjem/BG92PPmHIz6YxWPRTuBa1XUZdX1e71G5VFmu5mmdYwQoLHJxkk45q1Z661tosulz2Fre27ymaPz/MDQyFdpZSjr2xw2RwOKy6Km2lg63Nk+J74i6wkKm6s4LNmUMCqReXtI54b90uT9eBTNZ10a2zTT6XYwXkj+ZNdweaHmbHJKlygyeTtUc1k0U3qBLa3D2l5DcxhS8MiyKG6Eg55rUg8S3MWpaldTWtrdRamzNdWsyv5T5feMbWDDDcghs/rWNRQBsX3ia8v4LuB4beOG5WFBHEhAhSLOxU56c9Tkn1zU+neMNQ0zTYrKCG2aOJHRS6sWIeSOQ9G9Yl/An8MCihabA9Sa8unvr6e7lCiSeRpGCjgFjk49ua2Lnxdd3VlLG1nZpdTwLbT36o/nTRrjCnLFBwqgkKCccnrnBopWVrB1uXdR1SfU1s1nWNRZ2y20ewEZVSSCcnr8xpul6lNpOox3lsqNJGrACQEj5lKnoR2NVKKYGjpGsy6T9pT7Pb3dtdR+XPbXIbZIAQw+6ysCCAQQRWrH481WHzhBFaxJI8DRokbAQLD91E+bOMcHOSR361zNFAHS2nja6tNcudYj06yOozytIs+6dfKyMbFVZApUDswbPQ5Fc0Tk5oooA6K48aXdxpMtk2n2CPPaxWkt0qP5rxxFSg+/tH3B0UZ79qanjTU4r65u4kt0muNRTUWIQkLIu/AAJ+7854OT05rn6KA6W/rsbGseIpNWsLaxXT7KxtraWSWOO0Rx8z7d2SzMT90dTx06YAr6PrE2jXEzxQw3EVxC0E9vOpKSocHBwQw5AIIIIIHNZ9FGwbm5b+JhbrcQf2Lp0lhPIkv2GQzGOORRgOp8zfnBOcsQc9OmJrXxjPDcalcXel6ffz6kGS4knEq5QkEoBHIoAyo7Z9652igDorPxlc2Wni1i03T2ZLea1juHSQyRxSliyL8+OrtgkE84zjIp9z471O6gnikgtAswcMVRsjdFHEcfN/diU/Un6VzVFAG1deJ7q9+3i6traRL+/W+nTDgF13/ACjDZCnee+enIpNV8Szapb6fbfYrW2tdPLGC3jMrqNxBIzI7NjgfKCB145NY1FGwGm2tZ8Sf2x/Zunj98JfsQg/0b/d8vP3fbNZ80nnTyS7Ej3sW2IMKuT0A7CmUUAbOieIholrdQrpFheG7jMUsly024xnBKfJIoAyoOcZ96sQ+M76DTYrVba1L28UsNpct5hktY5M7lT59v8RGSpYZ68DHPUUPUNjoZ/Geo3GneQ0Nuty1tHaPfjf57QoQVTltoHyryqgnHJOTlms+L73W7aeKe3tYXupVmvJ4Q++6dQQpfcxAxknChRz04GMGih67gtAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPq39l//AJJZf/8AYam/9EQV7LXjX7L/APySy/8A+w1N/wCiIK9loAK4TR/+QHYf9e0f/oIru64TR/8AkB2H/XtH/wCgigDwj40a/f6B8XLqbTDbpK9pEC8tpFMQMMDgup25BIOMZ715xa+LNYsWlNpNBF5khmAWzhxE5GC0Q2/ujgDlNp4HoK9k+MaaPH4jvZdZhiHmyQhLgxlnHlpv8sEDID5K+mSCelcivg3Sta8TS/bI/sEd/cxw2f2aUxqWMKO22JYHGBvB5ZBzjIwSB7tf10FdWv8A1pc4WDxNq1tphsIblRCUeMMYUaREf7yrIV3qpycgEA5PqaJfEuqz6T/Z0lyptyixsRBGJHRTlUaQLvZRgYUkgYHoK2jHoMfw5jmm0y6kuxqEkLXEd1Gp3eWpBP7onZ/sZ65+bninqlhoGm6bbxsmpNf3NhFcrMJY/KV2wdhTbkrjPzbsjI4OMlPr8vyuVZ3+/wDOxzlFdbrZtJdL8Kuy38li0Mi/ZTNG0iATEEI4iHU5PzBsZxUHi/w1aeGTBBFLPcyzs8iznAjWMMVEZGM+apB384B4wetN6COZorqPCcOmto+tSavHCIWSKAXEkZc2xdj+8UAE8FRnHOMjvWlr+iWOo2NtqOl2jQ71sooobeMAOJDOpJAGS/7pRnuc9c07dvQV9zhaK7u0ik0a/wDG2g2t1cnT7e1uFELyHDFJUUMwGAWx3xVFV0FfhrDcTaXdPd/b5Imnjuo1O7ylIz+6J2f7GeuTu54m+l/JP73Yq2tvNr7lc5KiunvDHL8NtO+ztdIialIkkMkiOhfy0JdcIGXPAwWbpVvXvD+k6ZDq0+iSajDPouoJbedcTIRMSX5XaoKspTPU5HPHSm9H/Xl/mJar+vP/ACONorrvFl4JfEOj3mqm4u92mWrzMJ9ssh8vrvZW5z3INWtX0eLUPH/iSTUZ7u6isInu5dhRZpwNoxkLtX7wJO3AAPFHX7/wDt52/E4eius8P6Jo+s3N3czQXVrpsbxQxmS++cSPkBcpbOXJwSMIoGOT0rR/srQNI0rxVZ31hdX0um38cInS5jicrvdQVzExTp83XPHTFD0/r0/zA4Kiuosmhk+HWsrbG6haO6t2lRpY2jlyX28eWGBUZ6Ng56VZu/C2mQQ31nH9uN9Y2Ed692XU28obYdoTbkDEgAbcckdBng3f9drh1scdRXX+JvDmi6fY6o+kG/Eml6ktk7XUqMsoYSHICqNuDHjqc9eOlUPBdjb3/iBluYFumhtZ54bZwSJ5UjLIhA5PIzjvjHehP+vlcO39eRz9FdHpjQeI7y8n11FWKxsXnCabbwWpcqy4B2pjnd1IJHvjFXtK0PwzqNtfarLcXVpp1s0EQiuJyHWR1YnMkcEmVyhx+7XOeoIwT+v0A46iu98PeC9E1e+aJryZ7W5v2tNPu1laMzYAJPleQ5OAQTuaMe45IomPQY/hzHNNpl1JdjUJIWuI7qNTu8tSCf3ROz/Yz1z83PCvpf0/G3+Y1q/68/8AJnIUV2Gr+HPD+k6Gom1VhqzWkNyiBnYSlwrbQvkhQMMfm81vu9OcDkYyglQzKzRhhuVW2kjuAcHB98Gn1sLpcbRXY+IItPuvFmkf2re3UOnTafbM0kpV5Io/L4TckYzjgbthPfBrF8R6ZHpl/ELWB4rWeESwO12lyJVyRvDqi8ZB+UqCMc80f5tB/kZFFdNoiJZeDdT1m3tre5vobqGD/SLdZ1t4mDEvscFeWVVyQcduTVnS9E0/U4dOvNWju5p9avntoxpwjhjtiCoyUCEMfnB2Ls4HXnh2d7IV7K7OQor0q1+H+gtZxrcT6g900cRLxSxiPdJ5wGAUJwPJz153Y4xmsa58NaMNNu1tjfre2mlW+oSTyyIYS0gjJj2hc/8ALTg7uvGO5m+/kVZ3t/X9anHUV3F3Dc+KLfwTaX99K8t4JIDcTuZGUG4KjqecDoPoKWDTPCNr4r0aO2nlvw96sNxaGZiE+ZQrM0lvGCMkgptPT7wzVJXdvOxLdkzhqK7S30TQdW8R6uSlxptjpscksyS3O4sfNCfKUgJRRuz9xsYxkZyFg8P6Ak1zqFlNe6vZRXNtb28Vo/luZZAScu8WSAVKj92CxI6Uoe9Z9/10HLS/kcVRXR+MbO5ufHXiOS2tppUt72Z5mRCwjXzCMsR0GTjJrnKUXdJjas7BRRRTEFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfVv7L//ACSy/wD+w1N/6Igr2WvGv2X/APkll/8A9hqb/wBEQV7LQAVwmj/8gOw/69o//QRXd1wmj/8AIDsP+vaP/wBBFAHz1+0DcTH4mTWxmk8gQRSCLcdoYgjdjpnAAzXn8HiPW7VXW11nUIVkKlxHdOoYqAFJwecAAD0wK9v+MeoW2mazeHUIWmtrieL5UUE+ZHGHTk9snB9mPXpXP23hiz8Q+I7i71aw+2R311FG00UMjvBugjYs7rMiRg7+CVfJzweATq1/XQV1ZN+f6nlVnrGp6fDPFYajd2sdwMTJDOyCUcjDAHnqevrVeW4mnKGeV5DGgRN7E7VHQDPQD0rt7Um8+GbwWHhyDUHtL+Tz2QXDtEpiGJmCSYB4IyRt+Xp1rL1k6Rp2nWlpHokTT3OmwzG8+0SiRZWAJIG7ZtwMbdvc4I4AT0f3flcqz29fzsVLrxD4qFvave6vrAhYiW2aa5l2kqcBkJOODkZHSsp767ktRayXUz24kMohaQlN54LY6ZPr1rt9b0LU/wCzvC9w3he72srRSWTC58osZTtQbnJTcOcKRnORWd4y0TTtItbd9Eg8+0lmk33/AJhfZIDg23B2/IADuxl85HHFN6ff/X9f8AS/r+v6/M5ZLieO3kgjmkWGUgyRhiFcjpkdDjJx9atWuuatY/8AHlql7b5i8k+VcOn7vJOzg/dyScdOTW/4QuoLLQNemvUd7SVYLa4EagvsdmyVzgZBUEe4rc1XSW8WWFveWVg9xeeRZbEjJzFAWnRsgcBRsjG49AByKdn07/1/XqLq/wCuxymn6l4vjsby/wBJvdbW1Ehku7i2lmCbz1Z2U4yeOTzWdba1qlklwlnqV5brdf8AHwsU7KJuv3sH5up6+prt7Hw3dpr3jW30TS7qWzhgubWDyYnkGRKmEDc5bAzjOarWnmXXwya2tfDUN7NZ38n2natwzwAxD98wWQbT8pHI2/L061Lel/JP73YpLW3m/wArnONrPiT+w0il1HVTpLHyFRp5PIbaAdgGdvAxx24qXWvFGseJNeNz9rviTcmWztvtDyfZ2ZvlWP0I4AwB0Fa95o2oS/DCwuxot3bxxXjM0iCcxvGY1xMVZigyTjcoAOMVd8XeGLWyt9Sjt/DsulyRailvpjbpme/U7g2A5O4cKQVAxkAkk5NS0ev9bf5iWyOc1LWPF1rqUMesajrcN7bnfCt1PMskZYYyoY5GRxkdagvta8Rxawkup6lqialZ5RXuJ5BNB6gEncvWuj8S6Lq9trmgl/D93csdOto0t5beYCV1j+ZPk2tkdSAQRireqeGGPxF1pL7TLq4YQSXFhZ3Ly5vnG0bQxO+QAFjhW3HbjNLr9/4B0+78TjF8Sa4l1PdJrOoLcXKhZ5hdOHlAGAGOcsAPWo7XXNWsr6a8s9TvLe6nz5s8Vw6vJk5O5gcnnnmuw8O+Gxfanqcmq+GhALdoUbTktrl5Id+fn2m4RlTAyWdiBkYGKu21nDa2/i/QdI8PxatJaX6COEmd5ZY1kdckRuMhcjlQPvc5o2/r+u4HGWuteJYdImWy1PVo9ORtsohnkEKl88Ng4Bbnr15qnJrGpzabHp0uo3b2MRzHatOxiQ+oTOB1P511Om6NqN98ONWeDQrtfLuInSaBbjbMAz79y7ijbMYztyvc1Yv/AA5YW+jXTLpOyxjsYp7XWzLJ/pUzbcpy3lnkuNiqGG3k8Ghb/d+QdbHEy395Osyz3U8gnkEsweQnzH5+Zs9TyeTzyajhmltp457eR4pY2DpJGxVkYcggjoa7TxXpejRafrR0zSksX0vVks45FnkdpEKy53bmI6oMYA44Oetcjp+oXumXi3Gm3c9nOPlEtvK0bYPUZBzTjrKy8gexak1bXdavUSW/1HULqZfs6q0zyu6k/cHJJBPaoLLUtT0S6kfTr270+fBjkaCVomxnlTgg9R0rupLnVNY+NEtvNFeaulvqToiGacm0j80AuhjYFNvrnAqXSfC1hFJqP/CRaLM9wL6dEW5kliYRi3llU9QTkxjk54J68ETe0VLyf6f5j3dv66/5HC2/iLW7TzvsusX8P2iTzZvLunXzH67mweT7nmorPWNT0+GeKw1G7tY7gYmSGdkEo5GGAPPU9fWvR4/Cvh5Gu5V0W+1Efagkltp9vLctaxmJGGMTIVyWfDOJB8vsc+XSbBK/lbtm47d3XHbPvT62EtVc2IZPE954blit31efRLfiVIzK1tHg7vmA+UcnPP1rIilkgmSaCRopY2DI6MQykcggjoa7PU72xuPAvhy3fS7K0SeedWnRpi0OHjDOAZCCSOuQR6Yq/feGNPiuRFc6F/Z0CanBb2VwZ5CdShZiGbLMQ3y7W3RhQN3uKdncV1Y4+bxV4huJ4Zp9d1OWW3YtDI95IWjJGCVJPBxxxVK+1C91O6NzqV3PeTkAGW4laRiB0GSc1o+IbnTWuJbTT9HisGtriRBLHPI5lQHADByRuGM5XaOelXfA1xfW+q3J07StQv3kgMbSaYGFzbAsP3kbBW2njHTkEjIzUxtJXRUvdZh6fql/pNwZ9KvrmymZdhktpmjYr1xlSDjgflU0fiHWYTdGLV79DeEm523LjzyePn5+bqevrXeW/he0fVtWk1Zr/wASahELdvINrJNcqroSxkiSdG3KQqnDsFzyORjFmi0HStPur7+wHu1GrPbJBqMssUkUQUEqwjYYcHjJzjnIPZvz/rb/ADF6f1oc/De62LJp7e51AWtuUjaRJH2Rfe2KSOB1fA92x3qfWfFGo6xb29o91dJYwQQxJZm4ZogY4wm4L0BOCenetzTdIvdQ+HGrS2Wh3gjW4ikimh89hMu5924A+W+wDGQoxk561eu/CVjB8PZ72bTyl3DYwXUd5DFIscpd0G0SNMyuQG+YLGuD39R9fl+Q1vZf1r/wxzOtah4tjt4rXxFd60sMgEkUN9JKFYDoyq/Bx6iqGoa3qurNE2qaneXphz5Zubh5NmeuNxOOg/Kui8T6Lqtl4K8OS3mmXlvHDFMsjy27KELTMVBJHBI5HrWP4msvsOowR/2T/ZW60hk8n7T52/cgPmbu27rt7dKP8xf5EL+JNcl1CK+k1nUHvIVKR3DXTmRFPUBs5A5PFIviHWluri6XV78XF0uyeUXL75VxjDHOWGOxrb8AJGdQ1F0guLm+jsmazitMeeX3rkxEg4cLuIIBI5IBIpNe0DUdR8XzWtm15fXjWq3M6Xtwrzw4jDOkjnALL07HoMA8UPSwLX+vQ57+1L8NdEX1zm8GLk+c37/nPz8/NzzzVWu38D2mt3vh7xBb2FjdT2UtjIuYLYsJJt0eFLAZYgZIXJxkkDk1a0Gx8TWPgm8uZrPULjS54J7aDT4bd2R3P3ppQowAh5DN8xKgDgEgen3X/MFr9559RXc39hr918KbCS5068MEF8zREWhVEhMSbXGFAwTn5v4iSSSTVvxJZ+KrLw3Y2OrWup3V895HPDMsD+XZZXCQRMBtDEkEqnA2qBzkBvRten42Ba2+f4HndFdr47lu59H0htUTULa8jaZDb6vIZbvZlSHZyqkoSSFBUYIbk54x/B9lb3+uGK70u71NBCxWG1geYhuAGZUZWKjPOGHbr0KWoPRGFRXoum+FLGPVNaj1DTFvru0khCafpkE9wER1JZhGZo5eDtB3MSpJBXkYpwaDavZ6hdaF4budZmTUXg+wXSymWzhC5UvHC6sCTuGSSBsx1NH9fl/mBw1Fd7p/hywl0a0kbSPPsp7KWa71gyyL9jmG7EfDbFwVQbXBZt/B5FNuNI0STTL22j02O2mtdKsrw3vnyM5kkMO/Kltu3Eh4xnPfHAdtbf11/wAg/r8v8ziBbzNbPcLDIYEYI0oU7VYgkAnoCcHj2NR16frujR6b4dvLBNCe1s/7btY4Ghd3nv4wsoEg3MQdw6FFCkkgZxxzfjjRU0uS0nt9Mj0y3ud/lW7xTw3ACkcyxyu+OvBQlTz34E3/AK+SY7f18zlKKKKYgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+rf2X/APkll/8A9hqb/wBEQV7LXjX7L/8AySy//wCw1N/6Igr2WgArhNH/AOQHYf8AXtH/AOgiu7rhNH/5Adh/17R/+gigD58+P1ncy/Ey5uY7eV4Et4I2lVCVViDhSemTg4HtXmFzbT2dy9veQSQTxna8UqFWU+hB5Fe7fGfXotG8R3SkR3DzSRlrYyhSCsYaOTHXAcD2OCM1gabJoN5rUt3qV3pd3DdXMK3C3E9ovkx+RHlt0kbSPliy4jK4KkkjqDq/L/gCvov67nk5t5xai5MMnkFzGJdp2lgMlc9M4IOKjrt7TVZrn4eyafZPo4ltbyRnjuorRHMJjADKZAC7ZBGVy/T2rP1nWLeDTrTT7Gz0qSGXTYRNItrGZVmwCzeYPmDDGCM465HJpPR/d+VyrdP63sYd3pd5Y2dndXUOyG9QyW7bgd6hipOAcjkHriqldzqtnIbTw7dQt4c+3R5S5WOeyCFjIdnmIh2kbcZJB9+ap+Mv7HNrbt4a+xCyaaQzBSvnibPOM/P5OMbO3r81N6feJHLw2lxcRTSW8EsqQLvlZELCNc4yxHQZIGT60XFpcWbql3BLAzoJFWVCpZSMhhnsR0NdF4W1WDSNF1iWfZKJfJie1MwRriMlt6jqemOQDjity9ksvE+mwu93pkd8Y7SRzc3EaeUgecSKCx7ZjJQckY4OKdhX3OLs9FvdQ0+6vbRYXhs13zA3Eauq8fMELbiORyARVQ284tRcmGTyC5jEu07SwGSuemcEHFd5b2drL4g8Yvp11pUFnPHcW1oDfQQK5MqsoQMw+XaOCOOOtVrPU7mf4ePpttJowuLS8cyR3EdorNEYwNyNIPnbII3KS3TnpUt6X8k/xsVbW3m/yOTbTLyLSYtVaHFnLM0KS7hy6gEjGc9COcYpb+8n1vW7i8mEST3s7SMAdiBmOerHgZPc/jXR3VkLj4eWUkjaMLuC5LYhntUuDAUXbuCkOx3Z4OW9a1vGltaRjVbKS30S2mOprHpkdk1ujxxgsH81kOVH3eJCMHoAAcU9H/Xl/n+Alqv68ziNS0a90m+S0vY41mkRZE8uZJVdW5UhkJUg/WotS0660jUp7DUIvJubd9kke4NtPpkEg11niC0nTWtElsbrR53Swgg+e+tJo1kSPDBwzFQPduCelW7uy0uDx5q8kT6KVmt5H0oefA9r5vy4DAExrxvwHwucUuv3/hsHT7jz+pEt55LeSeOGRoYiBJIFJVCemT0GcHH0ruvDqQrqep3GtyaK9yjQr9mR9PjhZDnc6s0bx/KAMrGNxJ9RVmDUoYv+Er0jQZNFWP7csliLqO18uSISPnEkw2tgFSAScDOO9H9fkBwcWl3k+lXGpRQ7rS2dI5ZNwG1nztGM5OcHoKqV2FhZm88B6lHcNoi3Amje1LT2kU+Az+bzkPjpgHg8bRV2/wD7JXRroR/2N/ZRsYvsOzyjefafl3b8fvevmZ3fJjGP4aOv9dg62OCqxY6de6pdC20yzuLycgkRW8TSMQOpwATXX+K77Sr3T9aS0g0mE2urIlj9ihjjZoCsu4gry6khDkkgEjGBgVxK/eH1px952DoabeGdbj1O00640q7tru8cJbxXMRhMhJxxvwOp61nTRPbzyQzLtkjYowznBBwa7OGaK6+Lt5PFLpktk+ou8sl60BheEy/MQZflJx0xz6Vp6MujaT9vj1FNCmke9maPzHgnHlfZ5WQKQSAN4jHHOcDvgzf3VL1/QfW39dTzaivU45/DiNdy2VhpN/M10Gnhe8s7VDGYkICedGwxu8wHyirA/wDAceXSFWlcouxSxKrnO0eme9PrYS1Vy9Fod9No7aoFhS0VmUNLcxxs5UAsERmDPjcPug9az67HUPEKXXg7QLO5NgU86YXSQWcCyxoHTBBVdyEgHkYLd81qX39ki5C3f9g/ZP7Tg/s37H5Jb7NuO/zSnzY2bc+d82c+9O2v9f1/TFfQ86q1p+l3+rXBg0qxub2ZV3mO2haRgvTOFBOOR+dX/EOsDULiW3js9OhhguJDBJZ2qRHZnAUsgG8YAILZPvzU3he6sLa21waqHeGXTwgijnWF5G8+I4VmVhngn7p4B+tTF3VymrOxi3NrcWVzJbXkElvPGdrxSoVZD6EHkVFXoeh6tYazqF5qF2ljEsEdtawWV3NbZ8lQV3mS4jcMVCjIRQzZ4AwBVTUtT0vRF1J9EttHuT/bcoiE1vFc5tgBtADA/IT3H4Ec03p/Xmv8/wAxb/15HD1fudFvbXSbfU5VhNpcMUjkjuI5DuAyVZVYlTgjhgDXbaHHoZ8Hyfbm0tzcWl1IQ8trG9vMA3lxhShnY5CkNvC8gc9DjS2LD4ZwJ9q08yrfvdGEahAZBG0aAHZv3ZyD8uMj0oeify/OwLVr5/kYWpaLe6THbSXqw+XdIXheG4jmVwDg8oxAweMHmqtpbSXl1HbwtEryHAM0qxKPqzEKPxNdtLY2UNl4RXWbvT5bK0kZL+ODUIZWRWnLcqjliNp5IBx9ah8Vxwahc2NpZafpdrOZJMXMWqWJSRcDAbyVjRAMEguNxzjPGKfX5gcnqOn3Wk6jNY38YiuYG2yIHDYP1BIP4Gq1dvr0a/8AC1hdRXGi3EFzdK8UlzdRzWpHA/e7GOF9QcGuOvP+P6f/AFX+sb/Uf6vr/D7entUp6IOpZsNB1jVLd59M0q+vIYzteS3tnkVTjOCQCBxVCux8IyW91pg0/XYNLbREuWmnnuL3yriElAC0aCQM5wBgbGBPFc4umrJpVzqEd7aqkEyxrbyS4nkBz8yp3Axye2ab0YLYc/h/WYtPS/k0i/SzkClLhrZxG277uGxg5yMetS3PhXxDZoj3mhanbq7iNGls5FDMeAoyOSewrevZLTUPB7XOuQ6ZDeQWkEOnS2d75k8u3A2yRCRgo2ZJJVCDj1xVcX40Kz0Wx0ie2nu3ni1G6cyL5fmg/uombIGFGSckYLnpin1t5/1+AulzCv8ARNV0qSKPVNMvLJ5v9UtxbvGX+gYDPUdKkbw5raakmnvo2oLeyJvS2Nq4kZfULjJHB59q7a1n0ax8RaXfXC6dZ6tMLrz47G/8y3RmQiFzLvcRsWJzhiFGD8tR2kGkW15Msf8AZMV5caU6z6cmoBrOaTzRtQzu7Y+UByFkByoAYZxS6a/1uPqcDd2dzYXT219by21xGcPFMhR14zyDyKhrf8aS28viRjaXKzxrbwptR1dICI1BiR14ZVxtDDrjqTydPwalrNpN1b3P9m2fmS86jdNaStEoX7vkTfOw5+9GQc9mwBS6Nh1RxtFd9YzaLB4Hh8jTrG/kNtMLwzX1rBKsuWwQskZmOF2EeW4BxjGd2aV+LZdF0/8As86QdINvAbzH2b7b5uR5v3/32d2cbfl247Zqra2/r/hg6f1/VzjqK9Lf+xl1WFdQ/wCEf+w/2tb/ANn/AGXySfs287/OK87dm3PnfNnPvVSxu9G1NdMuL6HRoLtZr5UjEUcMWRGhtxKBgFd5I3P1xySM0lr/AF/Wof1+f+Rw91YXNnDazXMexLuLzoTuB3puK546cqRz6VXr0i5vIZNa0QXKaLqM0GkvFOsVxZwwwSGaTpvHklgGHy4IOcj+9XMajo8V74svLS31jTCixmX7U4jtoWIQMUUR5Tdn5QFJBPQ96Ho/v/Bh/wAA56iiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD6t/Zf/wCSWX//AGGpv/REFey141+y/wD8ksv/APsNTf8AoiCvZaACuE0f/kB2H/XtH/6CK7uuE0f/AJAdh/17R/8AoIoA+Z/GttrnjPxVd6lNHGjwu0EjXl1b2+399MsaZLhSQqFeCc7Seep4a7tJ7C8ltbyJoZ4XKSRuMFWHUV6v8Sn0/wAI+I9b02WC31Np7m3u4Le8WUKoZrh2OY2XO1pccnkHocZrkR451OLRpbi01SW21a41NrqYwDZuTYoA4GNuR93ocDIof+X6f8Eb3/rzOQor0C08W20PguO0tJ9Nhl8iZLu0u1ux58jMx3qkR8liQwALgFSo7AVRvtZtrvwDFY3Osr51vFGtvY2MlwEY7gT50bp5e4DJ3Iw57NnIHoI42iuy8W6zbaroVqH1lbq8ikVVtLKW4NqkYQjd5cyDY/QfISpGeF743hO5s7LxPa3Oo3UlpDHvYTRtIu19h25MfzhS2AdvOM4o62F0uY1Fej6x4ztFuJrzTdTX+0W0QWpubdZzun+0hvlebMnEY4ZjkYGMHAC2+qWHiXWtRgvZnn01rS1v7q4KtlZYI0EpOR1fLpnuzL1o/r+vlqP+vy/z/Bnm9XbvS57PTbC9laMx36O8QUncArlTnj1HbNN1TUrjWNWudQvGzNcyGRsdBnsPYdB7CuwsvEemjwTZ6TFqH9m6kltKDfLG5KZlZvJJAJCuCPmT0w2QThfZuPrY4QHByKnvbyfUb6e8vH8y4uJDJI+0DcxOScDgV3Oq+Lbd/CUdppN1YRxC1hj+xyfbPPhlXbudFybcNuUtvGGIJ7k5q+MdQRNLi8geTc6+U1K+iAxt+XCL9Cxkf6MhpvT+v67fgJanHWlrNfXkNpapvnnkWONcgbmJwBk8dTTZont55IZl2yRsUYZzgg4NaPhvWJdC8R2OoRTzQrDMhlMDlWaPcCy8dQR2711Z8QJ/bWqSS+LvOubmErp+qn7S32IeZuKZZN6blyMoDjOOhND6fMO/yOAorb8Wajb6nrQnt5/tTLBHHNdFCv2mRVAaTB55PcgE9SM1o+H9WjtvDElpYa9/wj+o/azLJcYmX7RFsAVN8Ks3ysGO0gA7s9RR0bA5Oiu90/xHYW+jWif2v5FnDZSw3mjiKQ/bJm3Yk+75bZ3IdzMGXZwOBTLvxgk+k31h/aUht10myis4QrBVuI/J3kDHDDa/znsMA4xR1/rzBa/16f5/gcbe2Fzp7QreR+WZoUnjG4HKMMqePUdutP1Gw/s6aOP7Xa3XmQpLutpN6ruGdpPZh0I7Gup8ReI7nXbPSpR4rlHlxQJNaTy3BaKZODMcKVP97IJbnpmr17r9jD4qsdaTxDBfzxaU9tJKIp2fzxbOgY+ZGNwLkc8+4FD0v6v7tf8AgAtfu/E89orupPEFjrNokWp6vtu7jRPsk95dJK+JhdeYA7BWZvkUDIB7CtSHxZo9rqeonTNRgjmaCyjgv7kXcKusUIR0zbkSKS2DjlTt56A07f18w/r8v8/wPMaKu6zd/b9bvLrFsPOmZ/8AREZIjk9UDcgfXmkitbJ9GnuZdQ8u9SVVis/JY+apzubf0GOOOpzUra7G97FOiirl7a2UFpZSWeofa5poi1xEIWT7O2eFyfvcc5HFMRTop0So8yLLJ5aMwDOQTtHc4HWrGpQWlrqU8GnXn261R8RXPlGPzR67TyPoaAKtFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfVv7L/wDySy//AOw1N/6Igr2WvGv2X/8Akll//wBhqb/0RBXstABXCaP/AMgOw/69o/8A0EV3dcJo/wDyA7D/AK9o/wD0EUAfO37QP/JVp/8Ar1i/ka8xrt/ivLfXPiy1utVuxd3V1ptvO8ixCNRvXdtCjsM46n+lcRTaadmJNNXQUUUUhhRRRQAVOl/eR2EljHdzraSuHkt1kIjdh0JXoT71BRQAUUUUAOjkeGVJYXaORGDK6nBUjoQexp91d3F9dPc3s8tzPIcvLM5dmPqSeTUVFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfVv7L//ACSy/wD+w1N/6Igr2WvGv2X/APkll/8A9hqb/wBEQV7LQAVwmj/8gOw/69o//QRXd1wmj/8AIDsP+vaP/wBBFAHzJ8YdEtfDvjiLS7KKGOO3sIEYwxCMSMFwX2juTyfrXB16d+0D/wAlWn/69Yv5GvMabd3cSVlYKKKKQwooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD6t/Zf/AOSWX/8A2Gpv/REFey141+y//wAksv8A/sNTf+iIK9loAK4TR/8AkB2H/XtH/wCgiu7rhNH/AOQHYf8AXtH/AOgigD52/aB/5KtP/wBesX8jXmNenftA/wDJVp/+vWL+RrzGgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+rf2X/wDkll//ANhqb/0RBXsteNfsv/8AJLL/AP7DU3/oiCvZaACuE0f/AJAdh/17R/8AoIru64TR/wDkB2H/AF7R/wDoIoA+dv2gf+SrT/8AXrF/I15jXp37QP8AyVaf/r1i/ka8xoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPq39l/8A5JZf/wDYam/9EQV7LXjX7L//ACSy/wD+w1N/6Igr2WgArhNH/wCQHYf9e0f/AKCK7uuE0f8A5Adh/wBe0f8A6CKAPnb9oH/kq0//AF6xfyNeY16d+0D/AMlWn/69Yv5GvMaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD6t/Zf/AOSWX/8A2Gpv/REFey141+y//wAksv8A/sNTf+iIK9loAK4TR/8AkB2H/XtH/wCgiu7rhNH/AOQHYf8AXtH/AOgigD52/aB/5KtP/wBesX8jXmNenftA/wDJVp/+vWL+RrzGgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+rf2X/wDkll//ANhqb/0RBXsteNfsv/8AJLL/AP7DU3/oiCvZaACuE0f/AJAdh/17R/8AoIru64TR/wDkB2H/AF7R/wDoIoA+dv2gf+SrT/8AXrF/I15jXp37QP8AyVaf/r1i/ka8xoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPq39l/8A5JZf/wDYam/9EQV7LXjX7L//ACSy/wD+w1N/6Igr2WgArhNH/wCQHYf9e0f/AKCK7uuE0f8A5Adh/wBe0f8A6CKAPnb9oH/kq0//AF6xfyNeY16d+0D/AMlWn/69Yv5GvMaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD6t/Zf/AOSWX/8A2Gpv/REFey141+y//wAksv8A/sNTf+iIK9loAK4TR/8AkB2H/XtH/wCgiu7rhNH/AOQHYf8AXtH/AOgigD52/aB/5KtP/wBesX8jXmNenftA/wDJVp/+vWL+RrzGgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+rf2X/wDkll//ANhqb/0RBXsteNfsv/8AJLL/AP7DU3/oiCvZaACuE0f/AJAdh/17R/8AoIru64TR/wDkB2H/AF7R/wDoIoA+dv2gf+SrT/8AXrF/I15jXp37QP8AyVaf/r1i/ka8xoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPq39l/8A5JZf/wDYam/9EQV7LXjX7L//ACSy/wD+w1N/6Igr2WgArhNH/wCQHYf9e0f/AKCK7uuE0f8A5Adh/wBe0f8A6CKAPnb9oH/kq0//AF6xfyNeY16d+0D/AMlWn/69Yv5GvMaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD6t/Zf/AOSWX/8A2Gpv/REFey141+y//wAksv8A/sNTf+iIK9loAK4TR/8AkB2H/XtH/wCgiu7rhNH/AOQHYf8AXtH/AOgigD52/aB/5KtP/wBesX8jXmNenftA/wDJVp/+vWL+RrzGgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+rf2X/wDkll//ANhqb/0RBXsteNfsv/8AJLL/AP7DU3/oiCvZaACuE0f/AJAdh/17R/8AoIru64TR/wDkB2H/AF7R/wDoIoA+dv2gf+SrT/8AXrF/I15jXp37QP8AyVaf/r1i/ka8xoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPq39l/8A5JZf/wDYam/9EQV7LXjX7L//ACSy/wD+w1N/6Igr2WgArhNH/wCQHYf9e0f/AKCK7uuE0f8A5Adh/wBe0f8A6CKAPnb9oH/kq0//AF6xfyNeY16d+0Dx8Vp/+vWL+RrzGgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+rf2X/8Akll//wBhqb/0RBXo1v4x0wyapFqEn2CbS5GE8c/BMYbCyL3YMCuAOcsBzkE+c/sv/wDJLL//ALDU3/oiCvTtX8L6Rrl9aXep2izS2rZUno45+Vv7y5OcHv7EggFjQ9U/trRoNRFtJbJcbmSOUfNs3EKx+oAb8ep61yej/wDIDsP+vaP/ANBFd3XC6OhOhWH/AF7R/wDoIoAoeLvg74b8W69Jq2rx3Mly6KnyTFVAUYAAFc6/7P3g5eltd/8AgS1FFADP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooAP+FAeD/8An2uv/AlqP+FAeD/+fa6/8CWoooA6zwv4OXwZpUmm+Gr26srSSYztH+7ky5VVJy6k9EXjOOK2fL1n/oNXX/fmD/43RRQBIkGsMedbu/8Av1B/8bqe00pLSzhto9xSGNY1LdSAMc0UUAf/2Q==)

It can be seen, when the number of threads is 2, the time taken by the parallel block is less than of the serial one as the threads are increased so multiplication time is decreasing.

1. Number of threads = 4

![A screenshot of a computer

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAeAB4AAD/4RD0RXhpZgAATU0AKgAAAAgABAE7AAIAAAAOAAAISodpAAQAAAABAAAIWJydAAEAAAAcAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG5pa2hpbCBtaXR0YWwAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzYyAACSkgACAAAAAzYyAADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA0OjE5IDE4OjQ2OjE2ADIwMjA6MDQ6MTkgMTg6NDY6MTYAAABuAGkAawBoAGkAbAAgAG0AaQB0AHQAYQBsAAAA/+ELIGh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjAtMDQtMTlUMTg6NDY6MTYuNjI0PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm5pa2hpbCBtaXR0YWw8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgBoAJHAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A9Zu/hPomoahLe6lc3N7NKytm6gtpQhUYBUNCdpx6Vqf8Icv/AEHNU/8AIH/xqukrPfVtsrpHYXkoRiu+NFKkg4OMtWPsKT+yiuZ9zL/4Q1f+g3qn/kD/AONUf8Iav/Qb1T/yB/8AGq0jrDgZGlagfYIn/wAVUtjqQvZpYmtbi2kjCsVnCgkHOCME+ho+r0v5UHNLuZH/AAhq/wDQb1T/AMgf/GqP+ENX/oN6p/5A/wDjVdJRS+r0v5UHNLuc3/whq/8AQb1T/wAgf/GqP+ENX/oN6p/5A/8AjVdJRR9XpfyoOaXc861/4LaH4lv0vNV1bWHmSIRKUkhUbQSegi9WNZf/AAzp4T/6CWt/9/4f/jVes0V0RbiuWOiIaTd2eTf8M6eE/wDoJa3/AN/4f/jVH/DOnhP/AKCWt/8Af+H/AONV6zRT55dw5UeTf8M6eE/+glrf/f8Ah/8AjVH/AAzp4T/6CWt/9/4f/jVes0Uc8u4cqPJv+GdPCf8A0Etb/wC/8P8A8ao/4Z08J/8AQS1v/v8Aw/8AxqvWaKOeXcOVHk3/AAzp4T/6CWt/9/4f/jVH/DOnhP8A6CWt/wDf+H/41XrNFHPLuHKjyb/hnTwn/wBBLW/+/wDD/wDGqP8AhnTwn/0Etb/7/wAP/wAar1mijnl3DlR5N/wzp4T/AOglrf8A3/h/+NUf8M6eE/8AoJa3/wB/4f8A41XrNFHPLuHKjyb/AIZ08J/9BLW/+/8AD/8AGqP+GdPCf/QS1v8A7/w//Gq9Zoo55dw5UeTf8M6eE/8AoJa3/wB/4f8A41R/wzp4T/6CWt/9/wCH/wCNV6zRRzy7hyo8m/4Z08J/9BLW/wDv/D/8ao/4Z08J/wDQS1v/AL/w/wDxqvWaKOeXcOVHk3/DOnhP/oJa3/3/AIf/AI1R/wAM6eE/+glrf/f+H/41XrNFHPLuHKjyb/hnTwn/ANBLW/8Av/D/APGqP+GdPCf/AEEtb/7/AMP/AMar1mijnl3DlR5N/wAM6eE/+glrf/f+H/41R/wzp4T/AOglrf8A3/h/+NV6zRRzy7hyo8m/4Z08J/8AQS1v/v8Aw/8Axqj/AIZ08J/9BLW/+/8AD/8AGq9Zoo55dw5UeTf8M6eE/wDoJa3/AN/4f/jVH/DOnhP/AKCWt/8Af+H/AONV6zRRzy7hyo8m/wCGdPCf/QS1v/v/AA//ABqj/hnTwn/0Etb/AO/8P/xqvWaKOeXcOVHk3/DOnhP/AKCWt/8Af+H/AONUf8M6eE/+glrf/f8Ah/8AjVes0Uc8u4cqPJv+GdPCf/QS1v8A7/w//GqP+GdPCf8A0Etb/wC/8P8A8ar1mijnl3DlR5N/wzp4T/6CWt/9/wCH/wCNUf8ADOnhP/oJa3/3/h/+NV6zRRzy7hyo8m/4Z08J/wDQS1v/AL/w/wDxqj/hnTwn/wBBLW/+/wDD/wDGq9Zoo55dw5UeTf8ADOnhP/oJa3/3/h/+NUf8M6eE/wDoJa3/AN/4f/jVes0Uc8u4cqPJv+GdPCf/AEEtb/7/AMP/AMao/wCGdPCf/QS1v/v/AA//ABqvWaKOeXcOVHk3/DOnhP8A6CWt/wDf+H/41R/wzp4T/wCglrf/AH/h/wDjVes0Uc8u4cqPJv8AhnTwn/0Etb/7/wAP/wAao/4Z08J/9BLW/wDv/D/8ar1mijnl3DlR5N/wzp4T/wCglrf/AH/h/wDjVH/DOnhP/oJa3/3/AIf/AI1XrNFHPLuHKjyb/hnTwn/0Etb/AO/8P/xqj/hnTwn/ANBLW/8Av/D/APGq9Zoo55dw5UeTf8M6eE/+glrf/f8Ah/8AjVH/AAzp4T/6CWt/9/4f/jVeoahqVjpFhJfareW9jaRY8y4uZVjjTJAGWYgDJIH1NYn/AAsfwR/0OXh//wAGkH/xVHPLuHKjiv8AhnTwn/0Etb/7/wAP/wAao/4Z08J/9BLW/wDv/D/8ar1DT9SsdXsI77Sry3vrSXPl3FtKskb4JBwykg4II+oqzRzy7hyo8m/4Z08J/wDQS1v/AL/w/wDxqj/hnTwn/wBBLW/+/wDD/wDGq9Zoo55dw5UeTf8ADOnhP/oJa3/3/h/+NUf8M6eE/wDoJa3/AN/4f/jVes0Uc8u4cqPJv+GdPCf/AEEtb/7/AMP/AMao/wCGdPCf/QS1v/v/AA//ABqvVLe7t7yN3tJ4p0SRomaJwwV1YqynHQhgQR2IIoN3breJaNPELmSNpUgLjeyKQGYL1IBZQT23D1o55dw5UeV/8M6eE/8AoJa3/wB/4f8A41R/wzp4T/6CWt/9/wCH/wCNV6zRRzy7i5UfOvxM+DuneE/DtreeGn1a/vJrxYDDIVl+QxuxICIDn5B+tFexeOoUntdKSTeF+35+R2Q/6iXuCDRT9rUWwnCLOoryD4jO41q3EZYHbJyGI/5atXr9c5qXhWPUrsyzx2s2C2wyq+VBJOOGA6k0oycXdEVoSnDliY/w+yfDP71iSLlup9lrX8M2r2eq6mki7d58we4aWUg1NZ6DcafbmGzNnFGW3bQjnn8W9qvWFjPb3c1xcyxu0kaIBGpAAUse5P8AepXfUdODjFJ9Dmr+ytvFXxHu9I12BbvS9L0+C4jsZhuhnlmeUF5EPD7REAoYEAsT1xi1qnhMnR30PQLXT9P0h4JZBHGjI0F0GV4WjUfKqhwzEcc4x1NaGteGINW1C31G3vrzStSt1MaXtiyB2jPWN1dWR1zyAynB5GDmpbHQpLS6tbibWdUvZII5Uf7RKoScuVO50RVXK7cLtAABbjkml0ttv/X9behtfW/p/X9dzm9Q1ca1pXgvUXURSTatF50ef9VKIpVdPqrgr9RUviS8utP8dR3mn2bX11b+Hr2SG1U4MziSAhB16nirp8IC4XWLK6mMVhdXqX9k9s+ya0m4ZmHGP9Yu8ZyCXYEY4M1r4QWB725uNa1S81K7g+zDUZmiWaCMHIWMRxqi/Md33Dk4zkAAC7+r++NrfJi8vRfdK/5HNP8AEG7tfDttL/aOn6tfX9+LKF7DSrn/AERxGXkE1qHeUugU/JlTyM7Rk0+Lxp4km0+GGO0hF5NqyWEV3d6Zc2cU0bxM/mCCUhwVIwRuIO04I3fLtN4BspraU3OpajNqUl0l2NWLRJcJKi7EK7IxHgLlcFCCCQwOavJ4XVorMajq2o6jNaXovUnuWiDM4QoFIRFULgnhVHPOeuTr933aX/X/AIIdNOz+/X/gf5GA+ralqXiifwtr91pVvbyxfZ2tp7KWN9VjMIMslvIZNoALEGMCRlCkluQakt/El/pfgGN5PKl1PTr+DS7oS5OT9oSLecHq0bq4/wB4fStqfwsl3r0WoXuq6hcwQXAuYNPkMXkRShdoZSE8zjJOC5XJ6dKq6l4QGp6pqyzSeXpuq28Jl8l9k0V1E3yTIcYzgJye8S8EZoT2v/Vv6a+fTZN7/wBf12+75lTxD4r1bTtS1q002yjuDY2dlNGVgkmZPOmkSR2RDukVFQNsXBOCM88Zl34/u4bTSLWx1Kw1O71NJ5xqWm6Tc3kCwxsq5+zwuz7tzhTlwAQcnOFO5B4HFvcX97H4i1r+079IEmvy8PmAQs5XanleWBhypGzBHONxLFP+EBskhtntNS1G01K3mlnGqQtF58jS8y71MZjYNgfLswCqkAECj1/r+v6vfQfl/Wn9f1vlWvizxNqn9i2Vva2theX5u1mmv7CdF2wsoWVYHZHAcHO1jkbhycc2dM1ePwd4Y8Q2l3GDH4bEk0EStgvalTJEB1wPvRj/AK51vW/hyKK8027uL+9vLrT0mRZrhkLS+aQWLBVA/hGAoUAcYqDVvDg1LxBHdOkEllc2MthqUEmQZ4jymMDkqS46jiRj1od/6/r+rsFbS/8AX9L8jm7mTxDD408Jz+JJtMlhY3Uv+hQSRm3b7MxKHc7eYME/MNn3fu88TW3izxC2iaZ4puP7MOialNbhbFIJBcQwzuqRuZi5VmG9GZfLHUgMcZOrYeBobXU9OvrzW9W1OTTFdLRbySIqiOmwqQka7+MfM2W468nJZ+A7Oze2gXU9Sl0q0mE1tpMrxtbwsp3Jg7PMIVuVVnKjAwMAAPTm+77uv4f8P1ISdtf60/z/AOG6DNF1nXvEV3NqNhJp1vosN7LarBLbyPcTrE5jeTzBIFTLq2FKNwBk88Q6Z4uv73RvBd3LDbCTX3C3QVWwn+jSS/J83HzIBznjP1rRtPCUen6xLd6dq2pWtpNcNcy6ZG8Zt3kb7x5QyKCfmKq4UnJxyc09P+Htjp9/pk66pqk0GkTPLp1nLKnk2wdHQoMIGZQHwN7Mw2gAgFgSO2vl/wAH7/6tsW+vzt+NjCtPF3jK5stCvdmiiLW7uSyjh8iXdbMBIVmLeZhxiIkx4U8gb+9S3fj/AFPS9Mks7+O3m1kaw2lpPZ2M80TARed5v2dC0hxGeUDHLD7wHI6e38I2FtY6PaRy3Jj0e5N1AWZcsxWRcN8vIxK3THQfjDeeCdPvFu2FzeW9zPqC6jHdQyKJLacRrHmPKkY2rgqwYEMwOQcVMdFr/W3/AAf6tYfS39b/APA/q5z0XjTxJLY28UdlCbubV47CO6u9NubKKaJ4i/mrDKd4KkEEZIbbwRu+WrrOveKLvTJbOPUrC01HTPEVrYz3EFpL5dwkjQuhCecCoxJhlLNuwRkZzXZJ4XVorMajq2o6jNaXovUnuWiDM4QoFIRFULgnhVHPOeuYL3wTYXseqYu72CXUr6G/aaJ03QTRCMIUypGP3SnDBgee3FOOju+6/Dl/+2E9VZdv8/8AgGTPq9/qfiu58L63caXbWk0fkfZLizlSTVI2hBlkgkMm3ALEGMB2UKSSMg0628R6hpXgOO4n8qS50a8Sy1TzASfKSQI8owRgmMrLzng9K1z4TE2rW97qGtanfxW0q3EVncGHykmCbRICsYfPJO3dtyThegCy+HDNrmrtL5T6VrFksV1B0YygFC3TBDRkKST/AALxRql5/wCWv+a+fTZGj9P89/0fy+Zjahr8t/qeyWwsLrTodft7C3NxBvbzFXdJKpJwGV8KpA4KN14xUm8b6xCPEsss+l28+lWt3PDo89rKlyUiz5c28uBLE+3JKIANwXdkGuktPBunWWh6VpcUtyYtMuVukkZlMk0oLEtIduCWLEnAHJ7VC3gm0uryabWdRv8AVoningit7xo9lvHNxIqlEVzkfLlmYgDg0tUml5/kv1TGmrpvy/N/pYW88SzWmvWFrKbSG1n0i5v5pp2KCNojCBls4VMSMSSD0H48rD4yv9Vh1nSb6e3v4pdDuLuC8ttKubFDtG0hfOZhMpDqQ6Nj25BreT4b2EjM2q6tq2rM2my6Xm7mjGLeTZlcRoo3DYPn+8cncWwuJ4PAluLuW71DWdV1K5l0+XTjLcvEMQuQSAscaqCCv3sZOec4GCaUotLqn+tv0CL5beVv0v8Ar/W1m2vLrT/hvBeafZtfXVvpSSQ2qnBmcRAhB16niuQ1LXvEOq+FLK70vxNo8kv9s2lvLJa6dPE0ZaVAYZYmn3owJ+ZWIJU4wvWvQTparoK6Vb3VzbKluII7iJgJUAXAYEgjdxnkY9qxX8CWs2m3cFzqmozXt3cw3UmpMYVnEkJUxEBYxHhdoGNmDznOauTTqOXS6f43/IiKapqPWzX4FS+8WanYaJ4yuHS0luPD6fuGETKkrfZY5SWXcTjcx4B6YGSeag1fWtf1iPxFFoTabHaaTEYJo7mJ3kupDAJWVXVwIgFkUAlX5zxxzc1j4d2etLqEdxrOrQwarAsWoQwSxIt0ypsErfu8q2AuQhVTtAKkZBsaj4Htb+8vZYdV1PT4dSiEd/bWckax3WF2biWQsrbcKWRlJAHpWc1zRa8vx7mkWk0/66HOaf4htdA0qxvrywt5F07whHeG4WL/AEgqAMxB+ynaDj15rbg1fxLpmq6MniN9KnttYlNuI7GCSN7SXymkUF2dhKuEZc7U5wcdhfj8G6UsaRTCW5hXSl0lopmBWSAeuADuPqMfSmaZ4PjsL60uLvWNT1VbAEWMN88bLbZXbkFUVnbaSu6QucE85JJ1bTlfzf5t/lb+t8oq0UvL9F+tx3jC38NNpsdx4t0+31GCJ9tvbT2/2gySt0WOLB3yHGBgE9cYBNchpWgtc3fhfwx4st1uLWDTru8Om3bLOuRLGsKSZyHMUcm3uM884Brsde8Lf23qthqUWsahpl1YLKsT2YgYfvMBiVljcZwuAQAcEjvUdz4Sa7hsnm1/Vf7Ssmk8nVFFus4V8bkKiLymU4Xgp/CD1GazXn/W/wDw5b/r+vwOJvNPa7+DPiS0Go30Ntokupx2y29wU3xRCURxOw+YouQMZGdgByMg9Zqum2F/4T0p9R8L/wDCTeVCnl2hSFwhKD5yszKvGMZGWGTgcmtL/hFbAeDrjw2rTraXNvLBLLvBlfzQfMkLEYLkszE46np2p19oM9xa2kOn67qWlfZY/L3WggYyrgD5hLG4yNvUAHk+tHRr0/C+o9Lp+v42sjjvDDLpVp4U1ZLwXkVxC2j305LjYwZjEp8wK3ySBovmUNl+QDWX4psdIv8AxZ4ugm8Pz6nrkkFsumT2+nPJJBKYvkIuQu2DDYbJdcYzXeXPhG0XwPN4d0wmEeWxhmlbeyz7t4mYnOW8z5yfWr2laT9ju7rUbhv9O1BITdKjZjV0Tb8nAOOvX9Kclzaf1r+t7iTs7/1p3+VvuOVbxVrWktrk2pvZtpvhq1R7oiF2nu2+zK5CtvCp83cqcg4wMZq/Bq/iXTNV0ZPEb6VPbaxKbcR2MEkb2kvlNIoLs7CVcIy52pzg47DYPhvT5JNZNyjXEesgC7hlIKFRGI8DABAKj161kf8ACNPoSwX/AJ+ueJ304YsLCWa2zBkbNyswj3EKSN0js2CcZJOS+t3/AF3/AK/pltEl/Xb/AIJz0Pjd9P0HQbHSbG2sLrU0ublvsej3F3DAkcmGIt4PmJZnHO4AEkk5wDo2PjHX9XGlaVa2kNhq92LmSa4v7GdIlggdU81bd2ST94XTClhtBOS2But6Z4Hf/hGtES6vbjTNY01H23enuhaPzDl4/wB4jI69PvKeVBGCBWhd+D0u4bBzrOqRanYGTytVR4vPYSffVgYzGVPHy7MDauAMChaaMN9v6/r+vPHZ/FcfxJ0q3uNWsGhOlTyz20NnKqSlZYgSMzYVju+UkNtBYfNnNZcWs6v4m8O3WoTS6fJq2jPHqEekQ2ssF1YyrkmGUSOS2+MugfagbJIBBGOvk8KLJf6bfHV9SF5YQPbtOHj3XUblWYSApgZKA5QIR2wOKfovhhNJv5b+51O+1a9kgW3FxfeVuSJSSEHlogPJJyQSfWhXS9L/AH3bX6f1udX52/JJ/r/W2taXcF/ZQXdpIssE8ayRupyGVhkEfgamrk7DwbcRabJYTavfWkEKXVtZrp1x5YSCVgyEjbxJGBtQjOB65439P037BPdyfbby5+1SK+25l3rFhFTagx8oO3cR6knvT0DYu0UUUgCs3V59ch8n+wdO0+9zu837bfvbbOmNu2GTdnnOcYwOueNKigDm/t3jf/oXvD//AIPp/wD5DrpKKKACiiigAooooA5vx5/yLtr/ANhrSv8A04W9dJWbr+ix+INIawluri0/fQzpPbbPMjeKVJUI3qy/eReCCMVm/wDCL6v/AND34g/78af/APItAB4D/wCRduv+w1qv/pwuK6Ss3QNFj8P6QthFdXF3++mnee52eZI8sryuTsVV+87cAAYrSoAKKKKACiiigDg/F89z4X1mPUvCFt9u1vUs+doattXUFUAGYnpEyDaDIeGG1DkmPbreCbazm0xtbjvf7T1DUf8Aj7vWjMbblJHkiM8xLGdyiM8qd27LFidTTdCtdN1C+v1aW4vb6TdNcTsGfYCdkS4ACxoCQFHqScszMS30K1tPEFzq1o0sEl3GFuYUYCKdxjbKy4/1gUbdwIyDhs7V2gGlRRRQBzXjT/UaV/1/f+0JaKPGn+o0r/r+/wDaEtFAHS0V8GXngE2iXkn9pLJHb2IuUcQHEkmCWi68bcHnn+HgZ4xn8L6lHDDMfsTQzSCISx6hbuiMQSA7ByEyAfvY6GjrYOlz9DKK+AdX8D6jp3iT+x7OS3v5nkZIRDcxF3wu45QOSnH97GaZp/hK7PiHTrLUkjaG7YMDa39sfNTdtYRyF9hfPG0nOe1C12B6I/QGivzv/sK9uGvn0+2eWKzmEbpvVpV3NtXKg5POBkAjJA7iqd9ZTadfTWd2EWaFtjhJFcA9xuUkH8DSTurjsfo5RXwZY+ATex6bINSVY7y1aaRhAT5L/wAMZ553ZHPH8XBxzzz6HqKJcM1vgW1tHdSnevyxSbdjdec714HPPPen1sJan6KUV+fup6JZNZ6HPo4lgbU45C6Xt3HtVlcr98qigHGefzpdb8H3GieIv7Me7sp1MvlrIL2BCcAElgZD5f8AwMijrYD9AaK/P2+8K3MvijU9M0W2lCWOZHW8uIVaKMEAs7htnBYZIOMc+tS6N4aiPiSTRfENvcxzvA8sT21ym1cRNIGztYOpAGNpHXrSvpcOp9+0V+e2jaKmoaTqt7Msjizty8YhuIVZW3L8zozbymD1UHnFVoNAv7jSzqIWCK1+ba9xdRQmXb97YrsC+Onyg88daewbn6JUV+eC+HdQfTft8YtZLcBWfy72FnjDEKC6B9yDJAywAGRmruveD7rQ/sha8sZ1uYYn+W9gyrOM4wJCSo/v/d75oA/QKivz81bwzLFr1tpelW07yy2scpEs8LgkpuZw6MUEfUgk8Dk1Gvg7W3umgS2iYrb/AGrzVu4jEYgwUuJd2wgE4JzxznoaAP0Hor85tS0270i/ez1CIRToFJUOrghgGBDKSCCCCCDjmtvQfC9pq9lZPcajcW9zqF69nbRRWYlXcqocu28FR+8HRWxgmha7Bsff1FfnvH4P1ma2NxFBC0WZdhN1ErS+XnfsVmDPjB4AJ6eoqKXwvq8OmG/ktVEKxrKyCeMyojHCu0QbeqnIwxUDkeoo31HbWx+htFfnzP4L1y2hWWa3gGZ0tygvYWdZX+6jIH3K3sQMYOcYqO68J6tYyQpdx2sRmlaEMb6DakijJR234jYZ6MQaBH6FUV+fcHgfX7m7+z21nFK2xJA8d3C0bKzFFKyB9rZYbeD1461m6ro99ol4LXU4RFMUDgLIrgg+6kjsfpigD9FqK/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6K/NyigD9I6KoSf61/941EkscjSLG6s0bbXCnJU4BwfQ4IP0IoAyPH8M89jpaWtybaT7fxIED4/cS9jRUfin7ul/wDX6f8A0TLRTuI+Lp/GE0+s3920EhtrqGaNbRpyUiMiBC3TBPyqTwM4HpV3xL48/t/RZdOSzuoUkuo7hRNfGaODarL5cSbAET5uB2x1PGOPopDWmx09x4ss5fEkeuxaZMl4wb7SGuw0cjNHsyg8sFOSTglvSsrQNRtdJ1u2v721multpFljjhnEWXVgRklG446YH1rNooWjuhNXVmdTY+MLfRdau9V0PTpobq4YbWuboSiNScyLgIud3TPYZ74I52+ktpr6aSwt3tbZmJjheXzDGPTdgZ/KoKKSSRVzoofF80GraZcpFJ9nsYoUe1887ZjGpXceMDhj2OASKnn8XWcui3Vsukut7d2MFlLdG7yoWIpgrHs4JEYzlj7Y6HlqKfcS0afY39Y1zS9Q0PT7Cz0y8tpLBWWOWW+WUMGcs2VES85PHPHvRq+t6VrOsJqN1pl4ksp3Xix3ygSHaBlMxHZyM87vT3rAoo63A7j/AISLRNW1LxDqNzY3Nsl5YYktzqCbpX8+EgRsYuOFzjaxwD07U7TxhYxeJBqlzpM8iQWwtbS3ivQnlxiMx/MxjbecHORt57Y4rk6KOlv6/rUP6/L/ACOi0fXdF0sakraTfzJfQtbgDUUUxxEqcZ8k5bK9eBz0qKXW9OvNDtrC/wBNuHksVlS0nhvAmFZi4EimNt+GJ5BXIOPesKijcDsbrx6J/Ck2ix2VzGs1nDbFftxNvGY2Vt6Q7cBm2nJJJJOc9c5Oo61p+qWun/a9PuRd2sMVvJLHdqEkiTjhDGSrYwM7iOM4rEoo3/MForf1/Wh10/jHTjqFvcWuj3KRrY/2dcRTXyv5sGzZwREu18c7uRnt2qnceKIDp0unWGntBZmyNrEJbjzJFJmSVnZgoDcpjAC4B9uedoo63/r+tQWho65q39s6il15Pk7beGDbv3Z8uNUznA67c47Zqxb+KNRsvDS6Pp91dWcZnllmaC4ZBMHRF2soxkDYeufvfnjUUBtby/4Yv3mp/a9J06y8nZ9hWRd+7O/e5bpjjGcd62pvFlrd+dK2nNFqN7bR2l1dNcFovLG0FliCghiEXPzkdcAZGOWoprQR6l4v1ayR5L5LqBza6pFcW8Vte2sovwCcuywxh0IAGDKzEbiOSSa4bSdfXTPFZ1l7QygvI4jWXYyFwwBV8HDLuyDg4IBxWNRUre/9dP8AIfS39f1qd4/xMLXdvM2n3E3kJbJvur8yyyeTcGbLOU5Jzt6cdcdq5bXNZ/tq4tpfI8nyLdYcb927BY56D+9WZRT/AOHAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP0F8Qf2mdLuV0LyxfuwSJpfuplgCx+gJPfp0PQ8zZ+Dr3w5f2V9oV/JcSySKmqpctkXas+WlGTwy7iRz0HUnO/qLjVII7mVGWTKuQcAev1qP+17f+5J+Q/xoAoeKfu6X/1+n/0TLRUHiC8ju103yww23vO4f9MZaKAPhKiuv1ux0iy8OWK28elJeT2UEzbmvDdFmwSRz5OPY9s98U3VvCGmaULpxrVxcR2F+tleFLEAqWDkFAZPmxsIIO3noSOadtbedvxsHRP+u5yVFdvq/hLSbjx5Po2hXc8CRtI8wuIVRII0TedrtKd3AP3tgzjJA5FSTwdYR6jJGNejktYrF7ySSFIppE2sFKFY5WTcc5Hz9xnHOJvpcDk6Kt6lBZW93t0y9e8tyisJJIPKYEjlWXJAIPHBI966Dw3Y6ZqGkmC2tbC+12ScqtrqM8sIdCAF8lkdFL5JyHbnA2g0+gdTlKK6S2soB4D1aT5PtcFzAs6zWQ3xZLgBJd+RnB3Ap2HNQHRdNbw4l/FqF59rldYoreSyVUlk43hXEpJC5HJUdQO/Bu9P6uG25hUV1PiTwdB4fspHGs21xdQTCGa2EkO7POSgSV2IBGDvVDyOOoGPoek/2xfvE84t4IYXuJ5du4pGgyxC8bj6DI57jrRuGxnUV3Phvw3oh8VaI9xfXF5YX2ZIEexUF2RiGSVTJhRleoLZB7Vy2uXkV9qjy2zrJFtAVhYRWeeO8cRKjnPOSTQBn0V2+i6LoEug6Pc6kiLcSTvLMJJyn2mLf5YjAB6htvTBwWPbhG8BRXEWpTRXclpJA108FvMsQWRIS2dpM3mtwpGRGRkEZ4JA9P67AtTiaK6nWtK8PWnhPR7yzur77ZdQyMd1ooWZhIV+Y+cdmMYGAc4ycZqvreg6Po1xLa/21PNeW8qLLH9h2qVYZJRt5yV4yCFB7E0dbAc9RXXazpNjc+KtMsjdRWltd2NuYp4bDy+WQbTJGHbknG5gT1JwelY3iDQz4evU0+5n336IDdwqg2wMeQofJ3naQSQABnAJo/r7g/r7zKorq/A3h0axcXV1daVc6nZ23lxvDbK5bdI4G75OflXe3pkDPWuf1XT5dJ1e70+5GJbWZom47qcZoejsC1KlFdFZW1tJ8P8AVJ4jG9zFcQeaJbMbkBLgeXNvyAcfMCnpzU134StLfR7ieHVnmvLawt76W3NrtQJLs+UPvyWHmD+HBHfPAAWun9djl6KltVt3uo1vJJIoC3zvFGJGUeyllB/MV3dxoXh21+It1ptlLL5CQXYkjurUGODFs5DK292fB56Agjij/g/gB5/RXYQeBre7uIZbfVj/AGbJYfbjcTxRwuo80xbSryhM7h3kAx78HA13S4tI1Z7S3vob6IKrLNC6sORnB2My7h0IDEZHU0bBuZ1Fdl4Qi0aHw/rOp3k0n2u2ijUb9MhukiDSqNyrI4DMenIGATgmq0PhaC7W3FxqRh1PUbZ7y2t0tB5RQbiAzhhsJ2NgKpA45HYemoLU5aiumPhnS40sYZ9bljv723hnjh+xZjHmEDYX353YJP3cHA5GeLniDwJbaLo097BrDXckJIaI2nlggTNCx3bz/EpxxyOuOlD039AWpxtFaOh6T/bF+8Tzi3ghhe4nl27ikaDLELxuPoMjnuOtdR4b8N6IfFWiPcX1xeWF9mSBHsVBdkYhklUyYUZXqC2Qe1HqI4aitDXLyK+1R5bZ1ki2gKwsIrPPHeOIlRznnJJq7peiaZPoo1PWNWmsYmu/soWGz8852htx+dflAPPU9MA9jpcfWxhUV1EHhC2kjtoJdWK6he2z3VrClsWiaNd2N0hYFSwRsDaccZIycT3Xw/uLVby4a+RrG3ikkSYR/M+2NXXK5+UNuwDk/db2yd/IOy7nIUVv6/4bh0ewt7m1u7i+SUgNcJbp9m3FclVlWRssP7rKrY5IFZ2i6adX1iCyBlAlJ3NEisygAknDMq4AGSSwAGTmjrYOlyjRXY3Xge0srqRrjWsWKad/aAnjgSVmHnCLZiOVkzk8EOR0yRzhr+DrPT7uefUNUl/s6F7YRSRWYeSZpo/MUGMuAuFzk7j7ZppXdv63sD0RyFFbPjCCG18ba1BbRJDDHfTLHHGoVVUOcAAcAUp0WytdBtr/AFO/nimvkkktYLe1EoIViuXYuu3LAjgNwM+1SneNxtWdjForprvwlb21vdw/2mzarZWi3c9t9mxEEO07Vl3ZLAOpIKgdcE97d5Ypr0Pg+IpbWk+pFoJZre1jjz+/KBiqBQxAx7n1p9bf11/yFfS5x1FdRpHg6LUdMS+uNSNvF/pRcLb7yqwKjHHzDJIfgcdOvPGjqXw+sdLuLr7RrshtrSGWSWVbHLFo5UjKqu/nPmDBJAyMdOaB2/yOGorrY/BVsdcu7FtVkdYreGe3WG3Q3F0JUVwqRNKuWAblVZjnoDWHHYWYbUkvr6SzltVPkQy2zb53DY2MAf3ZxknOcYxQIzqKK6dtO0298IaZPaWn2W6k1E2ctw8zOXGxCSRwoGWOAAMDAJPUu1/w/F2FexzFFeqyeA9FvNQfTxDHYz2moxQmOCaR5pIGZlzKWJUStt3KqgYB5HIqGHwbpOo/Z7mKxtkuIGuFudMs7iQo7JF5iRmR2J3DgOVIAHTBBNTfS4+tjzCiun8ZaRp1hHpd3pZtwt5C4mS1Z2hWRHKsYy5LFe2STkgkcYrmKYBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfeN9/yELj/rq38zUFT33/IQuP8Arq38zUFAFXUPu2P/AF+j/wBEzUUah92x/wCv0f8AomaigD4zuPEeoXWmx2Nx9kkijjWJHNjD5qqvQCXZv/8AHqiutc1G9jvEubjet7ci6uBsUb5Ruw3A4++3AwOa3WW0vvA2lvLaWtpt1Q2zzwxAOU8tCSznLNySeTgZ4AGBXbSeH9CvdUl068gtFaz1eCCNba3SFFRmYLbtKAGldlUFmYnB6HrTe9v66P8AVf1YV9P68/8AI82fxZrEl7bXhnhF1bDCTraxLI427cOwXMgK8EPnIz61Xm16+mmmlBtoWngNvILa0ihVkJyRtRQM5A5xn3r0m30jSdTW0uZI9Ok1GB7tARaJb2k0iQ79uxQA6RseWIy3IORiuR8cW+nC30a907b5l1bv5rpbLbrPtkKiURKAEDYIHAyFyeSalvo/6uUv6+TOTrU0zxFqGkRBNP8AskbKxdZmsYXlQ+qyMhdSO2Dx2rLopiNe18UanZ6XNp8JtDbTnMolsIJGkOScs7IWJGTgk8Z4xTJvEeoXGlRadMLNreGMRRn7BAJEXOcCTZvHJJznJyfWsuigDS1PxBqGsRKuotbysCGMwtIkmcgYy0iqHb/gROetVtO1G60q+S7sJfKmTIB2hgQRggg5BBBIIIIIqtRQBqv4m1Z9UttQFyqXFoNtuIoI0jiHPCxqoQdSeByTnrWVRRQBafUrt4LOFpfkss+QNgGzLbj2559c1qnxvr5gliN6hEqyozm2iL7ZSTIofbuCksTtBxk8CsCijyDzNAa5fDRhpTNDJaKSUEltG7x5IJ2OVLLkj+EiobjUrq71M6hdOstyzh2Z41KsR6rjaRx0xiqtFHW4G7P4y1q4ure5eW0Se2TZDLFp9vG0a7doAKoMYHT+71GKzb3VLzUYbWO9lEotI/KiYooYJnIUsBlgO2ScdBVSigCx9vuf7L/s7zP9F87z/L2jl9u3Oep47dOvrRf39zqd2bm9kEkzKqlggXIVQo6Ac4A56nvVeigDWs/E2pWGkyaZbfY/ssv+sWSwgkZ+uCWZCxIycHPHbFQPrmoulwrXGRc20drKNi/NFHt2L04xsXkc8c96oUUAFa8/inVrmaOaWaHzkieHzltIlkdWTy2DuF3P8pxliT361kUUAalt4l1W0aAw3KlYLc2qRyQo6GIsWKMrKQ43En5gecegqjeXcl9dPcTLCrvjIggSJBxjhEAUfgKhooAsQX9zbWV1aQSbYLsKJk2g7wrbhyeRyO1XoPFGr22mCwhulWFUaNGMEZljRvvKspXeqnJyAQOT6msmijyAtyapeS3NtcSTZltERIW2j5FT7o6c496tXnibV9QtZLa7u/MilzvXykGcyGU8gf32J/HHTisqigCzp2o3WlXyXdhL5UyZAO0MCCMEEHIIIJBBBBFXH8Tas+qW2oC5VLi0G23EUEaRxDnhY1UIOpPA5Jz1rKooAKnN9cHThYeZ/owlMwTaPvkAZz16AVBRQBrQeKNXttMFhDdKsKo0aMYIzLGjfeVZSu9VOTkAgcn1NLN4q1qe0ltpr0tDLbR2rr5acxRnKL07evU9yayKKA2NO+8QahqFiLOY20duHEhjtrOGAMwBALeWq7iATjOcZPrVbTdTu9Iv0vNPlEU6BlBKK4IYEEFWBBBBIwRiqtFAGte+J9X1BWW6uUKNbC02RwRxqIQ4kCAKoAAYA8fTpxUkHi/W7eWSSO8UtIkSHfbxuB5S7Y2AKkKygcMMN71i0UAT317calfz3t7J5txcSNLK+ANzE5JwOOtW4fEOow6T/Zu+CW1G/YlxaxTGLd97YzqWTPX5SOeetZtFHSwdbmtN4o1e4037DLcqYTGsTMIIxK8a/dRpAu9lGB8pJHA9BUs/i/WLiG0jaS0jFk4ktjBYQRNCwbd8rIgI55IzyetYlFAdLG7c+M9du4hFLdxrEscsaxxWsUaqsoAkAVVAG7A59eepNQ3vinWdQWdby88wXAcSjykG4O6u3QcZZFPHpWRRQBrR+JtSju2umNpPMY44t1zYwTbVjUKgAdCBgADI5OOc1FHr+pxvqLLdsW1RSl4zKrGUFtxySOORnIxWdRRuAVrv4n1KTRBpLfY/sa9EXT4AwOAN28Ju3YAy2cn1rIooA2LrxZrV4sQmvdpimWcPDEkTvKowsjsoBdh/eYk8n1NLN4s1ma7trg3Mcb2pcxJDbRRRgvw5KKoVtw4OQcjg5FY1FAFzU9WvNXnjlv5EYxRiONI4kiSNQScKiAKoySeB1JNU6KKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+8b7/AJCFx/11b+ZqCumlt4GmctDGSWJJKjmmfZbf/nhH/wB8CgDktQ+7Y/8AX6P/AETNRWl4mijjXTPLRUze87RjP7mWigD4ffxJrkmnf2fJrOoNZbBH9ma6cx7R0XbnGOOlQ3WsanfQQQ3uo3dxFbDEEc07OsQ6fKCfl6Dp6V3HiOTU/wDhCtOjS08QHTzpttvnS6YWA6cNH5eM5x/H1x9Kg8Q2Oh2UWrTWOhQRf2TrCWiq9xM4njKy5D/P6oMbdpxwSetPq79/ydv1Bapf10ucjc67q95ew3l3qt7PdW+PJnluHZ48HI2sTkc88VBe395qd01zqN3Pd3DABpZ5C7EDpyea9I1rSrfV/iSv9paILWwujJLb3USTH+0SItyKpaQK2TgYQoTnGQSDWbdaTolvrF0z+Hr23FtpT3LWd/DLaq0gcBWVTK77cHB+fk5xjtOyuwWr0OBoq3qVza3d351jYJYRlFDQRys6hgMEqXJYAnnBJx612nghdVvdD/syzg1rTbea5JbWtMVhGuQAVnxgMijJzvG3cTg5xT6B1RwqWlxJayXUcErW8TBZJQhKIT0BPQE4OPpUVdtp2h3918OtX+y6RcyrDcxNHd2onKXKhnDMV3eWwXHULkZ5PNRT6LJF4Ht7u48K+UbgKy6lHFdEQxA4MjkuY8segAHHOOVo3f3fiBx1Fd5430LRtI01l0/SNRhKzqlvqDWrrBcR4PPmmZ1kJGCCioOvHYc94T0621TXPIu4vtBEEkkNqHK/aZVUlIsjn5jxxgnoOSKFqD0MeKKSeZIYI2llkYKiIpLMTwAAOpqa/wBOvtLufs+p2dxZz7Q3lXETRtg9DggHFehaHa2mk+OPDxm0GCyvrpGaeylkmzaMC211UvuUsoBw5b1GMivO724ju7t5obSGzRsYhgZyq8di7M3PXkmgCCivQdI1iDSfDfhtLmKRpDcSXNo0aj5ZfN8skk9tvPHdF+taj+D7Gez1ee+0/e7f2hPFeQQybYmiaTarSecEDZT7nlE7e/cD0V/X8AWrt/Wp5VRXc6w7X/w60e4svDkDwQRTRzXcIuGFo3m55PmFQWBB+YH73GKpeJF0u11ubRtL8Ox+dFPGIZEnmeSXj5kZdxBDE4G0KRgcmjrYOlzmLi0uLN1S7glgZ0EirKhUspGQwz2I6Goq9G1jw9dN4x0Y6h4du2s7qxhEsM0k6pD+7/ebZJGJXyxzgkhccjFc14t0q00meyi0uIy2MkAeHUiW/wBOz1bBOF2n5do5GOck0v8AP+v6/wCCBz1Fd98PZb+HQdWfTLXWLqUXlpuj0e4MUu3E2dxCNlOmRgdua5fxUIx4u1XyZIZUN3IQ8CBUPzH7oBIA/E05aO39dP8AMFsZyWlxJayXUcErW8TBZJQhKIT0BPQE4OPpUVdnpOjahf8Awz1SS20W7YJPC6XECzlbgAvvLLu8ttmOoXIzyalvtL0b+xdQht9KSG4s9Is70XYnkZ3kk8nfkFtu0iQ8YznvjgD6/wBdAWun9b2/U4enwwS3EhS3ieVwrMVRSxwoJJ47AAk+wp1rMlvdRyy28dyiNkwylgr+x2kH8iK9P1UEfEea8n0BbexmtbySO7j85RfIbRzw7sy9O6gdaOl/UFq7HldFei6d4f0PUbqyuv7MKtcaQbtdNtFln86UTtGdiGVXbCKW2iQHjPIBFcj4ptrS08QTQ2FjeWEaqm63vITE6NtBPyFmIXPIBYnBHJoejt/XYFqrlGw0y/1W4NvpdlcXswXcY7aJpGA9cKCcc1BJG8MrRyoySIxVkYYKkdQR2Ndf4Y1C2tvBXiLzdIsrpo44NzzPMDKDMvytskXgdRjHTnNXNO8O2E2i2cp0j7RY3FlLNd6z5sg+xzDdiPIbYuCEG1gWbfweRQ9FcFq7HBUV2MsWiW02kaa+hxSPfWltI939plEgkcjJA3bduMjG3PJII4xreLPD+g2nhy7m07SltZ4S22UTyucLdvDjDMRyqAnjr0x0oen32+4Fqr+n4nnFPiiknmSGCNpZZGCoiKSzE8AADqa2PCenW2qa55F3F9oIgkkhtQ5X7TKqkpFkc/MeOME9ByRXYaHa2mk+OPDxm0GCyvrpGaeylkmzaMC211UvuUsoBw5b1GMija1xd7Hnt/p19pdz9n1OzuLOfaG8q4iaNsHocEA4qtU97cR3d280NpDZo2MQwM5VeOxdmbnryTW9pn9lWHhNdSv9Gh1KZtQMBE08qARhFYgbGHzZPBOcc8HsdLsfWyOaorvrHw7ps+k2syaOZtOuLOWe51hp5P8AQ5Rv2x5BEYxhBhlJbdx1GLGoeENDtrPUdTiRtkdj9rjtTIdsaSoohYHOSRJuyCe6/iPS/kC1tbqec0V2Xi3QYrHQrW+s9HbS4DIsRF7DPDdSNsJJw7tG6cfeTByRlQCM43hPTBrHie1s3jjlVt7NHIrNvCoWKhVZWZjjgBhk45o62FfS5jUAFmAUEknAA716PrHh/RNJuJrttGYquiC8FlcGWDZN9pEXzL5ruvB5UuT1+6ejl8NWCX15c6VoaX8yixdLFppfLtklhEkkpKuG2hsDLNhQec04q7/rvYbvb+vL/M85ngltriSC5ieGaNirxyKVZCOoIPINMrd8b/8AI/a7/wBhCb/0M1oRaMF8F21/p2gf2w88czXl3++f7CVJAGI2AXC4fLg5z6CpTvHmG1aVjkqtX2lahpbRjU7C5szKu+MXELR719RkDI967LUfDlhb6Jdumk7LGKwjntNbMsn+lTHaSnLeWeS42KoYbeTwaml8OXgsfBEWt6Xdw2PnGG6M8Txqoe5PDNxtypyORxzT62/rqTfTmPPaK9FsvBttp2jxz+INGdbpY7+YwTyPGWESRmMMAQQMlvQkHr0NW9e8P+HNKm1G4h0SN47OC42QNczbXdLiGNWY7s9JDkAjI9DzR2Ks/wAbHl9FeiW/hzTZvE97b2mgT3SyWdrLBGkNxcW9s8sSu3mGJxIFyTg5YgZ4audt9JZJfEcL6TDftYxPmaC7Kx2mJAvmLk5kHYA5POaHpv5/gLf8PxOdorYtbLzPCGoXn9k+d5VxEn9ofadvkZDfJ5f8W7HXtj3rHHXijrYOlwor1Gax1F7jwTd+K7CeG2jkaO4e6tTFDDmY+WrDaFVeny4A29sVsbQ13p0OtSXsetq92tjeakrNPI3lcSLGeVTf/ql9Rwcng6ff+AdbHi1Fez/uprpf+QpZ+IV0s4LZl1J4xOPxEzR5x/dQ9wOeA+IbwyeKQ6Q/Z7hrWE3cRk3sk20bgzd36bj13ZzzSv8A19/+QLX+vT/M5eiiimAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/AN402nSf61/9402gDB8U/d0v/r9P/omWijxT93S/+v0/+iZaKAPhKSwvIrGK9ltJ0tZmKxTtGQkhHUK3Qke1S3Wj6nYwQTXunXdvFcjMEk0DIso6/KSPm6jp611RSQ+A7B9QvbO6a31AXD27alC8v2fy0VVCb93bG3GRjoK6yTxBoWnapLcTT2ktreavBdxXK3CzzudzMZnRSfKVAwVUIDdevZv4rf10/wA3933Lpf8Arr/XzPLLnQtXs72Gzu9KvYLq4x5MEtu6vJk4G1SMnnjioL2wvNMumttRtJ7S4UAtFPGUYA9ODzXqVvqmi2C2mlXU9rAXe7WG4t72OeRBJDs82SYMUV5Gz3AUAZAHJ5Hxxe2k1vo1nbx2cctnbujx2c4nSJTISieYCQ7Ackg4yx6dBN/6/r+vQr+v6/r7zk6KKKYgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP0Uk/1r/7xptOk/wBa/wDvGm0AYPin7ul/9fp/9Ey0UeKfu6X/ANfp/wDRMtFAHxHN4U1u3a4WaxZDbWq3cuZF+WJujdefoOeDxwax67u98YWtzqmp2pnjOnPazxwTrE++QmPCLzzgNuxkD75yemLvinxZYP4fEOj60891bX0UljKst2Z4ogjglnlOFfJXIjwvTr2Ov3fmC1/ryPP9QsLnS7+Wyvo/KuIW2yJuDYP1GRRYWn2/UILT7RBbedIE864fZHHk9WbsB613moeLI7jxzba1L4ja8scySRWsnnubMtCRgq6bfvHHykj14rH8P+KtSn8Wabfa14kltls2G65neVneLeGaLciszA88Nx24px1aTFLa6OWmj8meSLekmxiu9DlWweoPcUyu50vV9H0fVtVbUNQh1fS7qZX+xQxS7ZWL7hJ86LgoM/72dvKkmuV1yd7nXLuaTUf7TaSUt9s2svne+GAI+mOOg4qE3ZX/AK/r+utqe7LMPhTW7g2ghsWb7bA9xB+8Ub416nrx06HBORjqKx67ux8YW1pqOjWwmjNhFBAtxMYnLxELiRV9idpOAeVGO+WXOqaM2halOmqo11eaRaWcdmIJNyvEYQ+5iu3H7skYJz7dDXf+u4lrZPy/T/hzmtV0N9LtbG5F5bXkF9GzxPb+YMbW2kEOqnOQfaq17p1zp2pSWF8gguIn2SKWBCn6jIro9Wu7W00DQjo/iG3kv9MWRWFqtxHIC8hYFWaNRwDzyD6Zq14l8QTax4og1G08YskLyGSASSXQOnkoMg4Q4Ocj93u/Kmt/mHQ5HUrL+ztSns/tNvd+S+3z7WTfG/urdxVrQ9EfXrqS2gvba3nWNpESfzP3u1SxClVYA4U/ewK7n7fbz+K/FOq6N4itoxdWBkS9Ec6/ZyZ4RzmPcG9CoOCQcjtSt9Y0i58ejVLrWYI47ezEEl1NDMWvJTAY2kAVGPLHOWwSOevFTry+dv8AMf8AX5f5nF2Vh9thu5Ptdrb/AGWHzds8m1peQNqD+Juc49AaqV2Phu5tbDTtd0658U2sNrd27QRxbboxyyZQiXaIjxgEZIDe2KYuqxr4Pt7HSvEQ0p4UnW9tgJ0F+SxKsCiEMCuFxJtxj0Jpv9P8xL9TkasXthc6e0K3kflmaFJ4xuByjDKnj1HbrXe3HiXSY/AMum2+rGaT7Fb/AGaKR7ppYrhXRn4Y+SgGG2lBnHf1zvEXiO512z0qUeK5R5cUCTWk8twWimTgzHClT/eyCW56Zof6/wCYLVX/AK6HLajYf2dNHH9rtbrzIUl3W0m9V3DO0nsw6EdjVSvRLzW9LPiiy1OXxBDez/2aLQ3gind7a4EW0TnfGCQG5yMsOuMgVDN4uS0gnaLW3vNXXSmt/wC00STdNIbhHADuofKoDhmAIxx0FHX7/wBf6+YLW3y/Q4GtLTtA1DVLV7m2SFLdHEZnubmO3jL4ztDSMoLY5wDnFWfF2pwav4gN7bzGfzLa3EspUgtKIUDk5GSdwOT361bgn07VvB9nplxqdvpd1YXUsgNzFKyTpIF5BjRiGUpjkcgjnjFHQO39dDmmUqxU4yDg4OR+dJXUP4ru9P8ADOmado2pyR+Wlwl3FGCEkDucBgRhxtPAOcZ7GtfV/FVnceD0sNPuNPW1a0hhaxlF2ZonXbvZFz9nDZBbeMEhjnknJ0uHWxwFWNQsLnS7+Wyvo/KuIW2yJuDYP1GRXoHinxZYP4fEOj60891bX0UljKst2Z4ogjglnlOFfJXIjwvTr2S78WWlz46t9XvdeN/YOJGgt5Tct/Z8jRYDMuFxhiOYmJ4yOQKOodDzirem2H9pXn2f7Xa2nyO/mXUmxPlUnGfU4wB3JFa/jLWW1nUreR7iwumih2efZm5bd8xOHa4/eMRn6AYA6VP4D1KLS9YmmvNbXTLR4XjmjbziLjcjKoIjVgQCQfmx7Zo3T+YM5aiu38L6pZ6VZ3unXXiGG1spJsyT2El3DcygLjKER7WU5I2yAd/u5zXEHGeOlHUOhpy+HtRg0tb+4SCCF4xIiTXUSSuhOAyxFg7A9iFwazK6vXLnSdXvbfXE1C2UiC3WbSpI5RJmNVRlVghQqQuQSw4OMZFdPB4v0uDWBPfa8NQs2vlnsoDbyY06IK+U2suF4ZV2x7lO3noKHoCPLavaLpf9s6tDYLeW9pJOwSN7gPtZiQAvyKxySfTHvXptl4uh1m5sIk1bfd29qz+bPG7CJhp7iRzlTn5+vBJx3rnpNYsLzxP4dl1DX4rmTSwr3eqTJO32gibeEHyGRiFOAWA6EdMZpJKdmJ35bo4m5ga1upbeQgvE5RivQkHHFSRWFzPp9xexR7re2ZFlfcBtL528dTnB6V3Oi67pui3uti01WxFzdTpNBfMb2OMx5YtHuhCSg/MpxgqdvsDUWn+MLl4dfs18RLorXdwk9tLatcR2ykO28IqKXUMCDyvOOazV7K+9v8v+CU7Xdjg6u2WlzX9nf3MLRqlhCJpQxOSpdU4465cdccZrs7TxXa23guOys7rTkkWCaO7t7z7YTcuzMfMVYz5TkhhgyAEFR2Ap194l06TwpqFpb64/2efTbaC10hY5QsMqPGZC3GzJKudwJJyckHg09LiWrX9djz2irl7a2UFpZSWeofa5poi1xEIWT7O2eFyfvcc5HFU6ACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD9FJP9a/8AvGm06T/Wv/vGm0AYPin7ul/9fp/9Ey0UeKfu6X/1+n/0TLRQB8X3PgbVLQ3Xmy2uLWyW8YiQkOrAnavH3hhsjgfKeemc6Xw1rsEluk+i6jG1022BXtHBmOM4XI+bj0rcufGiXGq6iD9obS54J0gg2IrK0kYUE4PTIB6nHOByczeJPFOiX3hyfTNFt5YVkvIriNDYwQLCiI67CyEtIfmHzNyeenc639Pz/wAgXn/Whi6z4O13Q9U+w3mm3JdmKxOkD7JsDJ2EqN2B6UWPhPVZvEFtpd/p2o2TzYd82EryJFnBkEYG5gPatabxLpI8ax+I7WS/Esu95oDAi+S5iKjY4kO75j1IXisfw9qVva65p9zrN1eC1sJVmjSCMSnIcMVAZ1Cg85OfwNOO6uKW2hRm064QXMsUE8trby+U9x5LBVOTgN/dJx0PNQ3VrcWVy9vewS288Zw8UqFGU+4PIrrdL8T6ToGvahqVj9svxcuu23ubdIkKlw7FgHb5lwNvvhuMYPLak9vJqdxJZTXE8DyFkkulAlYHnLYJGffPPWoV7K5Ttdm3beBtUuv7PMctqFv7Z7mNmkOEC/wtxwxyuByPmHPXGGbC8USFrScCKNZZCYz8iNjax9Ady4PQ5HrXT2njNbTUtKEZnGnW0UC3MIjTc7ohVivPQ5PcZ4JGQMLceI9Fk0O+EYvzqN7pttYlGiQQxmIx5bduy2RH6DHTnqK7/wBdxLon5fp/wTM1Dw4qQ6RJost1qJ1RHaOE2myQMrlSoVWfdyD/AIUuqeC9e0jWk027026aSSTy4nitpGWYgZPl/KC+B6VLrd/olz4d0qz0661CS409HT9/ZpGkgdy5ORKxGM4xg59qNfv9D1vxB/aX2rUIBdtvuo/saN5J2jhD5o38jvt4prf5h0K91omoW2v6ho+iC/vth8uQRWskbyJuXG+L7wG7bwe+PanaL4cF/rU2k6rLdaZepG7JG1puO5ULlXDMpTgeh69K6X+09H1bWfFOo2l9qUFrd6aTMxtEEkeZ4V2hRLhwRwcsvBPBqlaeJ9FPi6PU7uTUI7a0sls7cJbJJJMBCYt75kUKec4G70zxmp15V3t/mPz/AK6f18jn9L0KTUNK1HUHFzHb2cW5ZY7R5Y3kyPkZ14Tg5yfT3qva6Nqd/ZzXdjpt3c21uCZpoYGdI8DJ3MBgcc81s6FfeHtNXV47m91MreW7WsTR2EZIUlW3sDMMH5SNoJ+vaorjUdI1Dw3Y2NzPfW9xpqzJCI7ZJI7je5cM2ZFMZ5wcB+APTFN+Xb/P/gf1cS/UzW0DWEsYr19JvltJioiuDbOI5C3QK2MHPbFXtX8Ga/ogt2vtMuglwkZRxbybQzjIjJKj5+xX1rYl8U6Gng+70ywtpop7qxhgKCxgULIrozu04PmOGKk4OAOBjpjK1fUNJ1e202V572C6gtobWeIWyNGFQbS6v5gJOMHaVHOeaH5d/wANQW13/W39fIrav4fn03WINMgS7uLqWKNvJks5IZBIw5QIwycHjI69qhPh7WhqDWB0i/F4qh2t/sz+YFJABK4zgkgZ9xXTS+JtBi1a0ubSbUpIxpn9mTF7WOJ418rZ5qEStlu+044yM85qrN4osbfSJdM0576SNdMeyiuJVWN3LzrKwKhjtTaGXAZs59+Dr9/6/wDA+/yBdPl+n/BOXurS4sbp7a9t5baeM4eKZCjKfQg8itXSfDserWFxdf23p9p9lTzJorhZ9yJuVd3yRMDyyjAJPPSo/Emqw6zqyXVusiqLW3hPmAZLRxKhPBPGVOPao9L1GKxsdWhlVy17aCCMqBgN50b5PPTCH15xQHVfIlGgOPDd1q8j3AijnWKB1s5DDcAkhmEpAC4wODyc+1QyeHdbhtGuptHv47dV3tM1q4QLnGd2MYyetaWl3+iQeEdR0+8utQS7vXjfEVmjxoYy2BuMoJzu644963734g6fc2d1EsN43miTasirt5t4Ylz83TMbfgR9KO4dUcTd6Pqen2sNzf6dd20FwMwyzQMiyDGflJGDxzxSaXpV7rOoR2WmW0tzPIeEiQsQO5IHYdzXSeLPFkGuW9z9guJY1vLgXE9mdLt4QrDJ5njO+TBYgFlGc5PNcxp9wtpqlrcyBikMySMF6kBgeKcdZailfl0NvXvCFzpfiBdG0631W9vPm/dyaaYjIFJG6NQzF0OCd2B0rMh0DWLi9ls7fSb6W6hbbLAls7PGeeCoGQeD19K14fEGny6p4iF39qgs9aZyJoI1aWIeb5gBUsAwOMEbh9eOX6p4ptbrTtRs7UXe2aC0topJcbpEhzkvg8Z4IA3YwBnjNQr2Vyna7scxPBNa3EkFzE8M0TFJI5FKsjDqCDyDWo/h5oNFh1G91CztPtMbS21vIJWknUErkbEKjJBHzMOnpzWXPPNdTNNcyvNK5yzyMWZvqTXUaNr+naboUlre3d9qEckUn/Eqms4zbrKykK6yGQlCM53KgJxjpVdBdTAfR9Tj0tNSk067Swc4W6aBhExzjAfGDyD3qWfw9rVtBFNc6RfwxTSCKOSS2dVdz0UEjk8Hiug1Xxfb32g+TaTPaXElnDaTWy6VblXVAo/4+c+btOwNgg4PGcc1k67ra6z4iu7hbi6isbuSPzFPLbVAAyu7BI5wM/iKOtg6XFv9Dv8ASdeh07TP7QlvprdSYhaSwTAunzxhD8xGCRkcEZ7U3TvDzv4lt9H19b3SZbh0jUPZ7nVmIC5RmT5eeufwNbVxrnhh9e0q8P2+7gtLNbWSO4sYgAUjKpIF81g/zYOw4HGMmn3XijRLzxNoN7K95HbaTCgZodPhjMzrM0nESOqIpDdicH1601bm17/hr/X/AAbid7advxOUbTLl9UuLGyhlu5IWcERRliVTOWwM4GBn2qnXQJqGkweKbq8ivtXS0mSUiS2RIJwzg4Ujew2ZODzyM8Vz9RG9lfsU7XdjUTQmGjrqN5fWtkkys1tFNvMlztODtCKwHIxlioJ78HGXXbab40trfw7a2lzPqANrazWzWESJ9mu9+7a0jbgfl3ngq33RgjNctJ/Zn9jQeUbv+0/NbztwXyRHgbdv8W7Oc54qvtCWxZ1Tw9NpKae9xe2ckd8pZZIJDIse1trbiBg4IPK7gccE1b/4Q66kmsfsWoWN3bXiyut3G0ixxrEMyFw6KwCjn7pz2yeKm1a+8PXei6PY2t9qZaw3Ru8lhGoZXkLlhiY8jPA7+orUh8cWVtfWf2l73Wo0jniub3UYV8945FCiML5jblQjcAX53MPlByT/AIP/AAP6/EDJHgi78/59Qsks2sjfJfMJhE8QYISB5e/O44wV9+mCatn4aS8jv511rTo7OxaNXunWfZIXzjaBEX7HqoravfGKXepWZh13W7NLWCRW1CGFRcTO77iNiyqEQAKAA5wFHHYA8Y28ni661WLVNZ0iGQxZFiitJd7AAWl/eIoZsZPDDLHr3Fv/AF3/AMv+GDocZKixzOiSLKqsQJEB2uPUZAOD7gGrcGjapc6dLqFtpt3NZQ58y5jgZo0x1ywGB1FJrF9HqetXl9DbJaR3EzyrBH92ME52itmy1jSB4Waw1cz3skccv2WD7Eii3kbOGFwJA5GTkqyFfbvSV+W438VjGfR9Tj0tNSk067Swc4W6aBhExzjAfGDyD3pZtF1W30+G+n028is5yBFcPAwjkJ6BWIwc4PSul1Txhb32heVaTPaXElnDaTWy6VblZFQKMfac+btOwNgg4PGcc0lz4m0j/hMrfxRbfbnuvtKTS2MsKBIwFwQkock4x8uUGOPTmupPS5z8/h7WrW7jtbrSL+G4lUvHDJbOruoGSQpGSAAefakbw/rKaoumtpN8t8y7ltTbP5pHXITGccHtXR2vinTNHjht9Ln1O4SNruYXM8axSJJLAYlCqHbocEtuyfTjltt4p0x9Ji029+2wodJ+wS3EEau6MLgy/KpcblIwCCR+lL+vzH/X4/5ambqPg/VbTXn0mxs7y/uo7eKeWOG1YvHvRWIKjJGC2Mn9KwpI3hlaOVGSRGKsjDBUjqCOxrtH8U6Pca5dSyPdxaXNbW0DWsthFcmYRRhDuPmIUPHDIQee1chfyW0uo3EmnwtBatKzQxO24ohPCk98CgOn3fkQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH6KSf61/8AeNNp0n+tf/eNNoAwfFP3dL/6/T/6Jloo8U/d0v8A6/T/AOiZaKAPju88Am0S8k/tJZI7exFyjiA4kkwS0XXjbg88/wAPAzxjP4X1KOGGY/YmhmkEQlj1C3dEYgkB2DkJkA/ex0NXJ/GE0+s3920EhtrqGaNbRpyUiMiBC3TBPyqTwM4HpV3xL48/t/RZdOSzuoUkuo7hRNfGaODarL5cSbAET5uB2x1PGDrf0/PX8AXn/WmhU1fwPqOneJP7Hs5Le/meRkhENzEXfC7jlA5Kcf3sZpmn+Ers+IdOstSSNobtgwNrf2x81N21hHIX2F88bSc57VLceLLOXxJHrsWmTJeMG+0hrsNHIzR7MoPLBTkk4Jb0rK0DUbXSdbtr+9tZrpbaRZY44ZxFl1YEZJRuOOmB9acd1cUttBf7Cvbhr59Ptnlis5hG6b1aVdzbVyoOTzgZAIyQO4qnfWU2nX01ndhFmhbY4SRXAPcblJB/A10Vj4wt9F1q71XQ9Omhurhhta5uhKI1JzIuAi53dM9hnvgjnb6S2mvppLC3e1tmYmOF5fMMY9N2Bn8qhXsr/wBf1/XnTtdnU2PgE3semyDUlWO8tWmkYQE+S/8ADGeed2Rzx/Fwcc88+h6iiXDNb4FtbR3Up3r8sUm3Y3XnO9eBzzz3rTh8XzQatplykUn2exihR7XzztmMaldx4wOGPY4BIqefxdZy6LdWy6S63t3YwWUt0bvKhYimCsezgkRjOWPtjoa7/wBdxLon5fpf9fmV9T0Syaz0OfRxLA2pxyF0vbuParK5X75VFAOM8/nS634PuNE8Rf2Y93ZTqZfLWQXsCE4AJLAyHy/+BkUzWNc0vUND0+ws9MvLaSwVljllvllDBnLNlREvOTxzx70avrelazrCajdaZeJLKd14sd8oEh2gZTMR2cjPO7096a3+YdB194VuZfFGp6ZottKEscyOt5cQq0UYIBZ3DbOCwyQcY59al0bw1EfEkmi+Ibe5jneB5YntrlNq4iaQNnawdSAMbSOvWtL/AISLRNW1LxDqNzY3Nsl5YYktzqCbpX8+EgRsYuOFzjaxwD07U7TxhYxeJBqlzpM8iQWwtbS3ivQnlxiMx/MxjbecHORt57Y4qdeVd7f5j8/66Gbo2ipqGk6rezLI4s7cvGIbiFWVty/M6M28pg9VB5xVaDQL+40s6iFgitfm2vcXUUJl2/e2K7Avjp8oPPHWtHR9d0XSxqStpN/Ml9C1uANRRTHESpxnyTlsr14HPSopdb0680O2sL/Tbh5LFZUtJ4bwJhWYuBIpjbfhieQVyDj3pvy7f5/8AS8+5WXw7qD6b9vjFrJbgKz+Xews8YYhQXQPuQZIGWAAyM1d17wfdaH9kLXljOtzDE/y3sGVZxnGBISVH9/7vfNaF149E/hSbRY7K5jWazhtiv24m3jMbK29IduAzbTkkkknOeucnUda0/VLXT/ten3Iu7WGK3klju1CSRJxwhjJVsYGdxHGcUPy7/hqC21/rb/gkureGZYtettL0q2neWW1jlIlnhcElNzOHRigj6kEngcmo18Ha2900CW0TFbf7V5q3cRiMQYKXEu7YQCcE545z0NaU/jHTjqFvcWuj3KRrY/2dcRTXyv5sGzZwREu18c7uRnt2qnceKIDp0unWGntBZmyNrEJbjzJFJmSVnZgoDcpjAC4B9uTr9/62/QF0+X6X/Ux9S0270i/ez1CIRToFJUOrghgGBDKSCCCCCDjmtPRdH0jUtNvbi91O9tpbKHz5Y4bBJVKb1QYYzLk5ccEDvzVPXNW/tnUUuvJ8nbbwwbd+7Plxqmc4HXbnHbNM0/UvsFpqUHleZ9uthb7t2Nn7xHz05+5jHHWgOq+X/BLyaJA3hS+1UCaXyriOOB0mhAVSWB82LcZFJwMcY68mpLjwN4htNPkvbiwVII0LuftMRYDAb7obOdrBsYzg56Umna3pVn4ZvdLudMvJpbxkaSeO+VFBQsUwhiPHzc8847VqXPxCaeCdE03Y0okwxn3bS0MUXTbzjys/wDAsdsk7h1Rgah4c1PTLQ3N5DGI1cJII7iORoWOcLIqsWjPB4YA8EdjUGkaXLrGqQ2UEkMbysBunmSJRz6uQCfbqe1bfijxnL4lgIkfVUeSUSyQzamZrUHBzsiKApyePmOBxXPWVz9j1C3udu/yZVk25xuwc4z+FOPxa7Clfl03Ok17wmIvEU+l6DbsRahzNPPqlvKm1W2h2ZQqw8j7rnOSB9c5PCGtPc3UJtoozaKjTSS3UUcaq/3G8xmClT2IODkeoqaHxLCdS1p76weay1h2eaCOfy3Q+Z5ilXKkZB9VIIzx6Go+KFvbO8tIrHyIJo7eGEebuMSQ5xk4+YnPJ4Ht2qFeyuU7XdjGvrK402+ms72Py54HKOu4Ngj3HBHuODXQ6f4RtdQ0+z2alOuoXlnNeRwfZAYQsbSAhpd+QT5Z52Y5H1rl62brxRqM3h+y0aC6ureyt4WilgS4by5yZWfcUGB/EBzn7oqvs+f/AA4upAdAvxpLakgt5bZFV38m7ikkjUkAFo1YuoyQOQOSKsX3hHWdOhMl7BBEFkSNx9rhLRl/ul1D5QHHDMAPete68eifwpNosdlcxrNZw2xX7cTbxmNlbekO3AZtpySSSTnPXOPP4gW48YrrslkjqLhJjayNuVguPlJx0OPSn9q3QX2b9Rk+iy6PNazazAs9lMzANY30Th9uMqJE3qCMg4IJwRxzWpJoOlWvxKbQZ1vJbFrpbZCk6JKu4qAxYoQcZ6bRn2p+v+M7fxDHp8F/aalNb2k00rGfU/NmfzAvyh2jwoBXgbenvzTLnxTpNx42TxCdHvVKyrO0A1BOZFIIO7yeF45GM+4ojuuYcttDLTw/dXmo30NgIhDazGNpbq5jgQckKC7lV3HB46nB44NW9N0O2kt9ctdUt7yDUtNtnnUiVVRSrKpRkKEn7x5DCr1j43i02fUlsLfVLS11CVZz9l1Typ0kG7/lqsWCh3H5SvpzxVXTfEmnWs2rS6jY6jfy6kjwtK2pKHEbMrckxNufK/e4B9KhX5beX42/zG7c1/P8DGi0m9n0e41SKHdZ20iRSy71G1mztGM5OcHoKp1dW6sF0u6tzpxa6klVoLppzmFBnKFQMNnI54xiq0E721zHPDtEkTh1LKGGQcjIPB+hquv9f1/XzF0NzWPCj6N4ctNRuLtTczzGKW0EfMB2BwGbP3trAkY4z65AxrKK3mvES9uTbQHJeURlyABnheMk9AMgZPJA5rd1Pxrfav4dbTL23szJJdtcyXMdnBGzEgf3UGGyMlgcnODxVaLVNEj8Q2l6dALWEKIJLE3jHznC8sXKnAJ5K4x2o+0+3/A/zDoX5fB9pFm7bU5jpYsEvjMtmDOFeTywpi8zAO7/AG8Y5z2qWP4f3TaldRM93LbQJDIhtbIzXEolXegEO4YO0EsC2FweTxmu/im1PiQ6vCmt28jRlWaDVkjlB4ACusACoFGNgXGMYwBinyeNRqMmoR63ZzT2d6YSIba7MLJ5I2oN7K+4YPORknnINH9fj/kH9fl/wSLQ/CsGtXV7B9o1G3+yuwMz6cDDCoBw07+Z+6+6c8NjB61Ti0O3m8J3Wrx6iGntZI1e1WE4UOWAy5I5+UnABGCOc5Auw+K7QeI5vEE+mztqn2o3MBjvAkMZGNoZChZ8Ec/OM+1RWOvaXb+HL7TrrS7yae+dZJZ475I1DIWK7U8o4HzcjJzjjFLW33D0OerUuvDep2clvFNFCZ7h1SO3iuYpJtzdA0asWU8jhgPSsuutl8bon9my2djPLd2FzHOl1qV0tzJtQHEQcRowTn7pJxgYxzmtCXfoZMvhbV4ri2gS2juGupDHCbS4jnVnGCVLRsQCAQSCRgc9KF8ManJfG1iFpK6xec8kV/A8UaZxl5Q5ROePmI6j1Fa9x46d9btL5Rqt1FD5oe21PVWulKSKUZUOxSnykjPPb05o2uuaTZG8tYNLvG02+gWO4hlvlMu5X3KySCIAYIHBU9/bCRT8hkXgzXZZ7mIWkaG1MYleW6iSMeYCYyHZgpDY4IJB49RVvw74Iv8AVPEENpqMX2W2W+Fncu9xFEwcH5kTefnYDsobqOORUN/4qW8tJbWKx8mDzLXyV87cUSBXUKTj5id+SeBx09NWL4g2p1dNQvdEaeS31OXUbVVvNioZCpZX+Q7sbRgjbz1BHFH9fl/wSXtp/W//AADmv7AvTpr6iBbx2oLBDNdxRvJtODtRmDP6fKDzWbXR2Xie2tfD9xp81ldXZmWQKlxdK9tEzZAkSIx5VwD95XBz7cVkS3Ni2jQW0en7L5JWeW888nzEIGE2dBj16nNIp2voU6KKKYgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD9FJP9a/8AvGm06T/Wv/vGm0AYPin7ul/9fp/9Ey0UeKfu6X/1+n/0TLRQB8hah4Osrbw7Je/ZdTtPL0+3uo7+5lU29zJIqExIvlqc/M2MM33TkemXdeC7q3vFsIdS0261Fp44PsUMr+YDJ90/MoUjpnBJGeQOaxtR1GXU7iOadUVo4IoAEBA2xoEB5PXCjPvVmXxBfSeJBrkZSG9WVZlMa/KrLjHBzxx0NPTm8g+zpubN58Odas9Q0+0YxsdQlaKJ2hniwygE5WSNXPBzlVOegyeKo2nhO4v/ABBLpNle288kMbSSyrFOAm37ylDGJCw6YCH9Ditc6zaXN9Fcjw/psKoWMkETXASbP97MpIx22las3niuTUNUt7y+0yzuFtbdbeC3eSfbGqnIO4S+YSMnGXOBx2GEtgfkY11ClvdPFFcxXSKcCaEMFf3G5Vb8wK2/DXg3UPFUcp0yRN8bhNjQTtkkcZdI2Rc+rMv5c1na3rFzr+sTalehBNNtBCZwAqhRyxJPAHJJJ7k1paF4xutBtbaGKwsLo2l0bu3kuUctFIQoJG1wDwo+8DjtihbA99At/Bt3c6VFeLf2CSTW011FaNI/mukRYP0UqMbCRlhntk5Agn8LXlutzJJPbeRb2Ud55wZtsiSbdir8uSxLYwQPut6UkHie9ga3KRQH7PZz2aZU8pKZCxPPX962O3A4NXNa1eBfCenaFaXcd6YmM1xcRo6r1by4hvAJC73OcDlyBnGaH5f1v+lh6X/ry/4JleH7WG+8TaZaXSb4J7uKORckblLgEZHPQ1sXPgi+bxIulWzQLdzSSFbIF3lgiXLBnCqcfKM7Rlzx8vIzz+n3smm6nbX0Cq0ttMsyBwSpKkEZx24raPjbUHure5mtrOa4gEkZlkRiZYXBBhf5vmTBIH8QHRuBhvp8/wBLf12uLv8A13H6n4E1XSjOLh4SYbT7YqlJY2kjD7GISRFYEHkhgOORkVj6rpcukXaW1zJE8phSVljJPl71DBWyB8wBGQM49a2tB1bTIvES6pcw2emWttEwextxPJ9sBVgYxvZ8bs4JLKAORk1gX97LqOo3N7cnM1zK0rkf3mOT/Op/r+v6/Mf9f1/XU3NG8N6fqXhbUNSutatrOa2liRUlWYqgYtnftibOccbT2OccVFb+ELq4tIpBfWSXFxC9xbWbu4lnjXPzL8u0Z2tgMyk46dM09J1ttLt7u2eytr61uwnmwXPmBcqcqwKMrAjJ796uQ+L7qCzijWxsmubeF4La9ZHMsETZyg+bacbmALKSM8Hphvy/r+mJbmBW9P4RuodQg01L2zm1WWVYm0+MyeZExGfmYoI+O+HOPwOMHpXQXHi+5n1KDVFsLKHVY5Vle/iWTfMwGDuQuY+e+FGfxNMRJF4LuLqe3Ww1XTLuCYzL9qSSRY42ijMjBt6KR8oyDjB9etW9J8EQXGvWlnqGs2n2W7tHuoJ7fzf3wAfpmLIwyHIYDgHGTiqDeLrhdiWOnWFhbqs/+j26yFWaWMxs5LuzZ2ngZwMdOuYLfxRe213pVxHHAW0uEwRKynEiMzlg/POfMYcY49+aX9fn+tiv6/r5F3w9odjc+IJrV7vT9TRLeRo08y4hWZvLY/K3lZBXGcMFBxjNQ6J4Qudcs7eeLULC2N1dNaW8Vw7h5ZQqnACqcA7xycDPUjIyzTPE8ek6xJqFnoWmh2QokTNcFIgVKtt/e5OQTnJPtim23ii4srmxlsrO0gSwvWvYIVEjKHYINp3OSV/djvnk80f1+IvT+tP8xlv4Zvbg2wWSBTcWU16u5jwkRkDA8fe/dNjtyORV+58Aa1a+GzrMqAQrAlwyGKUFY2xg7ygjJ+YfKHLc9ODiKz8Z3Vlpy2y6fYSSJbTWqXUkbmRIpdxZR823q7EHGecZxxVS/wDEB1OxSK902yku0iSIX480TFUAC5AfYTtAXJXOPfmh+X9b/wDAHpfy/wCG/wCCZFFFXNU1H+07pJhZWlnsiSLy7SLYp2jG4jJyx6k9zQIp0VZ029/s7UoLw2tvd+S4fyLpN8Unsy5GR7VDNJ508kuxI97FtiDCrk9AOwoAZRVyx1H7Fa3sP2K0uPtcXleZcRbmh5zujOflbjGfSqdABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH6KSf61/9402nSf61/8AeNNoAwfFP3dL/wCv0/8AomWijxT93S/+v0/+iZaKAPguiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA/RST/Wv/vGm06T/Wv/ALxptAGD4p+7pf8A1+n/ANEy0UeKfu6X/wBfp/8ARMtFAHwXRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/3jTadJ/rX/AN402gDB8U/d0v8A6/T/AOiZaKPFP3dL/wCv0/8AomWigD4LooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP0Uk/1r/7xptOk/wBa/wDvGm0AYPin7ul/9fp/9Ey0UeKfu6X/ANfp/wDRMtFAHwXRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/wB402nSf61/9402gDB8U/d0v/r9P/omWijxT93S/wDr9P8A6JlooA+C6KKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD9FJP9a/8AvGm06T/Wv/vGm0AYPin7ul/9fp/9Ey0UeKfu6X/1+n/0TLRQB8F0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH6KSf61/wDeNNp0n+tf/eNNoAwfFP3dL/6/T/6Jloo8U/d0v/r9P/omWigD4LooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP0Uk/wBa/wDvGm06T/Wv/vGm0AYPin7ul/8AX6f/AETLRR4p+7pf/X6f/RMtFAHwXRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/3jTadJ/rX/wB402gDB8U/d0v/AK/T/wCiZaKPFP3dL/6/T/6JlooA+C6KKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD9FJP9a/+8abTpP9a/8AvGm0AYPin7ul/wDX6f8A0TLRR4p+7pf/AF+n/wBEy0UAfBdFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB+ikn+tf/eNNp0n+tf8A3jTaAMHxT93S/wDr9P8A6Jloo8U/d0v/AK/T/wCiZaKAPguiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA/RST/Wv/vGm06T/AFr/AO8abQBg+Kfu6X/1+n/0TLRR4p+7pf8A1+n/ANEy0UAfBdFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB+ikn+tf/AHjTadJ/rX/3jTaAMHxT93S/+v0/+iZaKPFP3dL/AOv0/wDomWigD4LooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP0Uk/1r/wC8abTpP9a/+8abQBg+Kfu6X/1+n/0TLRR4p+7pf/X6f/RMtFAHwXRWh/YGsf8AQJvv/AZ/8KP7A1j/AKBN9/4DP/hQBn0Vof2BrH/QJvv/AAGf/Cj+wNY/6BN9/wCAz/4UAZ9FaH9gax/0Cb7/AMBn/wAKP7A1j/oE33/gM/8AhQBn0Vof2BrH/QJvv/AZ/wDCj+wNY/6BN9/4DP8A4UAZ9FaH9gax/wBAm+/8Bn/wo/sDWP8AoE33/gM/+FAGfRWh/YGsf9Am+/8AAZ/8KP7A1j/oE33/AIDP/hQBn0Vof2BrH/QJvv8AwGf/AAo/sDWP+gTff+Az/wCFAGfRWh/YGsf9Am+/8Bn/AMKP7A1j/oE33/gM/wDhQBn0Vof2BrH/AECb7/wGf/Cj+wNY/wCgTff+Az/4UAZ9FaH9gax/0Cb7/wABn/wo/sDWP+gTff8AgM/+FAGfRWh/YGsf9Am+/wDAZ/8ACj+wNY/6BN9/4DP/AIUAZ9FaH9gax/0Cb7/wGf8Awo/sDWP+gTff+Az/AOFAGfRWh/YGsf8AQJvv/AZ/8KP7A1j/AKBN9/4DP/hQBn0Vof2BrH/QJvv/AAGf/Cj+wNY/6BN9/wCAz/4UAZ9FaH9gax/0Cb7/AMBn/wAKP7A1j/oE33/gM/8AhQBn0Vof2BrH/QJvv/AZ/wDCj+wNY/6BN9/4DP8A4UAZ9FaH9gax/wBAm+/8Bn/wo/sDWP8AoE33/gM/+FAGfRWh/YGsf9Am+/8AAZ/8KP7A1j/oE33/AIDP/hQBn0Vof2BrH/QJvv8AwGf/AAo/sDWP+gTff+Az/wCFAGfRWh/YGsf9Am+/8Bn/AMKP7A1j/oE33/gM/wDhQBn0Vof2BrH/AECb7/wGf/Cj+wNY/wCgTff+Az/4UAZ9FaH9gax/0Cb7/wABn/wo/sDWP+gTff8AgM/+FAGfRWh/YGsf9Am+/wDAZ/8ACj+wNY/6BN9/4DP/AIUAZ9FaH9gax/0Cb7/wGf8Awo/sDWP+gTff+Az/AOFAGfRWh/YGsf8AQJvv/AZ/8KP7A1j/AKBN9/4DP/hQBn0Vof2BrH/QJvv/AAGf/Cj+wNY/6BN9/wCAz/4UAZ9FaH9gax/0Cb7/AMBn/wAKP7A1j/oE33/gM/8AhQBn0Vof2BrH/QJvv/AZ/wDCj+wNY/6BN9/4DP8A4UAZ9FaH9gax/wBAm+/8Bn/wo/sDWP8AoE33/gM/+FAGfRWh/YGsf9Am+/8AAZ/8KP7A1j/oE33/AIDP/hQBn0Vof2BrH/QJvv8AwGf/AAo/sDWP+gTff+Az/wCFAGfRWh/YGsf9Am+/8Bn/AMKP7A1j/oE33/gM/wDhQBn0Vof2BrH/AECb7/wGf/Cj+wNY/wCgTff+Az/4UAZ9FaH9gax/0Cb7/wABn/wo/sDWP+gTff8AgM/+FAGfRWh/YGsf9Am+/wDAZ/8ACj+wNY/6BN9/4DP/AIUAfeviC0vb3S7mDSrv7HeFg0M2MgMrBsH2OMHrwTwelctYav4k8SalbWRsm0dNPlVtUlPPmupDCKP/AGWGCTno3UjG/ppPEmhmRsazp/U/8vSf403/AISTQ/8AoM6f/wCBSf40AU/FP3dL/wCv0/8AomWiquuarp2ozaXDY39rcyC7LFIZlcgeTLzgHpyKKAP/2Q==)

As the threads are 4, then the parallel block is working faster because threads are increased which makes parallel matrix multiplication much faster.

4. Number of threads = 6

**![A screenshot of a cell phone

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAeAB4AAD/4RD0RXhpZgAATU0AKgAAAAgABAE7AAIAAAAOAAAISodpAAQAAAABAAAIWJydAAEAAAAcAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG5pa2hpbCBtaXR0YWwAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzU4AACSkgACAAAAAzU4AADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA0OjE5IDE4OjUwOjI3ADIwMjA6MDQ6MTkgMTg6NTA6MjcAAABuAGkAawBoAGkAbAAgAG0AaQB0AHQAYQBsAAAA/+ELIGh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjAtMDQtMTlUMTg6NTA6MjcuNTc3PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm5pa2hpbCBtaXR0YWw8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgBnQJGAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A+kaKK43XPFSaNfeVd315GZC5RYLaN1VQxXqee1NRcnZEykoq7OyorltJ1SXW7D7VZatdrGXMfz20QORj2PrVzw/qM15eXsUl1NcJCQoM0aIQwZ1bG3t8ueaLMFJPY3aKx9a8SQaRd21lFZ3mp6jdBnhsrJFMhRcbnLOyoijIGWYZJAGTxTZfEi2vhyXWNR0vULJYGxPbTLGZYl3BS52uUKgHcSrH5Qe4xS3KNqiqGpavb6XJYJcLIxv7pbWIxgHDFWYE5I4wp6Z7USavBH4hg0dkk+0T2sl0rADYFRkUgnOc5cdvWha7f1pf8g2/r5F+iiigAoqC+uvsWn3F15Mtx5ETSeTCAXk2jO1QSAScYHIosryHULC3vLVt8FxEssbeqsMg/kaAJ6KKKACiiqOjarDrekw39tHLEkuQYplAeNlYqyMASAQwIPJ6UAXqKo3mrwWOq6dYSpIZdReRImUDapRC53c+g7Z5q9QAUUUUAFFFFABRRVW/1K00yGKW+l8pJZo4EO0tl3YKo4HckDPSgC1RUF9dfYtPuLryZbjyImk8mEAvJtGdqgkAk4wORRZXkOoWFveWrb4LiJZY29VYZB/I0AT0VBd3EtusZhs5rsvKqMsJQFATy53svyjqcZPoDU9ABRRUF/eR6fp1zezBmjtomlcIMkhQSce/FJtJXY0m3ZE9FQWV2l/p9veQhljuIllQMOQGGRn35pl/qVppkMUt9L5SSzRwIdpbLuwVRwO5IGelU007Eppq5aooqK6uEtLOa5kDFIY2kYL1IAycVLaSuykruyJaKz9O1f8AtOKynt7K5FreWi3SXDmMKm4AhGG7duwc8ArweelaFU007MlNNXQUVnavqs+mLF9k0a/1aSQn93ZeUCgHctLIi9xxnJ7DAOMr/hOrCbS9LutMs77UZ9UD/Z7GBEWf5P8AWbhI6quw/K2WHJAGSRSGdNRXLXnxE0Cw8Ip4hu5LiO3fzFFsIGa48yMMZIzGuSGXY+7+EbSScc1p32uS21jaXFhouo6qbpd4itPKVkXAOWMsiKOoGNxJ7AgEg7+QGtRWJo3izTtdnto7FZ8XVn9sheRNoZQ+x065Do2AwI43Dk1S1bxzFpOo6hbtomrXdvpiJJe3lssLRwKy7txUyCRsLknajHjjND03Dc6iimQzR3FvHNA4eKRQ6MOjAjINPo2DcKKgs7iW6tRLPZzWblmBhnKFhgkA/IzLg4yOeh5weKnoAKKqtqVomrRaY0uLyWF50j2nlFZVY5xjguvGc81Hqeqw6V9kNzHKyXVylsJEAKxs+dpbJ4BYBcjPLD60f1+gF6iiigAooooAKKKKACiiigAooooAKKKKACisjxPrM+g6H9ss7SO8uHura1ihlmMKM006Qgs4ViADJk4U9KpfbvG//QveH/8AwfT/APyHQB0lFZHhjWZ9e0P7ZeWkdncJdXNrLDFMZkVoZ3hJVyqkgmPIyo61r0AFFFFABRRRQAUVj2HiAT67daNqNsbG/iLSQIz7lu4AcCWNsDOMgMvVCcHIKsxpviAaxrV1b6bbGbT7QNHLqG/CNOGAMUYx8+35tzZAVgFGTu2gGxRRRQB5X+0JdzWfw/sZLZ9jHVI1JwDx5Uvr9KKh/aN/5J1Yf9hWP/0VLRWkdiXuetV5Z450a/1PVoXs7SaeNPMDGNCQD5jV6nVSXSbCeVpJbSJnY5ZivWoTa2Jq01Ujys5XwTZ3Gm+HzDdQSRP57NtdSDjArZ0W1S01q+WMsRJGkhz6s8hNXv7E03/nyh/75qe2sbWzLG1gSIvjcVGM46fzpDhBRil2OPv9RtPC3xMu9U8RTpZadqmnQW1tf3DbYYpInlZo2c8IWEgIzgNggZIxWg134S8T6raMlxDf3F1ZXUNrLEzPHLATGs21h8jDOwZ5747109FFk1Z+f4ml3e6/qx5tPeS2/hTR31FmZvC+sxwajKTuZYkVoxO2BwDHJHIfQEk9KXV9T0rxRrmoXmk65Gul2mgXNtc6zZSCSK2kldCMSKcFlVCxAPAxnGRXfQada2t/d3sEWy4vNnnsGOHKjCnGcA44yOuBnoKtUevn97VmLbby/B3R4dNNB/wisdrpNt4d0/RItYji1TU9OtzPpl5F5J2yPGjphd/lrIpcqvG5mGa0bbRNMm0vTLW21XStX0m88Rx/udItjBZRD7O4eNF8yQFW6sFbblmGMk17BRR1u/L8Lf5B0suzX5/5nl0dvoOlfFaGGyg0XVLiS4SGO2RQl/oqpAAPLXn/AEfAyQAgUyH7+cB+r/8AEp8Ha1obq3l6JqVreIR8xFk10k2/A5CoFlX6RV6dVX+zrX+1v7TEWLzyPs5kDHmPduwRnBwehxkZPqaFdW8v+H/Nfcx9b/1/VvxPLta1PQ/EmteKXi1+yttNaw0xDqMv7yzlInnJRmDKrxN/q2wwHLKTkEVl3k9veab4eWW28O+H/DBkvFl+0Wpu9JmuAy+W4w8S7GHmMhbC7ugJ2mvb6KP6/r+uwN3/AK8rHlGmeHdMvLzwnp95d2XiDS2XUZYhFblbVk3xlY1jZ3BiU/dG4jCrjgCtnVf7Q0UeLtJ0NX+139jLqeliNgG80pslVB6hwj/WWu+qrPp1rc6ha300W65s9/kyBiNocYYcHBBAHBz0B6ik/wCv6+71sCdjy3Tf+ENPjLwm/gMWbXBjuftBs+7fZjj7Rj/lrnP3/n+/71W0oaFLo+htYi2/4WH9stmv8YGoCTzV+1ed/wAtPK2eZ975Nu3bxtr2Wiqv71/T8P61ISsrHmfho+GZfEd3/wAJT9hPjQarP5S3QH2pYw7eT5Gfm8rytp+X5fv553Vm+HNa0+a1+G+iw3Kyalp9y0V7bLy9pIlnOjJKP4GyDgNgnBIyATXr1FEdFb0/Atu9/O/43/zPGdM8K6NJofgq6exjNzf6rLBeT/x3MJS4YwyN1eLKKNhyuBjGKTV7ZtM0q+0uwaz07w5beKPLu1ntmmtLa3a2V9rxK6YhMzgsNwUbuflyD7PRUxVlb+un+X4g9bf13/z/AAPH7bRNNm0zS7a11fTNW0q68SxERaNbm3s4sW7744wJXBViMsFbaSzAjlqr6vpGhW2na7ZXmm2C6NpHimyaOOaBTDZwyC3abAIwiEsxboMMc8V7RRTWjv8A1py//I/iJ6q3l/n/AJnlkDeH7f4pW76d/YmuS3U0aQxxEC+0hBbjaY8ZzbEDPGwDzCcvuxV25sZYPDGt6Fax77zw7dJqemJkFni3+fEAOwyJIfotejVV/s61/tb+0xFi88j7OZAx5j3bsEZwcHocZGT6mjW39fL8UGnX+v6TPOIWGqw6d4nKkf214jt5LcsORaorJF+BAZ/+2hrIuINPku/Fdho0WmeINRvtP1Jv7QshnULZjkfZrleSRkhUJI+4FCcbq9oopW0aXn+SX6X8xptNP0/Bt/rY8qufGOl3uv2eoaC41tbHwvfSvHZucOwa3Plb1B2vxyv3lyCRyM4uhtYxatqy6HcaA1ndeGbqSaPw7amK2DqV2q772WWRQ7DdhGAbkDcAPb6KcveTXk/xv/n+AlpZdrfhb/L8TmJVhk+FIS51BtMhfR1V71CQbcGIDzOPTr26dq84mtPDF14Icz6H4b/s/TdcshLqOmxI9hcRmSISSjIIT5TtkGWAxgs1e3UVUnebl5p/c7iStBR9V96seO+Jta0bSNB+IWnm5t4Xv7RJtNtYsZuYDZRxq8Kj7yAo2SuQoUk4AzU2vHw2+qeKl8arb/2qIl/sVZzmfyPs67Tafxb/ADRLny/mzjPavXKKiS5lbyt/Xn/wS1K1vL/gf5HlEbammlxtoAY6mPA0f2UIMt5n8OPfPT3qfRU8JN4i8Nt8PRZ/blkf+1TaY877P5L7vtf8W/zfL/1vzbs991eoUVfNrf1/Ft/qZqNo2/rZL9Lrscl428YweHZbHTBqWn6XeakJDHe6nKqQW6Jjc5yRvb5lCpkZJ5IANYNneeHfDeseHtSttZtZ/D62F5ZnWHukeI3LyxSEySj5AzlZD1AyMAdBXpdFStNf67fk/v8AuKeuh5sY3/4Ur4wvDGY4dRj1S8twwwTFJ5hRsYGNww3P96tvVdV0yw8L6VBqfitfDDTQI0dwZYIzKFQApmZWX+IHjDccHrXXUUraWXl+Fx3u7+v42PNdPaW08AeHfEb2S2f9izMWRA8YksmZo2lIkJcAxlZyGJbK8kmp59H1TXvGPi2ws9Wt7DTrqO1iu8WZlndGhw3lyFwqErkZKP1zXfXVtDe2k1rdRiWCdGjkRujKRgj8jRbW8dpaQ20AIihRY0DMWIUDA5PJ+p5puzvf+v6/zEtLW/r+v8jzW60Py77xxeaFZJLrWnW8cWkuUDvbv9jUDy8/dYjAyOuADSaKnhJvEXhtvh6LP7csj/2qbTHnfZ/Jfd9r/i3+b5f+t+bdnvur1Cqmp2c1/YPb22o3WmyNjFzaiMyLz28xHXnp0+mKLtahpa39f0uh47c738OeEItUvNKs/D7R3fnyazZm5s2uPM/dLKvmRqPl8wqXONw6btuLyW2kWMHhuDxNqun6n4Nb7a6ztD5WneeXXyYyHd18pV80R7mK5C7ei16ppWmW2i6TbadYKy29tGEQMxZj7knkk9Se5NW6EuXT+v67dg3/AK/r5nmElh4KtfiF4cvre00mG0n0qddOuhCgDyLJF5YhYjlgpbYF5xnbxVPwdpOkatpeteH9LbSb5nsoz/wkmkEbriTcShuBzi4VgHJLMTnPy52163RR0t6/i2/1D/gfhb/I5ey8eaUug2t5rU4srlrKa6uYQjSeV5BC3AyoP3HOMdT2Brb0/WLHVJ7uGxn82SzkWKcbGXYzIrgcgZ+V1PHrT7LTrXTvtH2KLyhcztcSjcSDI33iATxnGcDAzk9zVqne+v8AX9f15BtogooopAFZur6Daa35P22bUIvJ3bfsWpXFpnOM7vJdd3TjOcc46mtKigDm/wDhA9I/5/PEH/hR6h/8frpKKKACiiigAooooA5b4i3MFn4SiuryaOC3h1bTJJZZXCpGov4CWYngAAZJNS/8LH8Ef9Dl4f8A/BpB/wDFV0lFAHLfDq5gvPCUt1ZzRz282ranJFLE4ZJFN/OQykcEEHIIrqaKKACiiigAooooA4TxLYn4i3D6Np0s1lYafOfP1q3O2ZJ1ypitm7MMlZH6AFoxkltmt4VvzZhfDGpWkFhqFhAPKjto9lvcwLhRLCOyjKhk6oSAcgqzdLRQAUUUUAeS/tG/8k6sP+wrH/6Kloo/aN/5J1Yf9hWP/wBFS0VrHYh7mZ/w1X4I/wCgV4g/8B4P/j1H/DVfgj/oFeIP/AeD/wCPV4rqFtobX2rWdtY2ovk014jAtvxGYo9wlU4wGbI5HPytn73OZrfhLR9H0c3zfaXls76O0vrVLwuQzIzFQ7W6qrAr28wc9emcuv8AXexa1/ryue+/8NV+CP8AoFeIP/AeD/49R/w1X4I/6BXiD/wHg/8Aj1eDa1pOgX/xMk0q3sruwh8xzM0U0bKVEW8eWgjUL07k5z2rM8PzaJ/wmmivpcOq25adEO+6iZ4pTIArqxiwwxg7Sg570R95pdxN2Vz6M/4ar8Ef9ArxB/4Dwf8Ax6j/AIar8Ef9ArxB/wCA8H/x6vnfRvDdt4k13VrCW4mguo5y0d25XyseZtKuAB8zZ+XBALYGOcjmtSS3j1O4jsobiCBJCqR3RBlUDjDYAGfbHHSkndJ9ymrN+R9W/wDDVfgj/oFeIP8AwHg/+PUf8NV+CP8AoFeIP/AeD/49XimlwaD9q0C0uLK1N7JZInlGDcLjzlLeYxxjcuCMnn5lx93jnpvCkEdnqlwv2opZ6VaXiOcbTJN5WVJx0+d8Dr8vU4NPq/IS1t5/rb/M+jP+Gq/BH/QK8Qf+A8H/AMeo/wCGq/BH/QK8Qf8AgPB/8er5316+a80Hwpc61JdXy+ROJCbjEjKJmAAdg2MDHY0vjL+wrHxzPHaaXdQRQz5lSK7jVXG0EeWPJwnrzuzTW9gPof8A4ar8Ef8AQK8Qf+A8H/x6j/hqvwR/0CvEH/gPB/8AHq8C1nTbG58b+KZtbmvrmOxiNxmN40klYyRoAx2bR9/qF464PQ2NEtjoHj6Kz0u6u4rO+00zyW8kvzYe2Zwkm3AbBORwOxwKm/u3/r+tB9dP62/zPdf+Gq/BH/QK8Qf+A8H/AMeo/wCGq/BH/QK8Qf8AgPB/8er5w8KtG2i+Ioka5iuP7OZ2eORPLeMOnyMrIT1Ochh0qvLpmmad4YsL6/hvbm51NJXhaGdYoodjFAGBRi5yMkArwR65pvR/15/5CWqPpf8A4ar8Ef8AQK8Qf+A8H/x6j/hqvwR/0CvEH/gPB/8AHq+f5PCGmxeEp76Zpo9RtLWC7mgFyX3JI6gZHkBUyrZH7xyO464r+MF0CB9LFjpV1A0ljbSswu49roV5BAiGXPd89f4aHp99vz/yBaq/9dP8z6I/4ar8Ef8AQK8Qf+A8H/x6j/hqvwR/0CvEH/gPB/8AHq8E1TSoNa8U2gnnvGtU0SO78stG0xjSHcIlZUUE4GNxX1JB6VXTw7oRsTq0ianHYtprXa2vnIZd63CxY8zYAVO7OdvHoccnW3r+v+TBa/h+Nv8AM+g/+Gq/BH/QK8Qf+A8H/wAeo/4ar8Ef9ArxB/4Dwf8Ax6vmDxPpdtpGuG3sGlNu8EM8YmYM6iSJX2kgAHG7GcD6V0nhiTTLLwrZXeqSaXFA2pTLdLdaf9omuYljhPlxt5bFT8zY+ZOWzn0Ydv66XPe/+Gq/BH/QK8Qf+A8H/wAeo/4ar8Ef9ArxB/4Dwf8Ax6vnCWx8OWui2d5dxamZNQFwY/JmjCwbXKplSpL9sjcvQ8nPFq78K6bDDe2UQvzf2VhHetdllMEu/YdqptyB+8ADbjkjoM8Jaq4dbH0L/wANV+CP+gV4g/8AAeD/AOPUf8NV+CP+gV4g/wDAeD/49Xg2q+EvDthcw2CT3DXsmoxWildRgl3xk4kkMSpuiIOAFc5BPfBrNj0fQtQ8RR6ZpcGohoZphctcXSBWijUkyBliJQjaxK7X44BJo/r8v8w6f15/5H0X/wANV+CP+gV4g/8AAeD/AOPUf8NV+CP+gV4g/wDAeD/49Xilv4A0Ca/t2+1XslndQWskXky8gzXBhzueJCQOG+4PT/arkPFek2Wkalbx6aZzBNbLMBcMrMCSwPIAH8Oenfv1o2/INz6a/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD62/wCGq/BH/QK8Qf8AgPB/8eo/4ar8Ef8AQK8Qf+A8H/x6vkmigD9HmuUViCG4OKT7Uno35VUuZY4BNLO6xxx7md3OFUDkkk9BXN6F440zXtUlsoBJA5y1o0y7RdxjILpn0Ktx1wM9mCgGD8d7dNU8C2cAd49upI+RGX/5ZSjoPrRVv4rf8irbf9fq/wDoD0Ua9GFkfFjX949zLcPdztPMpWWUyEs4IwQT1II45qa913VtSgWDUdUvbuJcbY57h3UYzjAJ7ZP5mqNFAF+XXtYnS3SbVb6RbVSsCvcuRECNpC8/KMccdqhsNTv9KuDcaXe3FlMV2mS2laNiPTKkHHFVqKAL13rmrX+/7dql7c+Yys/nXDvuK8KTk8kZOPTNVrq7uL66e5vZ5bieQ5eWVy7Mfcnk1FRQBYGoXguIbgXc/nQKqxSeYd0YXgBT1AHbFTPrmrSacthJql41kq7VtmuHMYXIOAucYyAfwqjRQBpXviPW9StPsuo6zqF3b5B8me6d0yOnBOKP+Ej1vdan+2dQzZjFsftT/uBjHyc/Lxxx2rNooA6C08ba5byXk82qahcXc9r9miuXvH8yAeYjkq2SedhGAR1qhbeItbs7qe5s9Yv4Li5OZ5Yrp1eU+rEHLdT1rOooA1YPFXiG1eZ7bXdThad/MlaO8kUyN03Ng8ngcmoYNd1e1tZ7a21S9hguSxnijuHVZSRg7gDhsjg5qhRQBek13VpdPWwl1S9ezVdi2zXDmMLkHAXOMZA49hQuuastlDZrql6LW3cSQwC4fZGwOQyrnAIJzkVRooA07jxNr15LBLd63qM8lu++F5buRjE395STwfcVXudW1G9nmnvNQuriWdBHNJLMzNIoIIViTyMgHB9BVSigCSe4mupBJczSTOFVA0jFjtUYAyewAAHsKQzytbrA0rmFGLrGWO1WIAJA6ZIA59hTKKAHvPNJDHFJK7xxAiNGYkJk5OB2yeat/wBt6m1jDYzX9zNYwOGSzlmZoQQc/czjufzNUaKNgOy8QfECXWbO4ht4r+Ez3KXA+06gZ0tSpJAgUIvlDnHUnAArlIL67tb5by1upobpWLLPHIVcE9TuHOeagoo2Dc0JPEGszT+dLq988vynzGuXLfK29ec9m+Yeh5qpPcz3TK1zPJMUXapkcttHoM9uTUVFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB+g+t6Vba3YzWF+Ga3ldS6q2CwVw2M+h24OOcelQX2gadqC2Imt1Q6fKktq0QCmIoQQo/2TtAI6Y9wCIbvULlL6dVlwqyMANo9fpUP9pXf/PX/AMdH+FAGN8Vv+RVtv+v1f/QHorO+I960nhOI3UqgC9jALYH8En+FFAHyK/h/WY9LGpSaTfJYFQwumtnEWCcA78YwSfWs+u08QeTc+HdOmgtdGmEen26PdDUR9qRhgFfJ87t0/wBX0yferPiHVtNMWrSafb6LHJZawi2AgtITvg2y7jjB8xSQh+bIBIxgYFPr8/1S/UFql/XS5w1xbzWlw8F1DJBMhw8cilWU+4PSo69M1O9stR+IUV5q0mjz6VP5klo0LWqFnMXyCYqpZRuwP3qkA9QRmqN1fabFrF1O+laTbTQ6U5jDXFpdxyzbxtbEKrEGA42heQOQcnM7K7/r/ghucDV2w0XVNVSV9L028vVhx5jW0DSBM+u0HHQ03UtQbU7v7TJb2tu5RVZbWERIxAxu2L8oJ74AHtXT+GFj1LR4tM10WH9jC5aT7Q2pxW9zakhQ7qjNlxhR8pRs9FINPoHVHMRaXeT6VcalFDutLZ0jlk3AbWfO0Yzk5wegqpXYWNjHdeBNTi83Ryyzo9i801rDcsgZ/M6kScjb8rfhSziRPA9usp0OYTBXlaL7CtzbxA4CjGJWc9TnJAwO7YN39wHHUV3njebSP7NaLSNNsBb+eptLu3vrV3EeDwYo41l5GM+aWII65JJ57wmLE65/xMPs+fIk+zfayPJ8/afL8zPG3dj73y+vGaFqD0Muys7jUb6GzsojLcTuI40BxuYnAHNOv7CbTbr7PcNbu+Ac29zHOv8A30jEZ9s132l6tbaV4w0GSd9Eiu2jZdSkt4bdoU5bYQygxq23GTGR6HnNef3t5Jf3T3E6wq74yIIEhTgY4RAFH4CgB0Wm31wkDwWVxKtxIYoWSJiJXGMquByeRwOeRVd0aORkkUo6nDKwwQfQ122m+JItJ8O6FbDy523yS/68A2snmldxA6ZjLcHHUHtW7s0BtP1U3Nzpd2twL+RZWmtEeOQNJ5SgeWZ2JwrBg4XkDnoR6K/r+ALV29P1PL5LeeKGKWWGRI5gTE7KQrgHBwe+DxxUddrqurXGqeANMWB9H220csV1GYrSKdD5mV2KQH5BHKdec96reJNXim1ubTdKs9GFqs8ZtporaFdpA7ycBlJJyHJX6AUdbB0uc9qOl3mkzRxahD5TywpOg3Bso4yp4J6jt1qpXoF/awReLtJvM+HDbPaRLeqs1q0O4J++ykZ4PXBUAk4281geLRpwnsv7B+z/ANlmAG32lDcA/wAfn4537s9eMY28Uf5gYlpZXV/P5NjbTXMu0t5cMZdsAZJwOwFQ11vhG80zRdNudUvdQmtrt54oYFtYkmkCqwkYlC6YUlUXOfUc81i+I7e0tvEV4mmyxzWbSeZAyMGARhuUHBOCAcEdiCKHo7AtUV4tLvJ9KuNSih3Wls6RyybgNrPnaMZyc4PQVUrrtMs/tnw+1COVtGWYSxvaGWe1iuMAv5nJIk/u4B69hVq+vtJm0XULJINJRYdIs3t5IoY1le4/c+Z84+YtguCuccEkZyaH1/roC1/rzscPVuPSr6S/kshayJdRI7vFINjKEQu2Q2OignFQ2ty9pdR3ESxs8bZAliWRT9VYEH8RXo+p6wH8ePqk02iy6dLbXT25iNsrPutWAWXy8SZJIXD854FHS/qC3PM6K9F0650K6urK7uodMbUJNIJESG2tojcCdh8wdGhRvKHG5MHjoSDXI+KZYJvEEzWtlBZLtQNFb3MU6FtoywaIBOeuFAAPGBQ9HYFqrlbTNHvdYeZbFIsQJ5ksk06Qoi5AyXchRyQOtU5EMUrRsVJVipKsGHHoRwR7iuq8OeIG07wfrtuDp4k2QmBLizgkaQ+aNw+dSXwOcHOOoxWjpx0oaLZsf7G/s02Uv9o+f5X2v7T82Nmf3vXy9uz5euf4qHorgt7HBUV2MusWUE2kafDZ6PJZy2lsLqRrWMusmQXYyY3BhjBGcYzkcmtbxZd6BP4cu47CLRkmUsYjaRRLJxduqgFeT+6Cn3BBOetD0++33AtV934nnFT2VncajfQ2dlEZbidxHGgONzE4A5rU8JixOuf8TD7PnyJPs32sjyfP2ny/Mzxt3Y+98vrxmus0vVrbSvGGgyTvokV20bLqUlvDbtCnLbCGUGNW24yYyPQ85o2sLucDf2E2m3X2e4a3d8A5t7mOdf8AvpGIz7ZqtU97eSX909xOsKu+MiCBIU4GOEQBR+Are0zVoNI8JrNBa6ZcXx1A7lu7WOdjEEU4w4OFJ7jB9COaOl2Proc1RXfWL6SdJtZAmiJpjWcp1BZvKN0tx8+Am7M2M+Xt2fLjOf4qsahH4UWz1G/tjp/2x7HzkhVlKZmRUCKnQPGwLcDI3e3A9L+X9f15AtbeZ5zRXZeLUtZNCtZ4Tptk6yLGNPtWtJ2I2HMnnQ/ORwPlk5yc7m5xjeE4rabxParfXEMEI3sWnEexiEJCEygoNxAGWBAzntR1sLpcxqVFLuqKMsxwB716NrF1ollcTXlpb6O11/YgPkk29wi3P2kDgRosbOE5+VcEDncMkqH0lr29udJfQYr5xYuTdLB5McZhBnMaOCm4PjKqCw5CjrTirvX+tbf8H0G720/rb/M8+vrK402/nsr2Py7i3kaKVNwO1gcEZHB59KgrZ8YTxXXjbWp7aVJoZb6Z0kjYFXUucEEdRWpEEHgu2OinRzKY5v7S+2fZ/tAbJ27PO+bGzGPK5znvipTbjdja96yOSq/qWi3ukx20l6sPl3SF4XhuI5lcA4PKMQMHjB5rrdR/soaJdiL+xv7LNhH9h8vyjefafl3bsfvc58zO75MYx/DSmztra38GnUrrS5bazn23sa30E+xWuC3zIrEkbTzwQO9Prb+upN9LnBUV6LZWmj6Lo8YvZNCub9I7+UASw3ADbI/JBIyGOQxVeepHqKt69qHh+3m1G60230F5IYLhLZEghZCRcQhGC9GbaXIznIz1XijsVb87Hl9FeiW8mmSeJ71rS30jy7iztSbgyWSpbSNEpkKQz/u3+bOVXaRjGVzXO28ccUviOOC40a5jWJwk90mxpB5gw1uo6OeuOy5oen4/gL/gfic7U8lheRWMV7LaTpazMVinaMhJCOoVuhI9qgrtikh8B2D6he2d01vqAuHt21KF5fs/loqqE37u2NuMjHQU7afd+Yupyt1o+p2MEE17p13bxXIzBJNAyLKOvykj5uo6etPudC1ezvYbO70q9gurjHkwS27q8mTgbVIyeeOK9Tk8QaFp2qS3E09pLa3mrwXcVytws87nczGZ0UnylQMFVCA3Xr2r2+qaLYLaaVdT2sBd7tYbi3vY55EEkOzzZJgxRXkbPcBQBkAcmel/66af1929n1t/XX+v6V/Lb2wvNMumttRtJ7S4UAtFPGUYA9ODzVeus8cXtpNb6NZ28dnHLZ27o8dnOJ0iUyEonmAkOwHJIOMsenQcnQgCiiimAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfeN9/yELj/AK6t/M1BU99/yELj/rq38zUFAHNeP0WTwogdVYfbY+CM/wAElFO8ef8AIqp/1+x/+gSUUAfJF3oOpWOlW2o3dsYrW5bbEzOu4nAYZXO4ZBBBIGQQR1qxd+E9asvKE9ll5ZVhEcUqSSJIwyqOiksjHsrAHg+hrWin0218FWcS6zZTXlvf/bjaeVPlgUQeXkx7d2VOece5rp5PHeiafevPaTRz2l3qMV19mghcSxLuZpJJXdQGlywACkqAOCO7e9v66f8AB+4XT+vP/gHBy+Edaivre0+yxyy3LOsZguYpUynLgurFVKjk5IwOTgVS1LSrvSZ0ivUQGRBJG8UqSpIuSMq6EqwyCOD1BFehxeL9CskttJkntrnT3NwhNpFLHHaxPFsUEsgkZicl2AJweM8Acx4z1yDVI9Ltbe4t7r7FC6tLawtFCNzkiONWAbaq4GSASc9epko5eiiimIKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD76u9PuXvp2WLKtIxB3D1+tQ/wBm3f8Azy/8eH+NdBJ/rX/3jTaAPOfiHbS2/hWPzk27r2PHIP8ABJRV/wCK3/Iq23/X6v8A6A9FAHx5feH10/TYbm41ax8+eBJ47JVmMpV+nPl7M45+9UUnhrXYngWXRdRja4kMcIa0ceY46qvHJ4PA9K2dV8SwX/hy0s4da1mMQWkMLaaYh9ldkxls+b+P3OoH1pmu+KoNWt9dRftLNqGqR3kJlwdsarIoVuTg4dQAMjA609L/AD/C6/QFsv66f5lHWfB+uaHqq2F5p1yZJJPKgdIH23DccRkqN3XtVRtA1hdROntpN8L0KGNsbZ/MAPAO3Gccj866U+KdHj8af8JBELuQ3aSJdQS2kZEG+LYShLsJMEk4ZVBHB68QXHiyLz7kR3lxcQtpklnb7NOhsvKLvuI2RMV2nnJ6nPSp1SDc5i9sbvTrp7XULWa0uExuhnjKOuRkZB5HFaFn4ea40cand6hZ6favK0MTXIlYyuoBYARo2MAj72Bzx3rLlnmnKGeV5diBE3sTtUdAM9APSul8Ka5YaLHm/v794HkDXGlrZRzW10owQGLyYBOMbthK9RT6B1RmRaFI3hefWZhcxIkyRw/6I5imzncfN+6CMDg8nPtUcnh7WodMGoy6RfpYlQ4umtnERU9DvxjByO/etWw1HQY/C+qWVxPfwXF/LHIscNokkcXlliq7jKCc7hzjjHeoXvdEi8NQW1nc3y3akTXET2SeXcSZ4Bk83IRRwPl6knvwddfIDLu9H1PT7WG5v9Ou7aC4GYZZoGRZBjPykjB454qvBbzXVxHBaxSTTSMFSONSzOT0AA5Jrq/FniyDXLe5+wXEsa3lwLiezOl28IVhk8zxnfJgsQCyjOcnmsfw1q0GkapJLdrL5E9vLbO8GPMiEild6ZIBIz0yM8jIzmhAyxo/gvW9U8RxaO+nXtrKWUzmS1fMCH+NlwCB6ZxmqGuaamk6o9mgvlKKCy39p9mlBIzym5sDGCDnnNb9r4n03T9b0BoPttxZaQjqZZY1WWTcWY4QMQoBbAG49z3xXIUAb2n+D9Q1Gw0+8hltlhvrlrdC7kGMqMln44XAbkZPynjpmrP4a1mCG5uDpl3JaW0jxyXUcDtCCrbT8+MdavweKXstK0u0sXli8kMLv5FxIDNvG08noAM8dx0Jrej8Z+HoIb57e0uIp7qO9Rl+wwOztMX2OZy29QFZQUXjgnJ5yPa68wW9n5fqc1f+Dde07RbbVbrTLpbWeMyF/s8g8kBto3krhc9RzyCKqT+HtatoIprnSL+GKaQRRySWzqrueigkcng8VcutR02/8KafaTyXUN9pyyJGiQK8Uwd9+S5cFSMkfdboKbrutrrPiK7uFuLqKxu5I/MU8ttUADK7sEjnAz+Io6h0G6r4burDVk0+1hvbq4+zLPJE1jJFJGdu5xsYZIXn5uhxmsuW1uIbeGeaCWOGcEwyOhCyAHB2nocHjiutu9d0A69o+o2l5q//ABLreKIgWscTMYlwpDCVsbiOeOB/e6VkeKdZttfvoL+3SSCZoVSa2CBYYSowBFg8Ieu0gYJPXrR/mBHo/h86vaz3L6jZ2EMMsUJa6Ep3PJu2gCNGP8B64FUNQsZtM1K5sLoKJ7aVopArZG5Tg4PfpW/4V8RQ6Npl/avqmqaXLcTwSLcabGGYqgkBRsyJwd4Pfp0rF1q+i1PXLy9t7dbaK4maRIVAAQE8DgAflRLfT+tv+CC2LEWhSN4Xn1mYXMSJMkcP+iOYps53HzfugjA4PJz7VBLomrQaeL+fTLyOzO3Fy9u4j+YAr8xGOQQR65Faul3+iQeEdR0+8utQS7vXjfEVmjxoYy2BuMoJzu64496nufFVvcWuown7SRcaRa2EIbGEaIxFu/C5RyMevQZND6/10Bf19/8AX3HNWtrcXt1HbWcElxPIdqRRIWZj6ADk10M/gPWLHXn0zU7ea2xFO8dx9ncxzGOJpMISBuzjHtmuZHFdjceJtLHi2TxDZS6gtxcwTiSIwKnkSPAyAo4kJYBjnOFIHqaOn3/8AFuc83h/WU1RdNbSb5b5l3Lam2fzSOuQmM44Paqlza3FlcyW15BJbzxna8UqFWQ+hB5FdhpnjKwtra0tbiKUKukmxlma0iuNjfaDKCI5Dtdfugg4PcdBnnPEGpnVdXa4+0vcoqJHHI9pHbHaqgAeXGSqgYwMHoKHowWxp+GvBd9r9ldX7W+orY26AiSzsGuGmcsF2ou5QSMkn5uAKyRouoTWc9/Z6fezafC5Vrr7M2xcf3iMhTyOM8ZqbTdUhs/D+s2MqyGW+SFYioG0bJAxzz6Dtmtuz8UaZDa6ddTfblvtOsZLJLWJF8iYNvG4vuyv+sOV2nOOozwPa6Bb2Zz6+H9ZaxF6ukXxtDtxOLZ/LO7G35sY5yMeuRSXegaxYWpub7Sb62gGMyzWzovPTkjHOOK0Z/Em7VNJuIJLpIrO0gtplDY3KhBZQAeVJ5wa1/EPjay1jRbuziS73zFyplC4Ba7ebJ+Y/wALKPqPTmh+XcFtr5f18jjILea6uI4LWKSaaRgqRxqWZyegAHJNbej+C9b1TxHFo76de2spZTOZLV8wIf42XAIHpnGar+GtWg0jVJJbtZfInt5bZ3gx5kQkUrvTJAJGemRnkZGc1sWvifTdP1vQGg+23FlpCOplljVZZNxZjhAxCgFsAbj3PfFG1v6/r/gi3uYGuaamk6o9mgvlKKCy39p9mlBIzym5sDGCDnnNN0/Q9W1ZS2l6Xe3qqSCba3eQDGM/dB9R+dUa1o9Z8nwrHpsDzx3Cah9rDocKMIFU5BzuBB7fjR0H1K0WjapPp0t/Bpt3JZwkiS5SBjGhHUFsYHUfnUR069W6ltms7gTwqzSRGJtyADJJGMgAcmuqtvFenrDYXty1/wD2jYWUtotuiqYZ9+/52ctlc+YSw2nJHUZ4uX/jzTrrSbyCO1uBcT2aospVf9e6qk5Jz90qq475UcCh9QWtjjrvRtUsLSG6vtNu7a3nx5U00DIkmRkbWIweOeKr2tpc310ltY28tzPIcJFChdmPsBya6DxFrGk6ppsZj8+71bzF33slklqTGFI2sqSMrnOPmwrcck9s3w7eafYa7Bc6vbtcWqB8qsayYYqQrbGIV8Ng7ScHGDR1F0Gnw9rQ1BrA6Rfi8VQ7W/2Z/MCkgAlcZwSQM+4pbXw7rF3qr6dDpd893ER50CWztJEMjllxkdR1rpNX8Z2NzbyxWH2lS2jf2cJBbRWwZjcCRj5cZ2qpXIwM9cHPJpZvFmjahFcW98NQhikFi4eCNGaRreHy2RssMKTkhucddp6U42vr/Wv+Wo3tp/W39fI5bXNN/sbX7/TPN877HcPB5m3bv2sRnGTjp0zSWujanf2c13Y6bd3NtbgmaaGBnSPAydzAYHHPNS+ItRi1fxNqWo2yukN3dSTIsgAYBmJAOOM81el1LStR8L6fZXk17a3WmpMsSwwJLFPvYuCSXUocnaSA3AHpipV+XXcbtzaGW+j6nHpaalJp12lg5wt00DCJjnGA+MHkHvV7U9Ait7bSJtJuLi+/tRGMcb2ojkDhym0KrtuyRx/Kta+8UaZcQXt3D9u+3X+nx2L2jIot4QoQblfcSw/dghdowT145X+3tBtE8NyWc+o3Euizh2SWzjiWVTN5hwwlbBHQcc+1Prb+uv8AwCelzmbbSNSvdn2PT7q48xmVPKgZtxXGQMDkjcufTI9asHw1rouVtzouoid13LF9kfcw3bcgYzjcQPqcV00fivQ9N0cWGmHUpf3N8pmmhSMlp0RV4DnAGzB5Pr3wJNe8e2epJqf2Rb2N7yK4iRmAGBJNE4BIbpsjYH6gdKOxVvz/AA7nJQ+H9ZuNQlsLfSb6W8gGZbdLZ2kjHqygZHUdfWq6afeSfaNlpO32UFrjERPkgHBLcfLzxzXVr4p0y51aeW9luUsZ7S1gmtmsI7gTmKJUbJMqFOQcMrbue1Y0V/pkcmt+Q2pWUF0jLZwW0w2kbwQkxP3lA/HIFD0/EX/A/r5GWlncyWcl2lvK1tEwSSYISiMegLdATg1DWlb3ltH4cvLR7jUFuZZo3jhjcC2dRnJdepYZGPxrNo6h0Ny58JX8FzpVvDNa3kuqZWAW0u8Bg+wqWwF4PcEr3zVlvA980lqbS8sru0uGlX7dEZFhj8obpNxdFOAvOQCD2yeKvp4k0TTR4em02XULqbRnbdHcWiRLOjyFm+ZZWKnBI6H14rQHxCsLaeC3jW5vtPZpROtxbJGI42j8tI44lcrtQc4LDcSc4ySTp9//AAP6/EOv9f1/X3c83gq9SVXe8s109rT7YNRbzRCYt2zOCm/O75cbMnOenNZetaNdaFqTWV6FL7FkR0ztkRgGVhkA4IPcAjoQDXaL8RLYTfZZZby5tzbFft9xaxvMs/mCQSCHfswuAqruwMA9ttcr4p1tNd1ZJ4TO8UEEdvHJcnMsoUcu/J+ZiSepxnGT1pf1+f8AwP62F5/1t/wf63xqKKKYBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB+ikn+tf/eNNp0n+tf/AHjTaAOI+K3/ACKtt/1+r/6A9FJ8V8/8IrbY/wCf1f8A0B6KAPkGbw9EPDtjqNlf/a5rq6+ytAsJUI+1WADE5Y/MAeAM5wSOa25fhrPIqjTL17hkvlsZ3mt/KiD5IZo23EyIrAgnavbj0yh4h02LwvBplvpt7HcwXH2pLo3yFRNtVSdnlfd+XIG7Pua1br4kztfC/srForyW4inuDNcebGwjyRFGgVdkZLMSMseevXLe+n9bf8EWtv68/wDgEb+AA8NnfWt/N/ZU6zPJc3Np5Toka7i4jDtuVgDtORkjt1rI8TeGZPDrWT75ngvofOi+0QiGVecFXQM209D1PBH0raX4iva6jFNYWU6wmWWW5W5uhNJMZECcPsAUKoG0bTgjuOKwdf11dY+yxW8EsFtaowQTz+dK7Oxd3d9q7mJPoOAPrU6lGPRRRTEFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB+ikn+tf/eNNp0n+tf/AHjTaAOI+K3/ACKtt/1+r/6A9FJ8VyB4Vts/8/q/+gPRQB8w3/gbTbSO+ljubpo4bEvDuKgm4Rd0itx90cccH5159cq+8C3unaba6jd3kEdjcSpGbiS3uY1QspZTh4gWGAeUDfqKz38S3j63e6p5UAmvIpInUKdih02nAJ9PUmrWteMrrW7K5t5bCxtvtdyt3cS26vvllUMMks5xwx4AA9AOaOt/T89fwBef9aaFzWPBcEHjJtD0bV7W4ZpGVVlMitEFTd+8YxqvY/dz74qvpXh+zPifS7aXVNK1G3uXU4SWdEkO/b5TER70J9duMHOahn8XTz6vFqo06xjv0VhLOglzOSmwlgXKg45+ULzWfouq/wBi6rDfrZW95JCweNLkvtVwQQ3yMpJGO5x7U46NXFLVaF218M3esX2oQ6UIWuLWYgWKuxkZd20spIwyrxkkggc4wCRlX1stnfTWyXMN0Im2+dbkmN/dSQCR74rZi8X3VpqFze6VY2WnXNw6s0sAkZlwdxUb3bAY43DuBjgEg419cre301yltDaCVi3k24IjT2UEkge2ahXSRTtdna6d4G027h0uaS5uglxa7rkAqCszgtEFyPukAnv9xuRnjmpPDV5HHeO0kGLSyhvZMMeUl2bQOOv7xc9uDyaE8SXcesadqKxQebp8UcUS7W2sEGAW5zn1wRVqXxjdS6NPYHT7BWuLWK0mu1R/OkjiK7BkttGNgHAGe+Tg1Xd/11Euifl+n/BJNXsNOn03w9cwQ2ukm+il+0OGmeMFZCoYgl26DsPwp3iPw1pui+Km0+DW7WSBZtjeaJt0IAB/eERc56fIGqlqniNdT0i10/8AsfT7RLMEQyQNPvUFizD55GByTnkfTFF/4kXVNRivr7RtPluF5nbdOv2o7QMuBJx0z8m3mmt/mHQv6j4XFx4t1qztmsdKttOUzOJLiSSOOPcq4Vim9uXH8OT2GcCptE0CC08V/wBkaxa2moxXNo08NwkkoG3yWkR0wV64HDDt0FLH4wtb291rUNT0rT1mvLLy/IT7R5dzJ50TfN+8yuFUngqOPzpWvjO4t9dfVX0zT7iYRCCCOQSiO3jCFNiBZBxtOPmJPfOeam3upeX+f/AH5/10/wCCRaBplte6PrVxKLaee2tDJHFJLLHJHhl/ertQo3XG1mHXPaq6aCRo0eo3uoWdkk6u1tDN5jSXAU4JUIjAfMCAWK5IPYZqxpviePS/twh0HTHW9QxOsjXGFjOCUXEoOMqDk5PvUJ8RebpCafd6XY3SQCQWsknmq9sHOSFKuAwDEkbw3JNN+Xb/AD/4H9WEv1LY8E6g3hga8s0ZswqvIWguE2KzBc72jCNgkZCMx9AcU7xJ4Z07RmsfsmuWsxuLeCR0KzbhvXJcfugNnoPvY7Zplz4zu7nSJrFtPsEae0is5bpUfzXjjKlBy+0fcHRRnv2qpd+IPt1pZRXmmWU0tmiRC5JlEkkadEbDhcY4yADgDmh+Xf8ADX/gAttf62/4Jpat4aE3iC2sdLS0gibT47l50uJHi2bNzTEugYAjnbt46AGoU8GTyM0iarppshaG7F8XkERQSCNhgpv3Bm+6Vye2cjLp/G00t9bXMWkabbtBb/ZGSPzmWaDbs8tw0h4x3GG75qrc+Kbme2ltYbS0tbR7X7KlvCr7YkMqykgsxYsWUZLE9cemDr9/6/8AA/HyBdL+X6f8EpazpM2iam9lcSxTMESRZYSSjq6h1YZAPIYdQDWlbaXplj4bttX1qK8ufts8kVvBazpDtWMLudnZHzksAFwOhOe1Zmq6pNq94tzcrGrrDFCBGCBtjQIOpPOFGferVh4ha10n+zbzTrPU7RZTNFHd+YDC5GGKtG6HBAGQSR8o4o6B2/rp/mTQ+GTNpUOoSarp1ml0srW0FzK4kk2EgjITaDxgFioJP1xaufAGtWvhs6zKgEKwJcMhilBWNsYO8oIyfmHyhy3PTg4xLvU5byxs7R440isw4j2A5w7bjnJPc1cvvEJ1GzjS802ykvI40iF/+9ExVMBcjfsJ2gLkpkj35o6B1L994FvdO0211G7vII7G4lSM3ElvcxqhZSynDxAsMA8oG/UVPq3gdU8ZNoegajDfSGRgI9spkhVV3Ev+7AbjPCbiegGcVS1rxlda3ZXNvLYWNt9ruVu7iW3V98sqhhklnOOGPAAHoBzRL4xuZNXj1MadYpebSlzIBIReKybGEilyvIznaF659KOv9f1v8w6FbxF4Zv8AwxdQQ6hg/aI/MiYRyR7hkg/LIquOQeqj1GRU3hDTLbVNWkiuhbTbYJWS2nlli81hGxyrIjYK43YbAOMZrL1C7hvLgSW2n22nqFwYrZpCpPr+8djn8ccVb8P68fD1813Fp1peTbSqG5Mv7sFSrYCOvUMRzn2xR0fzBj9N8OTahol1qz3dvaWdtIImkmSVssRkD92jbewy2ASeO9Y9b2keKjod/Je6bpFjFcli0UgkuP3IIxtA83DL7OGznnI4rBJyc0dQ6HR6xo+m6O8ekm3vrrWHhicyrcIkSPIoYII9hLYDAZ3jJ7es0XgG/uLwWlpqGnXFyk4t7mJJXBtpCDgOSgB5UjKFhkdao3PieS8tYBdadZyX1vGkUeo5lWcBPuZw4QkABclScAVeTx7fQ3v2u007TraeScXFy8cb/wClSAHBcFyByzHCbRk9OlD8v6/r/IESyfDrUFe2Canpcq3Kl1kWV1VF8kzBmLIMAop/riotN0KHT/E2ixX6WOs6fqrosckbzKjKZNjEf6twwIPUY9jVjSPGzm6ij1eG1+yQ2roBsk/eFbR4EVtrZw2QCRjk5yKzk8XSx6tY3g0rT/K05AtnZ/vhFCQ+/cMSbmbdk/Mxzn2GK0U12/4cT1j5/qTad4Mvtf1PU10tfLtrKcxljDNNjLNtXbEjt0U84xxyeRmxD4Kgi0rWW1fWLWwvtNuY4GjkErKhJYHdsibOdvG0+uccVQ/4SsmS9EmjadJaXrrLLZsZ/LEq5xIp8zeD8zD72OenSq2n6/8AYFvof7Ns7izvipktJjL5alWyu0q4fjJHLHg85rNJpJeX+X/BKdrtmlY/D/WdQ0E6rbBTAY5JYx5U37xEzlt4Ty1+62A7KTjpyMyweFIbTw5q91qdxavfRWEVzDaI0nmwb5YwGb5QnKN03EjcOAemU/iHz9Jisb3S7G6+zo0dtcSGUSQIxLbQVkAIBJI3BuvpxVm48Z3lzpdxZvY2IkuraK1uLtY386VIypTJ3bQRsA4Az3ycEU+tv63/AOB+gLdX/rb/AIJz1FXL3UfttpZQCytLf7JEY/Mgi2vNk53SHPzNzjPpVOgQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/wB402nSf61/9402gDiPit/yKtt/1+r/AOgPRR8Vv+RVtv8Ar9X/ANAeigD5n1Dw54dik1NLaJfPi09glv8AaGLxTRpueQjPQjbjPHL46cZeqeCbXSdLjv7jUpxElxHBdQmGBpoS6sw+RJ25+Ugh9h/XGA2u6i+p3OoG5/0q6Ro5ZAijcrLtIwBgcelWdU8WazrNm9rqFzG8MkonkVLaKMySAEB2KqCzYJ5PJ70db+n56guz/rTQ3NZ8L6JJ4/fRNIvri2TzHDia1ykAWPdw3mMz9D1A/GqWiWOh/wDCXaQlrqUl3FNKoK3WmA7ZN+Akkfm4ZDwch847VnTeKdWnuoLmSaH7TApVZ1tIlkYFNh3sFy/y8ZYmqmlardaNfLeWBhWdPuNNbxzbTkEEB1IBBHUcinHRq4pao2dN8Lt4i1jUrGyuY49QhlZo4DFsikQPhyGz8u0c7cHIBAOcA4N9HbQ300dhcPc26tiOZ4vLLj125OPzrQk8U6tJLPIk8VvJcOkkrWttFAWZDuU5RR359yATkgVn317PqN9NeXZRp5mLyFI1QEnqdqgAfgKhJpJf1/X9elPVs7zTfDnh2ZtFS5iXz5rQCa3a4YNPJIpZJFAOcABunGQoPXnm5fC/lRX7/bM/Y9Ot77Hlff8AN8r5OvGPN698dBnjPXXNQTULS9W4xcWaJHA4jX5FQYUYxg496tSeLNZl0d9Me6T7LJEkMii3jDSIhBRWcLuYLgYyeOlV3f8AVtRLS1/L9DR1r7LdaP4Zub1IrX7RDMLiWyso1ZgsrKDsXYGOAByR9aXxVpfh7SfGUtpZXN7HbxT4ljNmrCIYBG3M2ZOfXbWVqPibUtU06KxvPsZt4f8AVLFYQRFOckBkQEAk5Izz3ouPE2pXdzb3F19jmmtxhZJLCBi/y7fnJT95wP48+tNb38w6G3qugWtz4y8RJeXcVhbachuGNnY4UjeihUi3/LnfwN2M9SOom0PSotK8ZR6cTbajY31g1wj3NmhYoYGdThtxjYHrtPbqaoW/je9e41O81Jbae8urPyI3Gn2+1m82N8yLsCtwh5IJzj8KNv4v1m11WbUo54Gu5lCtLLZwybVC7QqhkIQbeMLgY46VNvdS8v8AMfn/AF0/4JY8N21tcaNrxYxtdR2LSKk1mJFCB0yySbwUfJxnaeM1XOi2VroNtf6nfzxTXySSWsFvaiUEKxXLsXXblgRwG4Gfaiy8Wapp7XRtBYJ9rz5wOmWzBgcZXBjIC8D5Rge1Qp4j1JNNawLW8tsS5RJrOGTyt/3vLLKTHnr8pHPPWm/0/wAxL9TXPguMeFm1d76SKSGCO4mtpI4Q3lu6ruVRMXP3gQWRQR3GRlPFWk+HdOfThp11fK01pbyyK1ouCrLlpM+cfmPXZjHbNZ03i3WrjSn06W6Q28kKQSYt4w8kaEFFZwu5sbRjJOKhk8QahNZWtrObaWO02iFpLOFnAUkhS5Xcy8/dJI7Yofl3/DUFtr/W3/BN/VtAh1DxHbQwTwW9kukx3kk8Vl5RESx7ixjDtukI6/Ngk9QOarx+EtOlha+Gsyrpn2FrsTNZfvTtmWIxmMPgHLcHdg8ZI5xSn8Z63PeW1001sk1quyJ4bGCP5Nu3YdqDcmONpyMdqrXXiPVLzzRNcKElgFsYooUjjWPeH2qiqFX5lB+UDJ+po6/f+v8AwAXS/l+n/BE8QaQuiaw1nFcG5iMUU0cpj2FlkjVxlcnBw3IyfrWl4dk05tH1U3uh2V7LZWv2iOWaW4VmJmjTBCSqMYc9AD05rCvr+51K4E97J5sixpEG2gfKihVHHoABSW97cWsNzFBJsS6i8qYbQdy7lbHPTlVPHpQHVfL/AIJu20FpP4E1a6gWETpdQmSN7PJiDF9oimMhbHHIK9hya1rz4cQW+mzzRa081zEjEQfY9oZljjkI3b+m2VRnHXtjmubs/E2pWGkyaZbfY/ssv+sWSwgkZ+uCWZCxIycHPHbFPm8W63cRSxzXu5JQwceUgzuRYz2/uxqPw9c0aah1RoeJPB0Hh+ykcazbXF1BMIZrYSQ7s85KBJXYgEYO9UPI46gY2g21jea5a2+qSzRW8siqTBEJGJJAxgsuAfXPHoadqfiDUNYiVdRa3lYEMZhaRJM5AxlpFUO3/Aic9aoQTSW9xHPC22SNg6NjOCDkGnF2ldilrGyO28Q6fp+qeIdXZLpbPS9HZxKYNJhhdCZdixqqMPN5x8zsDjP0Oe/hKwt0vLq71eVbCCG3nikis98kqzZ2jYXAVhjkbsdcE8ZyLbxBqVpqV1fxToZ7zd9oEkKSJNuO4ho2BUjPOMcHGKS717Ur4XQurnet35fmrsUDCfcAAGFAzwFwKhJpIp6tlW+ht4L6aKyuftdurkRz+WU8xex2nkH2/nXTWOm6fqHhdE0Wzsb7VRFI93HdTSpcR43HdCodY3UKAcfM2c5GK5KtW28SalZ2BtLQ2sCGNozLHZQrNtbqPNCb+QSPvdOOlV0sLqa2oeC4tO0E3lxrFsl6tvHcG0eSEbg4UhVAlMhbDA4MYHB56E1db0HR9GuJbX+2p5ry3lRZY/sO1SrDJKNvOSvGQQoPYmqNx4h1C70xLG6a3mijRY0ke0iMyqv3VEu3fgdMbunHTiq1xqV1d6mdQunWW5Zw7M8alWI9VxtI46YxR18g6eZ0usaLFfeLNMsbTAgubCCRXtbJIW2eXu3sjS7d2BlmLgdTU0GhL4a8caDDHNa6la6k0R/fwQTKUaUowIDSJn5TyrE+4ORWRL401uW8trszWqT2yGOJorCBPkK7dhCoAy7Tjacj2ph8YaydTtr9prZri0iEVvusoCkKhtwCoU2rgnggZHanF2lfz/DUTV1byIzZ2E3iS+gvr0abbI8xSRYDIMjO1Aq9MkAZ6CsitZPE2qxazJqsE0MF5LG8TvDaxRqVYEN8qqFyQTzjNZNRFNJLyKbu2ztLTw5Z/wDCMWZhXTrnVNRtZrhY7uaYSAIXGIhHhAcITmQ4JwAODnkLSD7VewW+8J5sipuPRcnGa0LXxNq1lpn2C2uUSEK6KxgjMkav95UkK71B5yFIHJ9TVeTV76XRoNKebNlbytNHEEUbXYAE5xk9B1NXpzX6f8H/ACJ15bHoOo+DdH8yW2hsRFc2WpQQfZrWZ3nmgdyn7wu2xZGxuAXbgZyBkU1fCmk6he2rWWnWtxHGbxm/s64lENyYkBSFjI7Mr55YghdpypP3hxs/i/XLgwF70K8My3Akihjjd5VGFd2VQZGHPLEnk+pom8Xa1NdW8/2mKJrZmeNILWKKPLDDEoihW3Dg5ByODxS6f12Q/wCvzO0Hg3R5oxqllDY3KrZFntluJUtFlEwjaTzGff5Sgkk7uSvBwQKdZ/D6wufFEN7b2NzqGhyrbFYbaOXDPLjIJ5ZI1GXyxzjaCcnNcOfFerm/F2Z4twg+ziL7LF5PlZzs8nb5e3PONvXnrzVaXW9Qn1pNWluN17G6SJJsUBSmNuFxtAGAAMYAGMU1ur/1uJ7P+uwmt2Eml65eWc1tJbGKZgIpVKsq5+Xg89MVo2vhuG58Kyaql3cTzoHLWtpbpN5Kr/FKfMDIp/vbCvTnJxWHNM9xPJNM26SRi7HGMknJrQtfEGoWWnPZ2htoo3Ro2kWzh84q33h5u3fggkfe6cdKiKajZ7lOzldbGxf+CotO0E3c+sWyXy28dwbR5IRuDhSEUCUyFsMDgxgcHnoTHP4St11+Hw/b6lJLq5nEM6tbBbeM4y2JN5Ztv+4M847Zy7jxDqF3piWN01vNFGixpI9pEZlVfuqJdu/A6Y3dOOnFSXHirV7p4JJriI3Fu6Ol0ttEtxuUYUmYKHbA9WPQVelyenmalp4R07Umt5tP1uQ2LtcJLNcWWx4miiMudiu25So65z7eo/g+zVVvRq039k/2eL5pzZgTAGUxBPK8zBJcf38Y5z2rMuPFesXMqO9xFHsWVVSC2iiT94pVzsRQu4qcFsZ6c8Cm2vifVrPyhDcoUhtjarHLBHIhiLl9rKykN8xJ5B/Sl/X5/wDAH/X4/wCR0up+GNN1HxRcQWty1tDDYWjwQW9tGZ7pmhQnbEZFBY8khWZsngHrXEXMJt7uaErIpjdkIlTY4wcfMvOD6jtWqfFmrSalLqFxJa3V1MqK0t1YwTHCDC43oQOAORjPesu6upr27luruRpZ5nMkkjHlmJySaA6fd+RFRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/3jTadJ/rX/AN402gDiPit/yKtt/wBfq/8AoD0UfFb/AJFW2/6/V/8AQHooA+cNQttDa+1aztrG1F8mmvEYFt+IzFHuEqnGAzZHI5+Vs/e5zNb8JaPo+jm+b7S8tnfR2l9apeFyGZGYqHa3VVYFe3mDnr0zxzX949zLcPdztPMpWWUyEs4IwQT1II45qa913VtSgWDUdUvbuJcbY57h3UYzjAJ7ZP5mjrf0/O4LTR/1odfrWk6Bf/EyTSreyu7CHzHMzRTRspURbx5aCNQvTuTnPaszw/Non/CaaK+lw6rblp0Q77qJnilMgCurGLDDGDtKDnvWJLr2sTpbpNqt9ItqpWBXuXIiBG0heflGOOO1Q2Gp3+lXBuNLvbiymK7TJbStGxHplSDjinH3WhS1VjpdG8N23iTXdWsJbiaC6jnLR3blfKx5m0q4AHzNn5cEAtgY5yOa1JLePU7iOyhuIIEkKpHdEGVQOMNgAZ9scdKlu9c1a/3/AG7VL258xlZ/OuHfcV4UnJ5IycemarXV3cX109zezy3E8hy8srl2Y+5PJqErJIpu7bPRtLg0H7VoFpcWVqb2SyRPKMG4XHnKW8xjjG5cEZPPzLj7vHPTeFII7PVLhftRSz0q0vEc42mSbysqTjp874HX5epwa50aheC4huBdz+dAqrFJ5h3RheAFPUAdsVM+uatJpy2EmqXjWSrtW2a4cxhcg4C5xjIB/Cq7v+uolpb5fodBr1815oPhS51qS6vl8icSE3GJGUTMAA7BsYGOxpfGX9hWPjmeO00u6gihnzKkV3GquNoI8seThPXndmsS413xBrMUen3Wq6lfxu6hLaS4klDN0UBSTk+lI/iDXo5bdZNX1FZLHKwBrmQG342kLz8vHHGKadnfzDodNrOm2Nz438Uza3NfXMdjEbjMbxpJKxkjQBjs2j7/AFC8dcHobGiWx0Dx9FZ6XdXcVnfaaZ5LeSX5sPbM4STbgNgnI4HY4Fc9aeNtct5LyebVNQuLue1+zRXL3j+ZAPMRyVbJPOwjAI61QtvEWt2d1Pc2esX8FxcnM8sV06vKfViDlup61NvdS8v8x+f9dP8Agmt4VaNtF8RRI1zFcf2czs8cieW8YdPkZWQnqc5DDpVeXTNM07wxYX1/De3NzqaSvC0M6xRQ7GKAMCjFzkZIBXgj1zVWDxV4htXme213U4WnfzJWjvJFMjdNzYPJ4HJqGDXdXtbWe2ttUvYYLksZ4o7h1WUkYO4A4bI4Oab118v8/wDP+riWn3nTyeENNi8JT30zTR6jaWsF3NALkvuSR1AyPICplWyP3jkdx1xX8YLoED6WLHSrqBpLG2lZhdx7XQryCBEMue756/w1z8mu6tLp62EuqXr2arsW2a4cxhcg4C5xjIHHsKF1zVlsobNdUvRa27iSGAXD7I2ByGVc4BBOcih6/f8A5gtF/Xl/wTrdU0qDWvFNoJ57xrVNEju/LLRtMY0h3CJWVFBOBjcV9SQelV08O6EbE6tImpx2Laa12tr5yGXetwsWPM2AFTuznbx6HHPP3HibXryWCW71vUZ5Ld98Ly3cjGJv7ykng+4qvc6tqN7PNPeahdXEs6COaSWZmaRQQQrEnkZAOD6Cjr9/6/5/h5gul/L9P6+Zc8T6XbaRrht7BpTbvBDPGJmDOokiV9pIABxuxnA+laPhjUpIdF1pfsuny/ZLLz4WuNOgmZXM8S53OhJ4ZhgnHNYCrf6tdBUW4vrgR8ABpHCIv4nCqPwAqGOeWFJEildFlXZIFYgOuQcH1GQDj1Ao2Dqn6f8ABOmtJUuPh5rZja4ilW7t3nRWj8mUsX24QRgpt56NjnpW9feA9Bg0u5a3m1D7VEj7Xlmj8vcsMUuSNmcfvdvXtnPauKtvEet2Vh9is9Z1C3tMEfZ4rp1jwevyg45zUL6xqciMkmo3bq4IYNOxDZUKc891VR9AB2o01DqjovFvh/w9oUc9rY6m8uqWs4hkhYyN5g53NgwoI8EDgPJnPXjJw/Dwsn8QWaanby3EDzKpjilEZJLADJKtkeoxz6io7rW9VvrGKzvtTvLm1hx5UE1w7omBgYUnAwOOKpI7xSLJGzI6kFWU4II7g04u0rsUleNkd/4gNtr/AIk1+71CTVp7PRS/+iNfCR2Jm2fuyY8RRjIONrYwBnnIo3HhzRLCG+vrpdSktore0uILZZkjkHnAna7lCOMZyF59Bnjl7fVNQs9QN/aX1zBeMWJuIpmWQlup3A55zzTZtQvLhrhp7ueVrlg85eUkysOhbJ+Y8nk1CTSSKbu2xL77J9um/s3z/sm8+T9ox5gXsGxxn3H6V29rLpFj4T0ptUbTPJn06cyWv2ANdzy+bKqOs3l/KAQvWQcKeD0PA0+SeWWOJJZXdIV2xqzEhBknA9Bkk/Umq+zb+uoutzsp/B9hH4Oub5nlh1O0s4LuSHz2kBWRlC5XyVVchsj94xGMEdcV9S0LRI/EA0HSrfU5dR+1RRI0lxHsmDfeXGwFCMjDZYdSQKwJNd1aXT1sJdUvXs1XYts1w5jC5BwFzjGQOPYVXe8uZLz7W9xK1zuD+cXJfcOh3dc8U/tX6C+zbqdV4i0e08N2+l6x4av7iN5p5ohJHcOxRo9oJWQxRH+MjhSOOp6C/d313afHMyWt1NA8upRRyNHIVLqzLuUkdQe471yUviTXJryK6m1rUJLmElopnunLxkjBKtnIyABx2FPPirxC16t42u6mblEMazm8k3qpOSobOcZ7URdmm+g5aqyN2w0LSr+413U9duzBbWt6IQqyvHlnZzkssMpA+TGNoBz1GMFdEmW1j8W6bpepT3WlDT5XjyWRJcSRhXKHvjuRmufXxLrqag9+mtait5Igje4F24kZf7pbOSPai18Ta9YmY2Wt6jbmeQyy+TdyJ5jnqzYPJPqahRtHl8rfhb/g/gNu8r+dxLeztpPDl5dvb6g1zFNGkc0aA2yKc5Dt1DHAx+NUYITcXMcKuiGRwoaRwqrk4ySeAPen/b7s281v9qn8mdxJLH5h2yMOjMOhPJ5PrUFV1F0PQPFWhWdl4Et206PTWWzvWia8hu4JJbobFy2Vck5YkhOqrgkdTXN6JoBuNehtdaxYQiP7Q63Uq2zSx4yFRpCoy3ABzjnPQVjm4nNqLYzSeQHMgi3HaGIwWx0zgAZp13e3V/MJb65muZAoQPNIXIUDAGT2HpR1b/rYOiX9bnb+KEg0bxVp140Om2FtdafEXjsra1vlRtgJIiZtp5xhyRkZIJ5p0ts8Hji8ksNP0qGwMVvd3E1zapJFbQMisSUdSqM24fIq7s/Khx14611zVrK5FxZ6pe286xCESxXDqwjGMJkHO3gcdOKfaeItbsJp5bHWL+2kuW3zvDdOhlbnliDyeTyfWhaO/r+YPVW9DtNKtNGuLf7TpirayatrEtraCXTUvvKj+UohVztQfPksMtwMDGaw4EiPgTW4JbKzE9jdQKLlIwZGLNIG+c5OMADAwOOmSScePxFrUMl08OsX8b3n/Hyy3Tgz9vnOfm6nrS23iTXLOwFjaazqEFoAVFvFdOseD1G0HHOT+dK2lvT9B3M2uzPhTS9RuNKj0KaWW1uruG0n1BrpWCO4+6YDGjoeCRyynGAxNcZV++17V9UjiTUtVvbxITmNbi4eQIfUZPFUSzpz4X8O3+u2Vho+pzO7NN9qgUvK6rGhf5WeGL5m2su3acHBz2rNsNP0TUU1C/jtdRistOtlkktftaSTSszhMiTygFUbgT8jdPfjLu9f1nUJoJr/AFa+upbZt0DzXLu0R4OVJPB4HT0pz+JNck1FNQfWdQa9jTy0uTdOZFXn5Q2cgcnj3pIpnSS+GdBsYbi8vV1N4D9iNvbpLHHIouEdiHYoR8uzghRn0GcjY8PeFrDQ/G1gXS+vpf7dltLXyXVFiWFlJeT5G3fezgbeFJz6ecy6jeztM095cStPIJZS8rEyOM4ZsnkjJ5PPJqzD4h1q2M5t9Xv4jcSebMUuXXzXznc2Dyc85PNH9fl/wSWrq39dTWtdG0y/0C5ltfNvNXjE0stut2sPkxrk79jRnzRgEkK4b2wCa55rO5SzS7a3lW2kcokxQhGYdVDdCRnpVldd1dNMbTk1S9WxbO61Fw4iOTk5TOOvPSqz3t1JZR2b3MzWsTF44DISiMepC9AT60im7u5DRRRTEFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/wB402nSf61/9402gDiPit/yKtt/1+r/AOgPRR8Vv+RVtv8Ar9X/ANAeigD5m8Q+IYLTRTpk95qF61xpFlHHYyqBa2reTG3moS5Jbjsq/ePJ71L+18O/8Jinh9tLi0+3F5CjX63Um8Icbw29imDng4GMDJPNcRRT+1dh9myPQdV0PSbfX9Ktz4W1uFnmkEtsunyx/aUUDHlq08jOQc5KuoxjGOtRnw3Bb+NUtrzQXnilsjNHZafa3TtHkkK00LSCVSOpAfHIILDrwVFJbA9TV8S6c+k+IrqzkitYWjKkx2pkMaZUHA8z5wRnkNyDkGus+HvhSx1uxjl1PT/tcNxe/ZvNhhkdrcbQSzusyLGPmG0sr5OeDwD59RQtrA9Wd1YaTosmmWVpLpSPc3Ok3l294Z5A6vE02zaobb/yzAOQc+3JNO+0vSIfDTa9Dajybu3it7aHzHxFdc+a3XJACEgEkfvVrka0dT1mXUre0thbwWlraKRFb24baCxyzksxJY8ZJPYAYAxQ9f69f+G/Ed1f+vL+vvJfCn/I5aN/1/wf+jBXaT+GtJufFVmi2hm025ed/twZmkurgKzfZygdVQ7gAEBDN2f5gR5rRTfTyv8Ajb/IXc7y90PSLjW20i20S/06+u7Em2ju7eS3/wBIDErsRpXO11Up8zH5jxiuX8RxWVrrk1npkYWG0AgaQMW86RRh5OT0LAkAYGMcVHo+sSaJcPc2tvbvdbSIZ5Qxa3JBG5ACBu56sDjgjB5rP69an+v6/rt2H/X9f13O38IObrwbrdjZ+H4NWuxJby+SBO0kq7mBJWOQHC5H3QPvc5qex8N2Mmk2sj6N5tlPZzTXmrmWRfsUw34i+9sXBVBtcFm3cHkVwNFN6iW4Dk+ld9f+GrOHxFZafJo32TQpLmONNc3Sn7UpXIPmFjD83XhRj8DXA0UxHoieH9PWe1k1zw1/ZU4+2M+nCeZDNHHbs6P87M4+YY3A7Tjpwak0EabaeKvD9xa6PaRtq2myt5PmzFUlzNGAmZM/NtUYJPXjBrzeil/X5/5lHfeFNKv5/GVzbv4UnsW+zOJI4Fu42tMxPtIPmbhvIxhyQc4ApnhvQ9ORdJstd0MyXt/q8ljMbiSWJ4ECxdEBGGBcnJz7g8Y4Sij+vxF/X4HdaX4QhvNPtb8ae8tkulXstzcb2CC4jM2wE5xuAEZ2jqOcYzUmsaDotj4OW4t9K1GctZwyx6pDauYTK23cGm84pgEsu3ylYEAZ4JPA0UPX+vX/AD/Ad9b/ANdAq5qmkX2i3SW+pweRM8STKpYN8jDKngnt261TooEWdN0671fUoNP06Hzrq4cJFGGA3E+5wB+NQzRPbzyQzLtkjYowznBBwaZRQBcsdIvtStb24soPNhsYvOuG3AeWmcZ5PPJ6DJqnRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB+ikn+tf/AHjTadJ/rX/3jTaAOI+K3/Iq23/X6v8A6A9FHxW/5FW2/wCv1f8A0B6KAPiSiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA/RST/Wv/vGm06T/Wv/ALxptAHEfFb/AJFW2/6/V/8AQHoo+K3/ACKtt/1+r/6A9FAHxJRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/AN402nSf61/9402gDiPit/yKtt/1+r/6A9FHxW/5FW2/6/V/9AeigD4kooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP0Uk/1r/7xptOk/wBa/wDvGm0AcR8Vv+RVtv8Ar9X/ANAeij4rf8irbf8AX6v/AKA9FAHxJRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/3jTadJ/rX/wB402gDiPit/wAirbf9fq/+gPRR8Vv+RVtv+v1f/QHooA+JKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD9FJP9a/8AvGm06T/Wv/vGm0AcR8Vv+RVtv+v1f/QHoo+K3/Iq23/X6v8A6A9FAHxJRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/3jTadJ/rX/AN402gDiPit/yKtt/wBfq/8AoD0UfFb/AJFW2/6/V/8AQHooA+JKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD9FJP8AWv8A7xptOk/1r/7xptAHEfFb/kVbb/r9X/0B6KPit/yKtt/1+r/6A9FAHxJRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfopJ/rX/wB402nSf61/9402gDiPit/yKtt/1+r/AOgPRR8Vv+RVtv8Ar9X/ANAeigD4kooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP0Uk/1r/7xptOk/1r/wC8abQBxHxW/wCRVtv+v1f/AEB6KPit/wAirbf9fq/+gPRQB8SUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH6KSf61/wDeNNp0n+tf/eNNoA4j4rf8irbf9fq/+gPRR8Vv+RVtv+v1f/QHooA+JKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD9FJP9a/+8abTpP8AWv8A7xptAHEfFb/kVbb/AK/V/wDQHoo+K3/Iq23/AF+r/wCgPRQB8SUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH6KSf61/9402nSf61/8AeNNoA4j4rf8AIq23/X6v/oD0UfFb/kVbb/r9X/0B6KAPiSiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA/RST/Wv/ALxptQ6lfW2mwyXV9MsECuFaR/uqWYKMnsMkc9B3pt3fW1gsTXkyxCaVIY93V3Y4VQO5/pk9AaAOQ+K3/Iq23/X6v/oD0UfFb/kVbb/r9X/0B6KAPiSivQP+FXf9Rj/yV/8As6P+FXf9Rj/yV/8As6APP6K9A/4Vd/1GP/JX/wCzo/4Vd/1GP/JX/wCzoA8/or0D/hV3/UY/8lf/ALOj/hV3/UY/8lf/ALOgDz+iu/b4X7VJ/tfoP+fb/wCzrIj8F+ZZQ3H2/HmuqbfJ6Z2/7X+1+lAHL0V6B/wq7/qMf+Sv/wBnVdvhxt1KO1/tXO+JpN32fpggYxu/2qAOHor0D/hV3/UY/wDJX/7Oj/hV3/UY/wDJX/7OgDz+ivQP+FXf9Rj/AMlf/s6P+FXf9Rj/AMlf/s6APP6K7u5+Gn2e1lm/tbd5aF8fZsZwM/3qLf4Z/aLWKb+1tvmIGx9mzjIz/eoA4SivQP8AhV3/AFGP/JX/AOzqvH8ON+oTWv8AauPKRH3fZ+u4txjd/s0AcPRXcSfDjy7+C2/tXPnK7bvs/Tbjtu96L74b/YrCe5/tXf5SF9v2fGce+6gDh6K78fC7IB/tf/yV/wDs6X/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgDz+ivQP+FXf9Rj/wAlf/s6P+FXf9Rj/wAlf/s6APP6K9A/4Vd/1GP/ACV/+zo/4Vd/1GP/ACV/+zoA8/or0D/hV3/UY/8AJX/7Oj/hV3/UY/8AJX/7OgD7M1KxttTtrizv4Vnt5sq8bdCM/oe4I5B5rl9F8DfYdUjuNVv5NTh0/wCTS4ZuRbp1yexYHgHsFB/uhcVvi9uYn+xOpz/x9/8A2FJ/wt3/AKgn/k3/APYUAaXxW/5FW2/6/V/9AeiuR8V+Ov8AhJ9Kjsv7O+y+XMJd/n784VhjG0f3v0ooA//Z)**

5. Number of threads = 8

**![A screenshot of a cell phone

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAeAB4AAD/4RD0RXhpZgAATU0AKgAAAAgABAE7AAIAAAAOAAAISodpAAQAAAABAAAIWJydAAEAAAAcAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAG5pa2hpbCBtaXR0YWwAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzY4AACSkgACAAAAAzY4AADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA0OjE5IDE4OjU0OjU2ADIwMjA6MDQ6MTkgMTg6NTQ6NTYAAABuAGkAawBoAGkAbAAgAG0AaQB0AHQAYQBsAAAA/+ELIGh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjAtMDQtMTlUMTg6NTQ6NTYuNjg0PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPm5pa2hpbCBtaXR0YWw8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgBngJEAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A90PhmQ9dd1P8rf8A+NUn/CLt/wBB3U/yg/8AjVb1Zo1ksA0enXzqejKi4I9fvUAU/wDhFm/6Dmp/lB/8ao/4RZv+g5qf5Qf/ABqrbay6jjSdQY+gRP8A4qrNhfrfpIRBNA0T7HjmADA4B7EjoRQBl/8ACLN/0HNT/KD/AONUf8Is3/Qc1P8AKD/41W9RQBg/8Is3/Qc1P8oP/jVH/CLN/wBBzU/yg/8AjVb1FAGD/wAIs3/Qc1P8oP8A41R/wizf9BzU/wAoP/jVb1FAGD/wizf9BzU/yg/+NUf8Is3/AEHNT/KD/wCNVvUUAYP/AAizf9BzU/yg/wDjVH/CLN/0HNT/ACg/+NVvUUAYP/CLN/0HNT/KD/41R/wizf8AQc1P8oP/AI1W9RQBg/8ACLN/0HNT/KD/AONUf8Is3/Qc1P8AKD/41W9RQBg/8Is3/Qc1P8oP/jVH/CLN/wBBzU/yg/8AjVb1FAGD/wAIs3/Qc1P8oP8A41R/wizf9BzU/wAoP/jVb1FAGD/wizf9BzU/yg/+NUf8Is3/AEHNT/KD/wCNVvUUAYP/AAizf9BzU/yg/wDjVH/CLN/0HNT/ACg/+NVvUUAYP/CLN/0HNT/KD/41R/wizf8AQc1P8oP/AI1W9RQBg/8ACLN/0HNT/KD/AONUf8Is3/Qc1P8AKD/41W9RQBg/8Is3/Qc1P8oP/jVH/CLN/wBBzU/yg/8AjVb1FAGD/wAIs3/Qc1P8oP8A41R/wizf9BzU/wAoP/jVb1FAGD/wizf9BzU/yg/+NUf8Is3/AEHNT/KD/wCNVvUUAYP/AAizf9BzU/yg/wDjVH/CLN/0HNT/ACg/+NVvUUAYP/CLN/0HNT/KD/41R/wizf8AQc1P8oP/AI1W9RQBg/8ACLN/0HNT/KD/AONUf8Is3/Qc1P8AKD/41W9RQBg/8Is3/Qc1P8oP/jVH/CLN/wBBzU/yg/8AjVb1FAGD/wAIs3/Qc1P8oP8A41R/wizf9BzU/wAoP/jVb1FAGD/wizf9BzU/yg/+NUf8Is3/AEHNT/KD/wCNVvUUAYP/AAizf9BzU/yg/wDjVH/CLN/0HNT/ACg/+NVvUUAYP/CLN/0HNT/KD/41R/wizf8AQc1P8oP/AI1W9RQBg/8ACLN/0HNT/KD/AONUf8Is3/Qc1P8AKD/41W9RQBg/8Is3/Qc1P8oP/jVH/CLN/wBBzU/yg/8AjVb1FAGD/wAIs3/Qc1P8oP8A41R/wizf9BzU/wAoP/jVb1FAGD/wizf9BzU/yg/+NUf8Is3/AEHNT/KD/wCNVvUUAYP/AAizf9BzU/yg/wDjVH/CLN/0HNT/ACg/+NVoarrelaDarda5qdnptu7iNZby4WFGYgkKCxAzgE49jWT/AMLH8Ef9Dl4f/wDBpB/8VQBN/wAIs3/Qc1P8oP8A41R/wizf9BzU/wAoP/jVbVtcwXlrFdWc0c9vMgkilicMkikZDKRwQQcgipKAMH/hFm/6Dmp/lB/8ao/4RZv+g5qf5Qf/ABqt6igDB/4RZv8AoOan+UH/AMao/wCEWb/oOan+UH/xqt6igDB/4RZv+g5qf5Qf/GqP+EWb/oOan+UH/wAarZtbu3vrSK6sZ4rm3mQPFNC4dJFPQhhwQfUUJd28l3LaxzxNcQoryQq4LorZ2kr1AO1sHvtPpQBjf8Is3/Qc1P8AKD/41R/wi7f9B3U/yg/+NVvUUAYQ8NSDpr2p/lb/APxqit2igArw/wAYvL/wkeIyw/cRZO4/3B2r3CuXufB0V1P5s8VnM4AUO6SZIAwM4fHSrjJx2MK9OVSHLFkfhIbvCdhvOW8th1/2mq34NtXstMntpV2vFIqlfT90lTW2jXdnbJBbPaRxR52qI3OOc/3qvabZS2guGnkR3mkDnYpAGFVcck/3am7NIxslfojkrPSdP8Z+LvEUnieyh1KDSbtLGzsrtBLDEvkxyNL5bfKXYyEbiMgKAD1zP4j0e/stIY6PaWYstDjhvNLt4t3miWMv5kfPyhGiOxQOm49sVqal4Tju9ZbVtM1XUNFvpYxFcS2BiIuFH3d6SxuhK8gNgNg4zjirun6N9gvGuG1LULstbxwMlzMGQlSxMm0AAO27kjAwFAAApa2Vun59/v1NOrv/AEu33GJe3lve+O/CV3ayrJBc2V5JE6nh1KxEEfhzWZq+qX+j+K/FN7pVqbm5Sx01QBC83lq0sytIY0+ZwgJYquCQuAR1rUtfBbf2PDYT3stm+m3ssulXdgyiS3hYnamHQocKxTaVYbQD16WrfwgtrZXiwa1qi6jeypLPqu6L7Q5TAUY8vygoAxtCY5Jxkk0egvJnOXfj+7htNItbHUrDU7vU0nnGpabpNzeQLDGyrn7PC7Pu3OFOXABByc4UzWnizxNqf9iWVta2theXxu1mmv7CdFAhZQsqwOyOA4OdrHI3Dk451f8AhAbJIbZ7TUtRtNSt5pZxqkLRefI0vMu9TGY2DYHy7MAqpABArSt/DkUV5pt3cX97eXWnpMizXDIWl80gsWCqB/CMBQoA4xT/AK/r+l6B/X9f15evKNf6l4wuda0C/u9OspoxKbfTHtZY7uMxyDyLpZGfbIhZVbKpgZC7iQc7Efi24uNN8K3MMMStq94LW7jfJMLCGVnUYPDLJFt5z0NXrPwslvrqapd6rqGoyQiUWsV2YttqJCCwQoiseAB87NgCqEngtrma/ikvJLS3OopqWnT2bKJrSYriXhkKEMS55DA+a+R0pLS1/L8/1X5DfX5/iv0Zn6z401azOqrAlrbwWWrrZPfy2ss8dpAbZJjLKiMCRubbu3KqhgTwDmtqXj3UUvrbStNurWa5XT4r241C00W81G3m8wsEEaQNlA2wtuZzxgDdyRuW3gYWEF0NO8Ra1a3N5efbbi7WSF5JZDEsbAh4mTaQgOAowfu7RgBB4BsrT7G+halqOiz2tqLQz2bRMZ4gdwEiyxuhIYsQdoI3Ng4JFHS3p+X+f/DMNP69f8jNh1nWvFt3baNPYWunWl7o8d1qMF9byNKokZ0khA3IRkDhmHHdTnAltvE93pPw/wAzJHcaxY3SaQUlfarzmVYo3YjJAYOkh74auks9Bgs9WGoie4muBZR2RaZw25EYsGJxksSxyc/hWXqPhBNT1bVRcMo0zVLeIyiJik0V1E3yTIQOu0JzngxrweaPL1/N2/DT1F+lvyV/x1fkjnbzVtU8M+NL3VPFMlnepYeHJ7lZbCB4PMCyoSnls74PA+bdg7ugxzsJrfiPRtQ0lvE8mlzWmqO0JSxt5I3s5PKaUAuzsJVxGy5Coc4OOcC1B4FszfXN5rGo6hrU11Yvp8325owrwMwJXZGiKO/IAJzznAxLpvg6KyvLWe81fU9WSxUiyhv3jZbbK7cgqis7bSV3SFzgnnJJJrypev5t/qv63Wl2/wCtkvzTMSLxP4mm8D3XjEHSo9PfTJr+0sGtpDKiiMvEXl8zDZABZQi43YDHGTp6x4ovdPv4IIYrdlk0S71Al1YnzIvK2jr9394cjr05FPsfA1pY2s2nDU9Sn0WSGSBdImkjMEUb5BVWCCXABIALkAHjoMQ2vw+tYrj7Re61q+pTjTpdMSS7lj+SCTZkAJGo3DYPmILHJ3FsDClqny9tPuf62LVrq/f/AC/4Jl2niDxrc6ho1m7aHG2t6e17HILWVvsJQRllZfNHnZ80AEGPHJwehgl+I2oHTdGtVhjh1a9F19pmg0y5v4ohby+U7LDD85DORjLAKDyScBuyh8O2kN/pV2kkxk0u0ktIQWGGR/LyW45P7pemOp49M5/AlktvZiw1DULC7sp7iaC+t3j81RO5eRCGRkZCT0ZTjap6jNXK19Nv+C7foRG9tdzHtPFvifU20SytrO1sbu/N4s89/ZTxgCEqFmSByj4cEHYxBG77x2/NR/t7xNrd14TltdRsbCVtSu7K9iW1lkjlkhWZWbAlXKHy8hTkgkHJxg9rb+HIorzTbu4v728utPSZFmuGQtL5pBYsFUD+EYChQBxiqB8C2SWtrHZ6hf2ktpqM+ow3ETRl1kmLl1wyFSpErDBXIGOcjNJbg9Y/15/8AxHv9S8YXWt6BfXenWM0fmm30yS2kju4/LkHkXQkZ9sqFlVsqmASF3Eg51o/FlxJpnhrUvKhS21G4FrqCsCWtpWVlCgg4GJl8s5zyav2fhZLfXU1S71XUNRkhEotYrsxbbUSEFghRFY8AD52bAFU5fBwvbPX9KvZvL0vUrgXVsbZts1tIcM5GVwD5i+YDzyxyKlXt/X9ar1Kdm/66/5GdZeIJtY1rRLm406wmiurm/NhK0OZYoo12o6uScF/mJIAyrAepNKx8d6xLoNxf3NxpZvI7mzhm0r7JLDcaeZrhEKSh5Mt8rHa4VAxXIBBrrx4ZsEfSTB5sCaTA8FtHEwVQrIE54zwAMYxWY3gCzubW8TVtW1PU7m5gjgW8uHiSaBY33psMcaDKvhssGJIGcjimtJeX9fn/T6Nbr+v6/r7l1XxTNYaxrtpLc6fY2+n6fbXEV1ebtiSSvKh34Ybh+7XCjBJOM8jHKX/AIqvtc8J+JdP1LbJJY/Y5EuF0y40/wAxJJRwYZyWBBQ/MCQQR0wa6dvh3ZTHUJrzV9Vu72/W28y8lkiEiNbyNJE6KsYRSC3TbtOBkEliZF8A2TR6p9t1PU72fVUgW6uJ5I9x8liyFQqBV64ICgcZxkkk6MJb6f1ojR8V6pf6P4buL3SrU3NyjIoAheby1ZwrSGNPmcICWKrgkLgEda5G51XxDqd74PuNJ8T6Nc295eTo09lZytDcAQynlRcdguNpJw4Bzxtru9UsJNRsTbwahd6dJuVlubQp5ikHPR1ZSD0IKkVif8INaLZ2SQalqEF3aXr34v0MXmyzSKyyFwYzGQwcjAQAcYxiiO+v9f1/V+hLVWX9f1/XnUbxffjw3JqHk23mrr/9mBdrbfK+2i3z9772znPTPbHFYHi7WNf13wLr+oWbaaujRzy2i2zROZ5Fim8p5fN37V+ZWITYcgD5gTx0tz8PbG5vGdtU1RLM6imprp6SoIEuFkWQuPk3kMyklSxXLEgA4IZqHw6sdQiv7X+1tVttMv5jcTadbyxrCJSQxdSYy4yw3Fd20knK8mnHZX/rRf8AB/rYnre39b/8D+t62p+JBoureI5rfTLJr1JbCzt5AnlvcSTYWMSyDJKqz+nAzjmtLTtU1yx8VQaL4im0+8+22klzb3NjbPb7DEyB0ZGkkzkSKQwYdCMdDVm+8IaZqR1X7Z57jVDC0oWTYYmiA2NGy4KsCAc56inaT4aGn6kdRvtVv9YvREYI7i+8oGGMkFlVYo0XkgEkgk4HOAKUfP8ArTT8Qf8AX9en9dsj4gaf4curH/ic6PFq+q3MT22m24iEk5cg8xE/6rBILSDaFABY8Csu18Ow+IvEc2j+NVh1d9K0OzTbMA6ieXzRLOueQ58tQH4IwcYya6TU/CLX3iM63Z6/qml3TWq2pFqts67AxbgTQuQSTzgjOBnpTb/waL6SK4Gu6tbXwtfslxeW7QrJdxZJw48soCCWIZFVhuOCM0re7/Xn/nr/AMAb3/ry/wAtP+CcNqsdzrHwZ8PazfapfSTwGyUqk5SO5Y3UK+ZIF++cA4BJHzE4zgjqPiNpNleaVLcTeFzrN2LWVIbwojDTzjIkGSZFOTnMKM/yjjIWt3UfDGnah4ah0IK9rYwGAxJbkAoIXV0UZB4ygB9s/Wm634en1mVtmv6rp0EkXkzW9m0IWVec8vGzqSCRlGU9O4Bolre3d/l/Ww4tK1zF0KaPT/ElhLDeLe2XiLTY5Fvc4+0XMSL8/wBZIjn/ALZVxzabp+oapq6aRoc7eKf+EjZodVh0508hBIhYtdbQu0IGBTeSc42nOK9G1fw4H8P2NloKQWk2lSwy2AfISPyyBszgkAx7kJwThjWjpekwaSLz7M8jfa7qS6k8wg4d8ZAwBxxVac/N6/mmv8vkZ2fIo+n5NHIP4x1yCx1XUZY9PaCHUm0qwtRG6vNO1wIo3eTcQq/MMgITwSCPu1Pe63rmkT3WmeIjpWpfaNJuby3ktrR4UzCFDxSRtJJuBEinIYdGGOhrZk8IaZPol/pVx58lvfXT3bnzNrxys/mBkZcFSrYKnqMDmsfV/Dl7Y6ddywHVfFGq3lrJYQz3UtrELSNxyTtEYCFgpYqrucDg4xWbv7O3W36f/Ja+hqrc9+l/1/y/rtl3Xja5s20/RdBt4rBodJt7uUw6Fd38MYkBCRJHb48sfI3JbgAAA840bLxT4h8SXVtYaPbWujXkemw31/8A2nayzeU8pZUhWMPE3/LNyWJGAFG3JONFvBan7Bc2mr3+lajbWSWUtzYeV/pEa9AySo6nByQcbhuIzgmpb3wfHcXlve2Ws6ppl/Fai0ku7aSNnuYwcgSCVHViDkhsBhubBwSK1la79X+tv0/4PXKN+Vei/S/6/wDA6YH9oeLLHxh4nmFxbalHZaVBcRaXDbSAySETbVRjKQCWXk7CWG0YGOYU1i4u9OsfFU2p6ZqT6Te+VcyWVtJam3gkCpPHLHJIzIyHZIQ2DhBlR36i48JpLq0+o2ur6nZTXNmlpN5EkZDhN2yTLoxDqXY5BAP8QNPsPClpa2epQ3txcapLqo23txeCPfMuzYFIjRUAC8cKPfNS31X9a/qUv6+79Dc60Vy+neFb7+y7dNW13UBdxw28Mhs7orG3kSFg4BXgyDAk9Rx2zW7pun/2bbSQ/a7q73zSTb7qTey73LbQccKucKOwAFPQOhbooopAFZGq3PiOG6VdD0rS7y32AtJeanJbuGycgKsEgIxjnI6njjJ16KAOftrzxi11Et5oWhxW5cCWSLWpndVzyVU2qhiB0BIz6jrXQUUUAFFFFABRRRQBzfij/kYvBn/Yak/9N95XSVka/oA15bBl1G80240+6+1QXFmIi6sYpIiCJEdSCsrdvSqX/CL6v/0PfiD/AL8af/8AItAB8OP+SWeFP+wLZ/8AohK6SqOiaVBoOgafpFm0j2+n2sdrE0pBdlRQoLEADOBzgCr1ABRRRQAUUUUAebeJL6+8Ha3PD4Ji+2NeI1zqGnLE0iacGJzeqq88ncTAOZSCVwQ5bsPC2nabY6JHNpV1/aC32LmXUWcO967AfvWYcHIwABgAAAAAAVPomhWug2kkVs0s808hmubu4YNNcyHgu7AAE4AAAAAAAAAAANL0K10e7vpdPaWKG9kEzWm4eTHJyXdFxlS5OWGcEjOASxYA0qKKKACiiigAor4I1PwM2n22pTJqKSrazxx25aPYtwjEDfuLYQAsBzkfe54qpZ+DNSuNY0+ynks4o76Xy0uUvYJY+CAwDK+0sNwOzO45GBzRH3tgem5+gVFfnzL4Q1MazNp1r9lupIUeVmivYGVY1bBZmDkJjqQSCB1qxpXhKeTXJbLVYiwjtmn22l7b7pAYyyMhZ9si8ZO0k4z3pXVrjs72Pv6ivzusfD2qalbwz2Nt58c1x9mUpIvEmM4YZyowCctgYB54NZ8iGKVo2KkqxUlWDDj0I4I9xTEfpDRXwZd+AGtVvHGpLJHb2IuUcQHEkmCWi68bcHnn+HgZ4wJtEvbE3Ml/asIbG6W2ugsqgq53fKDzzhG5AI4o2dmG6uj9EqK+BrnwrbXfivS9M0iVraHULe3mze3EZaPzACRuOwMRngAAntUFr4TkXxhBpF5JBPG02G+yahbb3QNtIUmTaHPZSc+1HW3r+AdL/wBan6AUV+ett4Z1DUri+/s2BRBZzCKV7m5iiEZYsFDMzBcnaRwcZ47irOnaDbtBrtpqtvdwanplu8wKzKEUqyqUZNhJ+8eQwpX0v5XHbW3yP0Bor89oNFR/B95q0iyNJHNGkbRXEJVAdwPmR7vMBOBtOMdarS6BfwaUmoXCwQwSIJEWW6iSV1JwGWItvIJ7hcd+lMR+iVFfnm/hfUo4YZj9iaGaQRCWPULd0RiCQHYOQmQD97HQ1b1vwfcaJ4i/sx7uynUy+WsgvYEJwASWBkPl/wDAyKfWwdLn6A0V+feoeGZz4q1DTNJtpkjtGJb7bPEpiQY5kkDeWOSBnOCSBTYvBmuyz3MQtI0NqYxK8t1EkY8wExkOzBSGxwQSDx6iktVcHofoNRX5xXdpPYXs1peRmKeCRo5I26qwOCPzrotP8I2uoafZ7NSnXULyzmvI4PsgMIWNpAQ0u/IJ8s87Mcj60dOYOtj77or89G8J6wmmi+a2j8kwLcKv2mIyNESAHEe7eVycZA459DTrnwjrdqsZksgzSTLB5cU0cjxyN91HRWLIx9GAPB9KA8z9CaK/PqTwTrqS2sa29vM93I8UAt76CXe6DLD5HOMD19R61BL4X1KG6hglNihnjMkcp1G38pgDg4k37Mg9s59qAP0Mor8/LfwL4iuppo4LBWaFgrH7TEASU3jaS2GynzArnIBPasfUNPudLv5bK+jEc8Rw6hww6Z4KkgjB6g0Afo3RX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uUUAfpHRX5uV0nw4/5Kn4U/wCw1Z/+j0oA+/6KzqZHLHMpaF1kUMVJU5AIJBH1BBB9xQBqUVnUUAfCGn+MJLS9uZrq1+3RSyxulvPMSkarOJdgGOhO4dvvE+1XNa8ey6pLpMkUF2X0y7e6SS/vjdO5YodpO1cKCnAA6H15PIUUL3bW6A9W33N+bX7BL7UrjTdNuIF1C2khkSe7EuxncNuBEa8DGMHP1qLwvrNloOqG+vLG4vHVGSNYrpYQNysrZzG2eG46Y96xaKSSX5Dvc6bSPFdpocV1b6fpcrW18xjvEnu9zS25Ujygyou05JO7HULwACDzchQysYlZYyx2qzbiB2BOBk++BTaKYjo5/F80+sX92YpPs93DNGlq05KxGRAhbpgn5VPQZwPSrGseLtP1Szu4E0aaBr+/S+u5Ptu4swDAqg2YUHeSM7iO+e3KUUf1+obHSan4nsrjVNK1DS9NuLWfTVhRftF2syusWNvAjTB45OfwFNi13RoPFkWsxaTfBI5vtH2c6ghJlD7h83k/d7Yxn/arnaKadnf+tQ6WOxh1fQJdI1qa5sbvyri/tpksxqKLKW2zFm3eVyo3AYC5GRzUFv4usn1DWb3VtLuLi41ZHif7NeLCkcbFTgAxuSRtHJPTt3rlaKmy/T8LDbu7nQWOuaRaeHb7TJdLvZGvXV2mW/RQpQsUwvkn+9zzzjjFR6lrdhqtjbm602Yalb28Vss8d0BC6x4CloihOdoAOHAzzjtWHRTEdh4l8ef2/osunJZ3UKSXUdwomvjNHBtVl8uJNgCJ83A7Y6njGdq+t6VrOsJqN1pl4ksp3Xix3ygSHaBlMxHZyM87vT3rAoo63DyOuvvGGnX2q6nO2j3ItNWQC7gN8pfcrBlaN/KG3BHQq2efwp3/AIqW8tJbWKx8mDzLXyV87cUSBXUKTj5id+SeBx09OdooWmwF7W9S/tnX77UvK8n7ZcPN5e7ds3MTjOBnr6VbuvFGozeH7LRoLq6t7K3haKWBLhvLnJlZ9xQYH8QHOfuisailaysO+tzTvtae6vNPuYohDJY28MK5bduMfRunf0rptL8U6bc+Jrcx2n9ljUNThur+5nujIilX3fIAFKLuYnksRxzwc8NRVLe/z/Ulq6t8j0TX9atrCbTtRDRtcQy3CDT4L21mj2OmPN3W0aorEnoQWO0dAK5Xwxr6+Hr24naCdzNbmFZbW58iaEkg7kk2ttPGOnQkVi0VKVim7nc3PxJNzdzztpjZlYE77su3/Ho1vyxXJPzbsn6e9crrep/2zrE195Pk+YEGzduxtUL1wPSqFFPrcXSwUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/5Kn4U/7DVn/wCj0rm66T4cf8lT8Kf9hqz/APR6UAfa/iS31e802O00KdbWS4lEc9yfvQRYJZl5+9wAPr2+8MrSPC1z4W1y3GhTtJo1wu28tp23NG4TiVTxyxABHv0xjbu/2vb/ANyT8h/jR/a9v/ck/If40AX6KhtrlLqMvGGABx81FAH550V3mvaFo8viK00LS/7JtXnvIbctB9se4jDYBL+YfKPJz8pz0x3qrY+FtF/tXRJJNTuLzT76+a0fFnsYujJkAeZnYwcfNkMP7ueKaV3YV9L/ANf1ocbRXWw+FdN1TxBqEGm6jNFY2KtJPLcwxQlP3gQIu+YK3JHLOvfvgGOTwpp1tLqUlzroezsVhYS2cKXDSebn5cLJsDKRzhyOuCeMyndJ9ymrNrsctRU99DbwX00Vlc/a7dXIjn8sp5i9jtPIPt/OumsdN0/UPC6JotnY32qiKR7uO6mlS4jxuO6FQ6xuoUA4+Zs5yMU+lxdbHJUV0V5bWo+H1hc2rRuxvpI5WezEcofy1JXzA53oM8Ahec1IPC1jdnSYNL1K6e81SdY4obyyWEBCceZuWV/lzkDjnB9OTrYV9LnM0Vv+JPDtpokNvLZavDfCV2RoxJCZExjkiKWQbTngkg5B4qro2jxajDe3d7dNa2VjGrzSRxebIdzBVVU3KCST3YADP0JuN6GVRXeaBoOjadrV297eSXSx6W99aE6ckqMhiyHdHkxvXP3DlSR96uM1G4W61KeaNlZHc7WW2SDI7Hy0+VeOw4o62Baq5Wor0PTfDnh2ZtFS5iXz5rQCa3a4YNPJIpZJFAOcABunGQoPXnHPguMeFm1d76SKSGCO4mtpI4Q3lu6ruVRMXP3gQWRQR3GRk6vy0Ba28zlKK7DXfD+gpqWjWWkXd4k19Ba5EtoAp8wDMhPmsQ3OdoGPes290zQtPv44k1m4uPKuGiuR/Z4BXb0ZAZMOpORyUPtR1t52+4Ohg0V2GpeHU1T4h6ppEU0FtdM7fZIre1EUMsgGQmN58oEdDkjPXA5HPa1p8WlapLYxXJuXg+SdvL2BZRw6rycgHI3cZx0pJ3SfcChRXaeC/B7a5pVxcS6Vc3i3Mps7aaJXK28nls3mNt4wG8sfNxhm9K4xlZHKOCrKcEHsab0dg3VxKK6O7tbb/hX9hcWrRuxv3jlZ7MRyh/LU7fMDnegzwCF5zUviHwlaaPZ30tlqz3smn3y2VwrWvlLuYOQVO8k42EHIHPTI5oen9en+aBa2/r+tjl6K1vC1nYah4p0+01VpRbTXCIwij3F8sBtPzLgHoSDkehrdttK8P/bvEcMV1ObW3s2Yyz2K74GFzGMRqJG3HBKgll684GTR2+f4AtX934nGUV2kfgCH7ZeGfV1jsLdbcx3DLDG0hmj8xRtlmRRhc5AcnOMAjJHK6nZrp2qXNnHcw3awyFFngbckgB+8D3FGzsHS5VortNLXR9P+Hl1qKSu1/LdLAWn0mC4CHy3bYpkc4UnBLgBhgcVRu/CVvbW93D/abNqtlaLdz232bEQQ7TtWXdksA6kgqB1wT3Ho35f8OC1t5/8ADHM0V2P/AAhelv4iTQofEEh1AzLG4ewIjwVLEqwckkcAggdTgnHNXxJ4SttE0i3v7PU3vFmMWUe18oqJIvMX+NsnHUfqaNlcN3Y5iitXRtHi1GG9u726a1srGNXmkji82Q7mCqqpuUEknuwAGfoen0DQdG07Wrt728kulj0t760J05JUZDFkO6PJjeufuHKkj71Gyuw8jg6Ks6jcLdalPNGysjudrLbJBkdj5afKvHYcVrRaFpaaFZ32paxLay3qStDEln5iqUJA3tvBAJAGQrY5yOOV0DqYFFddF4KtGumsJNYaPUYIop7mI2uYo43KZ2yb8syq6kgqB1APq258BXNjbXFxf3sMEUbqkblTgkzeWQ/9zA+fvwR+D6pdxX0ucnRW34l0GLQriJLaa6uYZQxS5lt0SKXB6xOkjrIOeSDx061D4e0Zdb1F4JZZYIo4jLJNGsZCAEDLGSSNVGSBkt1IHOaFrsN6GVRXYXHgmy0+61BdT1po4LWS1SN4LVZmm89C68CTaMAc4YjrgnjN/QfBtlpvi6yj12881f7YaxggS0Eq3JjYBi+5gFU7lHRjyeOOT+vy/wA0J6K5wFFPmAEzgDADH+dbd14ftbOCzgmvpm1W8iimito7YGICTBUNKXBB2kHhCOcZ64FqVJcraMGiuk1Lw7baZb3lxp+pm7udJuUhu4pbQKgYkjKEs29dykfMq544q5rmlx6t4gskjWCzaXRVvJPs9skas627SH5F2gbiuOPWlfS6/rS/6BZ3t/XY4+iuz0XwDHqsFlLPqxtluoIpBttt5VpLhoFX7wzyASeOCeOOUuPBOm2ayz3euzLap9nCPHYbnkMpkGApkAGDETyeR78GrP8AQRxtFdZF4Kj+06vbS38011p109uttYWyzTTBc5k8tpFbbx1UNjnOAOefitrJ9HuLiW/8u8jkRYrTyWPmqc7m39Bjjg9c1NwKdFFdtHoOk6vf+EorOzexi1Mus4WZpHcLKV6njcQMcADJ6dqrsJ6I4mivT4fBuk6j9nuYrG2S4ga4W50yzuJCjskXmJGZHYncOA5UgAdMEE0g8G6PNGNUsobG5VbIs9stxKlosomEbSeYz7/KUEkndyV4OCBS8hnmNFb/AIy0uw0vW4xpDhrS6tYrmMAMAu5eQN3zbcgkbucEZ5rAoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuk+HH/JU/Cn/AGGrP/0elc3XSfDj/kqfhT/sNWf/AKPSgD7GooooA2dI/wCPNv8Arof5CijSP+PNv+uh/kKKAPha48W6vdXUF1K9oLm3mSeO4jsIEk3r90l1QFvoSQe9Uf7WvhbW0C3BWO1na4hCgApI23LA4z/Av5V2UFnp+s6h4KFxYWlrFes6SxW6eWsgExVVLfeOQAu5iTz1rct9I0nU1tLmSPTpNRge7QEWiW9pNIkO/bsUAOkbHliMtyDkYo2V+1/wDrb+uv8Awf6uefHxZqx1J78ParPJG0cuyxgVJlY5IkQJtfJ5+YHkD0qpPrF5Ol2jNDHHeFDNHBbxxIxT7uFVQF69sZ716T/ZeiTWo1i2ayS5XTDI01zYRpCyi4EbXItgu0/LuCrt54JAOccZ46tbG38QRPpsJgjubOG4eFkVCjMgJyi8LkYbaOBuwOKW1v67/wCQ1r/Xp/n/AFoc3WrbeJNSs7A2lobWBDG0ZljsoVm2t1HmhN/IJH3unHSsqin0sI1m8Tak+hjSG+x/Yl5CCwgDA4A3b9m7dgAbs5PrTrvxVqt4YWle1jlt2RoprexghlQoMJh0QNwAOM9h6Vj0Udbh5F/VNZu9YkV71bUOpJ3W9nDAWJ6lvLVd345pumaveaPNJJYSIvmoY5EkiSVJF64ZHBVhkA8jqAapUULTYNzSk8QapLfXF491ma5ga3kOxQPKI27AuMKMcAKBjtis2iigC+uuagmoWl6txi4s0SOBxGvyKgwoxjBx71am8W61caU+nS3SG3khSCTFvGHkjQgorOF3NjaMZJxWNRQHmah8SambazhaSFvsJQ28htYjKm05UeZt3kAn7pJHtVSLUJ4dS+3DypJy5c+dAkqknrlGBU9e4qtRR1uHkbV54t1i+uri5nmtxPcwmGWWKzhid0PUZRAcnoT1xxnHFUNS1O71e7+1ahKJp9ioZNiqWAGAWwBuOO5yT3NVKKALZ1W8MFlD52I7Fma3AUDYS24npycgdc9BUV3dTX17Nd3LBpp5GkkZUCgsTknAAA57CoaKANZvE+pNoi6Sfsf2NeQgsIAwOAN2/Zu3YAG7OT61Bda5qN7HeJc3G9b25F1cDYo3yjdhuBx99uBgc1Qoo3AfDLJbzpNC5SSNgyMpwVIOQRWjeeI9SvpLmSd7dWuovKnMFpFD5i7w/OxRk7lBz1461l0UAbEXivV4ppZPtEUvnRRRSRz2sUsbLGoVMo6lcqBgHGevPJrKmlaed5XCBpGLEIgRQT6KAAB7AYplFAFgX9yNLOnCT/RWmE5j2j74UqDnr0J46Ven8UavcaZ9glulMJjWJmEEYleNfuo0oXeyjA+UkjgegrJooA0F13UU1wawtxi/DbxNsXrjHTGOntRe67qOoWUdpeXHmQR+XtTYoxsTYvIGeF4rPoo6WDzLumaveaPNJJYSIvmoY5EkiSVJF64ZHBVhkA8jqAalk8QapLfXF491ma5ga3kOxQPKI27AuMKMcAKBjtis2igAqea+uLi0trWaTdDahhCu0DaGOTz1PPrUFFAGvL4p1ibThZPdL5XlrEXWGNZXRfuo0oXeyjAwCSOB6CnXni3WtQ84Xt4s6z3KXUqPBGVeRRtBI24xjjb0PcVjUUAaGpa5fatHDFdtAsUBYxxW9tHAilsZO2NVGTgc4zwKbpes3ujSyyWEka+dH5UqSwpKki5BwyOCp5API7VRooA1L7xJq2pPM97d+a07xPIfLUbmiUrGeBxgEj375q3beOPENpcS3EF+omkuWujI1vEzJK33mQlTsz0IXAI4PFYFFACsxZix5JOTWlL4i1KfTI7CeSGWKJBHHJJaxNNGoOQqyld4APQBuBx0rMooDrc2L3xXrGoIq3dxFIokWVwLWJfOdejS4X96ev393U+pqWbxlrU95a3by2qz2q7InisII8Jt27CFQBl2kjacjB6VhUUAbz+N/EDzRy/blVoliSMJbxKqLHJ5iAKFwAG5wB7dOKp3HiHVLu38i4ud8eYzt8tRzHv2dB28x/z56Cs2igDZh8WavBe3F5HJbG7uJmne4exgeUSHqyuUJT1+UjB6VSj1a+h0m40yOfFndSLLNHtB3MudpzjI6noap0UAFbV14u1e7gtonktYltHD27W9jBC0JB3fKyICOeeDyaxaKANmbxZrM13bXBuY43tS5iSG2iijBfhyUVQrbhwcg5HByKQ+K9XN+LszxbhB9nEX2WLyfKznZ5O3y9uecbevPXmseigCzqGo3Wq3z3l/L5s8mAW2hQABgAAYAAAAAAAAFVqKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/yVPwp/2GrP/wBHpXN10nw4/wCSp+FP+w1Z/wDo9KAPsaiuj+y2/wDzwj/74FH2W3/54R/98CgCrpH/AB5t/wBdD/IUVdSNI1xGiqOuFGKKAPgK98S67qNuLfUNa1G7hDBhHPdu6gjocE4yKjudd1e8vYby71W9nurfHkzy3Ds8eDkbWJyOeeK9H8TQXupeLNNsNUsfEH9lTalbxl7u7c2UinAxGnlqFJBOCHPGax7B9Gtbzw3rMGj2tqr6rJbyI88zIFRoishJfO8bzzwp/u9qqKu7eYun9ef+RyB17Vzqg1M6re/bwMC7+0P5uMYxvznpx1qpcXM93cyXF3NJPNIxZ5ZWLM59STyTXoUegQ3njLU01rw3JZSRQyTW1jDbzu18fNALhGmVnwpY4R16ZwQCDQu7HRLBtduhoE/+hi2EdnqQlg8t3zvyiybtpxkAuT05PfNO6TfUprVnEUVPfTW899NLZW32SB3LRweYX8sf3dx5I+vNd3pMWqap4IWy8vV9DsobaZzfRKy2F4vzMRN90bjwgfLZwBtqulxdbHBG0uFs1u2glFs7mNZih2MwGSobpnBHFRV2d9o2oS/C6xvBot3bxxXbs0iLOY3jMa4mKsxQZJxuUAHGKuXXhyJG0O31jwz/AGLFd3MRu9QjS5SOON+ke6V2TcRyT24HZqdvet6fiK+l/X8DgKK67xvpen6Ylqtromo6VcF3D/abN7eKVRjG3fNKWIOckMBgjjvVPwnpcOo/2i/2D+1b23gD2unbnH2glgGOEIdtqkthSDx6A0lqN6GHaWdzqF0ltYW81zcSHCRQoXduM8AcmkurS4sbp7a9t5baeM4eKZCjKfQg8ivQ9OTT9F17VoItGtfM/sSSeWCWaZjbSGH54ciQEDJIIOXGcbs151PIs1xJJHCkCuxIijLFUHoNxJwPck+9Lrb+t2v0BbX/AK/rUZRXqel6pBBqXhrTZIn+2fYI4oHCAKIplJcN3zngezt+NG48KWFr4Blv7jTR9qgsre7S6jilWKYu6Ap5hnIc7WwwWNcHuO7el/J2/MFrZdWedUAFmAUEknAA716Lr0C6tdeGpv8AhHIY9NuYrKJr+EXG3+60IcyFeMEf3uOtYFzJZ3GvpY6L4Wje4t7qRUhhluJTcoOAGUPu3DBOUK/Sn9q3m19wdL+S/E565tp7O5e3vIJIJ4zteKVCrKfQg8ioq9F1Xw2B8RNYh1vTrqHTZI3lN/ctMTbIAMTBmP7z5sLgk7s4HODXKeK9PTS9fktILL7LbxoohbeX+0JjibcTg7xz8uAM4xxUp6J9/wCv6/4cff8Ar+v68jFor1H4fTXkPhjT/s1vqklu2qzi5ktZittEvlw/NcptIdAMnBZeA3PPHmMwVZ5AjB1DEBgMAjPXFN6Owlqr/wBdf8hxtLhbNbtoJRbO5jWYodjMBkqG6ZwRxUVdpeaNqEvwwsLsaLd28cV4zNIgnMbxmNcTFWYoMk43KADjFP8AFel6NFp+tHTNKSxfS9WSzjkWeR2kQrLnduYjqgxgDjg560PRv+u3+YLVL+u/+RxFPjglmSR4ondYl3yFVJCLkDJ9BkgZ9SK1vCF3BY+MNLnu4IZYluo8+ezBY/nHz5VhyOvPHqDXVTo2nar4nfVPDK2KCwZhbt58a3P+lxYcl3JIz12EAjpjrQ9LfP8AAFq7en4nnlFemW3hfQ31LUZItKnu2SGzli021hlujGssId2CLNG5AYgZ3nGeQcgjgNZitodbvIrGC5t7dJmWOG7XbLGAfuuOxHSh6Owbq42w0jUtUWU6Zp91eCEbpTbwNJ5Y9WwDjoevpVSuxg1C2T4VTIdHsnY6kkRkLzbi3kviQ4kxuHYY2/7Jq3qPhywttEu3XSfLsYrCOe01syyf6VMdpKct5Z5LjYqhht5PBolpfy/yuC1t5/52ODor0FbDw9N4+j8OHQI0hFwq/aEu5vMZdhLBssRgkjGACMDk85q+MNJ0i28N2d5pmmJZTSG3Zyk0jhvNtxIRh2OAD07+pND0VwWrscRU1pZ3OoXSW1hbzXNxIcJFChd24zwBya3PCelw6j/aL/YP7VvbeAPa6ducfaCWAY4Qh22qS2FIPHoDXTacmn6Lr2rQRaNa+Z/Ykk8sEs0zG2kMPzw5EgIGSQQcuM43Zoeiu/63/wAhbu39dP8AM88urS4sbp7a9t5baeM4eKZCjKfQg8ioqfPIs1xJJHCkCuxIijLFUHoNxJwPck+9dITpGm+F9KmuNEivZ76OfzZ3uJUZCHKoUCttBHXkMDgcDkldB9TmKK9F/wCEd0i2tzJdaL/xKIraCeLWTPIPtchKF487thzl12qAy7eTwaNV8F6TpFtfOYri7ljvI7MwRsS8cjS7wqAfeJhwBnPzZ/CtnYSd1c86orq/HGippclpPb6ZHplvc7/Kt3inhuAFI5ljld8deChKnnvwK/gnR01fVrgTWgvY7e2aZrZYZJpJOVGEjjkjZm5z94ADJ5pLUb0OcqSCCa6uI4LWJ5ppGCpHGpZmJ6AAck16Bq+iaFoV9qz/ANjpdrHPYJDDPNIixedE7yDCSZPI4G8445POdfw/4ZtNM8XxSaXpIvxD4glt5J5ZZMafFGy7D8rKNzZOC+QSoAGep/X5f5ildL+uzf6HkhBBwRgiinzf8fEn+8f5111/oUVtounva6J52n3FvBJca7iZ/JdiN65VvLXacptZSePUihaoqWkmjkI43mlSKFGkkdgqooyWJ6ADuamvtPvdMujbalaT2c4AJiuImjYA9DgjNdl4j8NQW2n3iw6C1g8V5HBpk6ySO2pI2RuAYkOSArZjAHzYxyKt6p4ZvJ/Eej2+p6VdKkuiCKJZYnj33CWrFUB4ywcL8vrxilfS/wDW1wW9v63POqK9R0jwXpdv/Z0et6QTcyW1qZ4pZpEKvLeNESQrAghMfLxggZHUGlqGl+H9OtZb5dBhmDmzWOCS5m2J5hnDk4cMciMdxzz04NW/Owu/krnndFejWnhOzl1bX9PstFe4e31CWC3u7yK4a1gjUnh5YnGxu+WDDpnaMmuRtbLf4R1C7/srzvJuYk/tD7TjyM7vk8v+Ldjr2x71N9L+n4jtrYx6K2Liy2eDbO8/sny/Mu5I/wC0ftOfNwoPl+X/AA4znd3z7Vm2QnN/ALOLzrgyL5UXlCTe2eBsIIbJ7YOafWwulyGivWJNP1H/AITrSrrWorq0up9GVLe6ubdji7EBxgEcyA9F67tver/7qa6X/kKWfiFdLOC2ZdSeMTj8RM0ecf3UPcDk629fwv8A5B/wPxt/meMUV7QXV7zUJtIhv4tbUWj3tnp0jNdSfu2zGZAMgb9nmvjqORk15l4zNofGmqnThEtv9obAh+4D/Ft/2d2ce1LrYOlzEooopgFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFdJ8OP+Sp+FP8AsNWf/o9K5uuk+HH/ACVPwp/2GrP/ANHpQB93UUUUAFFFFAH563Gn3tosDXVnPCtygeAyRMolU9CuR8w9xU9zoWr2d7DZ3elXsF1cY8mCW3dXkycDapGTzxxXdLMtldeENR1rUrK5NlM5vZE1GG5kjZpmZXIVyzYyGyM9K0bfVNFsFtNKup7WAu92sNxb3sc8iCSHZ5skwYoryNnuAoAyAOSdPvDqeaHQdXGqDTDpV79vIyLT7O/m4xnOzGenPSqlxbT2lzJb3cMkE0bFXilUqyH0IPINep/2roktqNHuFsYbgaYYlhtb+MRFRcCRbZrkttyVGWbPcgYOAOM8dX8GoeIImtzbM8NnDDM1ocxGRUAIQ5OVXhQcnO3qetL+vz/r+tRf1+H+f9dObooopgFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXSfDj/kqfhT/ALDVn/6PSubrpPhx/wAlT8Kf9hqz/wDR6UAfd1FFFABRRRQB8BXnhnV9PjvpLyzMaafKsNyS6nY7dBwfm+oyOR6is+0tZr68htLVN888ixxrkDcxOAMnjqa7a28W2d/cXkGs3Jt7UzQmOa2RhLIq3CkuT2YRgc8cIvfrf1nxvax6h4fvbLVTPdWV7I1zLaSXZJtyYyE3zkuwIDZXIGc8c5JDW3N1CW7S6HnE0T288kMy7ZI2KMM5wQcGrGm2H9pXn2f7Xa2nyO/mXUmxPlUnGfU4wB3JFddN4le08QapfN4obUpJbKaOyuFM7NCWkBVB5igqQATkcA9DmovCvia4k8Ry6hr/AIkNqr2xgnM3nM10PLZEDeWjb9pI5fn61Kba87f5jdr/ANeRxdFdz4b1nTNFspLK/wBWiugbotZSxQSMunyBCBdAMoJ5K/KBnjJGVXPFXDM91KzzeexckzZJ8w5+9zzz155quv8AX9f162XT+v6/r0vqTeFNbt2uFmsWQ21qt3LmRflibo3Xn6Dng8cGsmNQ8qI0ixqzAF2zhfc4BOPoDXc3vjG2n1TU7YTRnT2tZ47ecRPvkJjwiHPOA27GQMb2z2wniLUNEu9P1ZbLWoZpdW1iO7VfIlUQRYkzvJTqC/IXPsT2H5f1r/X9MFqtf60Ob1Dw5dWWs2mmwzQXst6kT2725YLIJPuffCkdR1Aqpbae8+rx6dNNBaSNN5LS3Em2OI5wSzc4A9a6281u00nxNoGq6TrqXC2cFtb3K2YnjfbGAHHzooKnBGM89xT4dckT4iW2pz+NvOto5fM+0l7slYfMyYcGPdyP4cbfemrcyXS7/wCAJ/DfyX/BOHmj8meSLekmxiu9DlWweoPcVoaboj6np1/dQXtsj2MRme2k8zzHQEAspClerDgsDXYaZcCzsPEU2l+KLawSXUbZxqEaXA+VvPOwYj3hvXgA4Izg81YNR0W+1rxRfHVLXTYdSilgtop4ZtxLOjByI42AB2njOQe3ep15fO342TKaXN5X/A5GKw83Sri++12qeQ6J9neTEsm7PKr3Axye2RVSuv0+7tj4B1LSbvxNbqZZo5La0kFyypsZ9xAEZVS2QR+uKTVtWju/DlpBpviA2llHaRRT6MBMheVT874VfKbLfPlmB/IU/wDgfkI5GrV7p1zp2pSWF8gguIn2SKWBCn6jIrvvFPiywfw+IdH1p57q2vopLGVZbszxRBHBLPKcK+SuRHhenXtneJfEE2seKINRtPGLJC8hkgEkl0Dp5KDIOEODnI/d7vyprf8AryDocjqVl/Z2pT2f2m3u/Jfb59rJvjf3Vu4qtXod7reljxZrl9p/iGGGfUowbTU44pwbVgy7gx8sOpZQRuQN1x3NR3XjRLWO9bStWlW+lksVlvIkaNrny0kEsgOMjJK8nDMDyOSKUdUrg+tjgK07fw9qNxpn9oBIIbVt2x7m6igMu372wOwL46fKDzx1pfE91a33izVbvT2DWs93LJCyoVBUsSDggY47Vp6hNpuuaBpTf2pbWF1p1o1rJazxSnzcOzqyMiMPm34IYrgj0OaSd43H9qxzFFdTqvi26ezsdOsr+V9NGnwQXNoMiNmXBbKkY3ZA+frwMHFb+v8AivTdTurOL7fZjSft8Uqpbi8+1WcQPRRITFHgHBEXHAwMAYrr87fjuT0v5HnlpazX15DaWqb555FjjXIG5icAZPHU02aJ7eeSGZdskbFGGc4IODXo+s+N7WPUPD97ZaqZ7qyvZGuZbSS7JNuTGQm+cl2BAbK5AznjnJgtfEsFt4rv7u98Rx6m89u6WF7M95ttCZAwUkBZUyoIzHnGccgmlvb5lf1+J55VuysPtsN3J9rtbf7LD5u2eTa0vIG1B/E3OcegNXPFOpHVvEE10z2cpKoplsxLskwoG7MvzlvUtyTk1q+Er6CDRdZs77xDFYQXts0KWkouGVpCUIkIjRl6AjPX2xS6Ni6o5Oiu007V7WPwRcaVea2lvEqTNFBYSXMcs8h+6JVKeVIhIHUqwHfjbXIWswtryGcoJBFIrlG6Ng5wapW5rC1tcvah4e1HSrZZtQSCAnbmBrqLz1yMjdEG3rx6qKzK7S6u9BHjlfEbalb31lcX32mSxaCXzow53EMGTy22k4wHIOPetWLxdb2VvIL3xI2r6ksF0bfUFjlJi3oBHGGdQwO4bum1expLbUfWx5tWnoeiPr11JbQXttbzrG0iJP5n73apYhSqsAcKfvYFelXXimDWrvV7nStcW2khs7jZeSRyqII2uoNmMIWHGcbRkE54PNYNvrGkXPj0apdazBHHb2YgkupoZi15KYDG0gCox5Y5y2CRz14pa2v/AF1D+vy/zOAqwbC5GlrqJj/0VpjAJNw5cAMRjr0I56V3HhnxFY6BokllZ6jpiXUd2zyzXIvRDeRlV2gCEAsAQwKSrj5uOpFUrTxRc3HgeXSx4kl0yWG5eRYTJOElhZMeUmxWAAIPytgfN9ab0Tt5foC1tc4yrselzS6HcaorR+RBPHAykncWdWIIGMY+Q9/Su01LxXYzeFYbKzl082f2aCKTT5ftZmRl27yi5+zhiQTvGCQxzyTlvi7xHZah4f1C1t9ea/WfUYp7KzEUqpaQKkg2AMAqkblBC8cDBPOCWl7f1qgWtv66HAUVc1S1srS6SPTdQ/tCIxIzSiFotrkfMmG5ODxnvVOgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/yVPwp/wBhqz/9HpXN10nw4/5Kn4U/7DVn/wCj0oA+7qKKKACiiigD4PvvBOqWKagXa3lNjcJAVhZmaYvjBjGOR8y9cH5hx1qvb+ENfn1q10p9Jvba6uiNiT20iYXOC5G3O0dzjitS08YW8s93Frkc95YSSReVAqquI1uBIyseOSu4d+wzgDFjVvGOmyNoZ02KST+zL97ts2MFmrgmMhQkRIyNhGTkng+wIa25glu0v6/rY5+68La7Z6odPl0i++1clYxbPukUNt3KMZK54z71PpnhS/u9VuLPULXULH7LC0s5+wSytD8pZdyAZUNgDJ4Gc1ZOs6VY6nq9xpc9/Kmo2k0QMtusTRtI4OPlkbK4BBPH0qPwrrFjYa0l/rt3fsIIGhhSCFZiVaNkxlpF2gbsgDP4VKvbzt+Oo3a/9eRjR6bfTRQSw2VxJHcS+TC6xMRLJx8inHLcjgc81BJG8MrRyoySIxVkYYKkdQR2Ndb4f8SaT4et7q0ifULqG9lKSSGJI2gj2MoliG9sTfOecgAAjJ3ZHJSBBKwiZmjDHazLtJHYkZOD7ZNV1F0OiufA2qWrXQlltcWtkt4xWQkOrDO1eOWGGyOB8p56ZxTp9xC7m8t7mCKCYQ3D+ScxMc/KQcfNgN8pI6GuluvGiz6rqODOdMngnS3gMahld4woJwemQD1OOcdTl+u+ItB1Gx1GK0OpLLqmqR307SwR7YVAcMqgP85Bfgnbn27j8v61/wAgW2v9af5lC48Hzy+JLHSdCkm1A30EM8btbFCiyAHLqpfAXPJyajg8G6t/wk0Oj6hYX9szv87rYyyMIw2DKqAbmUe1XdU17SBreialpMl9O2mpbxvFc2yRBhDjkFZG646Y49TUNvfeH7bxtBqqXmptaR3AuyDYxiTcJNwTHnYxj+LP/AaatzLtd/d0/ATvy+dl/wAEzbfSdXvJbqx0e1v76JJgJEt4HIZhu2lkA4ON+M8j5vepdM0OG/sdVM9zPbX2nQNObdrYFWCsqkFi4Ktlum09K6C3n0aXQ/EMv9o6pFYXGo2jl47NPNYkTtsKedjAIznceQOKhh8S6Leat4h1HVJL+2fVo5IUit7VJhGrMrBizSJlvl5GOc5z2qdbW62/Gyt+JbtzeV/wMGLQpG8Lz6zMLmJEmSOH/RHMU2c7j5v3QRgcHk59qrro2pvpbamum3bWCnDXYgbyhzj7+MdeOtbGnX2g2/hXU9OuLvURcXskbqY7GNkXyy23JMwPO4Z4496j1jUtJ1ixsp2lvob61s4bX7KIEaFtnGRJvBXI+bGw/MTzzmn/AMD8iSjL4a12CS3SfRdRja6bbAr2jgzHGcLkfNx6Vb1TwXr2ka0mm3em3TSSSeXE8VtIyzEDJ8v5QXwPStfxJ4p0S+8OT6ZotvLCsl5FcRobGCBYURHXYWQlpD8w+ZuTz075uv3+h634g/tL7VqEAu233Uf2NG8k7Rwh80b+R328U1v/AF5f8EOhSvtAuI/E1xo+lRXeoyxOVRVs3SVwBknyiNy/Q1FD4e1q5u5rW30i/luIGCSwx2zs8bEE4ZQMg4B4Poa6bUPEug3es628c2pJaa1EFkl+yxiW3ZXVgAvm4dTtwfmX9Oa2o+LbaewuLO0+2BC1kiSSEBpY7dXBLgHgkspC8gY68A0o7K4PqcnJG8MrRyoySIxVkYYKkdQR2NbVr4biudDk1Q69psMcTIkkUiXG9HYMVU4iIJOxuQSOOtVfEeoxav4m1LUbZXWK7upJkEgAYBmJGcE88+tFvqMUXhm+05lczXF1BMjADaAiyg55zn94MfjSV3HzHpcluPD89v4fstQkS7Wa9nMcUD2ciq6YBV0kI2vkkjA5496gufD+s2Vv595pN9bw5UeZLbOq5bpyRjnt61uWer6Da+GbGza51Fru2vxfMoso/LJwoKBvNzj5fvbefQVtyfEmxE0cyW13O0Vz56pNtAP+mPP13HB2sozg8juKp/Fbz/Rfrcn7N/66/wDAOD1DSNS0iRI9V0+6sXkG5FuYWjLD1AYDNXPDPhu+8Ua1DYWEMzKzgTTRwtIIEJ5Zsf8A1s9Kt+J9dh1OCC2sLySW1jleUQtpVvZBGbAz+5J3kgAEnHQVS8MapDoviay1G6WR4bdyzLGAWPBHGSPWkn3G/Imu/DF8dbl03R9P1e8mhQPJFNpzRTJnuY1ZyByOSe9VLLQNY1IuNO0m+uzGxVxBbO+0jqDgcEZH51f0fVdOXQLnSNVkvLWOS5juluLKJZGJUMuxlZ14+bIOeD2Oas654tGqW1z9lFxbTTaob5fnzgbAqksMEuCCc470PT+vT/g/cG/9ev8AXzOXIIOCMEVr6j4ebSrKOW91CzS6kiSZbECUy7HAKnITy/ukH7+ce/FZLu0kjPIxd2OWZjkk+prrF8RabB4YksJrm91h/KVbaC+s41js23KWMcnmM4HykbQFBzk0dNQ6mBPoerWsVtJc6Xewx3ZAt3kt3UTE9NhI+bOR0qU+G9ajubSC40jUInvDiBWtH3S45OwYy2Ac8V0+reN7S91KK7tp5khl1CK8ubIaVbRY2sW/16HdKQSQCwGc5PNcxNqCajrE7X95eR2M909w2xfNYM2fm2F1BboCc0Ldf12/4IdP68yxcaJqEHiG/wBF0JdQv2XMbrFaSRySoCD80X3gMgHB7gUuieHV1DWptJ1SW6029SN2SNrTd8yIzlXBZSnC+h69K27nxD4am8Yahq2LyVLyFvKa402GX7NLlefKaQpINoYckYz04pw8VaFcePJNcuGv4LdbVIIoorOIsx+z+UxIEiqoB5AGR2wKSvb5fiPq/wCu39fI4yCzubmOaS2t5ZkgTfM0aFhGucbmI6DJ6moa17S606zj1aFL3VPLmg8u2MIWITHcDiZdx+XAPAJ5xWRTEal1oTWOmR3N7fWsE80azRWTbzM8bfdbhSgyOcMwOOccjOdDE09xHChQNIwUGRwigk92JAA9ycV2d/40tr3w7LbST6hJJNYxWn9nsiC1idNo84NuyWwn90HkjcQMVzM40cx6eLZ75HKf6e8iIwVt3WJQRkbezEZPpR9oOhLqfh2707VrbTkkhvprqOKSA2pZhIJPugbgDnn0q1f+FTpWrnT9V1jTbVvISdZiZpI2DdFBjjY5/DHoTWne+KdLtNSstQ0RJr2a3sFsWj1G2MKqFTZ5itFNuDEZ9MZ6mo7/AMTaHqev6Rd3Wj+VaWNrHHLDDuJmdE4Q75D+73ADP3sE5yaP8/w1/wCAH+X46FKfwmlpqhsLvX9Mim2xsgMdy3meYoYABYSQcEZDAHmn3Hg17KO7kv8AW9Mto7a8ez3N57iSRFBO3ZEeOe+Kh0vxAkPiC713VFkuNQIea2woKi4Y/K7ZPAXJYAZ5AHSrnhLxPHoLtPd6pqpQSNI+mQqDb3mVxiVjJ0PQ/I3FHQDlauto2qJpa6m+m3a2DHC3ZgYRHnHD4x1461Tdg8jMFCgkkKOg9q6afW9In8NRQXYmv9SgjjS2eSySAW4VgSpkSQmVcAgb0zzwV6EQdTEu9H1PT7WG5v8ATru2guBmGWaBkWQYz8pIweOeKln8Pa1ay20d1pF/DJdnbbrJbOpmPHCAj5uo6eorqtW8d29xqUd/ZM7I2oRX0+nvpltArFCWwZ0O+TBJALLyDk81nwazolh4inv7W51S4iv47iK4aW3RJYBKCNyMJG3sMnOdufbPB/X9f5gYp8Pa0NQawOkX4vFUO1v9mfzApIAJXGcEkDPuKW18O6xd6q+nQ6XfPdxEedAls7SRDI5ZcZHUda25vFFjb6RLpmnPfSRrpj2UVxKqxu5edZWBUMdqbQy4DNnPvxam8WaNqEVxb3w1CGKQWLh4I0ZpGt4fLZGywwpOSG5x12npTja+v9a/5ai1t/XkYd74T1SLW9UsNMsrzUk02d4ZZre2ZgNpIywGducE8msSu3HinRLvVdXm1YXU+nXt/Jdrp5sY2Lbuh84Sq8TdvlyOOQw4riDjPHSpV7alO3QKKKKYgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArpPhx/yVPwp/wBhqz/9HpXN10nw4/5Kn4U/7DVn/wCj0oA+7qKKKACiiigD4Z1PwM2n22pTJqKSrazxx25aPYtwjEDfuLYQAsBzkfe54qpZ+DNSuNY0+ynks4o76Xy0uUvYJY+CAwDK+0sNwOzO45GBzTtP8YSWl7czXVr9uilljdLeeYlI1WcS7AMdCdw7feJ9qua149l1SXSZIoLsvpl290kl/fG6dyxQ7Sdq4UFOAB0PrySHTm+YS3djNl8IamNZm061+y3UkKPKzRXsDKsatgszByEx1IJBA61Y0rwlPJrktlqsRYR2zT7bS9t90gMZZGQs+2ReMnaScZ71DNr9gl9qVxpum3EC6hbSQyJPdiXYzuG3AiNeBjGDn61F4X1my0HVDfXljcXjqjJGsV0sIG5WVs5jbPDcdMe9Sr217fjr/wAAbtf+vL/glex8PapqVvDPY23nxzXH2ZSki8SYzhhnKjAJy2BgHng1nyIYpWjYqSrFSVYMOPQjgj3FdJpHiu00OK6t9P0uVra+Yx3iT3e5pbcqR5QZUXackndjqF4ABB5uQoZWMSssZY7VZtxA7AnAyffAquv9f1/Xza6f1/X9fJddd+AGtVvHGpLJHb2IuUcQHEkmCWi68bcHnn+HgZ4wJtEvbE3Ml/asIbG6W2ugsqgq53fKDzzhG5AI4rSn8XzT6xf3Zik+z3cM0aWrTkrEZECFumCflU9BnA9Ksax4u0/VLO7gTRpoGv79L67k+27izAMCqDZhQd5IzuI757D7r+tf8v0Bba/1p/mJc+Fba78V6XpmkStbQ6hb282b24jLR+YASNx2BiM8AAE9qgtfCci+MINIvJIJ42mw32TULbe6BtpCkybQ57KTn2pdT8T2Vxqmlahpem3FrPpqwov2i7WZXWLG3gRpg8cnP4Cmxa7o0HiyLWYtJvgkc32j7OdQQkyh9w+byfu9sYz/ALVNW5l2u/u6Cd+Xzsv+CVrbwzqGpXF9/ZsCiCzmEUr3NzFEIyxYKGZmC5O0jg4zx3FWdO0G3aDXbTVbe7g1PTLd5gVmUIpVlUoybCT948hhV+HV9Al0jWprmxu/KuL+2mSzGoospbbMWbd5XKjcBgLkZHNQW/i6yfUNZvdW0u4uLjVkeJ/s14sKRxsVOADG5JG0ck9O3ep1tby/Gy/Ut25r+f4GfBoqP4PvNWkWRpI5o0jaK4hKoDuB8yPd5gJwNpxjrVaXQL+DSk1C4WCGCRBIiy3USSupOAyxFt5BPcLjv0q/Y65pFp4dvtMl0u9ka9dXaZb9FClCxTC+Sf73PPOOMVHqWt2Gq2NubrTZhqVvbxWyzx3QELrHgKWiKE52gA4cDPOO1P8A4H5EkT+F9SjhhmP2JoZpBEJY9Qt3RGIJAdg5CZAP3sdDVvW/B9xoniL+zHu7KdTL5ayC9gQnABJYGQ+X/wADIq94l8ef2/osunJZ3UKSXUdwomvjNHBtVl8uJNgCJ83A7Y6njGdq+t6VrOsJqN1pl4ksp3Xix3ygSHaBlMxHZyM87vT3prf+vL/gh0DUPDM58Vahpmk20yR2jEt9tniUxIMcySBvLHJAznBJApsXgzXZZ7mIWkaG1MYleW6iSMeYCYyHZgpDY4IJB49RWjfeMNOvtV1OdtHuRaasgF3Ab5S+5WDK0b+UNuCOhVs8/hTv/FS3lpLaxWPkweZa+SvnbiiQK6hScfMTvyTwOOnoo7K4PqYd3aT2F7NaXkZingkaOSNuqsDgj862bPRtFn8NzanPqt/HJbyRxSQpp6ON7hyuGMwyP3ZycA8jg1na3qX9s6/fal5Xk/bLh5vL3btm5icZwM9fSiHUvJ0C703ys/abiGbzN33fLWQYxjnPmdc9vekr8uu49L6F+Xw/t8M6deRRyPdXt2YVZLmF4iNqlVwrF0fJ5DAcEU+88C+I7CFZbjTuGkESrHPHIxYvs27VYnO4bTxweDg1NbeJNKtfD9pp66VeNNbXYvBMb9drSYUH5PKztwvTdkZ6mtBviRKsqTW2mqksc3moXm3DP2pp8EbR/f29R0z7VTtzfP8ACy/W5OvL5/8AD/8AAOZ1LQ77SY45btIWilYqstvcxzpuGMrujZgGGQcE55FW/CXh4+JfENtYtNHDCzjzmaeONtnfYHI3NjsAfXFP8S+JDr7RYl1dkjZm2ajqZu1XOPuZRdv654qloGrf2Hr1rqXk+f8AZ3LeXv27uCOuDjr6UlfqN+RoXHhqa91K4j0W1SG3twgke41a3ljDN0HnjZGSeyjJ4PocRWvg7XLt5VS0jiMNx9lcXNzFBib+587DLc8Ade1M0rWrS30ifS9XsJbyzknW4UQXIgdJFBX7xRgQQSCMemCKfrPiaTWbWeKa2SJ5r5rvcjHaoKBAgB54A65oem39bf8ABDf+vX/gGLJG8UjRyKVdCVZSOQR2rprjwjarptxJa6lPLeWlhDfzxSWgSIJIqHasgcksPMHVRnBrl62tY8U6hq8NtayXNythbwQRLZNcM0WY4wm4LwBnBPTuee9HQOvkMk8MapHFBKsdvOlxMkCNbXkMwEjfdVtjnYTg/ex0PpTrrwnq1jJCl3HaxGaVoQxvoNqSKMlHbfiNhnoxBroNU+I41CGGJLC6VI9QhvVjm1AyxxeWCPKiTYBGnPA5xjvxjn9J19dM8VnWXtDKC8jiNZdjIXDAFXwcMu7IODggHFHX+vL/AIIdP68/+AWNN8PLb+KNO03xDBI0N+yLG9leREEO+0OsgDqwBzkDuMZFO0PRtNvvFF3pF6t2wHniCWGdU2GNXbLAod2doHG2rt342tr/AMR6Tqd9YX1wNLiVIxJqW+WVlkLhnkaM564IAHtjpVbTvEmj6f4on1ddIvnEgfy4TqCDaXVlclvJ5HzcDAxjnNJ/5/8AAHp+X/BMvTfDupavD5tjFEyl/LTzbiOIyvgHYgdgXbkcLk8j1FWrfS7CfwfqN60V1FqFhNEjFplMbhywxs2ZBG3+8fpWhpnjZdL0uTTLVdYtbRbhpoDY6t9nkG4AFZGEZEg+UEHapHPrVKw13S7bw5fabd6be3E186PLcLfqgDIWK4UxE/xc5PPtTfkJeZlyaTexaNDqskOLKeZoY5d6/M6gEjGc9CO1VYonmmSKFGkkdgqIoyWJ6AD1q1Jc2TaNDbR2Gy9SZnkvPOY+YhAwmzoMHJz3zTdN1G50jUYb6wdY7iBt0bNGrgHGM7WBB/KjqHQ1PEvhn/hHIrAm+S6kuo3MojTCxOjlWQNk7sEEZ46fjVHRNOTVdUS0kF8xkU7FsLT7TKxAzgJuXIxk5z2rQ1bxbLrOmaXZXljarHYljIYLeKEy5ctgbEGwYOMDgnk81Te70WXWrm4k0m5i0+Qkw2dtehWi6YHmPG+4de340Lz8/wCv6+YPyNyPwJH/AGre28uozSQwXMdpE1pZ+bLNK6ltvll1C7QDu+Y7SMc1Ha+ELH/hJpdA1LVLqC/jnaMtb2SSwhAN3mlzKp27csfl4HrUiePTIt/a31lM+n3awoIre6EUqrEmwKZCjbgycNwN3sOKz5/FklxLrdy1qi3urYj85W4giz80ajHcBVznoCO9HX+vIB9h4YttQ0K/1GK7vUWzWRvOksMWrlcYTzt/DsCMLt6kD3pNQ8JSaX4dj1G7+3GSSOOQeVYlrZA4BVXnLDD7SDtCnqBnOcV9K1qy0e1kktbG4bU5IJYDPJdKYdsilT+6EYJO0nq5Gecdqu3Pi+O402VTYynUZrCPT5Lh7rdF5SFcbYtvDYRf4iM5OMmh7af1v/wAW+v9bf8ABObhikuJ0hhQvJIwVFUZLEnAArSm8NalBqUVgVtZLmTdhYL2GUJt5YuyOQgABJLEYAJ7VnW0iw3UUr+ZtRwx8p9j8Hs2Dg++DiutPj1YtZsb+0sbjzbdJUnubi7D3Vwsi7TmdI0OVH3WIYg9yOKegjFPhbVxfx2i28btJEZlljuY2hMa5DP5obYFBBBO7APB5og8Lapc3M8MK2jC3KiSb7dAIQW+6olL7Cx9A2eD6GtJ/GKy6nPJdR6nf2d1ZtaTR6hqfnTBSwbKS+WAuGVTgqRwfXitb67pMVnc6bNpV3Lpcs6XEUf29VmjkVSpzJ5WGUgnjYO3Pqv6/H/IY218E+ILzeIrAKyXDWpWaeOJjMoBMYDMCzYIwBkntnBqfQPCFxqcEt5fAQWYtLmaIm4jSSRoo2PyxsdzLuXBIX15GOJR44kbWLHUJrBC9pqb6hsSUqrBhGBGMgkYEXXnr0p1r4ztYbKET6Q017BYz2Ec4utqCOTfzs28sPMPO7BHbPIPs+f/AAP8xq1/67/5GHcaFfWulxX9wLeOGVQ6I13F5rKTw3lbt+D67enPSs+uhm8S20nhX+yWs7q4l2Isc15dLMttggnyV8sNGDjGA5GDyCcEZV7c2M9pZR2Wn/ZZoYitxKZy/wBofOd2DwvHGBR1EtinRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXSfDj/kqfhT/ALDVn/6PSubrpPhx/wAlT8Kf9hqz/wDR6UAfd1FFFABRRRQB8VeIPAltZGaG0ttQ06ZdRSytm1KVWS+ViR5kYEakAYUkjcMMOfXGXwVdXGqQ6dp+paff3TyyRSR2rSM0BRdzFlKAsMA4KBskYGTgHMn1u5n8StrjpELlrr7UUAOzfu3YxnOM+9FlrlzYa2+pxJE8khk82KRSY5FcEOhGc4IJHXPvnmkr/wBfL/gh/X5/8A2pPh5rEWtxabI0atLbNdLK0M6/IpIP7sx+bnI6bPfpzVDTvDEmqS6gbbUbQ2mnoJJrzy52j2nuFWMvjrklQBjntmBdYtE1JbtNB09UVNothJchN2c78+bv3f8AAse1XP8AhMLiTxJLrl3p9pc3rsjRu8twhhKAAFWSVWJwBksWJx1601uDMCRQkrKrrIFYgOucN7jIBx9RW/pngvUdX8Pz6tZOjRQJI7oYJ+Agy37zy/KzjnBfP48Vi397LqOo3F7c7fOuZWlk2LtG5jk4HbrW3Z+M7uy0qKzXT7CR4bWa0juZEfzEil3bgMOFz8552598UteXzH9ryCfwZcwaa122paeWjtobuWBXkMkUUu0KzfJjjeMgHd3wRgmrqPhm90uPUXvJYFFhcrbHDE+c7AkFOORtG7JxwR607/hIru4NzDILaJL20gsZXZWwkcXl7W4JOf3a54PfA6VZ8V61Dfw6bp1nOt1Dp9uFkulRlFxKVUFgGwcBURASASEzgZpvy/r+v1EvP+v6d/kiDwdpkOseKLexuYGuEljmxEpILMImK4xz1AqxaeB9RvdWbTbae3luYYTLdJCJZja8gbWEaMWbJAwgbHOcYOMjSNVn0XUkvrVY2lRHQCQEjDIVPQjsxrU/4TK7kuGmu7Gxumntvs955qv/AKaoIIaTa4O8FQdy7Scc55p/1+YBqXgrVdMN0s3lPJbSQo8Shw5EwJR9rKCAcYwcMCQCBWRqlg2larc2Ek0M728hjd4SShYcHBIGeeK6Hw7r1npF1qGsL9ltHMJjt9LhWZw0nylHy5YBVYB+XJyuAMHjlCSTk8k1P9f1/XUZ0qeGtPbwTFrDa3axXL3LxGJ1mI4QME4iPz5PXO3BHPWoLjwjd21jNK95Zm6t4FuZ7AO/nRRtjDH5dh4ZSQGJAPI64q2eutbaLLpc9ha3tu8pmj8/zA0MhXaWUo69scNkcDirVz4uu7qyljazs0up4Ftp79Ufzpo1xhTlig4VQSFBOOT1y3u7f1p/n+Al0v8A1r/l+JjWlrNfXkNpaxmSeeRY40H8TE4A/M1sf8Isz6mLG01bTrqRBI1y8RlCWqoMszs0YBA5+5uzjjORnIs7uewvoLy0fy57eRZY3wDtZTkHB9xWx/wlTR6oL+00fTbWRxItzHEJTHcrIMMrq0hwOv3NuM8dBg/r/L/gh/X9foSp4MnkZpE1XTTZC0N2L4vIIigkEbDBTfuDN90rk9s5Gblj4Ig+1avbarrNpA9lZC6idPNKurBGWTiInZh+Rw2SOOtZdz4puZ7aW1htLS1tHtfsqW8KvtiQyrKSCzFixZRksT1x6Ycniy7GrSXs1raziazWymt3DiOSJUVADtYMD8inII5H4UdH8/1t+gev9bf8El0nR7Oaw11zNZX8lpas0WJZ42ADL++QeXhhzja5U85xxTbXwfdXekw3qahYK89rNdw2jO/mvHEWDnAXaPuEjJGe2TkBmmeJ49L+3CHQtNkW+Vo3WRrjCRkg+WuJQcZUHJy3vUcPie7t2tzDBbqLezns412sQI5TIW/izkea2D7DOe4/Lt/n/wAD+rDX6/hoI3hm9Vbs74T9ls4LxwGOWSXy9oHH3v3i57deTV7XvAWseHdL+3X6r5ayLFKvlSp5bEHAy6Kr9DyhYe+CCY38Z3baTLZLY2Mck1tDay3iI/nOkRUpzu2gjYo4AzjnJwap6zro1tmmn0uxgvJH8ya7g80PM2OSVLlBk8nao5ofkJef9af5mTRTopPKmSQosmxg2xxlWx2PtVjUr7+0tSnvPsttaec+7yLWPZFH7KvYUAVaKuaXqP8AZd20/wBitLzdE8fl3cXmINwxuAyPmHUHsap0AFFXItR8rRp9P+xWj+dKsn2p4szR7c/KrZ4U55GOap0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH3dRRRQAUUUUAfnbRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV0nw4/wCSp+FP+w1Z/wDo9K5uuk+HH/JU/Cn/AGGrP/0elAH2v4kt9Xm02OXw9Osd7ayiZYpPuXAAIMbc9Dn8wOR1GRoeqa34o1mC+NtJpOk2W5XglB8y5n2lWU9PlQk/ivTPCddRQAUUUUAf/9k=)**

It is clear from the above outputs that the time taken by the parallel block is less than the time taken by the serial block. The time taken by the parallel block tends to decrease as the number of threads increases. The system used to test the code is a 2-core computer. And if the number of threads is more than 2, there's no difference in the time taken for the program to end. But we can see after the thread is more than 2 the time r=of parallel multiplication is almost the same for threads 4,6,8. And if there are more threads than the cores in the CPU, the code can slow down due to overhead thread formation.

**References:**

[1] <http://www.bowdoin.edu/~ltoma/teaching/cs3225-GIS/fall16/Lectures/openmp.html>

[2] <https://bisqwit.iki.fi/story/howto/openmp/>

[3] OpenMP: A parallel Hello World Program

**(**<https://www.youtube.com/watch?v=Ka3rBhwMgXg>**)**

[4] <https://www.openmp.org/wp-content/uploads/OpenMP3.0-SummarySpec.pdf>

[5] <https://www.openmp.org/spec-html/5.0/openmpsu160.html>