**Databases 1 Exam 2020.05.28 Name: Mohid Ali**

**Neptun code: A2TK3S**

Copy your solutions into this file and send it to the following email address: [nikovits@inf.elte.hu](mailto:nikovits@inf.elte.hu). You should send the **results of the queries** too. You can use ARAMIS or ULLMAN database.

Deadline: 15:40.

Each exercise counts 10 points, so altogether you can get 60 points.

Grades are the following: 2 -> 20 points, 3-> 30 points, 4 -> 40 points, 5 -> 50 points

**Exercise 1. SQL (**Tables needed: nikovits.emp)

Give the employees who have at least two subordinates who started to work on dates that have the same name (e.g. Monday, so the name of the days should be the same for the 2 subordinates.) For these employees give the name of the employee (that is the name of the manager), the name of the day, and the number of subordinates starting to work on this day.

**(Ename, Day\_name, Count\_of\_emp)**

**Solution :**select m.ename,

to\_char(e.hiredate,'Day') day\_of\_week, count(\*) as count\_of\_emp

from nikovits.emp e, nikovits.emp m

where e.mgr = m.empno

group by m.MGR, m.ename, to\_char(e.hiredate,'Day')

Having count(\*) > 1

**Answer:**

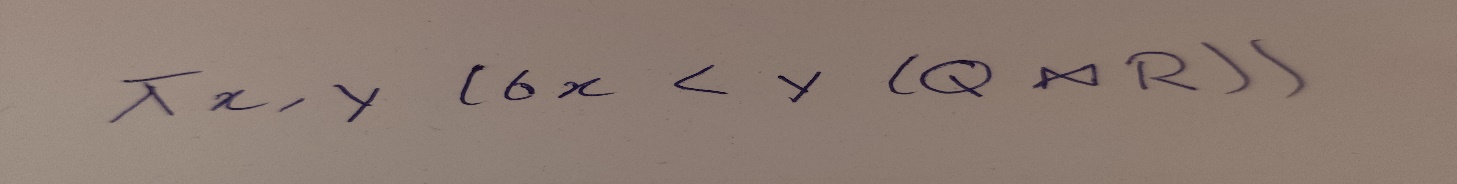
KING Tuesday 2

JONES Thursday 2

**Exercise 2. Datalog**

We have two relations: Q(A,B) and R(C,D). Write an expression of relational algebra that defines the same relation as the head of the following Datalog rule:

P(x,y) ← Q(x,z) AND R(z,y) AND x < y



**Exercise 3. DML (**Tables needed: nikovits.emp, nikovits.sal\_cat)

Create a table EMP2 which has the same tuples as nikovits.EMP, then write an UPDATE statement on this table which increases the salaries of the employees falling into salary category 2. (see nikovits.SAL\_CAT table) The increment is the average salary of the employee's own department. After the update, select the new average salary of the employees and give it too. (**Avg\_Sal**)

**Solution:**

ET SERVEROUTPUT ON ;

drop table emp2;

create table emp2 as select \* from emp;

DECLARE avgsal NUMBER;

BEGIN

update emp2 e21 set sal = sal + ( select avg(sal) from emp2 e22 where e22.deptno=e21.deptno )

where e21.empno in( select empno from emp2 join nikovits.sal\_cat sc on sal between sc.lowest\_sal and sc.highest\_sal where category = 2 );

SELECT AVG(sal) INTO avgsal FROM EMP2;

dbms\_output.put\_line('Avg sal:' || avgsal);

end;

**Answer:**

Avg\_sal = 2549.51

**Exercise 4. PL/SQL (**Tables needed: nikovits.emp)

Write a PL/SQL program (procedure or anonymous block) which prints out the following data. The name, the salary, and the department number of the employees whose salary is the second largest within their own department. **(Ename, Sal, Deptno)**

If there are ties (equality) between salaries, then any name can be printed from them.

**Exercise 5. Normal Forms**

Let R(A,B,C,D) be decomposed into relations R1={A,B}, and R2={B,C,D}.

For the following FD's {B -> C, C -> D} use the chase test to tell whether the decomposition of R is lossless. If not lossless, give an example of an instance of R that returns more than R when projected onto the decomposed relations and rejoined.

**Exercise 6. E-R models and DDL**

Convert the following E-R diagram to a relational database schema. Give the CREATE TABLE statements with **primary key** and **foreign key** definitions. The statements should be syntactically correct, please run them in Oracle to test it. (You can use any Oracle datatype for the columns.)

![A képen szöveg, térkép látható

Automatikusan generált leírás](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDcRXhpZgAATU0AKgAAAAgABAE7AAIAAAAGAAAISodpAAQAAAABAAAIUJydAAEAAAAMAAAQyOocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFRpYm9yAAAFkAMAAgAAABQAABCekAQAAgAAABQAABCykpEAAgAAAAMwNgAAkpIAAgAAAAMwNgAA6hwABwAACAwAAAiSAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMDowNToyOCAxMzo0Nzo1NgAyMDIwOjA1OjI4IDEzOjQ3OjU2AAAAVABpAGIAbwByAAAA/+ELGGh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjAtMDUtMjhUMTM6NDc6NTYuMDU2PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPlRpYm9yPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAkUDiAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKxfEHjHw54VEf/AAkWtWWnNIMxpPMA7jpkL1I9wK5TWPGuveI/EU/hn4bWgBtZ3ttU8Q3cW6209gPmWNcjzZlz93oDtyCCStGx0L4e/Ce8S58Va6L3W70+auo67KJ7j5evlnHyLuYn1JPJOBgA0bj4heItU1RLXwP4HvtRs3Uf8TbVHbT7ddwUhwkieY6DdzgAnadoPWtCKx+I2o2sy6hrXh/RGdwqf2dYy3ciJgZYSSuihid3BiYAY61pQeO/C914oPhy11yzm1dXeM2kcm5wyAsy8cZAU5HbBHUVLrPjLw94ev47HWNWt7a7khe4W3JLSeUgJaQqMkKArHJ4wrehwAc7e+BfF1/Zy2s/xO1ZY5V2s0FhawuB7OiBlPuCKg074aeING3f2V8TfEh81EE39oCK9yy55TzVOwHPQe2ScDGu3xU8DLpUepN4n08WkkzQJIZPvOqqzADqcB1ycYG4eoq1F8QfCU+r2elwa/ZSX99HHLb26SZd1kXehx2ypDAHBwQe4oAzofC/je1uop4viG10EY74L/RYHikBUjB8oxuCCQQQw6c5FVdW1v4maAWkj8L6R4ntlDYOnXrWcvAzuMcoYDuNqs5z3ro9E8Z+HPEl9cWfh/WrPUp7ZQ0q2sokCgnAORwR9DUGreP/AAroeoXNjqut2sFzZxLNcxbixgRioVnwDsBLoOcffX1GQDJs/i54We9Fhr01z4X1AgsLTX4fsjFASN4ckxlSVOCGOcV3FVdQ0uw1a3MGqWNtewkEGO5hWRSCMHhgRyK82n8Eav8ADFLjVvhi1zfaWoV5/Cc8pdJMcM1vK5LRtyWI+bceOcKtAHqdFYfg/wAYaP458Ow614euDNbSHY6Ou14ZAATG47MMj1ByCCQQTuUAFFFFABRRRQAVn61r2k+HNP8At2vala6dbbtoluZRGGbBO0Z6thScDk4NcLdeMPEvjbW59I+G8cVlpMS/vfFd1CZYJDuKstqn3ZSCMbidvysMfdLXfDXwf8OaJK17rAm8Uas7AtqOuEXMi4wQEDZCgHJz97JPOMAABL8Vre+jZvB3hvXvEyNExgvLS08qzkkDMmzzpSuRuXllDAA98EU7T7/4oaxJHJPo3h/wzbM5DpeXEmoTooU4wsRRGy2P4xgZ4J693RQBxk/hjxtdXEk0nxCe03kYgsdGt1iQAAcCXzH5xk5c8njA4rJPwhurh3nv/iT44e5ldnkNtqggjyST8sYQhBz0HA7ADivSaKAPNv8AhTf/AFUf4gf+Dz/7Crlp8PPEGkxGDRviV4iWBm3sNSS3vpN3TiSSPIXAHy9M5Pc13tFAHHro3j3T9PmSx8W6bqk+1niOr6Rgl8cIXgkjCpkDnYzDJPPAGfJ4n+Iuj3yJq/gW11ayKh5LvQ9TVjEMkFRFMEZ24B4wMHr1x6BRQBxVv8WvConS0125n8NagwybLXIDauF3MobcfkZTsOGViPcHiuxtrmC8tYrqzmjnt5kEkUsThkkUjIZSOCCDkEVDqOl2GsWZtNWsba+tmOTDcwrIhP8AusCO9edX/wAMdS8KXl9r/wAKtVmsbl1eQ+H7jEmn3B+95aISvkktkhg3G4gbVJoA9Pori/AnxDTxTc3mia1YtovinTP+P/SpH3bV4xLGw4dCGXkdMjqCrN2lABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRTY5BLEkihgrqGAZSpwfUHkH2NADqKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuJ+L3jG68DfDPUdX00f6cdtvbOVBEbucbyDwdoyQCCCQARjNdtXm3x4jvB8L5L2x06PUjpt7b3sttNF5sbxxvuben8SY+8P7uScAE0AdV4I8NweFPBmnaVDEUkjhD3LM+9pZ2G6R2bJySxJ647DgCvLPjfpl54++I3hD4f2dz9nglWTUL1t3Cxj5Q+MH5gqyhexL4OBzXtdle2+o6fb31jKs9tcxLNDKvR0YZVh7EEGqjeHtJbxMPEL2UbastqLRbpslliDM20DOByx5Ayc4JxQB4Ta6loGmfFzxH4it47M6f4A0dtNsYnmaCW7vSJpHx8uGckXascHP3wG5Ij8M+J7Twt8G9X+JGsalbN4z8VG6NnPKoMylX8pYow27MaMivjAUDYp4VTXsNn8MPBdjr2oa1F4ftZNQ1JpWuprjdPvMu7zMK5KqGDsCFAyCR04rPtPgn8O7KK6jtvDFuoukaORmmlZgrcEKxYlMjj5SOCR0JoA8Sma2uv2d/CHgfwpfWp1XxHqyxXqpGGDnIlfzXVTgxmS1yfvBVA6BgNnUvAWl6l8WPCfw00zdPpvh6xlvdZull2TS+aFDJIQQcMqQJ8pJCSADhePZ7P4b+ErC80W5tNFiil0KNo9OIkfEAbJY7d2GJLE7mBOTnOea0bHwto+m+JNR1+zs9mqaoqLd3BldjIEGFGCSFAAHQDoKAPCvAWoWmjal8U/FWiCCK2tYJrfRUtpFkjmS0TBZVUElVDWx3Y24k5J5Ik8OeC21b4b2dz498R6Xp2meI7q3u7u6t5y91rMrtvjhmkcAJsAwETIBDNxtJb2DQvht4Q8NW+owaLoNtbxaorJeKS0glQggp8xOF5PyjA9qr+GPhR4J8Hap/aXh7QIba9ClVneWSZkBBB2mRm2kgkEjGQcUAdhRRRQB55qdovgj4naTq1jcRWei+JrlrDULIsVQ3zozxXCoBjzHMflseM5U8nJHodcH4/kt9Y8U+D/AAxb6ikN+dXi1WaBU8xvs1sryZI/hDSLGgORyTgHawrvKACiiigArzP4hahqPiDx7ofw704FbHUITfa3IkhVmslJVoiQMqshG0lSDyBwCa9MrzDX7k+HP2i9C1i/hkGna1o50OO52ny4rnzjKis3TL42gdSfYGgD0bTtOs9I02DT9Mto7W0t0EcUMS4VFHYVZoryW38Qt8SvijrujyXFzY+FvCatFeCC7e3N7csWQ+aykHylCS4UHBK5YkEKAD1qsvxPqMuj+E9V1O3lhhksrSW5Ek8TSooRSxyqspIwD0IrwjwP4rg8A+C/Gnjh7m6vNGuL4aZ4YtrlpWMkMLS+QiGU58oCQ8dV8uTjcMVl/Fbw5q9l8PPDyeMdfurvxhrupLFMr3LCOG3cBpIViRvKKrKsDEgcsFwcAYAPb/hXrmt+Jvhvp2t+JlVL6/aWcRrAYgkRlbywATyuzaVbupUkk/MczX/HGtWfxu8P+CtLFobXULVry8kmsndoY13/AHXWUDLGMrymFJU/PnaM/UdVGt/Eyw+GHh64n0jS9Es1vNTazmaCV4kWMQ20Uincq/OhboSvAYd+a+E3hnRbj44+Ktf8J7W8NaXEtjp7RGRoTM6q0vlOTgqrCTgZH71SOCDQB7xRXzn4M8IeI/iXo/ia4t/GWo6Vo0mtO+muLmW7mdopEMTM7yfcjVQFKMGZ8MzERoKfceMbj4h65qtp/YOu674f0KFLSDREZwNTulkJ864mRdqgBQfLZmydpAPzAAH0TRXiHi7wr4x8Pfssx6Lb6oz6hp1uW1LY+4y2mXLwhm6KiMo4xlYyo4OK1vh1Z2OreA9d1D4aavNa22q2Ihs9NmnkaHRb/wAuRpFTcPlXfKjHCnkEjIKgAHrNFeBfBvRF1jUtNvGa60vXfDF9c/8ACRWF1JJI2oTTQyLHcsScb8tIM4JILc4xn32gDjfiT4Y/tvQo9WsbqSw1rQPMvtOu4jtwwQ7onIGfLcYDAYzgdeh2fCGvDxR4M0jXAqo1/aRzOi5wjlRuUZ5wGyM+1U/iF4gsPDngTU7vUpQhmge3tohkvcTupCRIo5LE+nQZJ4BIPhzol34b+G+haRqahLy1s0WdAwOxzyVyCQcE4yDjigDpaKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqO5toLy1ltbyGOe3mQxyxSoGSRSMFWB4IIOCDUlFAHlWla5c/CCbT/C/i1pbnw7PMY9M8QEkRWinO22nyWKbTwrlsFSOgRsdH4kl+Is+pRyeBT4TbSmhVg+qPcNI7HJJHljbtxtx17nPOB11zbQXlrLa3kMc9vMhjlilQMkikYKsDwQQcEGvNrz4W6l4aukvPhHrS+H1LmW50e7Dz2N2+c5IJLREj5WKfwhcbSvIBZtm+NC3UTXkfgOW3DgyxxSXiOy55CsQwUkdCQceh6USt8aDHCII/AaOqETM8l4wdtx5UADaNu0YJPIJzzgVLn4p+I/Cy+V45+H+rAxqQb/Qdt5bzEELvGSpiVjkhXO4DHU5xv6T8WPAmtSyRWfiaxjmjl8lobxjayF+m0JKFYnPHAPPFAGWrfGj7LIrR+AzcF1KSCS8CKuG3ArjJJJXByMYPByCHQv8AGVbW4W4h8CvOyr5DpNeKsZ3DJZSpLAjIABXB556V2H/CR6H/ANBnT/8AwKT/ABqvD4x8Nz6hfWMeuWH2rT5vJuomnVWjfaGxgnnrjI4yGHVSAAc5ZSfF6OK5Go2vgm4kaIi2aC5u4hHJ2ZwY23r0+UFT7itLS7j4hC4sV1rTPDJhClb2S01G4DEll+eNGgwAF3/IWO4lfmXBzpXfjHwzYRCW+8RaTbRltoea+iQE+mS3Xg1y2o/GbQEV18M6frXiqdWkXZo2nSSoCp27vMICsm7jchb8aAPQq5vxd4307wpaBT/xMNWnYR2ekW0i/aLp2IACqTkKM5LdAMnngHmb62+Kfi9lFvc2XgGww6Oo2aheSdQGJGI0BG3AVtwOTk8Cuh8LfDzQ/Cs73sK3GpavL/rtY1SX7ReSjGADIRwAoC4UAYUZyeaAK3gvwbd6XqV74k8WS2t94p1DKTXVqGWKGD5SsEanHyKV6kbj1JNdlRRQAUUUUAFZXiTw3p/inR20/U1cAMJYLiFtk1rMv3Jon6pIpOQw+nIJB1aKAPM7PxzqvgO8stB+JVtK1ozfZ7bxXGym3ufRp0HNufmRMsSC245Cgmuf8L/Ba/0i81uLw/4tgtPCuszO5h0+EPO0Y3iOHzySwVd2GIO47SAVLE17Rc20F5ay2t5DHPbzIY5YpUDJIpGCrA8EEHBBrz/UvhDY2r3V98PNTuvBup3GDI1gd1tOQQR5kB+XAG4DZtxvbr0oA5U/s+Xd38KF8Kan4tnnntZxcafshC21scuSpTq+4yyZcnI+XAwpDO1T4JeLvEmraHrHiT4hy3GqabcmUSR2SCOBQVZPKjGFD7lyzEc/LwdnzdNa33xX8ORRw6po2k+MoyyILnT7sWNwo/jeRJB5bE5AAQr0568M0340WDukfiXwv4o8OMyMyyX2kytG5BA2qUBYnBB+6AOeemQCnefCPVY/idfeJPD3iZ9NttUsIrC7Zlaa7jjQRBvKkcn52WFR5j7iCzNycGk+Hfwf1jwJoGs6ZH4xmdbxJhZCC1EaW0sihPtDDJZ3ARMLuCrhupOR1WmfFTwJq1nFc2fi3SAkxIRLi7WCTIJHMchVxyOMjngjgitr/hI9D/6DOn/+BSf40AZ/gPwda+AvBdh4espmuVtVYyXDoFaaRmLMxA6DJwBkkAAZOM1wHhv4MeIvB+q6lB4Y8cHTtA1GYyywRadG1wg3/cR2JCkR5UPjqc7OmPRNO8b+GNWhllsNdsZEhmeB2aYJ86HDY3YyM9GGQeoJpbvxv4UsGVb/AMT6NbMwyom1CJCR7ZagDN8ReG/Es3iS01zwl4ggsXt7U20un31s81vdgtkFyHVgVySCOc5GcMwPJ6F8Fbrwz4L0XR9G8Qot9Ya8NamvLiz8yN3ETR+WsQYHaRtB+fP3iCMgDpNT+L/grT/OS31f+15oofO8rSIXvN33tqb4wUViVIAZl7E4HNZdp8UvEGu6lBaeGfhrr5WQK0lzreNOhjQnBbcQ+7GVOFyxG7AOOQDZ8FeC7zw/r3iDX9XvbS41LX2ge4isbUwQRGJCo2hmZiTuJJJ5ParPi/4gaJ4Otgt3MbzU5m8q00q0Hm3NzKRlUVFyRnjkjAyO5APNzeD/AIleJ5Iv+Eo8b22h2igCWz8MW7I0nLcieQ71OCvYjjpkZPUeFvAHh7wg73Gk2W7UJk23OpXLGW6uSTuZpJDySzfMcYBOOOBgA5nQvCer+L/E1t4w8eZS1iCXOjaA6lTpz5BEkmMEy4AJBzgsR/CuPSqKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqtqGm2Or2Eljqtnb31pLjzLe5iWSN8EEZVgQcEA/UVZooA43VfhF8P8AWbVbe88I6XGiuHBs4BavnBHLxbWI56E46HHArzfxl8IvB/gLXdF8X2OgJceHrOYRa1YzySTpFG5wt0FYszbCRuT5gRjCjBaveqjubaC8tZbW8hjnt5kMcsUqBkkUjBVgeCCDgg0AZGg+HPCunbNT8MaNo9p9phGy7061iTzYmwww6D5lOFPXBwDW3XmvgJrzwT4puvh/qhC6WIzceG55CWaaLc7SwmQ4DOmQQgGQmTyADXpVABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAFbUNNsdXsJLHVbO3vrSXHmW9zEskb4IIyrAg4IB+orxnxJ4W8MeNvGFx4B8M+EtP022tGjk1jxBZ6bEhgA2v9nicKAJGyoJycDd8rYOO98c+ILw7PCnhK6tx4m1RDsLNn7Db9HuWAPGAcKO7EYBCtjZ8J+FdL8F+GbXQtCiaO0tlPzSNueRics7HuxPPYDoAAAAAZ9t8MfAtraxW8Xg/Q2SFAimXT4pHIAwNzsCzH1JJJ6k1e0/wV4V0i/jvtK8NaPY3cWfLuLawijkTIIOGVQRkEj6GtuigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDl/H3g238Z+HhAHe21OxkF3pd7EcPbXKcow7EZwCD1HoQCH+AvFT+LPDZnvYkt9VsZ3sNVto87YLuPAkRTyCOQQQWGDjJINdLXmPjSzuPAHi5PiBoGny3FjckR+KIYTuLQBQqXKqckGPBJCjkZJxy1AHp1FR21zBeWsV1ZzRz28yCSKWJwySKRkMpHBBByCKkoAKKKKACiiigAooooAKKKKACuY8eeNLfwXoK3HlNd6leyi00yxjGWurl+ET2XPU9h6kgHS8T+JNO8IeGrzXdbkeOys1DSGNC7ElgqqAO5ZgPTnkgc1yfgHw7qeoapJ478ZpLHrV/GyWWnuxK6XaNhli2lR+9OPnYgHtgc5ANzwV4ZutBs7q9166gv/ABDqsiz6newwrGrsqBEjTAB8tFAUZ5J3NwWIrpaKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigApk8EVzbyQXMSTQyqUkjkUMrqRggg8EEdqfRQB5r4BR/AHiSX4d39zLNYtD9r8P3V05L3Ef8Ay2gJOFLxnB2oPuNuwK9KrkviR4O/4THwo8VkfJ1rT3F7pN0rbWguU5Tn0JGDnI5zjIGJfh94vfxp4W+3XdmLDUbW5lstQsg5b7NPG2GXJA7bW743YycUAdRRRRQAUUUUAFFFFABUF7e2+nafcX19KsFtbRNNNK3REUZZj7AAmp68ovr4fGTxUdH0S7lXwfoc6Pqd7CcxavNwfsqkEBogpJc5OSV4xtYgFvw7ZXXxK8TQeMtdjgbwxaru8PabINzNITg3co6buCEBztDZwrDLemU2ONIYkihRY40UKqKMBQOgA7CnUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRXBQ/FaC91DU7bSfCPibU10u+lsJ57S2gaPzYzhgCZgccg8gcEUAd7RXE/8LGu/+ifeMP8AwEt//j9H/Cxrv/on3jD/AMBLf/4/QB21eV+PbY/D7xvB8TbHc9lceTpuvWqgAGFjtW53E/eRvKXGORxleTW9/wALGu/+ifeMP/AS3/8Aj9QXvjl9R0+4sb74c+Lp7a5iaGaJrS3w6MMMp/f9CCRQB3tFeO+APEXiLwfpE+g3/g3xdqWmWcuNJuZIYTcC3IyIpR5uMoflVlJBXHypgCus/wCFjXf/AET7xh/4CW//AMfoA7aiuJ/4WNd/9E+8Yf8AgJb/APx+j/hY13/0T7xh/wCAlv8A/H6AO2orif8AhY13/wBE+8Yf+Alv/wDH6xPFvxD8Xy+HbiHwX4A8QxarKNkdxfwQqkAIP7wASPuYcYUjHc5xggFjxtrVz4v1n/hX/g7UliuJMnXb6HO7Trbg7VOQPMc/JgbiATkDrXe6RpFhoOj2ulaPbJa2VpGI4YUzhVHueSe5JySSSck15j4L1NfBulPFD8P/ABbc6ldt52o6kbC3WW+mJLF3/fk9WYhckDJx1rpP+FjXf/RPvGH/AICW/wD8foA7aiuJ/wCFjXf/AET7xh/4CW//AMfqB/iTqwmQJ8OPFRiMuHYxQBhHsJ3AeZy2/A25AwS2cjaQDvaK8tuvjJqGh2eo6j4s+HviDS9KtXUQ3SGKUurPtBkUsuw5KcAvyx54yfUqACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACvNvg3/AMz7/wBjnqP/ALTr0mvNvg3/AMz7/wBjnqP/ALToA9JooooAKKKKACiiigAooooAKKKKACiiigAooooA85+P8hj+BfiFlCklbdfmUMMG4jHQ9+evbqOa9Grzb9oP/khPiH/t2/8ASmKvSaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKpXGtaVaTtBd6nZwSrjdHLcKrDIzyCfSgC7RWb/wkeh/9BnT/wDwKT/GpbfWtKu51gtNTs55WztjiuFZjgZ4APpQBdooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKzm8Q6KjFX1ewVlOCDcoCD+dAGjRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXnfwgWAR+NjBJI7t4w1EzK8YUI25eFIJ3DbtOSBySMcZPolebfBv/mff+xz1H/2nQB6TRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB5t+0H/yQnxD/wBu3/pTFXpNebftB/8AJCfEP/bt/wClMVek0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFebeNPEWv+IvEh8C+AXW3keHfq+vo29dLjO5fLUKQROcZAyCAQQOrIAaHjL4saH4SvINLgiutc1u4YiLStLj86Y43ZLY6AFSMct7YBIxprT4p+OYIbyDVrXwHpk6lo7QWv2m+CEDBmLYCtkZCqVKh8Nkiux8IeBtA8D2U8Hh+zMT3TCS6uZZGkmuXAxud2OT3OBgAsxAGTXQ0AcN/wAKl0C9t/K8T3uteJwLj7Qg1jU5JERtu0ARIVjwAW/hz8x5xxT7LwH8MrbUpNGtvD/huTUET7Q9pLBDNOqcDcVbLBeR7ZPvWNZ+N/E+t/Hi+8L2NrZw6PoUIe8K3QzcGTaVYkxE5Cv/AKtdvzKcyEYUt8IaxZeIfi54vubTwpaWmu6NbLYT6lHqLMl1k5VGUIMcxY37WYBAOgAoA6mf4feBLe3kml8HaAI41LsRpMJIAGTwEyfwrB8P+HvhN8Q9Fe+8O+HtFvLKG4MLSw6Z9mIkCglfuKxGHB9Ofas74e+PPE+ueBfEfjnxFFBbaSy3FzpcPmq4gihVsgqkYZvmVssz5JX5UQYLZPwd1LSfht+znH4j115IYLmaa7kQITJI5fykVFJ5LCNMdBg5OAC1AHbn4T+H7W1eHw3c6x4a3zLOTo+pywoWAAyYmLRHIUA5TnFY+naB8VfClwbhPE1l40sYoXzp19CtlNIcFhsmCvhtwAG87cEg7eCLmifE+61LxVoGj6hoC2J160lu4EW+Etxaoihla4iCARq4ztO5jnggHIHoVAHC+FfitpGv6p/YesW1z4b8RAnOlamhRpBxho3ICuDngD5jhiBgZruqxPFvg/RfG+hnSfElp9qtd4lQB2Ro3AIDqQeCAx9uec1yWiahrXgDxRp/hbxRfjUtB1Bfs2i6tKgjkilT7trOQNrOyYCvwXKHgknAB6RRRRQAUUUUAFFFFABXO+K/HOh+ELN31O7V7vYzQafB+8uLhgudqRjJ/HoM5JArP8V+JtVfXofCPgxITrlxb/abi9uVJh0y33bfNYf8tHYghIweoy2FHNrw78PtF8O6xea0on1LXL5i1xquoOJLhuuFUgBY1AO3aiqMKo7DAByw1X4p+N9Pa58P2Vh4KsJRsRtXieXUNytkuIyNiqeVw4JwCw+8pGro3w41KJFbxV478Q63KGZikFy1hCc9OISH4z0349uK7yuH0r4krefE+68Ealo8+nX0MD3EUzTJIk6BgARt6blJYbsEAYIB4oAd/wAKb+Hx5fwvZyt3eUu7sfVmZiWPqScmrcHwt8B28Ijj8H6KVXGDJZRueDnqwJPJ/LjpWdo/xb0S78I6t4h1+GfQLXSdSfTbhLsb5FlXZxtjBJOXxgZxgnoM0aZ8T1ufFXh/QdT0K70268QWsl1aJLIjPEihmHnKPuFlQkAFiDgHBzgAnb4OfD12LHwnp2ScnEZA/IGkm+F1hGllHoXiHxRoUVkhjjhstZlkjK4CqpScyKAoGAABjPsMVH+LFtdw+Irvw5pE+raZ4djka81ATpHFI8ahnSLJLOQMnOAp2nBOVyy7+LUdr8IbX4gDQLx7OZwJbYyoskKGRo1kOfvAsExjJw4PQE0AVrDTPit4QkMjavY+OtPVkDWs0S2V3t6ExvnYTlskSMchMAgmtTwl8WND8T3n9l3sV14e1sNj+ytXj8iaT0MefvgnIwPm+U8YwTB4C+K0Xj3WDaWfh7VLK0NiLxL+6jKxSHKqUU4wSGLjIPPltXS+K/B+h+NtGfTPElhHdwHlGPEkLf3kccqeO3UcHIJFAG3RXnWn61q/gDxLpvhvxhqo1bSdVZ4NJ1ecCOaF0XIhunOFdmXARx8zsrZHPHotABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXm3wb/AOZ9/wCxz1H/ANp16TXm3wb/AOZ9/wCxz1H/ANp0Aek0UUUAFeY/G7x3qngvR9Fj0WSWyk1PUUhm1LyEeO2iHLAs+VV2zxlSNqyHjFenVy+uWXhv4iWOueEtUxcfY5I47uFX2ywMyLLHIuORw3B6Eqw5AIoAxLXRvEHhrxL4a/sjxLqeqeFWjuX1aXVbiK4xiHMLCUp5gDNlid2wbQOMgHW8L/E7wv4x8SapougX63Nxpu3dJlQlwDkMYucuqkYLAbfmXBIINcL8HLq98BweNvCXia7ifTfB7Jcx3axtu8iVZJmYqC3G1Q20AkFmGTXEeHNcT4d/s4v400nTNOtfEGu381vbXgtwzRqzkFRwcKohYqhO3KgkHoQD6GuvF3huxvJLS98Q6Vb3MSs7wzXsaOirnJKlsgDByfY1Ne+I9D077P8A2hrOn2n2nb5Hn3SJ5u77u3J+bODjHXFeBfETwtpvhb4beHPh5poX/hI/FOpW73U9xKWLzfKryyH5iF3soAHH3iMkHOj8cdNbWviD8P8Awb4ckFhfbjILqKINPaxKQI3V8+YAgSVsbgCVBzkZAB7XF4m0KeG+mg1rTpItOJF66XaFbUjOfMIPydD1x0NR6V4s8Oa9dNa6Hr+l6lcIhkaKzvY5nVQQCxCknGSBn3FedeJvhJ4esfhv4k8I+A4oLXV9Xgju1tZbrdLOIJEIA3tkKWBGT8oaTqBxS/AfV9D8XaG3iKHS7e08RW9rDpWoSw2yRK6xD5GTaAAGXaCBj/VquNqLQB63RRRQAUUUUAcT8Zf+SN+Jv+Qf/wAeR/5CP+r6jp/00/55/wDTTZXV6Zq2na1Zi80a/tdQtixUT2syyoSOo3KSM1wP7Qf/ACQnxD/27f8ApTFU+o/BLwhc6o2p6Kl94Y1Bl2m50C6NoQMAYCjKKMLzhRnJJyeaAPQqK88Fr8VfD+oqYL/RvF+m4JdLtP7PuwSWwAyBo8DKZYjnBAUdTNL8XtE0jVLfTPGljqXhW8uGCRnUoAbeRsJnZPGWjKjeMsSAvO7bQB3tFR21zBeWsV1ZzRz28yCSKWJwySKRkMpHBBByCKkoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKK8+m+KMevtf6d8MtPl8Salbqy/a9vl6fBIGC/vJmK7+u4CPduA4IGWAB3d3d21hZy3d9cRW1tCpeWaZwiRqOpLHgD3NVdJ1/R9fikl0LVrHU44m2yPZ3KTBD6EqTg1xSfCs+Jbyx1X4pagniG/s2ElvZQxeTZW2QpZAn3pQWXJZz8wCgqBkGXWfg34ZutSg1jw1F/wi2uWaEWl7pMaxKjc4LxAbHHJDAgblJUnGMAHoFFeZJ4p8beAY5n+IllHr+jRqRHrOh2zGaMLuJe5h4CrsGSyfKpAHzbsju9B8RaP4o0pNS8Pajb6haPgeZA+7aSobaw6qwDDKsARnkCgDSooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK4L4OaENM8AQ6rMqm/8AEUr6xdSCQyFjOd6AsQCSEKg/7W4jrmu9rzr4U6pqNguoeBfE4SHU9BbbYJgA3Om8LDKp/wCWgGChYAYwob5s0Aei0UUUAeIfCi6uovFnxH8V3ehas/2i6lkjjbTzHN5cRYxxRhiC8jhiCgxtMa5PzjGN8NNVvNP+D/jnU7rRtUuvEF99ovLy5bStiyzShlSIbSGkCnMrYUKglPTqfoiigD578Qz6nov7Jej6TpmlahBcaisNnJtjMTxq+6WVyibiUbayEHBYOSRzgs+LVtJHonw4l/srU9O8L6TeKk6zRbriG3jWHZI6gMUPlpKdp56bgDlR9D0UAed/DjTvDA1nUdW8N6ZrV3NcoI5/EOrly8+3biIecwmwAV5CBTsA3EqAPRKKKACuU+Jvha38Y/DrV9LuAvmfZ3mtmeXy1SZFJjZm6Bc4znjGa6uuC+MPiKLSfAtxo0Ma3Wr+JVbSdOs/OWNpZJh5ZbJ6Ku8Ek8ZKgkbs0AdJ4O1O41rwNoWqXxU3N9ptvczFVwC7xKzYHYZJrZrO8PaWND8MaXpIIIsLOG2BBJHyIF6nr0rRoAKKKKACiiigDzz4NXbeIfC174zu4Io73xJfzXDFQC6QxsYYoiwVchFjwOOck9WNeh1558JoE8M2WqeA55AJ9CvJWtEdw0ktlM5kilYgAZJZwQOhXkAFc+h0AFeO/Fax1LRPiz4H8aeH9Bm1y9DT6Y9rHcCLzGaJzEMkHaAHnYtjACckda9X1Zb99FvU0aSGPUWt5BaPOD5ay7TsLYBO3djPB4rlfCXhTXl1hfEfj/ULa+12KBrS2isCwtLaE7SzIrAHzXK5ZvTCjAFAHmPxZ0a30O88BWPii4vbfwnbzXFxqd5bobkG+f8AeeZIrq6NukZiAyHKvKAMcDYSHQovh94y8TfDt9a1TW7nTwj69eRzfaJsr92JmVWG1QrfIoUZTB+UBfa6KAPmDWPH+jwfsy2/hvwZZ3F0UsYYtUuSjpBZSuytKu+QfvJGkdsImcAswwqYrY8Uwx6l4L+GHwxtWuYItWaF7+WJpIi8EQw5CumSHYtIu8DGxCVHb6HooArabp9rpGlWmm6fF5NpZwpBBHuLbERQqjJJJwAOSc1ZoooA534gaJZeIvh7remaojPby2juQrFSGQb0YEdwyqfQ45BGRUHwz8TP4w+Geh63O0j3Fxahbh5EVC8yExyNheAC6MRjHBHA6VH8TfE1r4Z8CX0k7f6VqCPYafFsLCa5kjby0OOgJBJJIGAeelW/AHhceC/AGj+H8q0lnbgTMjllaViXkKkgHaXZiMgcYoA6KiiigAooooAKKKKACiiigAooooAKKKKACvNvg3/zPv8A2Oeo/wDtOvSa82+Df/M+/wDY56j/AO06APSaKKKACvP9U+FQufGmqeKtF8U6xouq6miRTfZjE0OxY1TGxkPOFyDnIJ4xXoFFAHH6L8NtJ0bwLqXhpZ7q4OrxTrqOoysDc3TzBg8jORy3zHGQccZyck41z8D/AA3cfDRfBxuLzy1lWf7exRrhpFDBCSVxtUNtAAGF4zySfSaKAPMLn4B+Gbu50q6u9T164vNPdjJeTagWnvEOMRySYyFAG0BNmAW7nNdYvgXRV8d2vitYSL2z00abbQhU8mCMMWDIu3KthmXIONpIxzXR0UAcf4p+H6eI/Etj4gtdd1LR9U06FobaWyMZXDHLb1dSHB444H1rQ8G+DdO8EaNNp+mT3l0bm6ku7m6vp/NmuJnxud2wBnAUcAdMnJJJ6CigAooooAKKKKAPNv2g/wDkhPiH/t2/9KYq9Jrzb9oP/khPiH/t2/8ASmKvSaACo7i2gu4Ggu4Y54mxujlQMpwc8g+9SUUAee6/8GtA1K5hu/Dt1feELuFCgfw/ILVJM9C6KMEjLDIwSDgkgDCTj4reHViW1fRPGVqiku0qHT7yRtzHHBMOAuFBwvJGRwSfQ6KAPN7f406PYalDpPjvTr/whqkhChL+PfbuxIHyTplWXnlztUc5Irv9P1Kx1ewjvtKvLe+tJc+XcW0qyRvgkHDKSDggj6ipbi2gu4Ggu4Y54mxujlQMpwc8g+9ee618EfDN5etqPhqW+8Jak3W50K4NuGG3bgxj5QMf3QuSSSTk0AejUV5/ef8AC0fDsQOn/wBj+MraJVJE/wDoF9KTIcrkZhICkYbCdOhI+aay+K+jw2kX/CZWd/4RvHIQxatbskTNtUny5wPLcZbHUN8pJUUAd1RVbT9SsdXsI77Sry3vrSXPl3FtKskb4JBwykg4II+oqzQAUUUUAFFFFABRRRQAUUUUAFFNkkSGJ5ZnWONFLM7HAUDqSewrhdQ+Jg1E/ZPhxpUviy7MjRPcwN5djbMuM+ZcEbCcMCFQkkDtkZAO4ubmCztZbq8mjgt4UMkssrhUjUDJZieAABkk15t/wt//AISjUrnSfhXpEniK8tdrXF7O32eyhU56ufmZiRgKF55YEhTU4+FcniTW4Nb+JOqtrMyLG66Pbb49NgdQM4jZmMg3DOWIDd1xhR6Ba2ltY2qW1jbxW0EYwkUKBFUewHAoA4KD4d6n4nvY9R+KOqJqXlyB4tB09mTTYtp+UsrfNOeA3z8ZZlwVrvbW0trG1S2sbeK2gjGEihQIqj2A4FTUUAFFFFABXB+KfhNpOuasNb0O9u/DOvA5OoaU3l+ccknzUHEmcnJ4JzgkgYrvKKAPN9Q8eeK/Bd5M3jfw0b/R1DlNW8PRvII1XBLzQsSY12Eknc2CpHzZBrsfDPirRfGOjLqvhrUI7+zZ2jMiBlKsvVWVgGU9DggcEHoQa164TxF8KNJ1TV4dc8PXVx4X1yDbsvdLARZAp4EsX3ZByRz1GASQMUAd3RXnn/CaeLfDGsvb+PNAgk0UGWT/AISLRxI0MUarlTLb/O6dPmbcVGepALV22ka1pmv6bHqGiX9vf2kn3ZreQOue446EdweRQBdooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACuP8deCJfEawav4fv20fxRpqP8A2fqKYwQRzFKCCHjJ9QcHkdw3YUUAeSa94utdVi07wt8R9R1b4e61Jm6F1p2opDBchN64W4G4BGHzbH2kEKOeC2l/wpv/AKqP8QP/AAef/YV3+o6XYaxZm01axtr62Y5MNzCsiE/7rAjvXCaV8J5fCeqG68D+K9T0u1IIGlXhN5ZDOOBGzKw+6OQ27tuwSKAI/wDhTf8A1Uf4gf8Ag8/+wo/4U3/1Uf4gf+Dz/wCwqfU9f+J+gMxPhDSfE0HzkSaXqBtXVVPDNHKG5Yfwoz4IIz0zZb4mSQywi78B+MoIpZVjaYaakwiB/iZYpGbaOpwp9gTgUAZ//Cm/+qj/ABA/8Hn/ANhR/wAKb/6qP8QP/B5/9hWvL8TNLj1+004adrhS4tZ5zKdDvg6mNolCiPyNzA+aSWHC7QD98VLefEGGLZ/ZnhnxRquc7/J0iSDy/TP2jys55+7uxjnGRkAw/wDhTf8A1Uf4gf8Ag8/+wru9G059I0a20+TULzUjbpsF1fOrzSAdN7KqhiBgZxk4ySTknh5/GvxD1C8Efh34bSQWjyoi3usanFCUBxuZ4VLMACT90sSBkDJxRqnw98VeMLeOLxj43mtbVljeXTvDtsLVFkCnI85y7uu4g84B2g7QcYANLxR8UNG8P62PDlgk2teKJlH2fR7NSXZmBK75CNka4G5ixyqndgil8L+F9Tn10+LvG7QSa28Jhs7KAloNJhJ5RD/HI3G+TH+yuFHOz4c8H+H/AAjZi28O6XBZJlizqC8jljk7pGJducdSegHQCtqgAooooAKKKKACiiigDkvGHg+81XUrLxD4Xv49L8SaajJDPJHuhu4jybacDloywByOUJLKM1R0L4n2b65H4Y8aW/8AwjnidtoW0nfdBdbjhWgm+64boAcNuyuCVNd3Wfrmg6X4l0ibS9dsYb6ynUh4plyOmMg9VYZ4YYI6gigDQryT/hSmuf8ARV/GH/ga/wD8XW7pXw61jwtqNxL4T8ZXsdlMxI03WYm1CCEZY4j/AHiOuC397nHzbjgiP/hMPiBpOo+Rr3w9+3WSth9Q0LUkm3ZXI2QSBHOG+Ukle5GeMgGN/wAKU1z/AKKv4w/8DX/+Lo/4Uprn/RV/GH/ga/8A8XXTyfFTQbDR31HxDZa9oUUTFZhqGi3IEJ37BukRGjwTjBDnO4d+Kwo/2hfAM/imPSodVH2RrZ5H1KSORIllDALEAVySV3tuOFGFALFsAAq/8KU1z/oq/jD/AMDX/wDi6P8AhSmuf9FX8Yf+Br//ABddpH8QdDniSW2i1q4hkUNHNBoF9JHIp5DK6wlWUjkEEgjkVgXnxF8XXsUQ8J/DHWriSSJnZtYnhsRH028Fm3Hk5UlSMfXAB2fhzSJ9C8O2mmXWqXerS26lWvb1t0svJOWPfGceuAMknmsfxl8RdE8GS2tleSNdavfMEstMtsNNOzZCcfwqzDaGPGfoaz7jw5448UWMlt4l8R2/h+AyjEfhneJnQBTzcycqdwPCoOOCSCRW54W8FaF4PsUh0ayQT+WEmvpQHubnnJaWXGWJPPoOgAAAABznhjwn4g1XxhJ4x+ILW6zrF5Wl6HGwni0xTtJfeRgzkgguvbPJBCr6FRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV5t8G/+Z9/7HPUf/adek15t8G/+Z9/7HPUf/adAHpNFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHm37Qf/JCfEP/AG7f+lMVek15t+0H/wAkJ8Q/9u3/AKUxV6TQAUUUUAFFFFABRRRQAU2SNJonimRZI3UqyMMhgeoI7inUUAcH4h+D3hjWrj7Zpou/DeobldrvQpvsrSFSxG9QNrHc+d2N3A+bHFZ0+lfFTwfahtA1iz8bWqIiCy1aJba6QKAo2TKQshOSzGTnCDBJJr02igDzOx+M8FiEX4h+GdX8HNI2xLm6haa0dyflQTKv3iNxwVAAU5Nd5ouvaT4j0/7doOpWuo227aZbaUSBWwDtOOjYYHB5GRVy5toLy1ltbyGOe3mQxyxSoGSRSMFWB4IIOCDXEXvwb8HzO9xo1pceHNQbOy/0O5a0mjBILAbflwcYwVIAJxigDu6K4eLQPHegRONF8UW2vxlvktvEFvsZFyx4nhAOeRncjZ2jG2q2nfE2+slkX4h+EtT8MGMFjeIPttnt+T700QOwksfvDaAp+bPFAHoNFYun+MvDWq6PNqun69p09hbjM9ytymyH/fJPyfjiuYu/iHqniBo7b4X6IdZEqknWr4Pb6dD8xU4YgNMQVIIj6Z68EAA725uYLO1luryaOC3hQySyyuFSNQMlmJ4AAGSTXm9/8V7zXJhZ/CjQZfE8m7ZLqcmYLG2bqVMjAb2AwSFxwy4JPFXpfhZF4gvJJ/iHrNz4mj84TwWJDWtpbOM8rEj/ADYB2jeWON2SSxNdvZWVrp1nFZ6fbQ2ltCu2OCCMIiD0CjgCgDgLL4W3Os6j/anxM1ybxDM+2RdJjLRabbOGDYWIH96FI2gv94feBJ49Ct7aC0gWC0hjgiXO2OJAqjJzwB71JRQAUV5zrfj/AFiX4v2vgHw3DY2sn2Q3dzqF/E84A2khEiR0yfu8lx1PHHO14S1jxRfeJPEOm+J7Kyjt9LaCO1vbNHVLssrO7YZjtwpi+XnaSRubg0AdZRVDRtb07xDpy6hot2l5ZszIk8YOxypwdp6MAQRkZGQR2q/QAUUUUAFFFFABRRXM+Atb8Ra/4ee78X6B/YN8tw0aW3mbt8YCkP7ZJYY/2c96AOmrhPE/wl0XXLg3+i3N54X1f5Ab/RZmt2dVDDa6KQrcMRuxu4AzgYPd0UAeYf8ACa+NfBF59n8f6F/a2ixLz4j0aMnbGvWWe3GSnHzPt4HzbQ1d14e8UaH4rsDe+HNUttRgBwzQPkofRl6qfYgVq1wusfCfQ7m/fVfDMk/hXWnOHv8ASD5fmqfvI8f3GBOD0zuUHPXIB3VFefnX/HPhTVLe18Q6MviXRnZIzrWkRFbiEbcFpbQbix3ckx8Y5C5wldX4e8UaH4rsDe+HNUttRgBwzQPkofRl6qfYgUAatFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAec/Ey7Oj+Nvh3rH2NbhV1s6eW3BSn2qJouDgnH8WO+wDI4NejVwXxnsRP8N5tSS3mnuNDu7bVIDAxDxeVKpkcYIyREZev16gGu9oAKKKKACiiigAooooAKKKKACiiigAooqO5uYLO1luryaOC3hQySyyuFSNQMlmJ4AAGSTQBJXL+KPiDofhaYWczT6lq8gBi0fTI/tF5KOpIiB4AXLZOOFOM4rE/wCEz13xvfGz+HVukGivG6v4quoS8aSAOpWCBtnmkMF+fJQHdkHHO54Z8A6N4buX1ALJqetzZ+0axqBEt1Lntvx8qgYUKoA2qo5xQBzWneDta8fXdvrfxRgFnaxH/R/C8NwXtwVbKy3GDtkfOflxt27QRncK9JggitreOC2iSGGJQkccahVRQMAADgADtT6KACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACvObn4MWD6vqV/pvi7xdow1K7kvZ7bTNUEMJlc5Zguw8n3J7DoBXo1FAHm3/Cm/+qj/ABA/8Hn/ANhR/wAKb/6qP8QP/B5/9hXpNFAHm3/Cm/8Aqo/xA/8AB5/9hR/wpv8A6qP8QP8Awef/AGFek0UAebf8Kb/6qP8AED/wef8A2FH/AApv/qo/xA/8Hn/2Fek0UAebf8Kb/wCqj/ED/wAHn/2FH/Cm/wDqo/xA/wDB5/8AYV6TRQB5t/wpv/qo/wAQP/B5/wDYUf8ACm/+qj/ED/wef/YV6TRQB5t/wpv/AKqP8QP/AAef/YUf8Kb/AOqj/ED/AMHn/wBhXpNFAHm3/Cm/+qj/ABA/8Hn/ANhR/wAKb/6qP8QP/B5/9hXpNFAHmV/8DtO1XRrjTNW8Z+NL+3ndGYXWseYMLk7dhTYQSVblSQUXBHOfTaKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDhvFfwc8D+L1uH1DRIba8uGLte2IEM28kkuSBhmJJyWBz36Cuf0pfHvwr0+Cxu7GPxp4fjbbG+k2q295aKBnHkD5HXjgA7sseegr1migDm/C3j/wAPeL3e30m926hCm65025UxXVsQdrLJGeQVb5TjIBxzyM9JXK+JPhr4W8U3g1DUNMSHVUYSRapZnybqORQAknmL94rhSofcBtHFYA1Xx78PtLz4itP+E202BVX7dpcPl36DcQTJASVkGCuChBG0ls5LAA9JorH8O+LND8V2bXPh/UYrtEZkkQApJEynBDxsA6HPZgOx6EVoX8EtzptzBbSmGaWF0jlBIKMQQG454PNAHkHxR8Fnxnplj8RPhZevL4htQDDc6fcgfa4RlWUc43LlhjjI3oQxwBB4l+I9r4q/Zf1DxDc21zHPND9haIXTQl52IjLbo8bl+YuUIAYAqRitTQ/hr4+8J+Dx4U8O+NdOTTtxKX0mlsLq1DPudYx5hQj7xyecu2CMAiz4j+DEF98LdH8F+HNQTTIbC8iuZp5YPO+0kBt5dCcMSzbtp+X5QOBjABgX0ep+BPC3hH4c+BTLaeIvEEK+fcyXLSLZBFV7iVUkYhdxMh2pjo2BuxWjrkF5YfHDwR4d8P6prhRLee91US6lcTpLCM7GkVmKgF1Zc4Ay6jsorT8Z/C7WNa8XaD4j8L+KX0nUdJha3866g+1Eq+7e4DHbuw7DG0DkcjaoEGi/B7UNG+LEvjBPFtzKlxBFHdwvDuluiqpuDSFjsUyRI+FAABMYCqBkA47VpPEHjn9oi60XwVr2vadoenJ5WtXNtqEjRRuQ4fYrMVRzny1AHyshcD5Sau/EiPxP8PtE8GyahrWu614d02aRddvbO5kguZy7jZvZZA23kqvzYyAC2WWu/wDh18PZPA934hvLvUk1G61y/a7kkEHllRuYgE5O77xPbBJ+tUNY+H/iHVdP8Y6WdWsvsfia6SVJJImL2ahY424H+sJSNQBlQCucnJFAC6VeX/g3wZNqejyap4+t9V1V7iyWCdpXtbWRfkTfI7FlTYASSOXOR1NUJPjFr8ckyN8KvFZMIyxW3LA8gfKQMN17Z7nsa9A8LaFH4Y8JaXocMglXT7WO3MoTZ5hVQC+3Jxk5OMnrWrQB514x8ZzD4B6v4lvNO1XQrqSzdIrYkxXVtK0nlRMSCpX5ijeu3seh898fSeNPDXwN8F6WuvauPFeo3yxSeXcuJ5vN3uI2kzu3IWiT7w7jkdPS/i98Prv4keE7TSbC+gspbe/S7Mk8ZdSFSRcYH++PyqOP4dald+MfDuqeJfEMmt2mhWryJFPBGpmv3diZyoXAVVI2KOUKLg9SwBwtxdeM1/aN8P6NL4puxJPHJf6hbW8yy2cFvukZLYRbEydqBTMw3HzFYAbefeq8yufhbq0/xzPjlPEX2eyZI0NpFCPNKIi/u97ZAVmXLEYJVmXjOa9LkkSGJ5ZnWONFLM7HAUDqSewoAdUdzcwWdrLdXk0cFvChklllcKkagZLMTwAAMkmuIuviat94g/sXwNotx4muUZBPfQyiLT7fceQ9zhsso5KqrdwPmBAr2fw31HXpnuvilrh8QBixi0i3QwWFvlsj5BgylRwrPkgHucNQAXHxPl19mtPhfpL+I5fMa2fUpA0NhaSjHLyEAyAA7iI8kjaAcsKyNC+Ct2NWvPEPiTxPcwa/eKVM/h2NNPSIGUStnav74kjBMgOQeQSFYerW1tBZ2sVrZwxwW8KCOKKJAqRqBgKoHAAAwAKkoA8xtrD4teD4yYtQ0zx5Zoebe5X7BeMMAAI/MfBJY7ySQuAcnAsw/GbSbKZYPGujaz4Skc7Ul1O0P2eVuu1JUyCcYJzgDpXotQXtla6jZy2eoW0N3bTLtkgnjDo49Cp4IoAj0rVbDXNLg1LR7yG9srhd0U8DhlYZweR3BBBHYgg1brhLr4ReHoriS88KPeeE9QkzuudFmMSuMNhXiOY2XLZxtB4GCMVClx8SvCdmv9oQWXji3UsGls1WxvAOWDlCfLcfw7V2t0Pzc0Aeg0Vxei/Fbw1qkv2bUnuvDd+WwLHX4fsUrdMbdx2sTkcKxPIyBmuyjkSaJJYXWSN1DK6nIYHoQe4oAdRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAGX4oshqPhDWLFomnW5sZ4TEucuGjI2jHOTnHFY3wr17/hJfhT4d1NpLiWV7JIZpblt0kksWYpHJyc5dGOSckHJweK62vNvgZB/ZngS+8P8A2v7X/YGtXum+Z5Xl52Sls499+7qcbsZ4oA9JooooAKKKKACiiigAooooAKKhuru2sbV7m+uIraCMZeWZwiqPcngV5p/wl3iL4nJdWXw783QtJAX/AIqS+s3/ANIUkD/RkbGT8rgk9MD7pIIAOo8T/EDR/Dd5FpSGTVNeuuLXRrEeZcSn1I6RqBlizkDarEZxisK18G+JPGV4L34m3duukt+8i8LWRJhQhlZPPmBHnMuMFcFCwBHHFdV4c8H6T4YV5LGOW4v51VbrUr2Uz3V0VUKDJK3J4UfKMKOwFblAEdtbQWdrFa2cMcFvCgjiiiQKkagYCqBwAAMACpKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDnNf8B6B4ivk1K5tXtNXhVlg1Wwla3uoSVK5Ei4LYBPytuX1BBIrjW174gfDOwLeLLQ+NtGjP/IT0uMR3dtGvUywnhxjnIPG1tzcg16rRQBieGfGXh7xjYLd+GtWt7+Jt2VQlZF2nB3Rthl7dQOCD0IrbrjfE3wu0DxJrLa2smoaNrbIsbaro921tOyDjaSMq3GBkqTgAZwBWbdeJvGfgSxD+K9HbxVYIzltT0GLbcRqANvmWrcc/NlkfAA5AxlgD0SiszQvEmjeJrL7VoGp21/EAu/yZAWiJGQrr1RsfwsAR3FadABRRRQAUUU2SRIYnlmdY40UszscBQOpJ7CgB1NkkSGJ5ZnWONFLM7HAUDqSewrz+b4prretS6N8ONKbxLdRKPOvxMIrC3JYKd0xzvKhgxWMMSOmecOl+Gs/ixYJfifqn9t/Z7hp4NNs0NtYxHGFyoO+Rhzy7HAJGOWLAFfVfi19q8QLoPw80WXxVeyR7jewShbCE9fmn5BwOTjuQoO4kBui/DDUtVthL8WPEE/ie4JJ+wRt5VgnCgHykVd7DDYY8fNnaDzXoOn6bY6RYR2OlWdvY2kWfLt7aJY40ySThVAAyST9TVmgCO2toLO1itbOGOC3hQRxRRIFSNQMBVA4AAGABUlFFABRRRQAUUUUAFFFFAFXU9LsdZ06XT9Xs4L2zmAEkFxGHR8EEZB44IBHoQDXDaj8IrO3s2XwDrep+DZyxcrYTvJayMdgLPbs20namAVKnnJzjFeh0UAeXHXPif4G09T4i0aDxxagc3mjDybuM7v44NuJMllA8sDARi3rW54Z+LPhXxIPIkvTo2pqP3um6uPs06H5ugbh+FJ+UnAIzgnFdrWbr3h3R/FGlPpviHTrfULR8ny50ztJUruU9VYBjhlIIzwRQBoqyuoZCGVhkEHIIpa87sPhFB4WjmPw88Rap4deRy/2d3F5ZtlkLboZOp2ptDBlYD+I9Kfc+JPHvhK13+IfDcXii1VsG88OkrcKnyKN1q/LMSXOY2IwOQo5oA9Borj9A+Kng7xCBHBrMNle7VMlhqP8Ao1xGxXdt2PjcQOpXcPc12FABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXnfg0/2b8ZvH2kq8cVtc/YtSt7WJMKGeIpPIcDG5mRSfXr1zXoleeGFtL/aNSeTyoLXW/DrJGzyjdcXME4LKoJzkRODgDkAns2AD0OiiigAooooAKKKgvb2106zlvNQuYbS2hXdJPPIERB6ljwBQBPXJeL/iDZ+GZ4NM0+0k1zX7pxHb6TZyJ5g3Dh5ST+6jzgFyOM9CM4x7HxX4h+IV63/CFg6N4diZN+tXlo3nXqkg5tUddoAAcF3Vh8y4Xg10nhHwRovgqzuI9Hile4vJPOvb66lMtxdyf35HPJOSTgYGWYgDJyAcvp/w+1PxZqDax8VZ1voSwlsPDasDa6eTn/WFcCeRQSu4jHLYzkbfSaKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA43xT8LfD3inVk1lvtmka3Hwur6RcG2ucbdpBYAhvl+XJBOOAQK5qDxf8RfA06RfEHQ4tf0fcI/7b0NCZU+VjvlgAyckKCQEVeeWyM+r0UAZegeJtE8U6eL3w7qlrqMBVSxgkDGPcMgOvVGx/CwBHcVozTxW0LTXEqRRIMs7sFVR7k1x+rfCrwvqXiKLxDZ20ui67FJ5q6lpTiGQsSxYsuCjltx3FlJYHByOKpJ8Ln1uS2m+JHiC48VtZzJLb2pgW1swVXALwISJGJLEliRg7cBcggDtS+JEmrx3dh8MdPfxFqkagpd7Nunx/OFJacsofAycRlicHHQ4zk+E9/wCLVhm+L+tr4h8jLW+nWUZtbe2Zhh/nTa8vRcE4xg9cmvS7a2gs7WK1s4Y4LeFBHFFEgVI1AwFUDgAAYAFSUAR21tBZ2sVrZwxwW8KCOKKJAqRqBgKoHAAAwAKkoooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDG8SeEPD/i+zFr4l0i11GNVZY2mT54g2N2xx8yE7RkqR0FcZL8Mdc8L2u34VeKp9HgUMf7J1Mfa7RjuLAIXy8Iy7biud3y55GT6ZRQB5na/EPxf4ehUfEfwRcxxgHOp6CftcLHk/NECXjAGFySct6Cut0Dxz4Y8UYXQ9btLmclgbUv5dwhUkHdC2HX7p6qOOelb9c14t+HfhTxwqf8JNo0F5LGAEuATHMoG7C+YpDbcsx2k7cnOM0AdLRXCXXhbxloGnL/AMIT4sk1B4d5Wx8TILlJNzZA89Aso2gtjcXzhR8oFMv/AIpJ4Uhgf4j6Fd+HI7iRo47yJxe2rELuC74xvDEZ4ZBnBxkAkAHfUVU0zVtO1qzF5o1/a6hbFiontZllQkdRuUkZq3QAUUUUAFFFc18RdcvPDXw61rWdLZFu7O2MkRkXcoOR1HegDpaK828OWnxD8QeFdK1n/hONPt/7Rsobvyf7AD+X5iB9u7zhnGcZwK0/+Ed+If8A0P8Ap/8A4To/+P0AdtXmfxOuRpHxC+G2s/ZXuCmryadkMVVftUflZJweR94DvtI46jW/4R34h/8AQ/6f/wCE6P8A4/WF4q+F3i7xlZWdrrfjy0aKyvEvYvK0EIRIgYDP7/kfMeKAPU6K4n/hHfiH/wBD/p//AITo/wDj9H/CO/EP/of9P/8ACdH/AMfoA7aiuJ/4R34h/wDQ/wCn/wDhOj/4/UVx4Y+I01u0cfxGs7djjEsXh1Cy89t0xHtyKANDxV8QNN8OXkWk2kUmr+IbpT9l0m0OZGPAUyN0hQllG9uMEkZwawNP+H+q+MJY9S+LjwXbQXKz2WiWkzGzgABI81cASyAuVOcrhcZIZgaHg/4R+JfA1ncwaB41sUe7l825uZtB8yaducbnM+SBk4HQZJ6kk9H/AMI78Q/+h/0//wAJ0f8Ax+gDtqK4n/hHfiH/AND/AKf/AOE6P/j9H/CO/EP/AKH/AE//AMJ0f/H6AO2orif+Ed+If/Q/6f8A+E6P/j9H/CO/EP8A6H/T/wDwnR/8foA7aiuJ/wCEd+If/Q/6f/4To/8Aj9V4z440Dxj4eh1jxFp2saVqlzNazomm/ZpY3FvLMhUh2BH7pgc4xxwc5AB31FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFIyq6lXAZWGCCMgilooA4nVfhD4P1PVV1S30+TR9QXGbrR52s3b5i3IjIBO453Y3cDnisZtH+LPhjUIV0TXNN8V6NEyjyNXXyLzy842GVBh2CgfvW5LEkqelen0UAeb2/wAbNCtNSh0vxpp+p+EtRkITbqlufIeTIVvLmXKtGGJ/eHapAzwK9EtrmC8tYrqzmjnt5kEkUsThkkUjIZSOCCDkEU25tLa9h8m8t4riInOyVAy5+hrhb/4P6IurLqvhK91DwjfBgzf2LKIoJiNu0SQEFCo2fdAAbJ3bqAPQK4n4y/8AJG/E3/Xkf5ila5+IWg3NtFJZad4ssfLVZbi2YWF2pBAZijs0bkrzw0YJyMIAM8P8T/i14Z1HwN4m8L3TXmk6/wDZ2i/s7ULYo+4Yb767oyCBkHdhsjbnIoA9J+HH/JLPCn/YFs//AEQldJXN/Dj/AJJZ4U/7Atn/AOiErpKACiiigAooooAKKKKACiiigAooooAKKKKACuY8UqT4o8Fv5jBRrEoKYGCTYXfPTORj17nrxjp64nxfq/k/Ez4faN5G77Xe3t352/7nk2UqbduOc+fnOeNvfPAB21FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFcH8arS2n+EPiGae3iklhs2MTugLRkkZ2k9Og6V3lcT8Zf+SN+Jv+vI/wAxQBpfDj/klnhT/sC2f/ohK6Sub+HH/JLPCn/YFs//AEQldJQAUUVm6R4j0PxB539g6zp+p+Rt837FdJN5e7ON20nGcHGfQ0AaVFVtQ1Kx0iwkvtVvLextIseZcXMqxxpkgDLMQBkkD6mjT9SsdXsI77Sry3vrSXPl3FtKskb4JBwykg4II+ooAs0UUUAFFRz3MFrGJLqaOFGdIw0jhQWdgqrk9yzAAdyQO9SUAFFFFABRRRQAVxPi/SPO+Jnw+1nz9v2S9vbTydn3/OspX3bs8Y8jGMc7u2Oe2rifF+oRxfEz4faaZbgS3F7ezrGqp5TCOylUliRuDDzRtAOCGfPIXAB21FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUVU1PVtO0WzN5rN/a6fbBgpnupliQE9BuYgZrj7/42fDnTd32jxXZvtfYfs6vPzz/AM81bI469PfmgDu6K5L/AIWVokulfb9PsvEGoRPD50AtfD9632gFcrsYxBTu4wSQORyBzUkHxB0uaMtJpniSAh3UJJ4cviSAxAb5YiMMAGHfBGQDkAA6miuCg+N/w6nlmi/4SaGGSFtsiXNvNAQeeMOg5GOfSur0TxHoviS1NzoGq2epQrje1rOsmwkZAYA/Kcdjg0AaVFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXE/GX/AJI34m/68j/MV21cN8aJEi+DHiVpXVFNptBY4GSygD6kkD8aANX4cf8AJLPCn/YFs/8A0QldJXN/Dj/klnhT/sC2f/ohK6SgCO5uIrS1lubhtkUKGSRsE4UDJOB7V81/s7fb7b4sasb6xtbBda0c6qltbRlEhRp0MaoucKm1yQOfl289a9T+NnjO38LeBWsBdJbX+vN/Z9u7H/Uo+BLMfmUgIjHBB4YpngmvN/Gvg/WpP2i9N0XwPeNpcNx4fjjuGi+VLeyBeF0PDbhhFC5HDFOhG4AFD42eLL7x/q2kaFoV3EfDN1qiWUEkHzPqVyCFkdDjBjjMiKMkBmfcN4GU9rv9f8K/Di3tNB0uwH2yYBrTQ9IgVricE4LhMgYwGYuxHCMckg143pF/4Qv/ANpLQtH0e6sl8M+G7UxaXEbkNbyXT5bchdjvkMkgww+YtGp52g10Wn6pp1r+1F4n1fxjq0Gjx2FhFa6bDqlykW9GVcvG27aVyJDjOf3vIBDAAHcaP8TWv7rU9Lv/AAxqln4g023W7fSEkglknhZ8B4m8wKxClSwJBBbaNx6sPxi8P/8ACtZ/GqWepvYWtz9lurUQoLi2k3hMOpfA5ZT97ow+lZ3w80ubxF8Qte+JdzFdWlrqEKWGkW86qpe1UITMRjJDsgK89CeoKmvO/hXY6z4pt/E3g6CMW2hN4hludXvllIM0OVDWibGDHzQmCwICqG+9uAoA9A+IOs+DfFmqeGvBXirS9VnGstBqNlLCVSNT83yuwcMMruVgAeHyCDgjrPE3j/RvDGp2ukzi6v8AWrxPMtdKsITLcTqDywHCqAAxyzLwjYzjFebXN/pGq/tcWWm3we3Xw9pIisLdVBSW5ZQ/ChTgCKYntgxZyAK4Lwa9nqHxF8XSeN/F8llNe6hJYX2liz8261KIMV+zpKoMiKSFQpGMsAFGMLgA90svirpMvwfi+IV9aXVtYGLdLbIBJIr+b5JVeQGG/gE4yMEgdBP4N+IL+J9Vn0bVPDmqaBq9rapcz296qmMqzFQY3By4yCM7RyCOorm/FMvgOHwfF8NbmZfDOmappTTWFxeJ5McJWQMA4mKsH34fDYLYbJB6y/AG5v7z4eMdVW2nk0+5bS7TUoISovbSDiJg5ALorPKqnA6HjduyAeo0UUUAFcT4vvbFPiZ8PrGW23ahNe3s0Fx5any4kspRIm7qNzSRHA4OznoK7avOfGsZPxw+GUmV2q2qqRuGcm1HQdSOOvbj1FAHo1FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFc9448YWfgbwrPrN7E9yyskVvaRMBJczOcLGgPU9ScZIVWODjFAFjxP4s0bwhpf27XrxYEZgkMSgtLO5IASNB8ztkjgDjqcAE1xcz/E/x1DG2nm38AaVIgO+4jF1qMmUz9zhI1O8DBIkUpnjOK1/BXg+6jmXxT44jt7zxddLuMuwEabGQcW0PJCqoZwWByxZss3WuP+IPxT8T+HfjTofhPQ4LG7tbvyZXhWImaQuXQxO27CDgPuAyowTuGVYA6WL4K+E57xr3xL/aPii/JIW61u8aZo0PPlqq7UCgliBt4LH8Ou0bw1ofhxZF0DRrDTBMFEv2O2SIybc7dxUDdjJ6+p9a4LwF4u8S3fjnxta+LdT0m40nQ1gBu7T9zb20nllpVBYEkDB3l5Moy4xgnbha58RvFt38Nbr4jWM8eg6Tbsv9naW1uk8uoZuETdcM2NqEB8LHhgG3b2wMgHttFeD+P/iT4z8LfDPwZNHqtquta9bxGcppRNyDhHZkQsY9wDqjKQNxbKheih+J/wARIPjPpehPY6beR6hZCSTRLclTYeYzMhnmwzLIi7C/BXaflTJBoA9v1DTbHV7CSx1Wzt760lx5lvcxLJG+CCMqwIOCAfqK4zUvgv4HvZhdWOknRL9CWhvtHma1lgY/xJsO3PHdSBz61zHw2+J+pnwF4t8SePL9Lyx0bUZIobiCGOMuAF/dqoIByWQLk9XwWPbMg+JnjDxD4q8ITaLdRx22r3oafRLaxWU29hvI824uCxKuyqzKqhRgHJyMEA6eDw98TfBcs0ui6/D4000NlNN1g+TdBOcKlxyC+AuWfCn5jgHr0XhP4iad4m1K70e6trjRddsnKzaXf7VkYDP7yMgkSpkEblPbPQqT1tc/4t8GaT4ws411GHZe2u57C/jJWayl4IkjYEEEMqnHQ7RnNAHQUVxnw+8WXWsf2n4f8QkDxH4fmW2viE2i5UjMdyoAAAkA3bR09ACK7OgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoqG5u7ayh868uIreIHG+Vwq5+prg7/4t2k+tto3gfRL7xdfeVvWeweNbIHBJVrljtBHGSMjLBc7vloA9CrnvE/jrw/4Ss5pNW1CI3Ma5SwgdXup24wkcWdzE7l9hnJIGTXOT+FvHfi58+J/E/wDwjennLLYeGmKzjklQ904ySowDtUKxzwOK6fw/4I8NeFpXm0HRrW0uJFKyXIXfNIDgkNK2XYEqCcnkjPWgDiY/FHxH8e2bnwfokXhCzU+W974hif7TITyGhhAxgDGS+VO7A+6a534g/Ciz0/4W63rfivV7/wAU+ILS1ZoL+8ldEg5wBHCGKqMYzndk88dB7rXE/GX/AJI34m/68j/MUAbPga9uNR+Hfhy+vpWnubnSrWaaVuru0SlmPuSSa3a5v4cf8ks8Kf8AYFs//RCV0lAGbq/hzQ/EHk/29o2n6n5G7yvttqk3l7sZ27gcZwM49BV62toLO1itbOGOC3hQRxRRIFSNQMBVA4AAGABUlFAHP23gHwfZ3UV1Z+E9DguIXEkUsWmwq8bA5DKQuQQRkEVe1fw5ofiDyf7e0bT9T8jd5X221Sby92M7dwOM4GcegrSooAKjgtoLWMx2sMcKM7yFY0Cgs7FmbA7lmJJ7kk96kooArf2bY/2r/af2O3/tDyfs/wBr8pfN8rdu8vfjO3dzjOM81W/4RzQ/7e/tv+xtP/tb/n/+yp5/3dn+sxu+78vXpx0rSooAy9W8L6Br8scuu6HpupyRLtje8tI5ig9AWBwK0La2gs7WK1s4Y4LeFBHFFEgVI1AwFUDgAAYAFSUUAFFFFABXBeMtOml+Lnw51NUYwW9xqFu7fLgNJaMyg85yRE3QEcHJHGe9rkvFmoWsXjfwLpry4u7jU7meKPafmSOxuFc5xgYMqcE5O7jocAHW0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAV5l8Q7eLUfjH8MdPvF8y1N1fXZjyR+9ghV4myOflbnHQ9wa9Nrz74r6TrJttF8VeFoRPqfhq8N00IRWeW1ZCs6ICPmYrjjIJAOPm20Aeg15no3gnWW+PviLxnrEKR2cdnFaaQokUiUFF3sSp3LtKsCGU/wCs4JCgnu9A17TvE2hWmr6Ncpc2d1GJEdWBxkcq2OjDoR1BBBqvqHjHwzpMvlar4i0myk3Muy5voozkdRhmHI70AeJaf8OPiPqXwe8V6LrNna22o6tdy6hJHNdRtJe3LS28m4eWNkS7YpFALcs/OxQCX+NvBnxQ8VfCnSNAstEsNPtdPgtoJNLF0j3EzxoVL+YWKLGMLtXcWPJJ7V7gfEuhKVDa1pwLHABu05PX19qzv+Fj+CP+hy8P/wDg0g/+KoA5a38Ga/L8YPDWr6pa2f8AZ2iaJJGlxasVRbh2ZPKCs5dgsTD5iMHBPBIUZ/hXwV4r0e6+JXia4tlXxLq0twuiyPPHOyxqrGEKzcKhJjG1sDES5UACu8PxA8Gqiu3i3QgrLvDHUocFc7c/e6ZGM+vFNX4i+CXOF8YaAxwTganD0HJ/ioA8bvPg74n1H9ny28NxaXaaZqNjdJepZCdJZryYeakjSTDbGu5ZF2D5tqxqrOc/J6H8N11hdP06PTPBVn4L0FU3XFncnfdXDmPaGG3BUgqoZpQXcdlxk9PB458JXUU0tt4o0WaOBd0rx6hEwjHPLENwOD19Km0vxZ4c1ucwaLr+l6jKOsdpexysOCeik9gfyNAGvRRTJ54ra3knuZUhhiUvJJIwVUUDJJJ4AA70AclfwJa/GfRbuC2mea+0S9t7mRJPlVIprd42ZSwGAZZFBUFsy88AkdhXnvgZr/xX4z1TxzdGRdGkt1sfD0bMy77fcGmnMZA2+Y6IQSAxVBkY2k+hUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRTZJEhieWZ1jjRSzOxwFA6knsKr2GqWGqxPJpl9bXkaMUZreZZArA4IJBOCCCMe1AFqiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoopk08VtC01xKkUSDLO7BVUe5NAD6K4m5+LHh7+3JdG0GPUPEmpQuqTQaNamZYSxAG+UlY1HzckvhdrAkEYqhaaZ8S/FF40niPUrTwno80ZB0/SGE17ghhta4ZSqHkHfHzwMbT81AHUeIPG/hrwup/t3WbW1l3Kq24bzJ3JKgBYly7H5l6A8HPSuTi8X+O/GdqJPBXhmPQbJ9pXUfExKyOpB3eXbR5ORkMGZtpA6c8dN4X8A+HfCEk9xo1gPt10zvc6hcOZrmcsQW3StliCVBIzjPOMkmujoA8zb4LWXiGZLv4ma5f8Ai+7iBWISH7Hbwg/3IoiNpOBk552j0r0i2toLO1itbOGOC3hQRxRRIFSNQMBVA4AAGABUlFABRRRQAVxPxl/5I34m/wCvI/zFdtXE/GX/AJI34m/68j/MUAa3gG5nvPht4auryaSe4m0m1klllcs8jGFSWYnkkk5JNdBXmXgj4m+CdK+G2hWt/wCKdLhuNP0K0e4iNypdcQ4KADlnBRgUXLDjI+Zc6R+Nnw5GrPp3/CV2fnpuy+1/JO1SxxLt8s8DjDcnAGSQKAO7orm/+Fj+CP8AocvD/wD4NIP/AIqj/hY/gj/ocvD/AP4NIP8A4qgDpKK5v/hY/gj/AKHLw/8A+DSD/wCKo/4WP4I/6HLw/wD+DSD/AOKoA6Siub/4WP4I/wChy8P/APg0g/8AiqP+Fj+CP+hy8P8A/g0g/wDiqAOkorm/+Fj+CP8AocvD/wD4NIP/AIqj/hY/gj/ocvD/AP4NIP8A4qgDpKK5v/hY/gj/AKHLw/8A+DSD/wCKo/4WP4I/6HLw/wD+DSD/AOKoA6Siub/4WP4I/wChy8P/APg0g/8AiqP+Fj+CP+hy8P8A/g0g/wDiqAOkrzbxt/yXb4Yf9xb/ANJlrpf+Fj+CP+hy8P8A/g0g/wDiq4jX/Eeh+IPjt8Nv7B1nT9T8j+1PN+xXSTeXuthjdtJxnBxn0NAHrdFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHmmt+DPEnhbXpvEHwskhf7dNJPquiajcuYLqR2BMsWf9XIecnIXAXjjBi0nUPhd4q8YXmiX/hTTbHxQJZHuLDVtIhW4kYfMz7wGSQsDvBVySuW6c16hWdrPh/R/EVn9l17TLTUYcEBLmFX256kZHB9xzQBmf8ACuPBH/Qm+H//AAVwf/E0f8K48Ef9Cb4f/wDBXB/8TWWvw0XSzNJ4R8Ua/ocjQukcRu/ttsrHGGMVwHzgqDwVJyw3AGqdxZ/GKxnaLTNV8H6rb8MLjULS4t5AccrsjZlwPXOeaAOg/wCFceCP+hN8P/8Agrg/+Jo/4Vx4I/6E3w//AOCuD/4msP8At74o/wBleX/whOj/ANoeTt8/+2v3Xm7fveX5edu7nbvzjjd3rN8O+LfijqvgewvV8JaPdXd5ZLPDenVPKjbeu6N2h2E9CuVDjJzgrngA67/hXHgj/oTfD/8A4K4P/ias6f4K8K6Rfx32leGtHsbuLPl3FtYRRyJkEHDKoIyCR9DXG2y/G6/jiW8k8F6UkjgSyRR3Es0K7uSqklGOOgJ5z1HUbNz4D1PW9Pjt/E/jbWrkbiZYtNEVhDJwygfIpl24blTIQTzjGAAC/wCLfiB4e8GCKLVrsyahcFVtdMtF867uWbIUJEOfmKlQxwueM5rk38N+I/ijeM/jiF9I8GsFltdCjlMd1dEYKm7IGVHU+WrDDbc8puPb+H/B/h/wsjDQdLgtZJARJcYLzygkt88rEu/J43E44A4AraoAjtraCztYrWzhjgt4UEcUUSBUjUDAVQOAABgAVJRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRXnTfF+01rVptJ+HWkXPiy9t5NlxLC4gs4BkjLXDAjnDbdobdtOCaAPRa4e7+KGn3Osz6J4NsbnxRq1uwSZbIbbW3YqWHnXJ+RBhW6bjkFQCciqdv8P9Z8V2iSfFTWWvMq4OjaRLJa2Shj0dlIklIAGNxAHIwclj3dhptjpVqtrpdnb2VuvSK3iWNBwB0UAdAB+FAHnrfDLUfG9pbS/F3U11Awu0kej6WzQWcLEnBLD95IwXgEkbcsBnJYvuPgpoVheLqfgS7u/COrxwrClzYuZI3VQAFliclZAdqkjgsw3Ek5J9IooA8tg+IHirwNBj4t6NGbHeFGv6KrS28YJAAmj++nP8QGDuUBc5z6PpWq2WuaRa6ppVwtzZXcSywyqCAykZHB5B9jyOhqzJGk0TxTIskbqVZGGQwPUEdxXG3fwy02HU5tW8JX154Y1SVmkZ9PfNtNIU2gy2zZjYdCcBSTzuB5oA7SivN0+IGveC9NB+K2jCCCIKra7o+64tXJfbmSPG+LqnOCGJOMHC13umatp2tWYvNGv7XULYsVE9rMsqEjqNykjNAFuiiigAooooAKKKKACiiigAooooAKKKKACiiuJ8WfFzwp4Q1ldFvbm4vdZfYE03T7dp5mL/cXj5QzcYUkH5lOMEGgDtqzde8RaP4X0p9S8Q6jb6faJkeZO+3cQpbao6sxCnCqCTjgGuQWb4k+KdQiaKK08GaJuDM0m261KRQx/hIMMW5MZB3lD/e6Vq6R8NfDum3kt/ewS65qUpBa/wBZcXUy4GMIWGIwcnIQKO3QAAA58fErxD4xs0f4V+F3u7aSQp/bWtN9ns1wRllQHzJRw6naBtYDryKRPhNc+K7WOX4ta5ca9ch1dbCzla2sYMA4Cou0u3zN+8OGwQOAOfTaKAK2n6bY6RYR2OlWdvY2kWfLt7aJY40ySThVAAyST9TVmiigAooooAKKKKACiiigAooooAKbJIkMTyzOscaKWZ2OAoHUk9hTq85+LurarJDovgvw4dmoeKriS2klIUeVaImbhgx4VtrDHBON2Bu20ARfCbS/7WvNc+I19Eou/E1xmy3Ku+Cxj+SJTgHa7BQWAYg7U7g16SsaIzsiKrSNucgYLHAGT6nAA/AVBpun2ukaVaabp8Xk2lnCkEEe4tsRFCqMkknAA5JzVmgCpqek6drVmbPWdPtdQtiwYwXUKyoSOh2sCM1lS+AfB88cMc/hPQ5Et0McKvpsJEa7i21QV4G5mOB3YnvXQUUAY114O8M3yxre+HdJuFit1tYxNYxOEhU5WMZXhAeQvQVWT4e+C0V1TwhoKrIu1wNMhAYZBwfl5GQD+AroqKAMK88DeEtRujc6h4W0W6nZVUyz6fE7EKoVRkrnAAAHoABUH/CuPBH/AEJvh/8A8FcH/wATXSUUAePeN/AXhvwz4w0HxVF4b0BPD6n+ztbhntoUhiSV1ENwEK7QVkbDP12kD7uSO9/4Vx4I/wChN8P/APgrg/8Aia1Ne0W18R+Hb/RtQ3fZr+3e3kKY3KGBG5cggMM5BwcECuS+E+t3Uugz+FNfdm8ReF2Wyv8A5TtkQ58iVGP3leNQcnDZBJAyMgGz/wAK48Ef9Cb4f/8ABXB/8TR/wrjwR/0Jvh//AMFcH/xNdJRQBzf/AArjwR/0Jvh//wAFcH/xNW9M8HeGdFvBeaN4d0nT7kKVE9rYxROAeo3KoOK2aKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACub+HH/JLPCn/AGBbP/0QldJXN/Dj/klnhT/sC2f/AKISgDpKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKK871T4v6dcfabL4fafdeMtWhdY2i0+NhbQk8hpLgjYFIDYIJyVxx1AB6JXnkvxbs9avbjTPhvp0vizUbeQJO8TGC0gBLDc07LtI+Ukbc7h90nmo7bwLrvjRrTUfihfFI4yzp4c0yYpaKGXG2dh80zDv823OQMqSD39jYWemWaWmm2kFnbRjCQ28YjRR7KOBQBwMvw81rxndJcfE7V1ltImlCaHos0kNoysu0GST5ZJGxn0GemAWDd9Y2FnplmlpptpBZ20YwkNvGI0UeyjgVYooAKKKKACiiigAooooAbJGk0TxTIskbqVZGGQwPUEdxXnt98JYrPxAut+ANbuPCN18vm2lpCr2MxA2ktbZVcleOCOQGA3cn0SigDz2bx/rng6zaf4naFHa2SNEh1nRZGubUM2Qd8ZAljAOBnawJYDOcbu50/UrHV7CO+0q8t760lz5dxbSrJG+CQcMpIOCCPqKsMqupVwGVhggjIIrhtX+F9odVGseDNUufCWq4k3vp6K1vOWAGZbdhsc8ZzwSeSSQpAB3VFeZWfxQ1fw5dPafFfw82hxhxHFrVjunsJmzjJIy0QPBXdzgnO3Fd9o+uaV4gsjeaFqVpqVsG2NLaTLKqtgHaSpODgg4PPIoAv0UUUAFFFFABRWP4h8W6B4TtVuPEmr2mnJICYxPKA0uMZ2L95sbhnAOMiuOTx94t8Ualbx+A/CTJpE6F113XCYYWX5trpCP3jowClehO4ZCj5qAPRbm5gs7WW6vJo4LeFDJLLK4VI1AyWYngAAZJNcQnxOh16e7s/h7pN14knt2eNrxf3Gno6FQym4bhjhgQEDbuDwp3BLD4XQ3OqQ6p471q78X3sAHkx30aR2kLbcF1tlGzccnk57dxmu4t7aC0gWC0hjgiXO2OJAqjJzwB70AeaXfgLxt44iH/CdeLW0iwdt50fw6gj2kfd3XLZZjz8y425AI6Cu08M+DfD3g6wWz8NaTb2ES7ssgLSNuOTukbLN26k8ADoBW3RQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAR3NzBZ2st1eTRwW8KGSWWVwqRqBksxPAAAySa84+GthceIfFOt/Em/kbytYUWmkW7Hd5VihGGySSpkYbigwAck5J4tfFe7e/t9F8EWzOk3iq8+zTyRsA0dpGA9wykgjds+UZBHzGu9traCztYrWzhjgt4UEcUUSBUjUDAVQOAABgAUASUUUUAFFFFABRRRQAUUUUAFedeLbIeDviFYeP7byIrG7WPSdf811jRI3dRDck8ZZXKoxbd8hGAoBI9FrK8UeHrXxX4V1HQr8lYL6Boi4GShP3WHuDgj6UAatFcT8MNYaTRrvwvqM80ur+F5v7Punnj2NNGM+ROBk/LJGFOSc5DdeCe2oAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACub+HH/JLPCn/YFs//AEQldJXN/Dj/AJJZ4U/7Atn/AOiEoA6SiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAorN13xFo/hjTft/iDUbfT7UuIxLO+0Mx6KPU4BOB2BPY1yJ+Ier+IJHt/APhW+vY5YVe31nVY2s7E7lBWQbgJJEG7oq5OOOPmoA9ArgtU+KVrdrc2Xw6s28YaxEq5jsXAtoNxwDLcH5ADhiACSdvYfMMjWPhb4q8a6Ddw+MvHd1b3N0o22ejxCOxh6/Iyn55l5/iZe3oKXSdZ1/4WaDYaR4l8MpdaJYwnztd0IKY4lLsS8lqEVk2jDOy7geW5OQAC/cfDW/8X38F78StZ+328LmSPQtPUxWKZAADt/rJsFQ2WI5zgAEg93YabY6Vara6XZ29lbr0it4ljQcAdFAHQAfhWf4b8X+H/F9mbrw1q9rqMaqrSLC/wA8QbO3eh+ZCdpwGA6GtmgAooooAKKKKACvPb34kX+s+IpdE+Gujw69Jats1DU7i5MNnZvnATdtJlbAOQnTK9eQG/HXxLqPhb4S6jeaNcSWt5M8dslxE214g7DcVOODtBAIwRnIIIFWvgz4Vj8I/CnR7MAfabqEXt02zaTJKA2CMnlV2pnvsBwOlADPC/xEurjxhP4O8babDoviFV82zSGYzQ6hD8/7yJtowAEPDYPsCCB3tfOUj3/xL/atN1oF1cRaX4dh+yvq2nKqmECOTqZVZWJmd0xtIZASAQC1aekfETxBovw18a6fcazLrfijRtRv7ayla2G8QQBN87AAqFTc7fOSM7U+bKqQD3qivINO1/xNr3hn4XS6fqky6jfTJNqSRxbhcWkS/vpJGPCj7i9stKMc4Fcrpvij4ja/408caToniWVbHQ3aF9SvraFnt0jd92yONVRpXKMASANobkHbQB9E0V5X4U1/xVffszf22ZmuvETabdSxTTMEYkPJscYUgsECkAj5iACRkkN+C9/qniPSbHxCvi2+1bTpLJ7e/wBP1BIzJb6gGjLMrooPllQdqk5AYHksQoB6tRRRQA2SNJonimRZI3UqyMMhgeoI7ivPdV+EdtHrZ1zwDrFx4O1V+JfsUKyWswI2nfbNhCcY6YGfmwW5r0SigDzXS/iB4m8Pbrf4peGpbCCNhGNd04i4tGABBklC/PCrFRglf4xuC4yfQNM1Sx1nTotQ0i8gvbOYExz28gdHwSDgjjggg+hBFcTf/FzTJ7ptP8C6deeMtQHDLpYH2aBskL51wfkQNtbBG77p9s83oPwUu59ZvtR8Qah/Yulahu8zwt4emkgtSp4CyyKV8z5SwYBRknghQFoA7TV/il4V0vVxo0F82ra0zOiaXpUZuZ2dSQyHb8qMMEkOy4AJPSsBLf4m+P8AT5U1R4fh/p7sNqWj/ab+VcZI8wMFiU7hyAHBQ9Aee80Pw1ovhmza18P6VaadCxBdbaEJvI7sRyx9zmtOgDlPC3w18MeEolax09bu+3Bn1K/AnupGG3BMhGQBtXAXAGMgZrq6KKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKjubmCztZbq8mjgt4UMkssrhUjUDJZieAABkk1JXm3xb1eW/j074d6TJJDqnixmhN0uCtrarhpnK9WJQMoXjI3ZYYGQBvwytpfEfinxH8RLzc0Oqyiy0XeG+WwiOBIoY5VZWG4oVXBXPO6vS6qaVpVloekWul6VbrbWVpEsUMSkkKoGByeSfc8nqat0AFFFFABRRRQAUUUUAFFFFABRRRQB5n4187wR8RdH8Z6bZCW01eSHR9cxGAsaM4ENyWUZDKTtJbIYbV+U7TXplZviLQrPxN4bv8ARtSijltr2FomEibgCejY9VOGBBBBAIIPNcv8KvEdxqfh+40DW7h5vEHhub+z9SZ33+aVyEmDHBZXUZywDEhs+pAO6ooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArhl8deIrue7Oj+Ar7ULOC7ntUul1G1jEphlaJiFdwwG5D1FdzXN+A/+Rduv+w1qv/pwuKAM3/hL/Gf/AETPUP8AwbWX/wAco/4S/wAZ/wDRM9Q/8G1l/wDHK7aigDif+Ev8Z/8ARM9Q/wDBtZf/AByj/hL/ABn/ANEz1D/wbWX/AMcrtqKAOJ/4S/xn/wBEz1D/AMG1l/8AHKP+Ev8AGf8A0TPUP/BtZf8Axyu2ooA4aTxh42ETmH4Y3zSBTsVtYs1BPYE7zge+DWX4T1rx1oPg7SNHu/htePNp9lFaM8Wr2ZV/LQIGGXGMgZx2zjnrXptFAHE/8Jf4z/6JnqH/AINrL/45R/wl/jP/AKJnqH/g2sv/AI5XbUUAcT/wl/jP/omeof8Ag2sv/jlV7vxl4/RV+wfCy5mbPzCbXbSMAexDNmu+ooA82/4Tb4nf9Ej/APLltv8A4mj/AITb4nf9Ej/8uW2/+Jr0migDyXXvit458LaJPrPiH4Wmz062KefOPEEEhQM4QfKqknlgK9arzb9oP/khPiH/ALdv/SmKvSaACiiigAooooAKKKKACiimySJDE8szrHGilmdjgKB1JPYUAOorzrXPjJpNvfpp3gzT7vxpfkbpU0UebFbqeFLyjKjJOOM4wc44zKugeOvFV+t34i11vDGlSQp/xJdGkV5w2Mt5l2UBDZOD5YAwBg5G5gDf8UeOdB8IWzPq14GuirNDYW4825uCBnCRjk/U4UZ5IHNcudU+IPj3TYbnwxDH4I095W/0nVYPOvpUBADC3I2RqRu+8xJwMYGGPVeHPA3hfwiAfDmhWVhII/KM8cQMzJwdrSHLsMqDyTyK36APP9I+Dvh6CePUPFbXHi/WAmx73W3M6gEcokJyiJuLMq4JXcfmNegUUUAFFFFAHDeIfhTo2qXk+raBcXXhfXpWZ21PSZDE0rNyRKg+WRC4VmU4LFeoyc0pPG/iPwNb2lv8QtEm1G1CIkniHREMsW7dgtPBgNFhcEldwJPyj+EejUUAVNM1bTtasxeaNf2uoWxYqJ7WZZUJHUblJGat1w3iT4Y2uoXkmreEtRm8Ja7I5eS/06MbLklst58XAlzyckg7jnnocmX4h+I/AS2ln8SdBmvLULsk8SaOplgYA8yTRBQYSFKk4yCd2wcYAB6fRVTTNW07WrMXmjX9rqFsWKie1mWVCR1G5SRmrdAHN+P/AAVZ/EDwbd6BfTyWwmw8VxGMmKRTlW2/xDPBHGQTgg4Iw7Kw+Jdl4Lh0KA+HUvre3FrHrP2uZyFX5Vl+zmHBfaBwZNu7nBHy16BRQBzngrwNo/gXR2s9HjcyzlZLy5lkZ3upQoBkbcTgnGcDAyTxXMwfCxhN8QryZ7Mah4qSa2tbgKWa3geLaAxIGMuclV4O1eTxj0migDzz4dfDW58B+EXBvkv/ABNJZ+QLu4d5LeELkxwomQRErEk4wzFmPGQBV8O/DDUPDvwGvvBdlcaemsX1rcJcXRR2hkklypJ6N/q9qBscbQdpxtPptFAHmPhzwV448L6Z4UgtdYsrpNLjmXUbAzNBbz5jjjiRCsRIChWkJYZZyegb5dH4XeALrwOuvzXs0MTaxqT3cem2Upa0soyTtSMFE+bBwTtAIRBgba72igAorhde+Kuk2dz/AGZ4Ut5fFuuMyotjpR3pGWLLmacApEAVIOTkcEjHIgPgrxP4p1Oabx9ryJo8iyxDw9oryRQujcDzbj5JJPlJyuFBPtlSAXdf+J2l6Zqa6PoVrdeJdbZ41aw0tN/khyQGll+5GBt53HIyCQF+YZs3gbxF45ut/wAStQt49EZDjw3pTOsbnfuQzz5DSMvy8KFXcoIwMhu50jRdM0DTY9P0Swt7C0j+7DbxhFz3PHUnuTyau0AZ+i6DpPhzT/sOg6ba6dbbtxitohGGbAG446thQMnk4FaFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFZ2qeIdF0MA61q9hpwIBBu7lIuDwPvEeh/KgDRory68+PGhysieEtC8Q+KDJHvSTTtNkERwxDLlwGyMZ4UjkDPXFtvHfxBnihn0z4UXUkE0SyA3et21vIM84MZyVOMcHBByCBigD0SSRIYnlmdY40UszscBQOpJ7CuB+HsA8Ra5q3xAn8uZNUY2mkSbXV47CNyoBVgNokdTJ0/iHToOd+KeseP8AUdI/4Qux8L2sd54it5UhvbHVmlRFjAaSN98EYBdMqMkA7uvFaOh+IPHmi6dZ6VZfB42enWkawxpD4jtnMaAYH3sbj7k5PUmgD1GivKIvjtFaMreKPAvivQ7ZmA+1z6exijX+J3JwQFHJ2hjjPHr2+hePPCviWCOXQ/EGn3fm7dsazqsgLHABjOGUnHQgGgDoKKKKACiiigAooooAKKKKACiisPxB418NeFbeWXxBrdlY+UMtHJKDIeM4EYyzHBBwATQBuV5Z43eP4e/EzSfHNvAfsOtMuka4eqpnHkz8cgrt2knIKgAAEglbn47aXNPLD4Y8LeKPEJCLJFPZaYwhlUgEsC3zgDdjJTk+xBqvrviXxb428FXNlF8JL24tNSheJ49T1GC1ZOoDeW/zghgGGQp4BB6GgD1qivG/BXjn4oLocGmaj8NrjUbnSnFheX0msRQPKyAfPtl5clSp3hirkkggHA0774u65pWova6j8LvFIERBlltYRcoqkAkq6ZRsA9m68EjmgD1GivPdE+N/gnVpUt76+m0C8dS4ttbhNqdo/i3nMeDzj5s8dK7uzvbXULZbiwuYbqBvuywyB1P0I4oAnooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK5vwH/AMi7df8AYa1X/wBOFxXSVzfgP/kXbr/sNar/AOnC4oA6SiiigAooooAKKKKACiiigAooooAKKKKACiiigDzb9oP/AJIT4h/7dv8A0pir0mvNv2g/+SE+If8At2/9KYq9JoAKKKKACiiuR134o+EtAv4tOl1MX2pzMUj0/TI2u7hmGOCkYO04bIDYyAcZxQB11Z2ueINJ8NaXLqOvahBY2kKlmkmbGcdlHVj6AAknAAzXBSaj8UvGcyyeH7S08FaMxG2fVofO1BxzlxDyidhsfByM5wcV0GifDLw5o/iCfX54ZdX124k8yTU9TYTTA9BsGAseAMDYq4HA4AFAGZB8Qtb8T3k1r4F8J3cluoKrrOtBrO0BIfDqhHmSgMoG1QDk4JTg1XuPhRc+LrWBfij4jutfEExmjsbRFs7RMgDkIN7sMMNxbgOQAOSfSaKAKmmaTp2i2Ys9G0+10+2DFhBawrEgJ6naoAzVuiigAooooAKKKKACiiigAooooAKKKKAOCufhVZ6dq82seANSm8I6hOqLLFZwo9lOFIH7y2OFJ27gCpXBYt1JzBJ8QNZ8GyQ23xK0ZktishbX9HikntAF5BkjAMkRIIHO4E8g4zt9EooArWGpWOq2q3Wl3lve27dJbeVZEPAPVSR0IP41ZrgdY+GYs7y81v4cXo8M67cEPKEUtZ3hUHCyw/dGc/fUbhlm5JOaFv8AE3V/CUC2/wAWdBm01lzjWdMia5sZRnvty8bY7EHO0kYGBQB6bRVaw1Kx1W1W60u8t723bpLbyrIh4B6qSOhB/GrNABRXFax8UdHtdTOjeHIpfEuttGTHZaaysivztWWbOyLO0k5OQATjoDQHhDxV40juB8Q9W/s7TZZX8vQ9DmZFaIrt2T3GA0gwWBVdqk8+iqAW9d+KemWWorpPheyuvFmsNtza6SBJHAGbaDNN9yIZz1PHBIAOarXPgzxX4wuZo/HeuQ2mitvA0fQJJIxMGyoWa4YK8i7CQVAUMTnA2gHtNG0bTvD2jW2k6LaR2djapshhjHCjr1PJJJJJOSSSSSTV6gDN0Hw7o/hfSk03w9p1vp9omD5cCY3EKF3MerMQoyzEk45JrSoooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKpavrWmaBpsmoa3f29haR/emuJAi57DnqT2A5NXa8tTRk+JvxOvNR1lPtHhrwtdfZdOt9zIs18m0zSOu0FwrfIMnadhwCC2QCS21f4hfEOH7X4bMXgjRWOI59TsTNqEpHIcRMfLEbAgcknKkgkEVe8M/BTwb4a1VdW+yXGrauszT/2jqs5nlMhbdvI4TcDyG27s85zXoFcl4Z+I+k+K/FWq6Bp1lqkV1pKg3MlzaGONSWwFznIY8kAgZAJGcHAB1tFFFABRRRQAVx/i/4V+DvG7NNrujQm8ZgzXtv+6nYgADc68sMADDZwOmK7CuU8S/EXRvCvijSNB1SK++2axLHFaNFbkxOzyCPG8kDKkgsOoBBxyAQDFFp478AWd1Na3b+OdHgj3R2l03l6lGARnbIFK3BC7jhgrMeAeAG6rwp4v0fxnoyajolxvH3Z7eQbZrV+hjlTqrAgj0OMgkEE7deY/ELQ7/wvrw+I/hFSLmEKPEFtuUJd2MY3O/zdJEVBgrzjpnoQD06io7a5gvLWK6s5o57eZBJFLE4ZJFIyGUjggg5BFSUAFFFFABWF4s8Y6T4M0d7/AFaVnYYEVpBhri4YnAWNCQWPf2AJPANaGtavZ6Bod7q2pyeXaWULTyt32qM4A7k9AO5wK4T4deFZtTvF+IvjGIS+I9UhDWsLZKaXasPkijBPDFSSzYBy7DAyxYAbHY/EHx7bx3OoakfBOi3Q3Cws03al5eBgSTNxEzcthRlRhTzurU8KfB/wR4NukvNH0SNr1Pu3V07TSKc5BXcSEPOMqAcV21FABRRRQAUUUUAVtQ02x1ewksdVs7e+tJceZb3MSyRvggjKsCDggH6ivPH+COj6RqMmr/DzULvwlrLAqtxAftEO1j86NDISGU9QMgBgpH3cV6ZRQB54fGuu+C9RtLL4kQWkmn3cnlxeIdOjdLeHhQBcq2REWc8Nu2nd/CFJr0CCeK5t457aVJoZVDxyRsGV1IyCCOCCO9Jc20F5ay2t5DHPbzIY5YpUDJIpGCrA8EEHBBryrRYbj4R+PbLwzGbibwXrzFNM3q0h0+94JhMhbhHAdwMZLE4HDsQD1miiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACub8B/8i7df9hrVf/ThcV0lc34D/wCRduv+w1qv/pwuKAOkooooAKK8Znmg8VftGa34Y8V394llaWMD6RYxX89qkrhFd5FEbrvcb3567Qf7pxqaLen4R+HPEWqfETWdQmt5dYkTTHur6W8kkttuYI1UkhXP7zPAzj5jgAgA9Sorz/TvjR4Pm8Bad4o1jUo9KhvcobeQNJIsq48xFVV3OFLD5guMEE4ziusufE2jWfiay8PXOoQpq9/E81vZ5Jd0QZLcdBwcZxna2M7TgA1KK53xZ4+8L+B4oX8U6xDYmdsRR7WkkbryEQFtvH3sYzgZyRXjfwf8T6Zo3hHxp4r1/wARXGn6Vear9is7h5XnaHAZl8pJA7M2JgfmDZC5YEK1AH0NRXLeBUTRfhnpsuo+JZNbt1tWu21q+3RmWFy0qu/mMSoCMB8x4C9ugl8N/EPwp4u1W903w3rdvf3djzNHGGHG7buQkASLn+JCRyvPzDIB0lFcb4m+LfgfwfrLaT4h16O1vkRXeFIJZigbkbvLVgpI5wecEHGCK7KgAooooA82/aD/AOSE+If+3b/0pir0mvNv2g/+SE+If+3b/wBKYq4X4g+KPih8QLy40DwB4W1vSdJMH764vbY2M05DjOJJGUBT8o2g7iN2eMgAG18Wv2gdO8IfatE8KGPUNfifypZGXdBaH+IE5+dx02jgHO45Uqd/SPjDB4o0uAeCNFvfEWqGOL7QqRta2tu5wXWSeQYXaMkABieAM8keEWn7MnxBvZSbptLtCy7y9xdlsn0+RWOefpx1r6A+DXgDVfhz4Mk0nWtTgvZZblrgR26sY4MgDarNgsCFDfdXBJ69SAV7bwh458W2NzD8SPEVvZafdxeXJo/h6Ly1dSFPzzuC+D86si8EH7xBK11/hbwhoXgvSRpvhrTorK3zlyuWeU5Jy7nLMee54HAwABW1RQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAebXnwgtdGurrWPhlqFx4X1d8yfZ4pS1hdPkkLNCQRtwzKNuAm7KjIAqNfh54o8Z6PNY/FjxDHNa+ahTTtB/cwyhR96V2QOx3EEIMKCoPPAX02igDL8O+GdG8J6QmmeHNPhsLNW3eXEDlmwBuZjks2ABkkngelalFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFeX/s6yW7/BDSFtwvmJLcLPhcEv5zkZPc7SvP0HavUK8y1jXo/hT46mvNWCxeE/E0yt5sMQAsdQwA7PjHySou4kZO5GOBksQD02vGvhZrui+HPhn4k8f6wTFBqes3N5PdrbndKpm2RhQBuK7mIAPALN05rs/i3NrUPwo13/AIRi3uLnU5YVgiitomkkKySKjlVXnIRmOR0xntXlXifwL4o1P9mPR9F0fQJ7Sawmhun08yn7RLH5DNMzISfmM7uwjznG0bQ3yAA6XTvid461Dxj4Yj/4R7SY9G8SN51tZC4Z76KzCKTcyOD5arhtwXG4/c+9zVDT/jJ4su/i1rfgc2OhS3aCeHSjbu7J56kMvnSb+VSPeXAUNlCoAPFdZ8OJIJUtv7C8BX/hu0hjaG7utbTZcvj5lijLM0si7nJ3OQoAwoJ4XifCnhrxDp/wb8c+JbjSLiLxR4me7lS2Fs4uokcldu0IrhtxdwBxjYcdRQB1Pw7+L7eIvhHqnjHxRZx2p0maWO4WxBIlCojgorHgkSBcFiMjOQDgc5cfGXx1Y3nhG8ufD2jPYeLpmWw05ZpUuEU+WsZec/KNzSq2RGRt9M8S28snh39nyy8I3ehC21PVrUWOl6VfS7576eVQ8zMi48lVeRyCzDYNpbYcLVD4Yy6FJ4v0Lw94/wBB1ay8Z6Jai20kalI0sLxxK+Xi2qqYysmCwYYRNrkgYANjx34i+I918V9K8J+FLjSrWK4jTU1ikjn3xwxgEi7kQEKjSoyARnnhWOG55rxZ4ut9V/acjtxp13qtxoFmbbRtPj/eRT6g2G8x1YARqu8lnHI+zq+eAK6Tw3ZeJz+0l4o1eTQLgWsyR2kWoXQkigjtl2bvLz/rGYxrgDgEsxI6MvgPw1rMNr4/8fT6dew6trpujpen3EJt7qKJN5jVhn5WY7B042BsndQB1nwe8c6r8QvAS61rmmx2Nx9qkhVoVZYrhVxiRA2TjJKHlvmRuR0HU+I/+RV1X/rym/8AQDXJ/BLT9Q0n4TaVp2qaVPpcluHCxXLfvHDMXZ2XGUy7OApycAE4zgZnxG1K78aa4vw08LzvHPIUm1+7Viq2tkcEx5HJeQFQFHUEg4UkgAu/AS2ntfgb4djuoZIXZJpAsiFSVeeRlbB7FWBB7gg969EqO2toLO1itbOGOC3hQRxRRIFSNQMBVA4AAGABUlABRRRQB5/8dPtX/CkvEf2H/W+THu6fc81N/X/Y3e/pzXoFUta0iz1/Q73SdTj8y0vYWglXvtYYyD2I6g9jg1w/w+8XXFjqX/CvvGciQ+JdOj/0aXbsj1S2AyksXAGQoIZRn7jHswUA9FoorP13XdN8NaJc6vrl0tpYWqhppmUsFBIUcAEkkkDAHegDyTWPi/4wPhe48d+H9D0keDLWVEX7fM/2y+Xz/KZ4wnyxDJxhwSME/NnFdfqXxX03SPBvhzWL2wuX1DxJDC2n6TbFZJZZJFUhQxwMAuo3HH3hxnivF/C89jaw6N4N+LekeINEsJLpZtLsGKrp0rSyiTY2UEmE81AQ8smMtu2kAVtfF2zbT/jhpeuePtNv7/wnJHHbaZLpUzo9tOCHwwXB3lw3AIJUgqSUKgA9F0v4i61Jr/ijR9X0OwjvtF05dQjgtNQMg+aIMIJHMYw2QTuAwAy8HG5uRb9oPU9R+GF94p0TwiVawuo4rpprkvbwozquN+1C8h3Y2oCFDKzHop0PFl8NO+B2pr4M8JX+jXGqzppVrFNZFbicSOIjLMPvKWy6q8h3FmUnlxWP448IjwZ8JfA/hOPTJru3l1uzGrvZIkgmckmRfnwxLucISuMIFYjgEA774sfEq4+GGi2OqJoa6rbXNwbaQ/bPIMTlSy4GxtwIV/TGB1zVfT/iyYoNS1Hxl4cvfDOhW0cM1pqdy/mrdJK2IxsQbhIRglFD7fm3FcDdzvje3ufHXxm8DeFNa094rKysTrmp2qTiaFnyVWN1K7XVXj2biPmWZgNueT9pGyu5vDugXt15svhay1JJNbt7fHnMhKqjKTjoDIv3h80icHqoBvaR8SNdv/H+haXf+HY9P0vXbW5nsybjzboJGA6TSoABErKcbDuO44yMEHT+L/8Aan/Cs7v/AIR7/kLfbbD7D93/AF/22Hy/v/L97H3uPXisr4WTeGdRkfUPBuhakbKWE+brmqySNJcSK20JGZCzMP8AWFiu1QeMEk7WNdH4nfEqx/syVJfCvhO6aa4m8rIutTQFVjUnnEYbduHBLd/lYAHp1FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFc34D/5F26/7DWq/+nC4rpK5vwH/AMi7df8AYa1X/wBOFxQB0lVNW1BNJ0W91Gbb5dnbyTvufaMIpY5PYcdat1W1LT7XV9Ku9N1CLzrS8heCePcV3o6lWGQQRkE8g5oA8i+J/hnQviZ8M4PiDod21hfadp76la3kKqZGVELmGQq3DKykcMdjbuvIrmvHPiq58X/A3wJp/iX/AEbV/E+oQpJ5iGLdEjlWuM7dqht0TdhiTIBAr0lPgb4DjMMaaZdCyiUj7AdRuGt3YsrBmQuckFTgdDubIPGOh1/wH4Z8UXGlTa7pMV2dIYtZIXZUiyVONikKw+ReGBGBjHJoA8/+Iw0m++JngvwiYLKysNPkk8Q6hM0KIsMUKtsG4kLsZkcOMdAp7VxHhfxedf8AjJ4z+Il5Ev2Tw/ps8Wn2c0ghkkZY3ZIwGBIZo4Z3bAJU57DFe76r4D8M654otfEOr6TFeanawiGKWZ2ZAgLMAY87GwzEglSQcHqBgsPAXhXTNe1DWrHQbKLUNRGLmYR53DBBwDwu7J3bQNx5bJoA8Q0/X5NG/Z51/wAf63ePf694uae0idm8trfc8kSxxtydqBXkCjAwAoAxuqPxRPYaL+zt4c8A+Fri31DWNfuorOaOKdWZbjeksyM64VWWR4o9rkEK4znBNeuR/BrwBHocukf8I7E9lIc7ZJ5XeP5gxCSM5eMEqCQpAPfNX7z4Z+C7/TdO0+68Nae1ppk3n2sKxbFR+M5243BsDcrZDYG4HAoA808YNZ678XPht4FjuFu9AWx+3uinfb3yKjNFuUNtdf8AR+MjGHPUHFJ4surfU/2htJuNNzHpHgfTnudZvYIyY7Ndjt5RAAydoUYXceW4+RgPVdd8D+H/ABHqGn3+qWUn2zTVZbS5tbqW2khDYBAaJlOOPwycdTUtr4N0Cx8OXehWmmxxaffRPFdIrNvnV12sXkzvZivG4nPvxQB49qGk2dh8Tor2cDW/BfxQWNJIwJEkik2B4ztBB2kkHdwVBbONuW98rl9D+HHhfw7cWc2l6fKDYq62aXF7PcJa7jljEkrssZOOSoBwSM8muooAKKKKAPNv2g/+SE+If+3b/wBKYq9Jrzb9oP8A5IT4h/7dv/SmKvSaACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqC9srXUbOWz1C2hu7aZdskE8YdHHoVPBFT0UAeZ2/gjxV4AEp+HWqJqelMxKeH9Yf5bfcR80Vx98BQqqI24wWJJbrpr8WvDtjr40HxYZvDGrFA4h1QKsTqVJ3LOpMZX5SMlhk/LjdkDuahubS2vYfJvLeK4iJzslQMufoaAJI5EmiSWF1kjdQyupyGB6EHuKdXC638HfB+rQSLZ2MugzOqqJtEmNptw2c+Wv7tickFmQnB68DGZb/AAl1rTtWW90z4oeLAI87I764W7XlcHcrjY3U4yvHHcZoA6Pxd4J/4SXWNE1qz1SfTNW0KSSSykVBJC3mbA6ypwzKVTbhXU4Y81BbeBJLzxtZeK/FWoQalqWmwNBYx2lo1tBDuzucq0kjM5BIyW2gfw55qL/hEPGf/RTNQ/8ABTZf/G6o6h8N/Eur7E1H4n+IFiDqzCxihtHIXPAaJRjhj6g/LkHaMAHolcf4j+KnhDwxqEenXuqrc6nLL5MenWCG5uDJlRsKJnax3DAbBPOM4rKj+CmhTh08R654n8Swsu1YdW1mV0jz1IEezrgdcjiu10zQNH0VQujaTY6eoUqBa2yRAAnJHygcZ5oA4u4/4Tzx5Esdt5ngXRZkDmZ9supTo2QU2fdtyVOc5LowX/aA6nwp4R0fwZoyadolvsH3p7iT5prp+pklfqzEkn0GcAAAAbdFABRRRQAUUUUAFYnijwlpnizTTa6iskMysr299akR3Nq6nIeKTBKN7jsSOhrbooA8+tr7xv4Jjjs9X00+LNFtwsa6nYOf7QWMJ96WBs+c27AJRskfNtJyKjbXfCfxn8Oi18L+JRBqVnPHfWzKpE9pPEVZZGgfHmICwByChJ4OQCPRaxdc8HeG/EsMsevaHYX3nKVaSa3UyDK7cq+NynHRgQRxg0Ac9rngDVfGM+lx+Mdds7jT9NvUvltdN01rVpZUBChneaT5cMwIUAnPUcV3debXXwXshJcNofjHxhocUvzJa2Wsv5MbbQM4YFjnGTlvYEDGJX8C+PoLW3t9L+Kt5EkKBCbvRra5dgAAMucMTxyWJJ659QD0SivNv+EJ+J3/AEVz/wAtq2/+KqdfA3jqfT5rbU/infSGZWQvaaRbW5CkY4IBZW6/MGBHGMEZoA9CrjNZ+K3hfSdWl0i2uLnWtYiVmbTdGtnu5htJDKdg2qwKkFWYEcZxmsy0+CegjUlu9f1nxF4nVFULba3qRnhyrh1JUBdwBH3Wypycg13Ol6LpWiW5g0XTLPToT1jtLdYlPJPRQO5P5mgDiL/w14m+IipD4wb/AIR7QFlzNotnMJZr9MKQJp1+4uQQVTqCfm+61d3p2nWekabBp+mW0draW6COKGJcKijsKs0UAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFc34D/5F26/7DWq/wDpwuK6Sub8B/8AIu3X/Ya1X/04XFAHSUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAebftB/8kJ8Q/8Abt/6UxV6TXm37Qf/ACQnxD/27f8ApTFXpNABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXN+A/wDkXbr/ALDWq/8ApwuK6SvP9S+Bvw61fVbvUtQ8Pedd3kzzzyfbbhd7uxZjgSADJJ4AxQB6BRXm3/DPnwx/6Fn/AMn7n/45Sr+z98MUYMPDAyDkZvrkj8jJQB6RRXnkXwG+GkOzZ4XiOwsRvup2+8MHOXOenGeh5GDSv8CPhq9mlqfC8Plo24MLmYOTz1cPuI56E+noKAPQqK4WL4K/DqEME8KWR3MXO8u3J9MscD2HA7Uz/hR/w42yj/hFbX96gRv3knAAI4+b5Tz1GD78UAd7RXB3PwR+HF3D5UvhW0Vc5zE8kbf99KwNY/gb4T+BNR+Hfhy+vvDFjPc3OlWs00rKcu7RKWY89SSTQB6pRXBn4I/DhvPz4VtP34w+HkGOMfL83y/8Bxzz1qRfgx8O1GB4TsOpPIY9fxoA7iiuJ/4U18PP+hT0/wD75P8AjR/wpr4ef9Cnp/8A3yf8aAO2orif+FNfDz/oU9P/AO+T/jR/wpr4ef8AQp6f/wB8n/GgDM/aD/5IT4h/7dv/AEpir0muJ/4U18PP+hT0/wD75P8AjXbUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEdzL5FrLNmMeWhbMr7EGBn5mwcD1ODiuf+HH/JLPCn/YFs/wD0QldJXN/Dj/klnhT/ALAtn/6ISgDpKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDP1+8GneG9TvWvVsFtrSWU3bQmYQBUJ8woOXC4ztHXGKy/hx/ySzwp/wBgWz/9EJWtreqwaDoGoaveJI9vp9rJdSrEAXZUUsQoJAzgcZIrJ+HH/JLPCn/YFs//AEQlAHSUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRXPeMfG+i+BdLhvddll/0iYQW8FvEZJZ5DztVR9OpwOgzkgHlP+EM8VeP2S6+ImpS6Lpu7KeG9GuMB1DA4ubgcyEjKlUwOFKkHNAGvrPxZ8LaT4hTQLa4n1nWnLKNP0mL7RIGXdlGI+VWGxshiCuMnA5qjear8VdYufK0Tw7o3hy1DSK1xrF59qmZMgIypB8qtjJ2lmGeM8c9ppWhaToULQ6JpdlpsTnLJZ26RKx9woHqav0AccnhDxLeWNxBrnxA1MvMGTOk2VtZqqFccFkkcN1O4OMcYAIyah+D/AIfnvFuNT1DxDqTKuwC71u4bj6hwe57967yigDhpPg34JmieKbT76SN1KujaxeEMD1BHm8ioNO+CXgjTdNgs4bPUGWFAu/8Ata6Que7FUkVQSck7QBknAFegUUAcE3wc8NJeJc6fd69p0iLgG11q4BB5ycs5OcHHWrUHgTVdLs549C8eeIYneTzUGpNDfop4GD5kfmFcD7okHUkEEmuzooA87nl+LmiXm6ODw34p06PPyxmSwvJ/kJ/iLRJhuO+QB0ySJ7z4xeHNE1CKy8W22reG5pmZYzqdkwjkZSAQskZdGHzA5DEAHkiu9qG6tLa+tXtr63iuYJBh4pkDqw9weDQA62uYLy1iurOaOe3mQSRSxOGSRSMhlI4IIOQRUleaan8MtQ8PXx1j4T6p/YtxuBn0a4Yvp92vm72G058knJAKAADhQmSa3fAvjl/FKXWna1psuieI9NOL/TZsnaCSFkjfGHjbacEZx6kEMwB11FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB5z4Zibxj8UPEPiDU1tZ7Lw/cf2PpcAcyeTMgDzTFT8qyEuq7lwQFKnplvRq868Izt4X+J/ifw1qNulrDrV4dY0m4OEF6WjQXCKM8shQEj72CWIAIJ7jWtUi0TQNQ1W4GYbG1kuZBzyqKWPQHsPQ0AOvdW07TJbaLUb+1tJLuUQ2yTzLGZpD0RAT8zHI4HNTwXMF1GZLWaOZFd4y0bhgGRirLkdwykEdiCO1eB6dPbR/CPxB8TfiT9mm1nxHayRWVve242RJiRYIIEKlgH+9wSCoVyeGaqMcWp+H/BvgP4T6BcXdlrfiILqGrXEZa3uLO3ZjI6gMeGCq6kBgSICCv7zFAHcfG/xPf2Phn7J4N8RSQa697DprWFk0TyM1wpKBsqXiYqrFGBTqTk8Y9Ge7tfD2gxza3qcMMFrEiTXt5KI1J4XczMcAkkdT1NeO6rofhzU/2lvDPh/SNG0+1t/Dlk+o3IsLcRESk7o0fZjAVvLkHUEyEEfMaseFNU07xbLrXxR8c3iQ6Hp00trptjNIZbWCNQFNxtOd0r7tgAUHqAGLLgA1vAGqarr/xi8XS/8JRdatoOjRRWVpEyIInklw8hzGqqzRtGyZKk4fr/AHvTTe2oFsTcwgXbbbf94P3x2l8J/eO1WbjsCegr5/8AAtzZ+Gv2Z/EvizVtIsL+31S+mvLeylgE8ZJkSGFJVbaCqzLu4PC8jnik8GfCnSPB3wus/Hni4TX+q6XF/bVpbC4khjhAQvFbkHuXKsTtHz4HKg7wD3+91Kx077P/AGheW9p9pmW3g8+VU82Vvuxrk/MxwcAcnFGoalY6RYSX2q3lvY2kWPMuLmVY40yQBlmIAySB9TXzb4Y8M+MPHehXZ1HQZJrzxUwlu/EerFTFp1qx3qlrHvLsCuCMbACUUjChq6D4r6NN4e07wrr3hpo9f0XwOyWeo6bLcq5UIqKGdQMb9pwxxldynaVzgA9y/tKx/sr+0/tlv/Z/k/aPtfmr5Xlbd3mb8427ec5xjmq2keI9D8Qed/YOs6fqfkbfN+xXSTeXuzjdtJxnBxn0NeZ65oGka/8As+3+mfD22itX16BtWtbGJEjll/fpK67AcHaCkRwSFG1RxtFXPg5c6P4vtz4702C3sb+4tF0zUrK0tvJiWeJi5cd2JV0wcn5dozkEAA9SrzH4v2R0L+x/iDpTQWl/od9Cl7OwwbiylcRvE3yndyykZ+6NxGDivTq85+K9ydc/snwFp1ut7e6zdwT3keA4tbGKZXkncE4C5UKA2A3zAZPFAHo1FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBieKfCemeLtNS21ONlmt386zu4mKTWkw+7LGw6MDg+hxyCK4i88T6lpVjqvhr4uWLJoslobX/hJ7ONzBdpIBF+8RFP2d23nJJCg5A42lvUqbJGk0TxTIskbqVZGGQwPUEdxQB5Jonwa8Haz4Al0W38S3mv6QXK2U8V1DKLH975jCFlUqHY8MxBOCQNoY51L74JaHNqumavpWqatpWsWHmB9St51aa58xmaRn3KV3sZJDlQAN54wFAt33wh0WJ7i68GXt/4Pv5wS0ukTFIZWwwTzID8jKpYkABTycEVQhi+MXhnzHkn0PxvaI5by2H9n3sgPyhUIHkqBw53ZJ+YA/doAtaX8FPC2j+OpfE1k1+JJQrPayXbyxySiQSeY7OS7neqPy2Ay554xRtPgJ4dttGudFfV9dn0eZpJI9OkukMMDuhUOo2ZLLklckjOCQSM1dPxL8QWG/wDt34ZeJIvLRS/9nGK9+Y44Xaw3DnqPTkDnFm++Mng/RrW0l8Rzapob3abkh1LRruJ8gAsv+rKsV3AHaSOepyKAIL34N6JqPw/g8J3mq6xJbRtEXuTcI0zrEpWOP5kKoig8Kir0ycksW7O/0TTtT0CbRL60SbTp4DbvbkkAx4xgEcjjoQcjqK5G0+OHw4vYjJD4qtVUNtxNHJEc/R1Bxz1qST40fDuKJ5G8V2JVFLELuY4HoAMk+woAk8L/AA0h8NJDbt4k1/VLC1CC0sr67BjgCFWT7iqW2leATt2nG3gGqOq/CK21K81ww+JNXs7HxDIZNVsolt2WU4wuxmiLR478nNXdI+L/AIM8Qed/YN7qGp+Rt837Fo17N5e7ON22I4zg4z6GqMfxR1a/8v8Asj4aeLH3Psb7fbx2e08Y++5456nAHr1wAbV14CtFGi/8I/qV/wCH/wCxLaS0tRYeUwMMnl7lcSo+7/VKcnnPJyateHPDmj+AfDc8FvcSLbq8l7e39/Pukmc8yTSyHAzgcngYFcsZ/i34ojdYrTR/AtudqF5pRqV4CGBLptxFtKnbhsnIPTIIk0/4P2dz9mn8f63qPjK6twdiX77LVDk/MsCnGdpAJYtnHbgAAjuvibeeKJzp3wq0yTWizCK41yRfLsrEkgE5fHnOoYMUXsRgnkV0vhPwevh37Re6jfyazrt7j7bqs8YR5QPuoqDiNB2Ucd66C2toLO1itbOGOC3hQRxRRIFSNQMBVA4AAGABUlABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH/9k=)

**Solution:**

CREATE TABLE "Stars" (

"name" varchar2(50) PRIMARY KEY,

"address" varchar2(255)

);

CREATE TABLE "Studios" (

"name" varcha2(50) PRIMARY KEY,

"address" varchar2(255)

);

CREATE TABLE "Movies" (

"title" varchar2(50) PRIMARY KEY,

"year" number(4,0),

"length" time,

"genre" varchar2(50),

"owning\_studio" varchar2(50)

);

CREATE TABLE "MovieStars" (

"title" varchar2(50),

"star\_name" varchar2(50),

PRIMARY KEY ("title", "star\_name")

);

ALTER TABLE "Movies" ADD FOREIGN KEY ("owning\_studio") REFERENCES "Studios" ("name");

ALTER TABLE "MovieStars" ADD FOREIGN KEY ("title") REFERENCES "Movies" ("title");

ALTER TABLE "MovieStars" ADD FOREIGN KEY ("star\_name") REFERENCES "Stars" ("name");