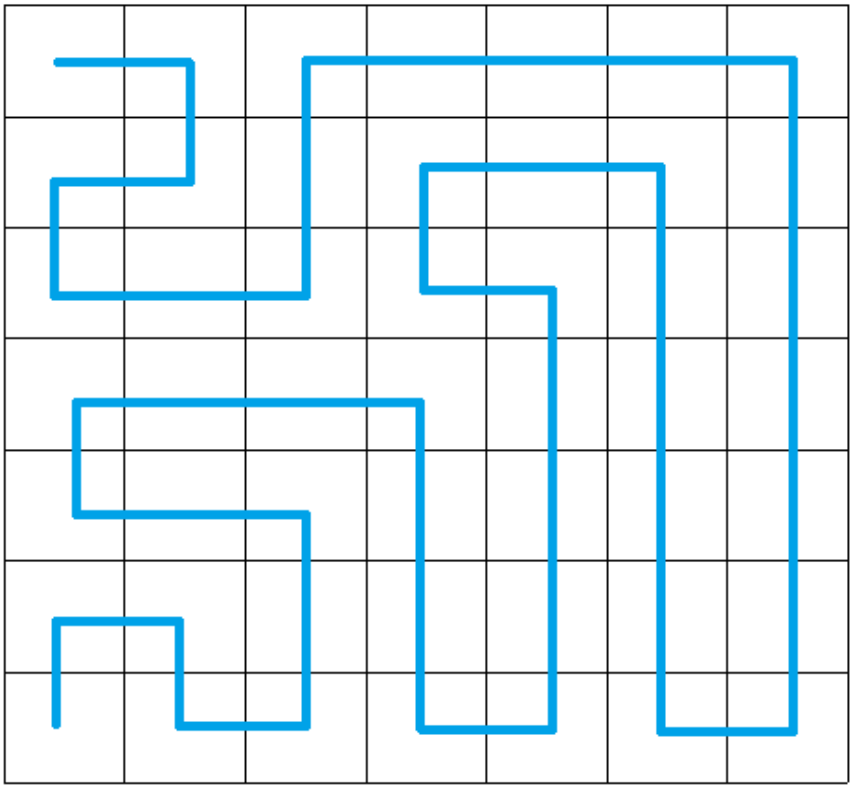
# Homework #3

1.



You start at (1,1) (1st row and 1st column ) point and destination is (7,1) ( 7th row and 1st column ) .

When you go to the destination (7,1) from start point (1,1) , you have to visit all the points.

That path corresponds to the string .

RDLDRRUURRRRDDDDDDLUUUUUULLDRDDDDLUUULLLDRRDDLULD

You are given a string of a path that may contain characters '?' ( any direction ). Your goal is to calculate the number of route which match the string.

**Input**

The input is a 48-charater string that consists of character U, D, R, L, ? .

**Output**

Print one integer : the total number of route .

Example

Input:

????U???????????D??????????????????????????????

Output :

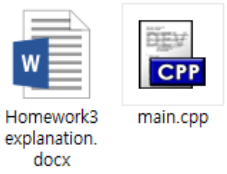
6665

You have to read input number using 'cin' and show output number using 'cout'.

To reduce time complexity you have to use backtracking algorithm.

You have to pruning state space tree.

I will check the answer and time. ( it's about 1 second )




You can use only C or C++ languages

You have to submit explanation report (use word or hwp) and code source file

코드 파일 설명 파일 반드시 두개 모두 제출해주세요

Do not compress file

압축하지말고 개별 파일 2 개로 제출해주세요

Please do not use header file

채점을 위해 헤더 파일 따로 만들지 마세요

Output should contain only the number of result.

Output : 0 (x)

Output : 244 (x)

0 (o)

244 (o)

결과는 정답인 숫자만 나오도록 해 주세요

If you violate above rules , you will get the penalty

위 사항을 어길 시 감점입니다

I will check your code similarity , so do not copy and paste.

친구들과 의논하는 것은 가능하지만 유사도 확인에서 코드 복붙이 확인되면 모두 낮은 점수를 받게 됩니다.

I will give you explanation points . 과제 설명이 부실하면 감점입니다.

And if you have any question, please message or e-mail to TA