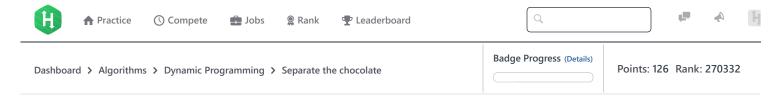
16/11/2017 HackerRank



Separate the chocolate **■**



Problem	Submissions	Leaderboard	Discussions	Editorial 🔒
Hobiciii	3451113310113	Leaderboard	Discussions	Editorial

Chinese Version Russian Version

Tom and Derpina have a rectangular shaped chocolate bar with chocolates labeled T, D and U. They want to split the bar into exactly two pieces such

- Tom's piece can not contain any chocolate labeled D and similarly, Derpina's piece can not contain any chocolate labeled T and U can be used by either of the two.
- All chocolates in each piece must be connected (two chocolates are connected if they share an edge), i.e. the chocolates should form one connected
 component
- The absolute difference between the number of chocolates in pieces should be at most K
- After dividing it into exactly two pieces, in any piece, there should not be 4 adjacent chocolates that form a square, i.e. there should not be a fragment like this:

XX XX

Input Format

The first line of the input contains 3 integers M, N and K separated by a single space. M lines follow, each of which contains N characters. Each character is 'T','D' or 'U'.

Constraints

 $0 \le M, N \le 8$ $0 \le K \le M * N$

Output Format

A single line containing the number of ways to divide the chocolate bar.

Sample Input

2 2 4 UU UU

Sample Output

12

Explanation

Note: In the explanation T and D are used to represent, which parts belong to Tom and Derpina respectively. There are $2^4 = 16$ possible separations. The 4 invalid are:

```
TT
  \mathsf{TT}
  DD
  DD
  DT
  TD
  TD
  DT
Some of the valid ones are:
  TD
  TD
  TT
  DD
  DD
  \mathsf{TT}
  DT
  DT
                                                                                                              f ⊮ in
                                                                                                             Submissions: 489
                                                                                                             Max Score:250
                                                                                                             Difficulty: Expert
                                                                                                             Rate This Challenge:
                                                                                                             More
  Current Buffer (saved locally, editable) &
                                                                                               Java 7
                                                                                                                                  \Diamond
  1 ▼ import java.io.*;
  2 import java.util.*;
  3
     import java.text.*;
     import java.math.*;
    import java.util.regex.*;
  6
  7 ▼ public class Solution {
  8
  9 ▼
         public static void main(String[] args) {
              /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
 10 ▼
11
 12
    }
                                                                                                                          Line: 1 Col: 1
```

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1 Upload Code as File

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