

Bot saves princess

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Princess Peach is trapped in one of the four corners of a square grid. You are in the center of the grid and can move one step at a time in any of the four directions. Can you rescue the princess?

Input format

The first line contains an odd integer N ($3 \leq N < 100$) denoting the size of the grid. This is followed by an $N \times N$ grid. Each cell is denoted by '-' (ascii value: 45). The bot position is denoted by 'm' and the princess position is denoted by 'p'.

Grid is indexed using [Matrix Convention](#)

Output format

Print out all the moves you take to rescue the princess in one go. The moves must be separated by '\n', a newline. The valid outputs are LEFT or RIGHT or UP or DOWN.

Sample input

```
3
---
-m-
p--
```

Sample output

```
DOWN
LEFT
```

Task

Complete the function `displayPathtoPrincess` which takes in two parameters - the integer N and the character array grid. The grid will be formatted exactly as you see it in the input, so for the sample input the princess is at `grid[2][0]`. The function shall output moves (LEFT, RIGHT, UP or DOWN) on consecutive lines to rescue/reach the princess. The goal is to reach the princess in as few moves as possible.

The above sample input is just to help you understand the format.

**Authorized by****idlecool**

March 4, 2014

9248 hackers have

submitted code



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The princess ('p') can be in any one of the four corners


Scoring

Your score is calculated as follows : (NxN - number of moves made to rescue the princess)/10, where N is the size of the grid (3x3 in the sample testcase).

[Suggest Edits](#)


Current Buffer *(saved locally, editable)*  

C

```
1 #include <stdio.h>
2 #include <string.h>
3 #include <math.h>
4 void displayPathtoPrincess(int n, char grid[n][n]){
5     //logic here
6 }
7 int main(void) {
8
9     int m;
10    scanf("%d", &m);
11    char grid[m][m];
12    char line[m];
13
14    for(int i=0; i<m; i++) {
15        scanf("%s", line);
16        strncpy(grid[i], line, m);
17    }
18    displayPathtoPrincess(m,grid);
19    return 0;
20 }
21
```

Line: 1 Col: 1

 [Upload Code as File](#)

Compile & Test

Submit Code

This is a beta version. Join us on IRC at [#hackerrank](#) on freenode for hugs or bugs.

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