

```
1 def display_path_to_princess(N, grid):
2     # Find the bot's position (always in the center)
3     bot_position = (N // 2, N // 2)
4
5     # Find the princess's position (in one of the four corners)
6     if grid[0][0] == 'p':
7         princess_position = (0,0)
8     elif grid[0][N-1] == 'p':
9         princess_position = (0,N-1)
10    elif grid[N-1][0] == 'p':
11        princess_position = (N-1,0)
12    elif grid[N-1][N-1] == 'p':
13        princess_position = (N-1,N-1)
14
15    # calculate the difference in row and column indices
16    row_diff = princess_position[0] - bot_position[0]
17    col_diff = princess_position[1] - bot_position[1]
18
19    # output the moves to reach the princess
20    moves = []
21
22    if row_diff > 0:
23        moves.extend(["DOWN"] * row_diff)
24    elif row_diff < 0:
25        moves.extend(["UP"] * abs(row_diff))
26
27    if col_diff > 0:
28        moves.extend(["RIGHT"] * col_diff)
29    elif col_diff < 0:
30        moves.extend(["LEFT"] * abs(col_diff))
31
32    # print all moves, each on a new line
33    for move in moves:
34        print(move)
35
36    # example usage:
```



Search




```
10 ▾ elif grid[N-1][0] == 'p':
11     princess_position = (N-1,0)
12 ▾ elif grid[N-1][N-1] == 'p':
13     princess_position = (N-1,N-1)
14
15     # calculate the difference in row and column indices
16     row_diff = princess_position[0] - bot_position[0]
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28     moves.extend(["RIGHT"] * col_diff)
29 ▾ elif col_diff < 0:
30     moves.extend(["LEFT"] * abs(col_diff))
31
32     # print all moves, each on a new line
33 ▾ for move in moves:
34     print(move)
35
36 ▾ # example usage:
37 N = 3
38 ▾ grid = [
39     "---",
40     "-m-",
41     "p--"
42 ]
43
44 display_path_to_princess(N, grid)
45
```





SRIRAMANENI RAMY

AI

NEW

PYTHON

RUN



STDIN

Input for the program (Optional)

Output:

DOWN

LEFT

New

History



ENG
IN



15
01-09-20