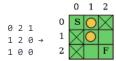## ☆ Bob's and Alice's Chance

1
2
3
4

Bob and Alice have teamed up on a game show. They won the first round, allowing them access to a maze with hidden gold. If Bob can collect all the gold coins and deliver them to Alice's position, they can split the gold. Bob can move North⇆South or East⇆West as long as he stays in the maze and the cell is not blocked. The task is to determine the shortest path Bob can follow to collect all gold coins and deliver them to Alice. If it is not possible, return -1.

You will be given an $n \times m$ array where each of the values $\in \{0, 1, 2\}$ representing *open, blocked* and *open with a gold coin*. Alice's position is given as *(x,y) = (row, column)*. Bob starts at the top left in cell *(0, 0)*.

For example, *maze = [[0,2,1],[1,2,0],[1,0,0]]* with Alice at *(2,2)* is represented as follows:

```
0 2 1
1 2 0 →
1 0 0
```


Alice's position is marked with an *F* for *Finish*. Tom, starting at *(0,0),* has two paths to Alice of length *4*.

Function Description
Complete the function *minMoves* in the editor below. The function must return the integer length of Tom's shortest path or *-1* if it's not possible.

minMoves has the following parameter(s):
   maze[maze[0][0],...maze[n-1][m-1]]: a 2D array of integers
   x: an integer denoting Alice's row coordinate
   y: an integer denoting Alice's column coordinate

Constraints
- $1 \le n, m \le 100$
- $0 \le$ *the number of coins* ≤ 10
- $1 \le x < n$
- $1 \le y < m$

Input Format For Custom Testing

Sample Case 0

Sample Input 0

```
3
3
0 2 0
0 0 1
1 1 1
1
1
```

Sample Output 0

```
2
```

Explanation 0

The shortest path Bob can take is *(0, 0) → (0, 1) → (1, 1).*

Sample Case 1

H   Fidelity International Python Developer Hiring Test - Exp...   🕐 **15m**   0/4 Attempted   👤 Vivek Ratnaparkhi
to test end

≡

❓

1

2

3

④

YOUR ANSWER

We recommend you take a quick tour of our editor before you proceed. The timer will pause up to 90 seconds for the tour.   [Start tour]   ✕

ℹ️   For help on how to read input and write output in Python 3, click here.   ✕

[Original Code]   [Python 3 ▼]   ⚙️

```
 1   #!/bin/python3 ⋯
10
11   #
12   # Complete the 'minMoves' function below.
13   #
14   # The function is expected to return an INTEGER.
15   # The function accepts following parameters:
16   #  1. 2D_INTEGER_ARRAY maze
17   #  2. INTEGER x
18   #  3. INTEGER y
19   #
20
21   def minMoves(maze, x, y):
22       # Write your code here
23
24   if __name__ == '__main__': ⋯
```

Line: 10 Col: 1

☐ Test against custom input   [Run Code]   [Submit code & Continue]

(You can submit any number of times)

⬇ Download sample test cases   *The input/output files have Unix line endings. Do not use Notepad to edit them on windows.*

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