

LeetCode

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Description

Solution

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Submissions

490. The Maze

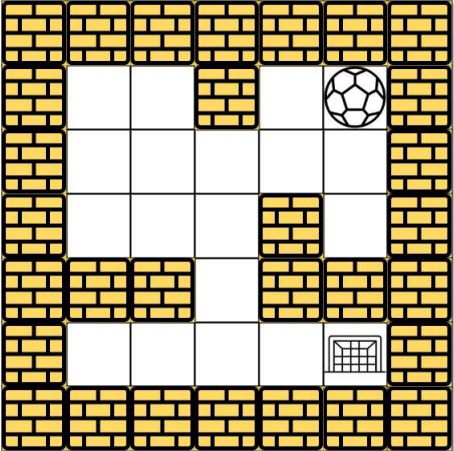
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There is a ball in a `maze` with empty spaces (represented as `0`) and walls (represented as `1`). The ball can go through the empty spaces by rolling **up**, **down**, **left** or **right**, but it won't stop rolling until hitting a wall. When the ball stops, it could choose the next direction.

Given the `m x n` `maze`, the ball's start position and the destination, where `start = [startrow, startcol]` and `destination = [destinationrow, destinationcol]`, return `true` if the ball can stop at the destination, otherwise return `false`.

You may assume that **the borders of the maze are all walls** (see examples).

Example 1:

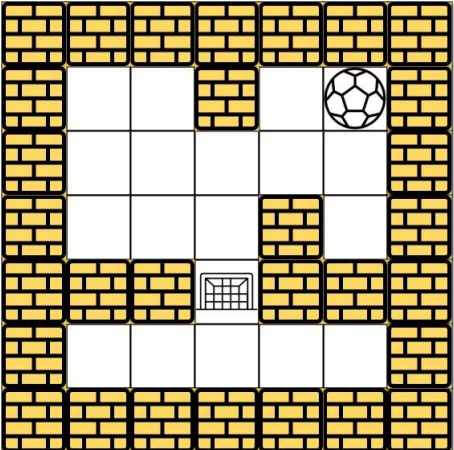


Input: `maze = [[0,0,1,0,0],[0,0,0,0,0],[0,0,0,1,0],[1,1,0,1,1],[0,0,0,0,0]]`, `start = [0,4]`, `destination = [4,4]`

Output: `true`

Explanation: One possible way is : left -> down -> left -> down -> right -> down -> right.

Example 2:

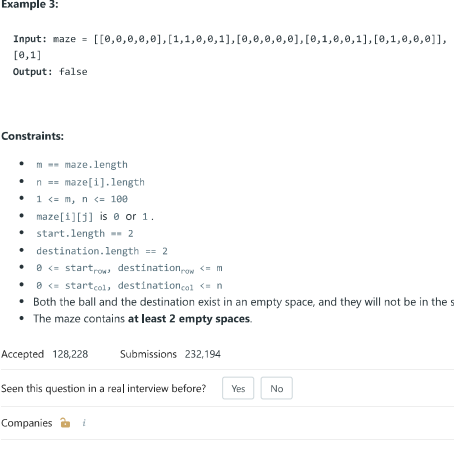


Input: `maze = [[0,0,1,0,0],[0,0,0,0,0],[0,0,0,1,0],[1,1,0,1,1],[0,0,0,0,0]]`, `start = [0,4]`, `destination = [3,2]`

Output: `false`

Explanation: There is no way for the ball to stop at the destination. Notice that you can pass through the destination but you cannot stop there.

Example 3:



Input: `maze = [[0,0,0,0,0],[1,1,0,0,1],[0,0,0,0,0],[0,1,0,0,1],[0,1,0,0,0]]`, `start = [4,3]`, `destination = [0,1]`

Output: `false`

Constraints:

- `m == maze.length`
- `n == maze[0].length`
- `1 <= m, n <= 100`
- `maze[i][j]` is `0` or `1`.
- `start.length == 2`
- `destination.length == 2`
- `0 <= startrow, destinationrow < m`
- `0 <= startcol, destinationcol < n`
- Both the ball and the destination exist in an empty space, and they will not be in the same position initially.
- The maze contains **at least 2 empty spaces**.

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```
1 class Solution {
2     public boolean hasPath(int[][] maze, int[] start, int[] destination) {
3
4     }
5 }
```

Console

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https://leetcode.com/problems/the-maze/

1/1