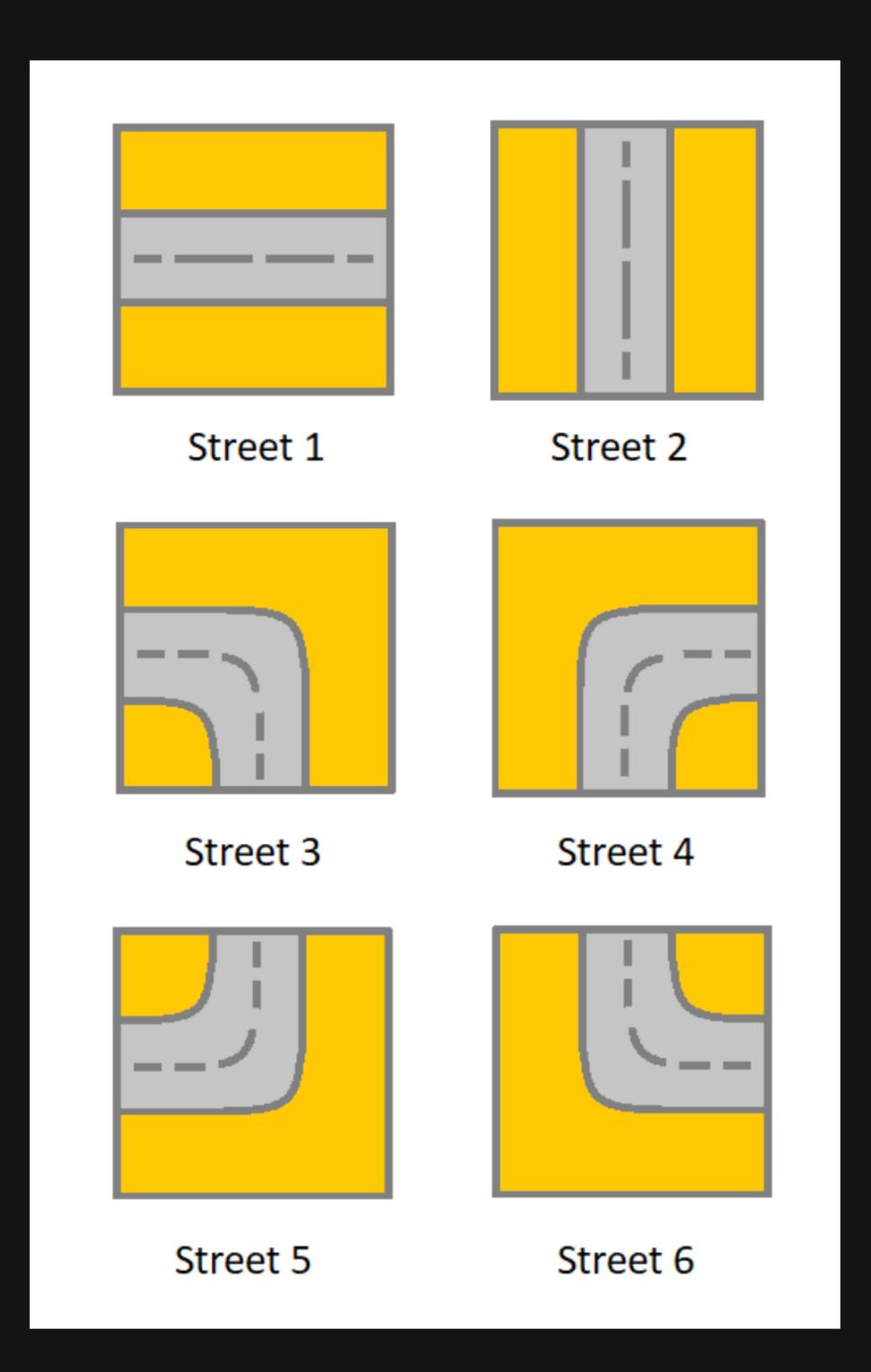
1391. Check if There is a Valid Path in a Grid

Description

You are given an m x n grid. Each cell of grid represents a street. The street of grid[i][j] can be:

- 1 which means a street connecting the left cell and the right cell.
- which means a street connecting the upper cell and the lower cell.
- which means a street connecting the left cell and the lower cell.
- which means a street connecting the right cell and the lower cell.
- which means a street connecting the left cell and the upper cell.
- which means a street connecting the right cell and the upper cell.

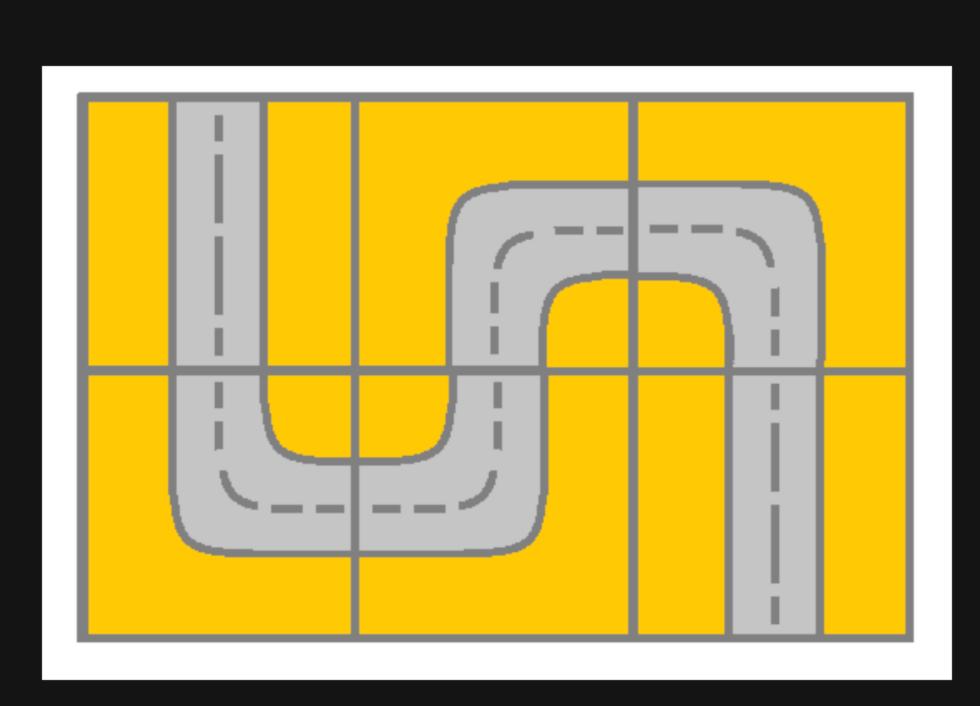


You will initially start at the street of the upper-left cell (0, 0). A valid path in the grid is a path that starts from the upper left cell (0, 0) and ends at the bottom-right cell (m - 1, n - 1). The path should only follow the streets.

Notice that you are not allowed to change any street.

Return true if there is a valid path in the grid or false otherwise.

Example 1:

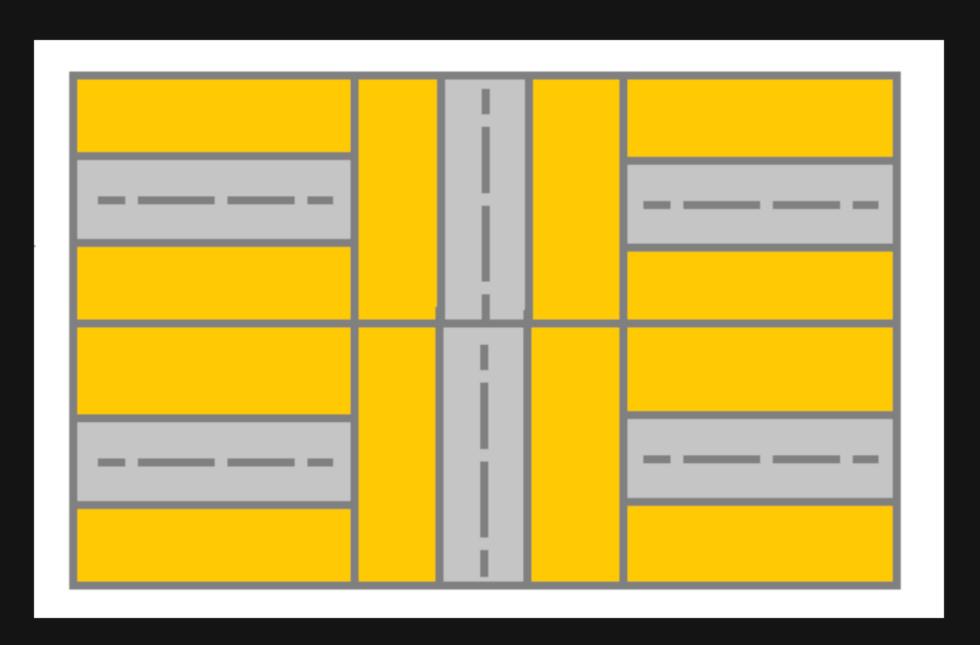


Input: grid = [[2,4,3],[6,5,2]]

Output: true

Explanation: As shown you can start at cell (0, 0) and visit all the cells of the grid to reach (m - 1, n - 1).

Example 2:



Input: grid = [[1,2,1],[1,2,1]]

Output: false

Explanation: As shown you the street at cell (0, 0) is not connected with any street of any other cell and you will get stuck at cell (0, 0)

Example 3:

Input: grid = [[1,1,2]]

Output: false Explanation: You will get stuck at cell (0, 1) and you cannot reach cell (0, 2).

Constraints:

- m == grid.length
- n == grid[i].length
- 1 <= m, n <= 300
- 1 <= grid[i][j] <= 6