

2641. Disconnect Path in a Binary Matrix by at Most One Flip

Difficulty : Medium

<https://leetcode.com/problems/disconnect-path-in-a-binary-matrix-by-at-most-one-flip>

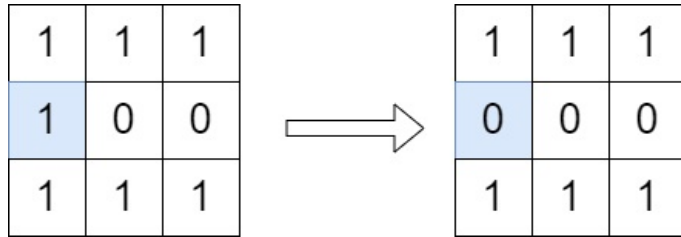
You are given a **0-indexed** $m \times n$ **binary** matrix `grid`. You can move from a cell (row, col) to any of the cells $(row + 1, col)$ or $(row, col + 1)$ that has the value 1. The matrix is **disconnected** if there is no path from $(0, 0)$ to $(m - 1, n - 1)$.

You can flip the value of **at most one** (possibly none) cell. You **cannot flip** the cells $(0, 0)$ and $(m - 1, n - 1)$.

Return `true` if it is possible to make the matrix disconnect or `false` otherwise.

Note that flipping a cell changes its value from 0 to 1 or from 1 to 0.

Example 1:



Input: `grid = [[1,1,1],[1,0,0],[1,1,1]]`

Output: `true`

Explanation: We can change the cell shown in the diagram above. There is no path from $(0, 0)$ to $(2, 2)$ in the resulting grid.

Example 2:

1	1	1
1	0	1
1	1	1

Input: `grid = [[1,1,1],[1,0,1],[1,1,1]]`

Output: `false`

Explanation: It is not possible to change at most one cell such that there is not path from $(0, 0)$ to $(2, 2)$.

Constraints:

- $m == \text{grid.length}$
- $n == \text{grid}[i].\text{length}$
- $1 \leq m, n \leq 1000$
- $1 \leq m * n \leq 10^5$
- `grid[i][j]` is either 0 or 1.
- `grid[0][0] == grid[m - 1][n - 1] == 1`