2123. Minimum Operations to Remove Adjacent Ones in Matrix

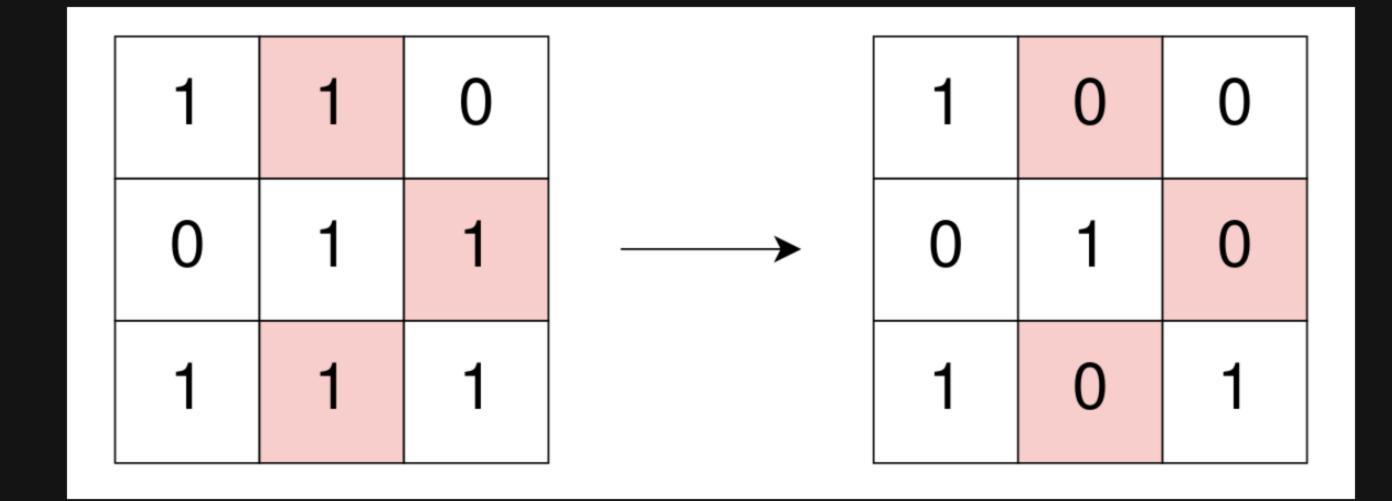
Description

You are given a **0-indexed** binary matrix <code>grid</code> . In one operation, you can flip any <code>1</code> in <code>grid</code> to be <code>0</code> .

A binary matrix is well-isolated if there is no 1 in the matrix that is 4-directionally connected (i.e., horizontal and vertical) to another 1.

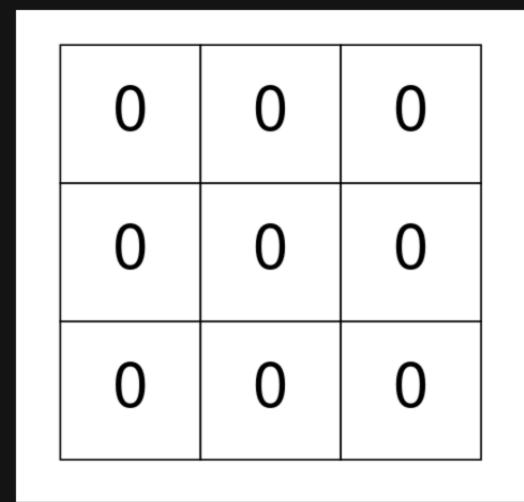
Return the minimum number of operations to make grid well-isolated.

Example 1:



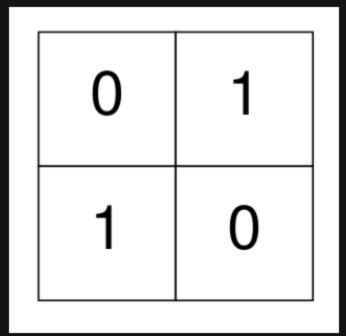
Input: grid = [[1,1,0],[0,1,1],[1,1,1]]
Output: 3
Explanation: Use 3 operations to change grid[0][1], grid[1][2], and grid[2][1] to 0.
After, no more 1's are 4-directionally connected and grid is well-isolated.

Example 2:



Input: grid = [[0,0,0],[0,0,0],[0,0,0]]
Output: 0
Explanation: There are no 1's in grid and it is well-isolated.
No operations were done so return 0.

Example 3:



Input: grid = [[0,1],[1,0]]
Output: 0
Explanation: None of the 1's are 4-directionally connected and grid is well-isolated.
No operations were done so return 0.

Constraints:

- m == grid.length
- n == grid[i].length
- 1 <= m, n <= 300
- grid[i][j] is either 0 or 1.