Shortest Bridge

You are given an n x n binary matrix grid where 1 represents land and 0 represents water.

An **island** is a 4-directionally connected group of 1's not connected to any other 1's. There are **exactly two islands** in grid.

You may change 0's to 1's to connect the two islands to form **one island**.

Return *the smallest number of* 0*'s you must flip to connect the two islands*.

Example 1:

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

Output: 1

Example 2:

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

Output: 2

Example 3:

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

Output: 1

Constraints:

- n == grid.length == grid[i].length
- 2 <= n <= 100
- grid[i][j] is either 0 or 1.
- There are exactly two islands in grid.