# 934. Shortest Bridge

# Description

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 o '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.