

## 5501. Minimum Number of Days to Disconnect Island

ubmissions (/contest/weekly-contest-204/problems/minimum-number-of-days-to-disconnect-island/submissions/)

to Contest (/contest/weekly-contest-204/)

Given a 2D grid consisting of 1 s (land) and 0 s (water). An *island* is a maximal 4-directionally (horizontal or vertical) connected group of 1 s.

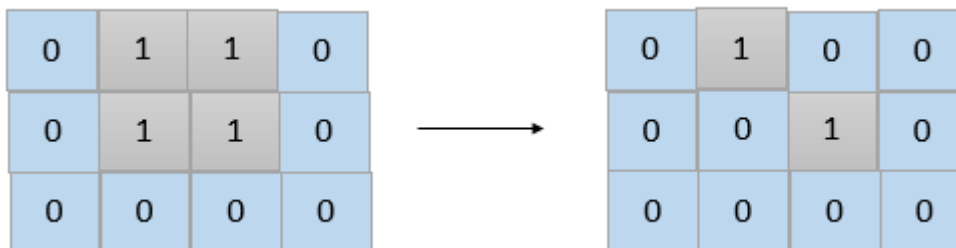
The grid is said to be **connected** if we have **exactly one island**, otherwise is said **disconnected**.

In one day, we are allowed to change **any** single land cell (1) into a water cell (0) .

Return *the minimum number of days* to disconnect the grid.

|                    |        |
|--------------------|--------|
| User Accepted:     | 0      |
| User Tried:        | 0      |
| Total Accepted:    | 0      |
| Total Submissions: | 0      |
| Difficulty:        | Medium |

### Example 1:



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

**Output:** 2

**Explanation:** We need at least 2 days to get a disconnected grid.  
Change land grid[1][1] and grid[0][2] to water and get 2 disconnected island.

### Example 2:

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

**Output:** 2

**Explanation:** Grid of full water is also disconnected ([[1,1]] -> [[0,0]]), 0 islands.

### Example 3:

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

**Output:** 0

### Example 4:

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

**Output:** 1

#### Example 5:

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

**Output:** 2

#### Constraints:

- 1 <= grid.length, grid[i].length <= 30
- grid[i][j] is 0 or 1.

JavaScript



```
1 ▾ /**  
2  * @param {number[][]} grid  
3  * @return {number}  
4  */  
5 ▾ var minDays = function(grid) {  
6  
7  };
```

☐ Custom Testcase ☒ Use Example Testcases