2658. Maximum Number of Fish in a Grid

Description

You are given a **0-indexed** 2D matrix <code>grid</code> of size <code>m x n</code>, where <code>(r, c)</code> represents:

- A land cell if grid[r][c] = 0, or
- A water cell containing <code>grid[r][c]</code> fish, if <code>grid[r][c] > 0</code>.

A fisher can start at any water cell (r, c) and can do the following operations any number of times:

- Catch all the fish at cell (r, c), or
- Move to any adjacent water cell.

Return the maximum number of fish the fisher can catch if he chooses his starting cell optimally, or 0 if no water cell exists.

An adjacent cell of the cell (r, c), is one of the cells (r, c + 1), (r, c - 1), (r + 1, c) or (r - 1, c) if it exists.

Example 1:

| 0 | 2 | 1 | 0 |
|---|---|---|---|
| 4 | 0 | 0 | 3 |
| 1 | 0 | 0 | 4 |
| 0 | 3 | 2 | 0 |

```
Input: grid = [[0,2,1,0],[4,0,0,3],[1,0,0,4],[0,3,2,0]]
Output: 7
Explanation: The fisher can start at cell (1,3) and collect 3 fish, then move to cell (2,3) and collect 4 fish.
```

Example 2:

| 1 | 0 | 0 | 0 |
|---|---|---|---|
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 |

```
Input: grid = [[1,0,0,0],[0,0,0,0],[0,0,0,0],[0,0,0,1]]
Output: 1
Explanation: The fisher can start at cells (0,0) or (3,3) and collect a single fish.
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Constraints:

- m == grid.length
- n == grid[i].length
- 1 <= m, n <= 10
- 0 <= grid[i][j] <= 10