# 2577. Minimum Time to Visit a Cell In a Grid

## Description

You are given a `m x n` matrix `grid` consisting of **non-negative** integers where `grid[row][col]` represents the **minimum** time required to be able to visit the cell `(row, col)`, which means you can visit the cell `(row, col)` only when the time you visit it is greater than or equal to `grid[row][col]`.

You are standing in the **top-left** cell of the matrix in the `0 th` second, and you must move to **any** adjacent cell in the four directions: up, down, left, and right. Each move you make takes 1 second.

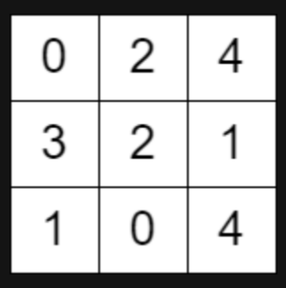
Return *the* ***minimum*** *time required in which you can visit the bottom-right cell of the matrix*. If you cannot visit the bottom-right cell, then return `-1`.

**Example 1:**

| | | | |
|---|---|---|---|
| 0 | 1 | 3 | 2 |
| 5 | 1 | 2 | 5 |
| 4 | 3 | 8 | 6 |

```
Input: grid = [[0,1,3,2],[5,1,2,5],[4,3,8,6]]
Output: 7
Explanation: One of the paths that we can take is the following:
- at t = 0, we are on the cell (0,0).
- at t = 1, we move to the cell (0,1). It is possible because grid[0][1] <= 1.
- at t = 2, we move to the cell (1,1). It is possible because grid[1][1] <= 2.
- at t = 3, we move to the cell (1,2). It is possible because grid[1][2] <= 3.
- at t = 4, we move to the cell (1,1). It is possible because grid[1][1] <= 4.
- at t = 5, we move to the cell (1,2). It is possible because grid[1][2] <= 5.
- at t = 6, we move to the cell (1,3). It is possible because grid[1][3] <= 6.
- at t = 7, we move to the cell (2,3). It is possible because grid[2][3] <= 7.
The final time is 7. It can be shown that it is the minimum time possible.
```

**Example 2:**



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

```
Input: grid = [[0,2,4],[3,2,1],[1,0,4]]
Output: -1
Explanation: There is no path from the top left to the bottom-right cell.
```

**Constraints:**

- `m == grid.length`
- `n == grid[i].length`
- `2 <= m, n <= 1000`
- `4 <= m * n <= 10 5`
- `0 <= grid[i][j] <= 10 5`
- `grid[0][0] == 0`