2617. Minimum Number of Visited Cells in a Grid

Description

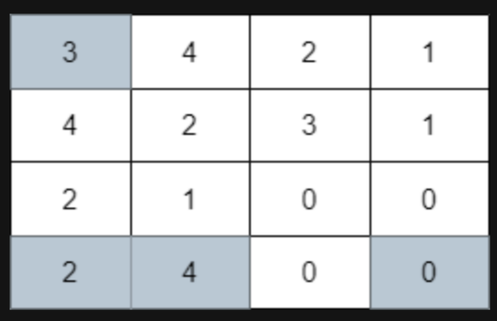
You are given a **0-indexed** `m x n` integer matrix `grid`. Your initial position is at the **top-left** cell `(0, 0)`.

Starting from the cell `(i, j)`, you can move to one of the following cells:

- Cells `(i, k)` with `j < k <= grid[i][j] + j` (rightward movement), or
- Cells `(k, j)` with `i < k <= grid[i][j] + i` (downward movement).

Return *the minimum number of cells you need to visit to reach the* ***bottom-right*** *cell* `(m - 1, n - 1)`. If there is no valid path, return `-1`.

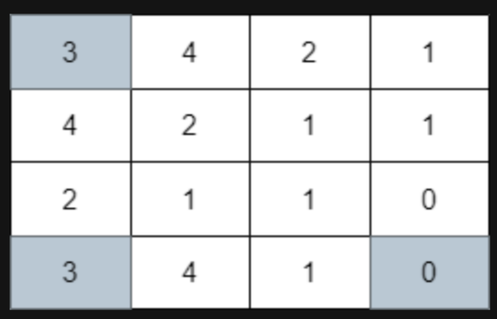
Example 1:



3	4	2	1
4	2	3	1
2	1	0	0
2	4	0	0

```
Input: grid = [[3,4,2,1],[4,2,3,1],[2,1,0,0],[2,4,0,0]]
Output: 4
Explanation: The image above shows one of the paths that visits exactly 4 cells.
```

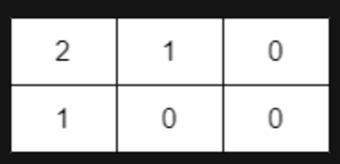
Example 2:



3	4	2	1
4	2	1	1
2	1	1	0
3	4	1	0

```
Input: grid = [[3,4,2,1],[4,2,1,1],[2,1,1,0],[3,4,1,0]]
Output: 3
Explanation: The image above shows one of the paths that visits exactly 3 cells.
```

Example 3:



2	1	0
1	0	0

```
Input: grid = [[2,1,0],[1,0,0]]
Output: -1
Explanation: It can be proven that no path exists.
```

Constraints:

- `m == grid.length`
- `n == grid[i].length`
- `1 <= m, n <= 10^5`
- `1 <= m * n <= 10^5`
- `0 <= grid[i][j] < m * n`
- `grid[m - 1][n - 1] == 0`