1102. Path With Maximum Minimum Value Premium

Medium | Topics | Companies | Hint

Given an `m x n` integer matrix `grid`, return *the maximum* ***score*** *of a path starting at* `(0, 0)` *and ending at* `(m - 1, n - 1)` moving in the 4 cardinal directions.

The **score** of a path is the minimum value in that path.

- For example, the score of the path `8 → 4 → 5 → 9` is `4`.

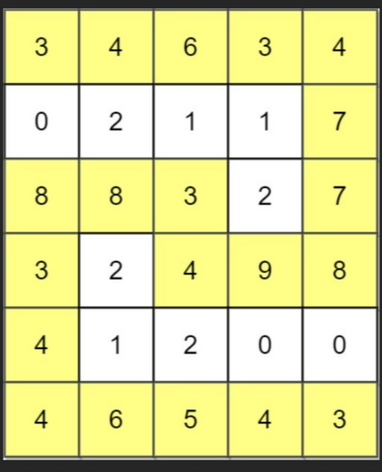
Example 1:


```
Input: grid = [[5,4,5],[1,2,6],[7,4,6]]
Output: 4
Explanation: The path with the maximum score is highlighted in yellow.
```

Example 2:


```
Input: grid = [[2,2,1,2,2,2],[1,2,2,2,1,2]]
Output: 2
```

Example 3:




```
Input: grid = [[3,4,6,3,4],[0,2,1,1,7],[8,8,3,2,7],[3,2,4,9,8],[4,1,2,0,0],
[4,6,5,4,3]]
Output: 3
```

Constraints:

- `m == grid.length`
- `n == grid[i].length`
- `1 <= m, n <= 100`
- `0 <= grid[i][j] <= 10^9`

Seen this question in a real interview before? 1/5

Yes | No

Accepted **64.1K** | Submissions **119.1K** | Acceptance Rate **53.8%**

Topics

Array | Binary Search | Depth-First Search | Breadth-First Search | Union Find | Heap (Priority Queue) | Matrix

Companies

0 - 6 months

Amazon 2

6 months ago

Google 2

Hint 1

What if we sort each cell of the matrix by the value?

Hint 2

Don't include small values in your path if you can only include large values.

Hint 3

Let's keep adding a possible cell to use in the path incrementally with decreasing values.

Hint 4

If the start and end cells are connected then we don't need to add more cells.

Hint 5

Use union-find data structure to check connectivity and return as answer the value of the given cell that makes start and end cells connected.

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