

## 329. Longest Increasing Path in a Matrix

Hard   Topics   Companies

Given an  $m \times n$  integers matrix, return *the length of the longest increasing path in* matrix.

From each cell, you can either move in four directions: left, right, up, or down. You **may not** move **diagonally** or move **outside the bounds**.

Example 1:

9	9	4
6	6	8
2	1	1

Input: matrix = [[9,9,4],[6,6,8],[2,1,1]]  
Output: 4  
Explanation: The longest increasing path is [1, 2, 6, 9].

Example 2:

3	4	5
3	2	6
2	2	1

Input: matrix = [[3,4,5],[3,2,6],[2,2,1]]  
Output: 4  
Explanation: The longest increasing path is [3, 4, 5, 6]. Moving diagonally is not allowed.

Example 3:

Input: matrix = [[1]]  
Output: 1

Constraints:

- $m == \text{matrix.length}$
- $n == \text{matrix}[i].\text{length}$
- $1 \leq m, n \leq 200$
- $0 \leq \text{matrix}[i][j] \leq 2^{31} - 1$

Seen this question in a real interview before? 1/4

Yes   No