Problem 2639: Find the Width of Columns of a Grid

Problem Information

Difficulty: Easy
Acceptance Rate: 70.15%
Paid Only: No
Tags: Array, Matrix

Problem Description

You are given a **0-indexed** `m x n` integer matrix `grid`. The width of a column is the maximum **length** of its integers.

* For example, if `grid = [[-10], [3], [12]]`, the width of the only column is `3` since `-10` is of length `3`.

Return _an integer array_ `ans` _of size_ `n` _where_ `ans[i]` _is the width of the_ `ith` _column_.

The **length** of an integer `x` with `len` digits is equal to `len` if `x` is non-negative, and `len + 1` otherwise.

Example 1:

Input: grid = [[1],[22],[333]] **Output:** [3] **Explanation:** In the 0th column, 333 is of length 3.

Example 2:

Input: grid = [[-15,1,3],[15,7,12],[5,6,-2]] **Output:** [3,1,2] **Explanation:** In the 0th column, only -15 is of length 3. In the 1st column, all integers are of length 1. In the 2nd column, both 12 and -2 are of length 2.

Constraints:

* `m == grid.length` * `n == grid[i].length` * `1 <= m, n <= 100 ` * `-109 <= grid[r][c] <= 109`

Code Snippets

C++:

```
class Solution {
public:
vector<int> findColumnWidth(vector<vector<int>>& grid) {

}
};
```

Java:

```
class Solution {
public int[] findColumnWidth(int[][] grid) {

}
}
```

Python3:

```
class Solution:
def findColumnWidth(self, grid: List[List[int]]) -> List[int]:
```