Problem 1940: Longest Common Subsequence Between Sorted Arrays

Problem Information

Difficulty: Medium
Acceptance Rate: 81.29%
Paid Only: Yes
Tags: Array, Hash Table, Counting

Problem Description

Given an array of integer arrays `arrays` where each `arrays[i]` is sorted in **strictly increasing** order, return _an integer array representing the**longest common subsequence** among **all** the arrays_.

A **subsequence** is a sequence that can be derived from another sequence by deleting some elements (possibly none) without changing the order of the remaining elements.

Example 1:

Input: arrays = [[_1_ ,3,_4_], [_1_ ,_4_ ,7,9]] **Output:** [1,4] **Explanation:** The longest common subsequence in the two arrays is [1,4].

Example 2:

Input: arrays = [[_2_ ,_3_ ,_6_ ,8], [1,_2_ ,_3_ ,5,_6_ ,7,10], [_2_ ,_3_ ,4,_6_ ,9]] **Output:** [2,3,6] **Explanation:** The longest common subsequence in all three arrays is [2,3,6].

Example 3:

Input: arrays = [[1,2,3,4,5], [6,7,8]] **Output:** [] **Explanation:** There is no common subsequence between the two arrays.

Constraints:

* `2 <= arrays.length <= 100` * `1 <= arrays[i].length <= 100` * `1 <= arrays[i][j] <= 100` * `arrays[i]` is sorted in **strictly increasing** order.

Code Snippets

C++:

```
class Solution {
public:
vector<int> longestCommonSubsequence(vector<vector<int>>& arrays) {

}
};
```

Java:

```
class Solution {
public List<Integer> longestCommonSubsequence(int[][] arrays) {

}
}
```

Python3:

```
class Solution:
def longestCommonSubsequence(self, arrays: List[List[int]]) -> List[int]:
```