

Problem 1198: Find Smallest Common Element in All Rows

Problem Information

Difficulty: Medium

Acceptance Rate: 76.77%

Paid Only: Yes

Tags: Array, Hash Table, Binary Search, Matrix, Counting

Problem Description

Given an `m x n` matrix `mat` where every row is sorted in **strictly increasing** order, return **the smallest common element** in all rows.

If there is no common element, return **-1**.

Example 1:

Input: mat = [[1,2,3,4,5],[2,4,5,8,10],[3,5,7,9,11],[1,3,5,7,9]] **Output:** 5

Example 2:

Input: mat = [[1,2,3],[2,3,4],[2,3,5]] **Output:** 2

Constraints:

* `m == mat.length` * `n == mat[i].length` * `1 <= m, n <= 500` * `1 <= mat[i][j] <= 104` * `mat[i]` is sorted in strictly increasing order.

Code Snippets

C++:

```
class Solution {  
public:  
    int smallestCommonElement(vector<vector<int>>& mat) {  
  
    }  
};
```

Java:

```
class Solution {  
public int smallestCommonElement(int[][] mat) {  
  
}  
}
```

Python3:

```
class Solution:  
    def smallestCommonElement(self, mat: List[List[int]]) -> int:
```