

Problem 2610: Convert an Array Into a 2D Array With Conditions

Problem Information

Difficulty: Medium

Acceptance Rate: 86.36%

Paid Only: No

Tags: Array, Hash Table

Problem Description

You are given an integer array `nums`. You need to create a 2D array from `nums` satisfying the following conditions:

- * The 2D array should contain **only** the elements of the array `nums`.
- * Each row in the 2D array contains **distinct** integers.
- * The number of rows in the 2D array should be **minimal**.

Return the resulting array. If there are multiple answers, return any of them.

Note that the 2D array can have a different number of elements on each row.

Example 1:

Input: `nums = [1,3,4,1,2,3,1]` **Output:** `[[1,3,4,2],[1,3],[1]]` **Explanation:** We can create a 2D array that contains the following rows: - 1,3,4,2 - 1,3 - 1 All elements of `nums` were used, and each row of the 2D array contains distinct integers, so it is a valid answer. It can be shown that we cannot have less than 3 rows in a valid array.

Example 2:

Input: `nums = [1,2,3,4]` **Output:** `[[4,3,2,1]]` **Explanation:** All elements of the array are distinct, so we can keep all of them in the first row of the 2D array.

Constraints:

```
*`1 <= nums.length <= 200` *`1 <= nums[i] <= nums.length`
```

Code Snippets

C++:

```
class Solution {  
public:  
    vector<vector<int>> findMatrix(vector<int>& nums) {  
  
    }  
};
```

Java:

```
class Solution {  
    public List<List<Integer>> findMatrix(int[] nums) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def findMatrix(self, nums: List[int]) -> List[List[int]]:
```