

# Problem 915: Partition Array into Disjoint Intervals

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 49.27%

**Paid Only:** No

**Tags:** Array

## Problem Description

Given an integer array `nums` , partition it into two (contiguous) subarrays `left` and `right` so that:

- \* Every element in `left` is less than or equal to every element in `right` .
- \* `left` and `right` are non-empty.
- \* `left` has the smallest possible size.

Return \_the length of\_ `left` \_after such a partitioning\_.

Test cases are generated such that partitioning exists.

**Example 1:**

**Input:** nums = [5,0,3,8,6] **Output:** 3 **Explanation:** left = [5,0,3], right = [8,6]

**Example 2:**

**Input:** nums = [1,1,1,0,6,12] **Output:** 4 **Explanation:** left = [1,1,1,0], right = [6,12]

**Constraints:**

- \* `2 <= nums.length <= 105`
- \* `0 <= nums[i] <= 106`
- \* There is at least one valid answer for the given input.

## Code Snippets

### C++:

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

### Java:

```
class Solution {  
    public int partitionDisjoint(int[] nums) {  
  
    }  
}
```

### Python3:

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