Description | Accepted | Editorial | Submissions | Solutions

1063. Number of Valid Subarrays

Premium

Solved

Hard | Topics | Companies | Hint

Given an integer array `nums`, return *the number of non-empty **subarrays** with the leftmost element of the subarray not larger than other elements in the subarray.*

A **subarray** is a **contiguous** part of an array.

Example 1:

```
Input: nums = [1,4,2,5,3]
Output: 11
Explanation: There are 11 valid subarrays: [1],[4],[2],[5],[3],[1,4],[2,5],[1,4,2],[2,5,3],
[1,4,2,5],[1,4,2,5,3].
```

Example 2:

```
Input: nums = [3,2,1]
Output: 3
Explanation: The 3 valid subarrays are: [3],[2],[1].
```

Example 3:

```
Input: nums = [2,2,2]
Output: 6
Explanation: There are 6 valid subarrays: [2],[2],[2],[2,2],[2,2],[2,2,2].
```

Constraints:

- `1 <= nums.length <= 5 * 10^4`
- `0 <= nums[i] <= 10^5`

Seen this question in a real interview before? 1/5

Yes | No

Accepted 13.1K | Submissions 16.7K | Acceptance Rate 78.6%

Topics

Companies

Hint 1

Hint 2

Similar Questions

Discussion (8)

300 | 8

Code

Python3 • Auto

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

        length = len(nums)

        count = length

        for i in range(0, length):
            j = i + 1
            prev = nums[i]
            while j < length:
                if prev <= nums[j]:
                    count += 1
                    j += 1
                else:
                    break

        return count
```

Saved

Ln 11, Col 30

Testcase | Test Result

Accepted Runtime: 29 ms

Case 1 | Case 2 | Case 3

Input

nums =
[1,4,2,5,3]

Output

11

Expected