



## 6911. Continuous Subarrays

transfer-requests/)

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You are given a **0-indexed** integer array `nums`. A subarray of `nums` is called **continuous** if:

- Let  $i, i + 1, \dots, j$  be the indices in the subarray. Then, for each pair of indices  $i \leq i_1, i_2 \leq j, 0 \leq |nums[i_1] - nums[i_2]| \leq 2$ .

Return the total number of **continuous** subarrays.

A subarray is a contiguous **non-empty** sequence of elements within an array.

User Accepted:	2807
User Tried:	5999
Total Accepted:	2925
Total Submissions:	12268
Difficulty:	Medium

**Example 1:**

**Input:** `nums = [5,4,2,4]`

**Output:** 8

**Explanation:**

Continuous subarray of size 1: `[5]`, `[4]`, `[2]`, `[4]`.

Continuous subarray of size 2: `[5,4]`, `[4,2]`, `[2,4]`.

Continuous subarray of size 3: `[4,2,4]`.

There are no subarrays of size 4.

Total continuous subarrays =  $4 + 3 + 1 = 8$ .

It can be shown that there are no more continuous subarrays.

**Example 2:**

**Input:** `nums = [1,2,3]`

**Output:** 6

**Explanation:**

Continuous subarray of size 1: `[1]`, `[2]`, `[3]`.

Continuous subarray of size 2: `[1,2]`, `[2,3]`.

Continuous subarray of size 3: `[1,2,3]`.

Total continuous subarrays =  $3 + 2 + 1 = 6$ .

**Constraints:**

- $1 \leq \text{nums.length} \leq 10^5$
- $1 \leq \text{nums}[i] \leq 10^9$

Discuss (<https://leetcode.com/problems/continuous-subarrays/discuss/>)

Java



```

1 class Solution {
2     public long continuousSubarrays(int[] a) {
3         int n = a.length, l = 0;
4         TreeMap<Integer, Integer> m = new TreeMap<>();
5         long res = 0;
6         for (int i = 0; i < n; i++) {
7             m.merge(a[i], 1, Integer::sum);
8             while (m.lastKey() - m.firstKey() > 2) removeOneOrManyMap(m, a[l++]);
9             res += i - l + 1;
10        }
11        return res;
12    }
13
14    <T> void removeOneOrManyMap(TreeMap<T, Integer> m, T x, int... args) {
15        int cnt = args.length == 0 ? 1 : args[0], occ = m.get(x);
16        if (occ > cnt) {
17            m.put(x, occ - cnt);
18        } else {
19            m.remove(x);

```

```
20      }
21      }
22  }
```

☐ Custom Testcase

Use Example Testcases

Run

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