

# 581. Shortest Unsorted Continuous Subarray

## Description

Given an integer array `nums`, you need to find one **continuous subarray** such that if you only sort this subarray in non-decreasing order, then the whole array will be sorted in non-decreasing order.

Return *the shortest such subarray and output its length*.

### Example 1:

**Input:** `nums = [2,6,4,8,10,9,15]`

**Output:** 5

**Explanation:** You need to sort `[6, 4, 8, 10, 9]` in ascending order to make the whole array sorted in ascending order.

### Example 2:

**Input:** `nums = [1,2,3,4]`

**Output:** 0

### Example 3:

**Input:** `nums = [1]`

**Output:** 0

### Constraints:

- $1 \leq \text{nums.length} \leq 10^4$
- $-10^5 \leq \text{nums}[i] \leq 10^5$

**Follow up:** Can you solve it in  $O(n)$  time complexity?

