

# 2972. Count the Number of Incremovable Subarrays II

## Description

You are given a **0-indexed** array of **positive** integers `nums`.

A subarray of `nums` is called **incremovable** if `nums` becomes **strictly increasing** on removing the subarray. For example, the subarray `[3, 4]` is an incremovable subarray of `[5, 3, 4, 6, 7]` because removing this subarray changes the array `[5, 3, 4, 6, 7]` to `[5, 6, 7]` which is strictly increasing.

Return *the total number of incremovable subarrays of* `nums`.

**Note** that an empty array is considered strictly increasing.

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

### Example 1:

**Input:** `nums = [1,2,3,4]`  
**Output:** 10  
**Explanation:** The 10 incremovable subarrays are: `[1]`, `[2]`, `[3]`, `[4]`, `[1,2]`, `[2,3]`, `[3,4]`, `[1,2,3]`, `[2,3,4]`, and `[1,2,3,4]`, because on removing any one of these subarrays `nums` becomes strictly increasing. Note that you cannot select an empty subarray.

### Example 2:

**Input:** `nums = [6,5,7,8]`  
**Output:** 7  
**Explanation:** The 7 incremovable subarrays are: `[5]`, `[6]`, `[5,7]`, `[6,5]`, `[5,7,8]`, `[6,5,7]` and `[6,5,7,8]`. It can be shown that there are only 7 incremovable subarrays in `nums`.

### Example 3:

**Input:** `nums = [8,7,6,6]`  
**Output:** 3  
**Explanation:** The 3 incremovable subarrays are: `[8,7,6]`, `[7,6,6]`, and `[8,7,6,6]`. Note that `[8,7]` is not an incremovable subarray because after removing `[8,7]` `nums` becomes `[6,6]`, which is sorted in ascending order but not strictly increasing.

### Constraints:

- `1 <= nums.length <= 105`
- `1 <= nums[i] <= 109`

