Problem 1909: Remove One Element to Make the Array Strictly Increasing

Problem Information

Difficulty: Easy
Acceptance Rate: 29.24%
Paid Only: No
Tags: Array

Problem Description

Given a **0-indexed** integer array `nums`, return `true` _if it can be made**strictly increasing** after removing **exactly one** element, or _`false` _otherwise. If the array is already strictly increasing, return_`true`.

The array `nums` is **strictly increasing** if `nums[i - 1] < nums[i]` for each index `(1 <= i < nums.length).`

Example 1:

Input: nums = [1,2,_10_ ,5,7] **Output:** true **Explanation:** By removing 10 at index 2 from nums, it becomes [1,2,5,7]. [1,2,5,7] is strictly increasing, so return true.

Example 2:

Input: nums = [2,3,1,2] **Output:** false **Explanation:** [3,1,2] is the result of removing the element at index 0. [2,1,2] is the result of removing the element at index 1. [2,3,2] is the result of removing the element at index 2. [2,3,1] is the result of removing the element at index 3. No resulting array is strictly increasing, so return false.

Example 3:

Input: nums = [1,1,1] **Output:** false **Explanation:** The result of removing any element is [1,1]. [1,1] is not strictly increasing, so return false.

Constraints:

* `2 <= nums.length <= 1000` * `1 <= nums[i] <= 1000`

Code Snippets

C++:

```
class Solution {
public:
bool canBeIncreasing(vector<int>& nums) {

}
};
```

Java:

```
class Solution {
public boolean canBeIncreasing(int[] nums) {

}
}
```

Python3:

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