

5717. Minimum Operations to Make the Array Increasing

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You are given an integer array `nums` (**0-indexed**). In one operation, you can choose an element of the array and increment it by 1.

- For example, if `nums = [1,2,3]`, you can choose to increment `nums[1]` to make `nums = [1,3,3]`.

Return the *minimum* number of operations needed to make `nums` **strictly increasing**.

An array `nums` is **strictly increasing** if `nums[i] < nums[i+1]` for all $0 \leq i < \text{nums.length} - 1$. An array of length 1 is trivially strictly increasing.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

Example 1:

Input: `nums = [1,1,1]`
Output: 3
Explanation: You can do the following operations:
1) Increment `nums[2]`, so `nums` becomes `[1,1,2]`.
2) Increment `nums[1]`, so `nums` becomes `[1,2,2]`.
3) Increment `nums[2]`, so `nums` becomes `[1,2,3]`.

Example 2:

Input: `nums = [1,5,2,4,1]`
Output: 14

Example 3:

Input: `nums = [8]`
Output: 0

Constraints:

- $1 \leq \text{nums.length} \leq 5000$
- $1 \leq \text{nums}[i] \leq 10^4$


JavaScript

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```
1 const minOperations = (a) => {
2   let n = a.length;
3   let res = 0;
4   for (let i = 1; i < n; i++) {
5     let before = a[i];
6     if (a[i - 1] >= a[i]) {
7       a[i] = a[i - 1] + 1;
8       res += a[i] - before;
9     }
10  }
11  return res;
12 };
```

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