Problem 2012: Sum of Beauty in the Array

Problem Information

Difficulty: Medium
Acceptance Rate: 50.71%
Paid Only: No
Tags: Array

Problem Description

You are given a **0-indexed** integer array `nums`. For each index `i` (`1 <= i <= nums.length - 2`) the **beauty** of `nums[i]` equals:

* `2`, if `nums[j] < nums[i] < nums[k]`, for **all** `0 <= j < i` and for **all** `i < k <= nums.length - 1`. * `1`, if `nums[i - 1] < nums[i] < nums[i + 1]`, and the previous condition is not satisfied. * `0`, if none of the previous conditions holds.

Return _the**sum of beauty** of all _`nums[i]`_where_`1 <= i <= nums.length - 2`.

Example 1:

Input: nums = [1,2,3] **Output:** 2 **Explanation:** For each index i in the range 1 <= i <= 1: - The beauty of nums[1] equals 2.

Example 2:

Input: nums = [2,4,6,4] **Output:** 1 **Explanation:** For each index i in the range 1 <= i <= 2: - The beauty of nums[1] equals 1. - The beauty of nums[2] equals 0.

Example 3:

Input: nums = [3,2,1] **Output:** 0 **Explanation:** For each index i in the range 1 <= i <= 1: - The beauty of nums[1] equals 0.

Constraints:

* `3 <= nums.length <= 105` * `1 <= nums[i] <= 105`

Code Snippets

C++:

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

}
};
```

Java:

```
class Solution {
public int sumOfBeauties(int[] nums) {

}
}
```

Python3:

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