Problem 3132: Find the Integer Added to Array II

Problem Information

Difficulty: Medium
Acceptance Rate: 32.55%
Paid Only: No
Tags: Array, Two Pointers, Sorting, Enumeration

Problem Description

You are given two integer arrays `nums1` and `nums2`.

From `nums1` two elements have been removed, and all other elements have been increased (or decreased in the case of negative) by an integer, represented by the variable `x`.

As a result, `nums1` becomes **equal** to `nums2`. Two arrays are considered **equal** when they contain the same integers with the same frequencies.

Return the **minimum** possible integer __`x` __ that achieves this equivalence.

Example 1:

Input: nums1 = [4,20,16,12,8], nums2 = [14,18,10]

Output: -2

Explanation:

After removing elements at indices `[0,4]` and adding -2, `nums1` becomes `[18,14,10]`.

Example 2:

Input: nums1 = [3,5,5,3], nums2 = [7,7]

Output: 2

Explanation:

After removing elements at indices `[0,3]` and adding 2, `nums1` becomes `[7,7]`.

Constraints:

* `3 <= nums1.length <= 200` * `nums2.length == nums1.length - 2` * `0 <= nums1[i], nums2[i] <= 1000` * The test cases are generated in a way that there is an integer `x` such that `nums1` can become equal to `nums2` by removing two elements and adding `x` to each element of `nums1`.

Code Snippets

C++:

```
class Solution {
public:
int minimumAddedInteger(vector<int>& nums1, vector<int>& nums2) {

}
};
```

Java:

```
class Solution {
public int minimumAddedInteger(int[] nums1, int[] nums2) {

}
}
```

Python3:

```
class Solution:
def minimumAddedInteger(self, nums1: List[int], nums2: List[int]) -> int:
```