Problem 1885: Count Pairs in Two Arrays

Problem Information

Difficulty: Medium
Acceptance Rate: 60.30%
Paid Only: Yes
Tags: Array, Two Pointers, Binary Search, Sorting

Problem Description

Given two integer arrays `nums1` and `nums2` of length `n`, count the pairs of indices `(i, j)` such that `i < j` and `nums1[i] + nums1[j] > nums2[i] + nums2[j]`.

Return _the**number of pairs** satisfying the condition._

Example 1:

Input: nums1 = [2,1,2,1], nums2 = [1,2,1,2] **Output:** 1 **Explanation** : The pairs satisfying the condition are: - (0, 2) where 2 + 2 > 1 + 1.

Example 2:

Input: nums1 = [1,10,6,2], nums2 = [1,4,1,5] **Output:** 5 **Explanation** : The pairs satisfying the condition are: - (0, 1) where 1 + 10 > 1 + 4. - (0, 2) where 1 + 6 > 1 + 1. - (1, 2) where 10 + 6 > 4 + 1. - (1, 3) where 10 + 2 > 4 + 5. - (2, 3) where 6 + 2 > 1 + 5.

Constraints:

* `n == nums1.length == nums2.length` * `1 <= n <= 105` * `1 <= nums1[i], nums2[i] <= 105`

Code Snippets

C++:

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

}
};
```

Java:

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

}
}
```

Python3:

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