

Problem 2364: Count Number of Bad Pairs

Problem Information

Difficulty: Medium

Acceptance Rate: 54.28%

Paid Only: No

Tags: Array, Hash Table, Math, Counting

Problem Description

You are given a **0-indexed** integer array `nums`. A pair of indices `(i, j)` is a **bad pair** if `i < j` and `j - i != nums[j] - nums[i]`.

Return `the total number of bad pairs` in `nums`.

Example 1:

Input: `nums = [4,1,3,3]` **Output:** `5` **Explanation:** The pair (0, 1) is a bad pair since `1 - 0 != 1 - 4`. The pair (0, 2) is a bad pair since `2 - 0 != 3 - 4`, `2 != -1`. The pair (0, 3) is a bad pair since `3 - 0 != 3 - 4`, `3 != -1`. The pair (1, 2) is a bad pair since `2 - 1 != 3 - 1`, `1 != 2`. The pair (2, 3) is a bad pair since `3 - 2 != 3 - 3`, `1 != 0`. There are a total of 5 bad pairs, so we return 5.

Example 2:

Input: `nums = [1,2,3,4,5]` **Output:** `0` **Explanation:** There are no bad pairs.

Constraints:

`1 <= nums.length <= 105` `1 <= nums[i] <= 109`

Code Snippets

C++:

```
class Solution {  
public:  
    long long countBadPairs(vector<int>& nums) {  
  
    }  
};
```

Java:

```
class Solution {  
    public long countBadPairs(int[] nums) {  
  
    }  
}
```

Python3:

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