2367. Number of Arithmetic Triplet

Info

Difficulty: `Easy`

Topics: `Array`, `Hash Table`, `Two Pointers`, `Enumeration`, `Binary Search`

Leetcode: 2367. Number of Arithmetic Triplet

You are given a **0-indexed**, **strictly increasing** integer array `nums` and a positive integer `diff`. A triplet `(i, j, k)` is an **arithmetic triplet** if the following conditions are met:

- `i < j < k`,
- `nums[j] - nums[i] == diff`, and
- `nums[k] - nums[j] == diff`.

Return *the number of unique* ***arithmetic triplets***.

Example 1:

Input: nums = [0,1,4,6,7,10], diff = 3

Output: 2

Explanation:

(1, 2, 4) is an arithmetic triplet because both 7 - 4 == 3 and 4 - 1 == 3.

(2, 4, 5) is an arithmetic triplet because both 10 - 7 == 3 and 7 - 4 == 3.

Example 2:

Input: nums = [4,5,6,7,8,9], diff = 2

Output: 2

Explanation:

(0, 2, 4) is an arithmetic triplet because both 8 - 6 == 2 and 6 - 4 == 2.

(1, 3, 5) is an arithmetic triplet because both 9 - 7 == 2 and 7 - 5 == 2.

Constraints:

- `3 <= nums.length <= 200`
- `0 <= nums[i] <= 200`
- `1 <= diff <= 50`
- `nums` is **strictly** increasing.