

Problem 2176: Count Equal and Divisible Pairs in an Array

Problem Information

Difficulty: Easy

Acceptance Rate: 83.99%

Paid Only: No

Tags: Array

Problem Description

Given a **0-indexed** integer array `nums` of length `n` and an integer `k`, return the**number of pairs** `(i, j)` _where_ `0 <= i < j < n`, _such that_ `nums[i] == nums[j]` _and_ `(i * j)` _is divisible by_ `k`.

Example 1:

Input: nums = [3,1,2,2,2,1,3], k = 2 **Output:** 4 **Explanation:** There are 4 pairs that meet all the requirements: - nums[0] == nums[6], and $0 * 6 = 0$, which is divisible by 2. - nums[2] == nums[3], and $2 * 3 = 6$, which is divisible by 2. - nums[2] == nums[4], and $2 * 4 = 8$, which is divisible by 2. - nums[3] == nums[4], and $3 * 4 = 12$, which is divisible by 2.

Example 2:

Input: nums = [1,2,3,4], k = 1 **Output:** 0 **Explanation:** Since no value in nums is repeated, there are no pairs (i,j) that meet all the requirements.

Constraints:

* `1 <= nums.length <= 100` * `1 <= nums[i], k <= 100`

Code Snippets

C++:

```
class Solution {  
public:  
    int countPairs(vector<int>& nums, int k) {  
        }  
    };
```

Java:

```
class Solution {  
public int countPairs(int[] nums, int k) {  
        }  
    }
```

Python3:

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