# 3583. Count Special Triplets

Medium ♥ Topics ♠ Hint

You are given an integer array nums.

A **special triplet** is defined as a triplet of indices (i, j, k) such that:

- $0 \le i \le j \le k \le n$ , where n = nums.length
- nums[i] == nums[j] \* 2
- nums[k] == nums[j] \* 2

Return the total number of **special triplets** in the array.

Since the answer may be large, return it **modulo**  $10^9 + 7$ .

## Example 1:

**Input:** nums = [6,3,6]

Output: 1

**Explanation:** 

The only special triplet is (i, j, k) = (0, 1, 2), where:

- nums[0] = 6, nums[1] = 3, nums[2] = 6
- nums[0] = nums[1] \* 2 = 3 \* 2 = 6
- nums[2] = nums[1] \* 2 = 3 \* 2 = 6

#### Example 2:

**Input:** nums = [0,1,0,0]

Output: 1

**Explanation:** 

The only special triplet is (i, j, k) = (0, 2, 3), where:

- nums[0] = 0, nums[2] = 0, nums[3] = 0
- nums[0] = nums[2] \* 2 = 0 \* 2 = 0
- nums[3] = nums[2] \* 2 = 0 \* 2 = 0

### Example 3:

**Input:** nums = [8,4,2,8,4]

Output: 2

**Explanation:** 

There are exactly two special triplets:

- (i, j, k) = (0, 1, 3)
  - nums[0] = 8, nums[1] = 4, nums[3] = 8
  - nums[0] = nums[1] \* 2 = 4 \* 2 = 8
  - nums[3] = nums[1] \* 2 = 4 \* 2 = 8

- (i, j, k) = (1, 2, 4)
  - nums[1] = 4, nums[2] = 2, nums[4] = 4
  - nums[1] = nums[2] \* 2 = 2 \* 2 = 4
  - nums[4] = nums[2] \* 2 = 2 \* 2 = 4

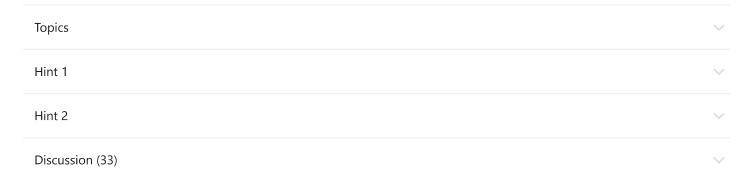
#### **Constraints:**

- $3 \le n == nums.length \le 10^5$
- $0 \le nums[i] \le 10^5$

Seen this question in a real interview before? 1/5

Yes No

Accepted 22.341/60.9K Acceptance Rate 36.7%



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