

# 3583. Count Special Triplets

Solved ●

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:

- $0 \leq i < j < k < n$ , where  $n = \text{nums.length}$
- $\text{nums}[i] == \text{nums}[j] * 2$
- $\text{nums}[k] == \text{nums}[j] * 2$

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`

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

**Constraints:**

- $3 \leq n \leq \text{nums.length} \leq 10^5$
- $0 \leq \text{nums}[i] \leq 10^5$

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

Yes No

Accepted **22.341**/60.9K | Acceptance Rate **36.7**%

Topics



Hint 1



Hint 2



Discussion (33)



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