# **Count Triplets**



You are given an array and you need to find number of tripets of indices (i, j, k) such that the elements at those indices are in geometric progression for a given common ratio r and i < j < k.

For example, arr = [1, 4, 16, 64]. If r = 4, we have [1, 4, 16] and [4, 16, 64] at indices (0, 1, 2) and (1, 2, 3).

## **Function Description**

Complete the countTriplets function in the editor below. It should return the number of triplets forming a geometric progression for a given r as an integer.

countTriplets has the following parameter(s):

- arr: an array of integers
- r. an integer, the common ratio

#### **Input Format**

The first line contains two space-separated integers n and r, the size of arr and the common ratio. The next line contains n space-separated integers arr[i].

#### **Constraints**

- $1 < n < 10^5$
- $1 \le r \le 10^9$
- $1 \le arr[i] \le 10^9$

## **Output Format**

Return the count of triplets that form a geometric progression.

## Sample Input 0

4 2 1 2 2 4

#### **Sample Output 0**

2

## **Explanation 0**

There are 2 triplets in satisfying our criteria, whose indices are (0,1,3) and (0,2,3)

## Sample Input 1

6 3 1 3 9 9 27 81

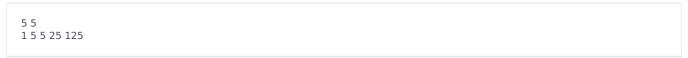
## Sample Output 1

6

# **Explanation 1**

The triplets satisfying are index (0,1,2), (0,1,3), (1,2,4), (1,3,4), (2,4,5) and (3,4,5).

# Sample Input 2



# **Sample Output 2**

4

## **Explanation 2**

The triplets satisfying are index (0,1,3), (0,2,3), (1,3,4), (2,3,4).