

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

Example

$arr = [1, 4, 16, 64]$ $r = 4$

There are $[1, 4, 16]$ and $[4, 16, 64]$ at indices $(0, 1, 2)$ and $(1, 2, 3)$. Return 2.

Function Description

Complete the countTriplets function in the editor below.

countTriplets has the following parameter(s):

- int arr[n]: an array of integers
- int r: the common ratio

Returns

- int: the number of triplets

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

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

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

5 5
1 5 5 25 125

Sample Output 2

4

Explanation 2

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