

Count Triplets ☆

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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 $i < j < k$.

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

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

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

```
5 5
1 5 5 25 125
```

Sample Output 2

```
4
```

Explanation 2

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

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Difficulty	Medium
Max Score	35
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```

2
3 const fs = require('fs');
4
5 process.stdin.resume();
6 process.stdin.setEncoding('utf-8');
7
8 let inputString = '';
9 let currentLine = 0;
10
11 process.stdin.on('data', function(inputStdin) {
12     inputString += inputStdin;
13 });
14
15 process.stdin.on('end', function() {
16     inputString = inputString.split('\n');
17
18     main();
19 });
20
21 function readLine() {
22     return inputString[currentLine++];
23 }
24
25 // Complete the countTriplets function below.
26

```

Line: 64 Col: 1

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