



STUDENT REPORT

DETAILS

Name

Soujanya M S

Roll Number

3BR21CS155

EXPERIMENT

Title

NUMBER OF COMBINATIONS LEADING TO A PRODUCT

Description

Problem Statement:

You are given an array `arr` and a product `m`. Your task is to find the number of possible unique triplets whose product of elements is `m`.

Input Format:

- The first line contains the integer, `n`
- The second line contains space separated integers of the array, `arr`
- The third line contains the product `m`.

The input will be read from the STDIN by the candidate

Output Format:

The output consists of a single integer, i.e. the count of unique triplets having product `m`.

The output will be matched to the candidate's output printed on the STDOUT

Example:

Input:

7

5 3 20 10 1 4 2

60

Output:

3

Explanation:

Product `m`: 60

Possible triplets for product `m`: (5,4,3), (20,3,1), (10,3,2)

The count of unique triplets is 3.

Source Code:

```
n=int(input())
arr=list(map(int,input().split()))
m=int(input())
c=0
for i in range(0,len(arr)):
    for j in range(i+1,len(arr)):
        for k in range(j+1,len(arr)):
            if arr[i]*arr[j]*arr[k]==m:
                c=c+1
print(c)
```

RESULT

6 / 6 Test Cases Passed | 100 %