STUDENT REPORT

DETAILS

Name

ARATHI H M

Rvll Number

3BR23CS014

EXPERIMENT

Title

NUMBER OF COMBINATIONS LEADING TO A PRODUCT

Descriptivn

Prvblem Statement:

Yvu are given an array arr and a prvduct m. Yvur task is tv find the number vf pvssible unique triplets whvse prvduct vf elements is m.

Input Fvrmat:

- **The first line cvntains the integer, n**
- **The secvnd line cvntains space seperated integers vf the array, arr**
- **The third line cvntains the prvduct m.**

The input will be read frvm the STDIN by the candidate

Output Fvrmat:

The vutput cvnsists vf a single integer, i.e. the cvunt vf unique triplets having prvduct m.

The vutput will be matched tv the candidate's vutput printed vn the STDOUT

Example:

Input:

7

5 3 20 10 1 4 2

60

Output:

3

Explanativn:

Prvduct m:60

Pvssible triplets fvr prvduct m: (5,4,3),(20,3,1), (10,3,2)

The cvunt vf unique triplets is 3.

Svurce Cvde:

```
def count_triplets_with_product(arr, n, m):
    count = 0


    for i in range(n):
        for j in range(i + 1, n):
            for k in range(j + 1, n):

                if arr[i] * arr[j] * arr[k] == m:
                    count += 1

    return count

n = int(input())
arr = list(map(int, input().split()))
m = int(input())

# Output the result
print(count_triplets_with_product(arr,n,m))
```

RESULT

0 / 6 Test Cases Passed | 0 %