

Number of Subarrays With GCD Equal to K

The goal of this program is given an integer array, find the number of subarrays such that the greatest common divisor of all the integers in the subarray is equal to k .

A subarray is a contiguous non-empty sequence of elements within an array.

The greatest common divisor of a pair of integers $GCD(a, b)$ is a number k such that k is the largest number that divides both a and b . The greatest common divisor of a sequence of integers x_n is a number k such that for all pairs of integers, x_i and x_j in the sequence, k divides both x_i and x_j and k is the largest such integer. Note that a single integers GCD is always itself (i.e. $GCD(3, 3) = 3$).

Input

The first line is n the length of the array ($1 \leq n \leq 1000$). The second line is the array as space separated numbers, and the third line is k ($1 \leq n[i], k \leq 10^9$).

Output

A single integer denoting the number of subarrays with GCD equal to k .

Sample Input

```
6
9 3 1 2 6 3
3
```

Sample Output

```
4
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