Problem B – Problem B

In the mystical realm of Numeria, you have been given a collection of numbers. The Grand Mathematician wants to know which pair of numbers in this collection has the greatest number of divisors in common and what that number is. If the collection has fewer than two distinct numbers, the answer should be 0, as there is no valid pair.

Your task is to analyze the collection and report the maximum number of common divisors between any two numbers.

Input

- The first line contains an integer N ($2 \leq N \leq 10^5$) — the number of numbers in the collection. - The second line contains N integers $a_1, a_2, \ldots, a_N$ ($1 \leq a_i \leq 10^6$) — the numbers in the collection.

Output

Output a single integer representing the maximum number of divisors in common between any two numbers in the collection.

Sample input 1	Sample output 1
3 1 2 3	1

Sample input 2	Sample output 2
5 2 3 6 12 9	4

Sample input 3	Sample output 3
10 1 2 3 4 5 6 7 8 9 10	3