

# The Chosen One

You are given a sequence of  $n$  integers,  $a_0, a_1, \dots, a_{n-1}$ . Find and print any integer  $x$  such that  $x$  is divisor of every  $a_i$  except for exactly one element.

## Input Format

The first line contains an integer,  $n$ , denoting the length of the sequence.  
The second line contains  $n$  positive space-separated integers describing  $a_0, a_1, \dots, a_{n-1}$ .

## Constraints

- $1 \leq n \leq 10^5$
- $1 \leq a_i \leq 10^{18}$
- It is guaranteed that a solution exists.

## Output Format

Print any positive integer denoting  $x$  such that  $x$  is a divisor of exactly  $n - 1$  of the sequence's elements.  
 $x$  must be between  $1$  and  $2 \cdot 10^{18}$

## Sample Input 0

```
4
3 6 18 12
```

## Sample Output 0

```
6
```

## Explanation 0

We are given the array  $[3, 6, 18, 12]$ . There are two possible answers:

1.  $x = 6$  is a divisor of  $6, 12$ , and  $18$  but *not* a divisor of  $3$ .
2.  $x = 2$  is a divisor of  $6, 12$ , and  $18$  but *not* a divisor of  $3$ .

Thus, we can print either  $6$  or  $2$  as our answer.