The Chosen One

You are given a sequence of n integers, $a_0, a_1, \ldots, a_{n-1}$. 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 $a_0, a_1, \ldots, a_{n-1}$.

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

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4
3 6 18 12
```

Sample Output 0

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6
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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.