Problem F. GCD on Blackboard

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

There are N integers, $A_1, A_2, ..., A_N$, written on the blackboard.

You will choose one of them and replace it with an integer of your choice between 1 and 10^9 (inclusive), possibly the same as the integer originally written.

Find the maximum possible greatest common divisor of the N integers on the blackboard after your move.

Constraints

- All values in input are integers.
- $2 \leq N \leq 10^5$
- $1 \leq A_i \leq 10^9$

Output

Input is given from Standard Input in the following format:

N
A_1 A_2 ... A_N

Output

Print the maximum possible greatest common divisor of the N integers on the blackboard after your move.

Sample 1

Input	Output
3 7 6 8	2

If we replace 7 with 4, the greatest common divisor of the three integers on the blackboard will be 2, which is the maximum possible value.

Sample 2

Input	Output
3 12 15 18	6

Sample 3

Input	Output
2 1000000000 1000000000	1000000000

We can replace an integer with itself.