

A. Ksusha and Array

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Ksusha is a beginner coder. Today she starts studying arrays. She has array a_1, a_2, \dots, a_n , consisting of n positive integers.

Her university teacher gave her a task. Find such number in the array, that all array elements are divisible by it. Help her and find the number!

Input

The first line contains integer n ($1 \leq n \leq 10^5$), showing how many numbers the array has. The next line contains integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^9$) — the array elements.

Output

Print a single integer — the number from the array, such that all array elements are divisible by it. If such number doesn't exist, print -1 .

If there are multiple answers, you are allowed to print any of them.

Examples

input
3 2 2 4
output
2
input
5 2 1 3 1 6
output
1
input
3 2 3 5
output
-1