A. Perfect Squares

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Given an array $a_1, a_2, ..., a_n$ of n integers, find the largest number in the array that is not a perfect square.

A number x is said to be a perfect square if there exists an integer y such that $x = y^2$.

Input

The first line contains a single integer n ($1 \le n \le 1000$) — the number of elements in the array.

The second line contains n integers $a_1, a_2, ..., a_n$ ($-10^6 \le a_i \le 10^6$) — the elements of the array.

It is guaranteed that at least one element of the array is not a perfect square.

Output

Print the largest number in the array which is not a perfect square. It is guaranteed that an answer always exists.

Examples

input
2 4 2

output
2

input
8 1 2 4 8 16 32 64 576

output
32

Note

In the first sample case, 4 is a perfect square, so the largest number in the array that is not a perfect square is 2.