

C. Remove Extra One

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

You are given a permutation p of length n . Remove one element from permutation to make the number of records the maximum possible.

We remind that in a sequence of numbers a_1, a_2, \dots, a_k the element a_i is a *record* if for every integer j ($1 \leq j < i$) the following holds: $a_j < a_i$.

Input

The first line contains the only integer n ($1 \leq n \leq 10^5$) — the length of the permutation.

The second line contains n integers p_1, p_2, \dots, p_n ($1 \leq p_i \leq n$) — the permutation. All the integers are distinct.

Output

Print the only integer — the element that should be removed to make the number of records the maximum possible. If there are multiple such elements, print the smallest one.

Examples

input
1 1
output
1

input
5 5 1 2 3 4
output
5

Note

In the first example the only element can be removed.