C. Boxes Packing

Mishka has got n empty boxes. For every i ($1 \le i \le n$), i-th box is a cube with side length a_i.

Mishka can put a box i into another box j if the following conditions are met:

- i-th box is not put into another box;
- j-th box doesn't contain any other boxes;
- box i is smaller than box j ($a_i < a_j$).

Mishka can put boxes into each other an arbitrary number of times. He wants to minimize the number of *visible* boxes. A box is called *visible* iff it is not put into some another box.

Help Mishka to determine the minimum possible number of *visible* boxes!

Input

The first line contains one integer n ($1 \le n \le 5000$) — the number of boxes Mishka has got.

The second line contains n integers $a_1, a_2, ..., a_n$ ($1 \le a_i \le 10^9$), where a_i is the side length of i-th box.

Output

Print the minimum possible number of *visible* boxes.

Examples

input

```
3
1 2 3
```

output

```
1
```

input

```
4
4 2 4 3
```

output

```
2
```

Note

In the first example it is possible to put box 1 into box 2, and 2 into 3.

In the second example Mishka can put box 2 into box 3, and box 4 into box 1.