Animals at the River (animals)

N animals come to the river to drink, one by one after each other. Each animal has a size S_i ($i = 0 \ldots N-1$), which is a positive integer. When an animal arrives, it chases away all smaller animals, but lets larger or equal sized animals stay there. We know the sizes of animals in order of arrival. How many animals will be at the river in the end?

Figure 1: Drinking from the river is a challenging task for a giraffe.

☞ Among the attachments of this task you may find a template file `animals.*` with a sample incomplete implementation.

Input

The first line contains the only integer N. The second line contains N integers S_i.

Output

You need to write a single line with an integer: the number of animals that are at the river after the last animal arrived.

Constraints

- $1 \leq N \leq 1\,000$.
- $1 \leq S_i \leq 100\,000$ for each $i = 0 \ldots N-1$.

Scoring

Your program will be tested against several test cases grouped in subtasks. In order to obtain the score of a subtask, your program needs to correctly solve all of its test cases.

– **Subtask 1** (0 points) Examples.

– **Subtask 2** (5 points) $N \leq 2$.

– **Subtask 3** (20 points) $1 \leq S_i \leq 2$ for each $i = 0 \ldots N-1$.

– **Subtask 4** (25 points) $N \leq 100$.

– **Subtask 5** (20 points) All S_i values are distinct.

– **Subtask 6** (30 points) No additional limitations.

Examples

input	output
2 2 2	2
5 3 7 2 5 4	3

Explanation

In the **first sample case** the second animal is the same size as the first one, so both of them stay there to drink.

In the **second sample case**,

- initially a size 3 animal comes to drink.
- When the size 7 animal arrives, it chases away the size 3 animal, and it will be the only one drinking.
- When the size 2 animal arrives, it doesn't chase away any other animal. There will be two animals drinking with sizes 7 and 2.
- When the size 5 animal arrives, it chases away the size 2 animal. There will be two animals drinking with sizes 7 and 5.
- When the size 4 animal arrives, it doesn't chase away any other animal. There will be three animals drinking with sizes $7, 5$ and 4.