Coding Area

Bottle Necks

Problem Description

There are N bottles. ith bottle has A[i] radius. Once a bottle is enclosed inside another bottle, it ceases to be visible. Minimize the number of visible bottles.

You can put ith bottle into jth bottle if following condition is fulfilled:

1) ith bottle itself is not enclosed in another bottle.

2) jth bottle does not enclose any other bottle.

3) Radius of bottle i is smaller than bottle j (i.e. A[i] < A[j]).

Constraints

1 <= N <= 100000.

1 <= A[i] <= 10^18.

Input Format

First line contains a single integer N denoting the number of bottles.

Second line contains N space separated integers, ith integer denoting the radius of Ith bottle.

(1 <= i <= N).

Output

Minimum number of visible bottles.

Test Case

Explanation

Example 1

Input

8

1 1 2 3 4 5 5 4

Output

2

Explanation

1st bottle can be kept in 3 rd one 1-->2 , which makes following bottles visible [1,2,3,4,5,5,4]

similarly after following operations, the following will be the corresponding visible bottles

Operation ? Visible Bottles

2 ? 3 [1,3,4,5,5,4]

3 ? 4 [1,4,5,5,4]

4 ? 5 [1,5,5,4]

1 ? 4 [5,5,4]

4 ? 5 [5,5]

finally there are 2 bottles which are visible. Hence, the answer is 2

Upload Solution [Question : B]

☐ I, **chukka bharath** confirm that the answer submitted is my own.

☐ Took help from online sources (attributions)

Choose a File ...