Castle Towers

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Problem Submissions Leaderboard Discussions

Eragon is a dragon that is visiting the town of Osaka. There are n towers of various heights in the city, and tower i has height of $height_i$. Because the taller towers tower over the shorter ones, Eragon can only blow out the tallest towers.

For example assume there are four towers of heights 3, 5, 4 and 5. Then Eragon can blow out 2 towers as there are two towers of maximum height 5.

Given the height $height_i$ for each individual tower, find and print the number of towers that Eragon can successfully blow out.

Input Format

The first line contains a single integer, n, denoting the number of towers in the city.
The second line contains n space-separated integers, where each integer i describes the height of tower i.

Constraints

- $1 \leq n \leq 10^5$
- $1 \leq height_i \leq 10^7$

Output Format

Print the number of towers Eragon blows out on a new line.

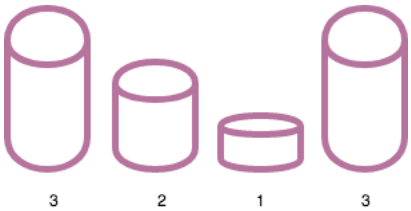
Sample Input 0

```
4
3 2 1 3
```

Sample Output 0

```
2
```

Explanation 0



As the tallest towers is of height 3 and there are two occurences, the answer is 2.

Contest ends in 21 hours

Submissions: 2951

Max Score: 100
Difficulty: Easy

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Current Buffer (saved locally, editable) C++

```cpp
#include <bits/stdc++.h>

using namespace std;
int castleTowers(int n, vector <int> ar) {
   int max = -1;
   int cont_max =0;

   for(int i = 0; i < n; i++) {
        if(ar[i] > max) {
           max = ar[i];
           cont_max=1;
        }else if(ar[i] == max) {
            cont_max++;
        }
   }
   return cont_max;
}
int main() {
    int n;
    cin >> n;
    vector<int> ar(n);
    for(int ar_i = 0; ar_i < n; ar_i++){
        cin >> ar[ar_i];
    }
    int result = castleTowers(n, ar);
    cout << result << endl;
    return 0;
}
```

Line: 5 Col: 4

Upload Code as File Test against custom input Run Code Submit Code