Record Breaker (4pts, 8pts)

Attempts	Penalties	Penalty Time	Points	Points
6	0	00:00:00	—	—

Practice Submissions

Attempt 1	RE	Jul 12 2020, 13:30

Competitive Submissions

Attempt 6	Sample Failed: RE	02:59:38
Test 1	Completed	02:35:24
Attempt 5	RE	01:50:45
Attempt 4	Sample Failed: RE	01:38:38
Attempt 3	RE	01:27:23

Last updated: Jul 12 2020, 10:45

PROBLEM ANALYSIS

Problem

Isyana is given the number of visitors at her local theme park on **N** consecutive days. The number of visitors on the i-th day is $\mathbf{V_i}$. A day is *record breaking* if it satisfies both of the following conditions:

- The number of visitors on the day is strictly larger than the number of visitors on each of the previous days.
- Either it is the last day, or the number of visitors on the day is strictly larger than the number of visitors on the following day.

Note that the very first day could be a record breaking day!

Please help Isyana find out the number of record breaking days.

Input

The first line of the input gives the number of test cases, **T**. **T** test cases follow. Each test case begins with a line containing the integer **N**. The second line contains **N** integers. The i-th integer is $\mathbf{V_i}$.

Output

For each test case, output one line containing `Case #x: y`, where x is the test case number (starting from 1) and y is the number of record breaking days.

Limits

Time limit: 20 seconds per test set.
Memory limit: 1GB.
$1 \leq \mathbf{T} \leq 100$.
$0 \leq \mathbf{V_i} \leq 2 \times 10^5$.

Test set 1

$1 \leq \mathbf{N} \leq 1000$.

Test set 2

$1 \leq \mathbf{N} \leq 2 \times 10^5$ for at most 10 test cases.
For the remaining cases, $1 \leq \mathbf{N} \leq 1000$.

Sample

Input	Output
4 8 1 2 0 7 2 0 2 0 6 4 8 15 16 23 42 9 3 1 4 1 5 9 2 6 5 6 9 9 9 9 9 9	Case #1: 2 Case #2: 1 Case #3: 3 Case #4: 0

In Sample Case #1, the bold and underlined numbers in the following represent the record breaking days: 1 **2** 0 **7** 2 0 2 0.

In Sample Case #2, only the last day is a record breaking day.

In Sample Case #2, only the last day is a record breaking day.

In Sample Case #3, the first, the third, and the sixth days are record breaking days.

In Sample Case #4, there is no record breaking day.