Analysis

We can check whether the current element is the last element and, if not, if it is greater than the next element in constant time. To check whether i is a record breaking day, we also need to check whether the number of visitors of day i is greater than number of visitors from all the previous days.

Test Set 1

For each element j such that (1 <= j < i), check that the number of visitors on day j are less than number of visitors on day i. Hence, for each day we would compare it with all the previous days and it would take O(**N**) time. Therefore, for **N** days, the time complexity of this solution would be O(**N**^2).

Test Set 2

However that wouldn't be fast enough for Test Set 2, so we need a faster approach. Instead of comparing the number of visitors of day i against *all* the previous days one by one, we can compare the number of visitors of day i against the *greatest number of visitors* from all previous days. That reduces our processing time for each day from O(**N**) to O(1). Therefore, for **N** days, the time complexity of this solution would be O(**N**), which is sufficiently fast for both Test Set 1 and Test Set 2.