# Temperature changes

## Assignment Description

Meike is a climate scientist and she would like to calculate the largest temperature drop over different periods of time. For example, if the measured temperature on 6 consecutive days was 19, 12, 13, 11, 20 and 14, then the largest drop is 8 degrees from day 1 to day 4. If the temperature on the last day was 10 instead of 14, the biggest drop would have been 10 degrees, between days 5 and 6.

Write such a function that given an unsorted list of integers returns the biggest drop in temperature.

The complexity of your algorithm **must** be of at most O(n)

## Input-Output specification

A single string in the form "[4,7,2,8,3]"

### Example

Input 1	Output
[4,7,2,8,3]	5
[1,2,3,4,5]	0

### Hints

- Don't think too much about the complexity to start with. First make sure your program works with a complexity of  $O(n^2)$
- After your program works correctly, work on reducing the complexity to O(n)