

Maximum Difference

Given an array **a[]** of integers, find out the maximum difference between any two elements such that larger element appears after the smaller number in **a[]**.

Examples:

- If array is [2, 3, 10, 6, 4, 8, 1] then returned value should be 8 (Diff between 10 and 2).
- If array is [7, 9, 5, 6, 3, 2] then returned value should be 2 (Diff between 7 and 9).

Input:

The first line of input contains an integer **T** denoting the number of test cases.

Each line **i** of the subsequent **T** lines consists of a single string, denoting the array **a[]**.

Output:

Print the maximum difference between two element. Otherwise print -1

Constraints:

$$1 \leq T \leq 80$$

$$1 \leq a[i] \leq 500$$

Example:

Input:

```
2
2 3 10 6 4 8 1
1 2 90 10 100
```

Output:

```
8
109
```