Find second largest element

Given an array of elements. Your task is to find the second maximum element in the array.

Input:
The first line of input contains an integer T which denotes the number of test cases. Then T test cases follows. First line of each test case contains a single integer N which denotes the number of elements in the array. Second line of each test case contains N space separated integers which denotes the elements of the array.

Output:
For each test case in a new line print the second maximum element in the array. If there does not exist any second largest element, then print -1.

Constraints:
1<=T<=100
2<=n<=1000
$1<=a[i]<=10^6$

Example:
Input:
2
5
2 4 5 6 7
6
7 8 2 1 4 3
Output:
6
7