## horizontal line

## Maximum of Minimum for every window size

## 

# **Problem Statements :**

Given an integer array of size n, find the maximum of the minimum’s of every window size in the array. Window size very from 1 to n.

# **Input Format :**

First line contains integer t which is number of test case.

For each test case, it an integer n which size of given array and next line contains n space separated integers.

**Constraints :**

1<=t<=100

1<=n<=1000

**Output Format :**

Print the maximum of the minimum’s of every window size in the array .

# **Sample Input :**

1

7

10 20 30 50 10 70 30

**Sample Output :**

70 30 20 10 10 10 10

**Explanation :**

First element in output indicates maximum of minimums of all   
windows of size 1.  
Minimums of windows of size 1 are {10}, {20}, {30}, {50}, {10},  
{70} and {30}. Maximum of these minimums is 70  
  
Second element in output indicates maximum of minimums of all   
windows of size 2.  
Minimums of windows of size 2 are {10}, {20}, {30}, {10}, {10},  
and {30}. Maximum of these minimums is 30  
  
Third element in output indicates maximum of minimums of all   
windows of size 3.  
Minimums of windows of size 3 are {10}, {20}, {10}, {10} and {10}.   
Maximum of these minimums is 20  
  
Similarly other elements of output are computed.

**Time Limit :**

1 sec.