**Assignment –I/CAP-680/DOC-14/G-1 and G-2**

**Q1)** Mr. Sam used to teach student in group. He evaluates the student by taking test. Once he takes the test and stored the marks and asked the student to tell the peak marks obtained by the student.

Note:- peak marks(number) is that which is not smaller than its neighbour

Example

Input: studentmark [] = {15, 22, 17, 3, 22, 98, 66}

Output: 22, 98

Explaination:- The marks 22 has neighbor 15 and 17 both of them are less than 22, similarly 98 has the neighbour 22,66

Note: But the edge element can consider any one of the either side

**Q2**) A class has 30 students .These student are divided into 3 groups of 10 each. The viva-marks of each student are stored in each group. The teacher wants the zero marks obtained in group to be placed at the end of each group. The constraint is that the marks should be between 0 to 20.Help the teacher in obtaining the task.

Input:

Group-A [15, 0, 17, 0, 18, 0, 3, 11, 18, 20]

Group-B [9, 10, 4, 0, 8, 12, 0, 0, 18, 17]

Group-C [16, 6, 2, 10, 0, 0, 0, 11, 9, 5]

Output:

Group-A[15,17, 18,3,11,18,20,0,0,0]

Group-B[9, 10, 4, 8, 12,18,17,0,0,0]

Group-C[16, 6, 2, 10,11,9,5,0,0,0]

**Q3)** A paragraph writing competition was organized in a school. The limitation is that paragraph will contain only a maximum of 10 sentences. The judge team wanted to know the number of words, number of characters and number of sentences that has been entered by the best performed student .As a programmer you are assigned to assist the team in achieving this goal. Make an effective program to achieve it by taking suitable assumption if any.

**Q4)** In an organization the information of employees are organized in hierarchical manner i.e. class “Salary” inherit class “Employee” and interface “Allowance”. Class “Result” inherits class “Salary”.

Each class and interface has the following attribute (member data)

(a)Employee: empcode (b) Salary: basicsalary (c) Allowance: da, hra , ta

(b)Result: netsalary

Where netsalary =basicsalary+hra+da+ta

Display the netsalary along with employee code of “n” employees .Use proper method as per the requirement.

Hra=House rent allowance Da=dearness allowance ta=traveling allowance

**Q5)** A play was organized, in which two words were given and asked whether the second word derived from the first word just by arranging the characters of first word. Make a suitable program to achieve this task.