**PSG COLLEGE OF TECHNOLOGY**

**DEPARTMENT OF COMPUTER APPLICATIONS**

**I MCA**

**20MX16 DATA STRUCTURES LABORATORY**

**Problem Sheet -4**

**Date: 17-10-2022**

1. Write a program to accept the integer values and display the second largest value in an array.
2. Write a program to sort the list of numbers in an ascending and descending order.
3. Write a program to search for a specified number in an array and display with its position.
4. Write a program to find the occurrence of positive, negative, even and odd elements for a given array.
5. In a gymnastics or diving competition, a contestant’s score is calculated by dropping the lowest and highest scores and then adding the remaining scores. Write a program that allows the user to enter eight judges’ scores and then outputs the point received by the contestant. A judge awards point between 1 and 10, with 1 being the lowest and 10 being the highest. For example, if the scores are: 9.2, 9.3, 9.0, 9.9, 9.5, 9.5, 9.6 and 9.8, then the contestant receives a total of 56.9 points.

Here is the sample output.

Enter 8 scores out of ten points :

9.1 9.0 8.9 8.8 9.4 7.9 8.6 9.8

Your lowest score is 7.90

Your maximum score is 9.80

Your total point is 53.80

Your average point is 8.97

1. Write a program that accepts an array and a key value. Rotate the array element by ‘key’ times.

Example:

Input:  arr[]= [1, 2, 3, 4, 5, 6]

key=2

Output : [ 3, 4, 5, 6, 1, 2]