TERM WORK

For End Term Lab (PMC-101)

1. Write a program in C to rearrange an array in such an order that– smallest, largest, 2nd smallest, 2nd largest and so on..

2. Write a program in C to rearrange an array in such an order that:
   A[]={x1 > x2 < x3 > x4 < x5 > x6 < x7 > x8 < …….};

3. Write a C program to print a matrix of any order by taking row and column from the user and then print the mirror and transpose of the input matrix.

4. Write a C program to take input two matrix of any order from user and print their multiplication, if possible, with appropriate message.

5. Write a program in C to count and print the frequency of each element of an array.
   e.g. A[]={2 3 4 5 4 3 1 7 8 9 8 5 1 4 5};
   Unique numbers are : 2, 7, 9
   Duplicate numbers are : 1, 3, 4, 5, 8
   Occurrence of each number are:

2	:	1
3	:	2
4	:	3
5	:	3
1	:	2
7	:	1
9	:	1
8	:	2

6. Write a program in C to sort N numbers using either selection or insertion sort.

7. Write a program in C to implements the non-linear search within N element in log(N) time.

8. Write a program in C to check whether a string is palindrome or not without using any string handling function.

9. Write a program in C to search a substring within a string and replace it with another string.

10. WAP to create a structure Student with (name, subject, roll, sid, marks) using appropriate data types, then take input and display the values of member variable of structure variable.

11. Write a Menu driven program to perform the following operations on array of structure of above (Student) data type:
    1. Insert
    2. Display
    3. Delete

4. Search

12. WAP to implement Single linked list using the following menu driven functions.

    1. Insert at Beginning
    2. Insert at End
    3. Insert at specific position
    4. Display
    5. Delete
    6. Reverse Display
    7. Reverse the linked list
    8. Search
    9. Sort (using selection sort)

13. Write a C program to write data in a file “myfile.txt” in d:\ and then read and display entire data from file. Also count total alphabets, digits, while space, special characters, and number of lines in the file. Open file using absolute address.

14. Write a C program to write formatted data (Name, department, Eid, Sal, Age) in a file “Emp.dat” in d:\data and then read entire data from file in formatted manner using appropriate method. Open file using absolute address.

15. Write a C program to search a string in a file and display the occurrence of the substring in file. Input file name and substring from command prompt as command line argument.