Assignment of CMSA CC 1 P: Programming in C Laboratory

1. Write a program to find out the G.C.D and L.C.M of two numbers.

2. Write a program to reverse a number.

3. Write a program to find out the the area of a traingle, square and rectangle.

4. Write a program to generate the following patterns for N number of rows:

    i)
```
*
* *
* * *
* * * *
```

    ii)
```
      *
     * *
    * * *
   * * * *
```

    iii)
```
      *
    *   *
  *   *   *
*   *   *   *
```

5. Write a program to convert temprature from Centigrade to Fahrenheit and vice-versa.

6. Write a program to generate a marksheet based on "Gradation" for a given marks.

7. Write a program to find out the prime numbers within a given range.

8. Write a program to find out the factors of a given number.

9. Write a program to calculate the factorial of a given number.

10. Write a program to generate the Fibonacci series up to N^{th} term.

11. Write a menu-driven program to implement different arithmetic operations.

12. Write a program to print a number in word.

13. Write a program to check a character is an alphabet, digit or special character.

14. Write a program to print the elements of an array in reverse order.

15. Write a program to get the summation of all the numbers in an array.

16. Write a program to find out the duplicate elements in an array.

17. Write a program to find out an element in an array.

18. Write a program to sort elements of an array in ascending and descending order.

19. Write a program to count the frequency of each element in an array.

20. Write a menu-driven program to implement matrix-addition, subtraction and multiplication.

21. Write a program to create a student database of N number of records. Each record consists of followings:

    Student_Name, Student_Roll, Total_Marks, Subject
    (Ex: Amit Dey, 13, 345, Computer Science)

    Arrange the records with respect to Student_Name, Student_Roll and Total_Marks respectively. Create the database using "structure" as well as "union" respectively.

22. Write a program to check a string (case sensitive) is palindrome or not.

23. Write a program to sort a list of strings in ascending and descending order.

24. Write a program to read content of a ".txt" file and copy the content of the said file into another ".txt" file.