

## **Assignment -1**

1. WAP to implement the following programs using recursion.
  - a) Factorial
  - b) Fibonacci Series
  - c) Greatest Common Divisor
  - d) Linear Search
  - e) Binary Search
  - f) Tower of Hanoi
2. Write a C program to find the sum of individual digits of a positive integer.
3. Write a C program to generate all the prime numbers between 1 and n, where value of n is supplied.
4. Write a C program to find the roots of a quadratic equation.
5. Write a C program to determine if the given string is a palindrome or not.
6. Write a C program that uses functions to perform the following:
  - a) Addition of Two Matrices
  - b) Multiplication of Two Matrices
7. Write a C program to count the lines, words and characters in a given text.
8. Write a C program to construct a pyramid of numbers.
9. Write a C program to demonstrate the concept of one-dimensional array finding the sum of array elements.
10. WAP to implement Magic Square.
11. WAP to implement Call by Value and Call by Reference mechanisms.
12. WAP to implement three different ways to swap two variables without using a third variable.

Note: while Submitting your code make sure to add screenshot of your output.