Algorithm Development and Programming Fundamentals
MCA SEM-1

Functions - I

1. Write a C program to input the radius of a circle from the user and find diameter, circumference and area of the given circle using functions.

2. Write a C program to check whether a number is prime, armstrong, perfect number or not using functions.

3. Write a C program to collect two numbers from the user and find all prime numbers, armstrong numbers and perfect numbers between them using functions.

4. Write a C program to allow the user input an integer number in decimal format. Provide users with a facility to convert the entered number to Hexadecimal, Octal and Binary formats.

5. Write a C program to solve the following series for N terms using separate functions.

1	1 + 4 – 9 + 16 – 25 +…….up to N
2	1 + ¼ + 1/9 + 1/16 + …….up to N.
3	1 + 1 + 2 + 3 + 5 + 8…….up to N
4	1 – 1/2 + 1/3 - 1/4 + 1/5…….1/N
5	1/2 + 2/3 + 3/4 ……..(N-1)/N
6	1! + 2! + 3! + 4!…….N!