EXPERIMENT-6

Functions, Recursion and Pointers

Objective: To understand the concept of Functions and Looping with Recursion.

List of Lab Activities:

Write algorithm and C program, compile, execute and test the code using Linux C compiler with suitable test cases.

1. Function main() gets a number and calls the following three functions
    a. "void armstrong(int)"checks if the given number is a Armstrong number or not.
    b. "void coprime(int) reverses the given number and checks if the given number and reversed number are coprime.
    c. "int factorial(int) computes the factorial of the given number using recursion and returns to main().
2. Function main() gets two numbers from the user and calls three functions in the given order:
    a. "int triangle_area(int base, int height)" returns the area of the right-angled triangle to main().
    b. "void swap(int *, int*)" swaps the two numbers using bitwise operator and displays them.
    c. "float* remainder (int a, int b)" returns the remainder of a/b to main().

List of Practice Activities:

Write algorithm and C program, compile, execute and test the code using Linux C compiler with suitable test cases.

1. Find the maximum and minimum between two given numbers using functions.
2. Write a function to reverse any number using recursion.