Assignment-03

1. Write a program to find the factorial of a given number by using a function
2. Write a program to create user defined function to check whether entered string is palindrome or not.
3. Write a program that defines an overloaded function *area()* to calculate the area of:
   a. a circle (given the radius)
   b. a rectangle (given length and breadth)
   c. a triangle (given base and height)
4. Write a program that consist of an overloaded function *swapValues()* that:
   a. Swaps two integers
   b. Swaps two floating-point numbers
   c. Swaps two characters
5. Write a recursive function to obtain the sum of the first n numbers of a Fibonacci sequence (In a Fibonacci sequence the sum of two successive terms gives the third term)
6. Write a recursive function to calculate the factorial of a given number n.
7. Write a recursive function to reverse a string.
8. Write a recursive function to solve the Tower of Hanoi problem for n disks.
9. Write a recursive function to perform Binary Search in a sorted array.
10. Write a recursive function to compute the sum of first N natural numbers.