Lab Assignment-3

UEC 613   Data Structures and Algorithms

Note: Use C/C++/JAVA/Python programming language.

Q1.   Write a function to perform following operations on the string:

(Note: You can make single function for all operations/independent function for each problem)

   i.   Finding length of a string
   ii. Converting a string in lowercase
   iii. Counting number of words and vowels in a string
   iv. Validating a string (Note: Valid string does contain only alphabets)
   v.   Reversing a string (Eg. Code   edoC)
   vi. Checking if a string is palindrome.
   vii. Finding duplicate characters in a string (Note: print the duplicate characters only once, irrespective of the number of times it occurred)

Q2   Sort the characters of the string entered by user.

Q3.   Implement combination formula ^nC_r using recursion

Q4.   Implement the Fibonacci series using recursion

Q5   Write a program for finding the factorial of a number recursively.