Q1)

a) Write a C++ function to implement the Merge sort algorithm.

b) Write a main program to test your function.

Save your program as *Que1.cpp*.

Q2)

a) Implement a Stack ADT class named ADTStack with the data type of **character**.

b) Implement the operations that can be done in a Stack ADT including the following operations.
   a. push(char c);
   b. pop();
   c. isEmpty();
   d. isFull();

c) Write a main program to read a word or string from the user and use the **ADTStack** class to display whether the entered word or String is palindrome or not.

   (Your program should ask the user to enter a word or string)

Save your program as *Que2.cpp*.