CL1002 – Programming Fundamentals Lab

Exercise # 11

Note:

- Submit a pdf file containing all of your C code with all possible screenshots of every task outputs on Google Classroom.
- Copied task will be awarded **zero** marks.
- Note that these lab task marks could be graded through a viva in lab.
- Please submit your file with this naming convention (roll-no-name) i.e (22P-8743-Zain.pdf).

Problem: 1

Write a program in which user will enter his name. The name will be passed

to a function which will check whether the string was palindrome or not and display a

message accordingly.

Note: A string is said to be palindrome if it remains the same on reading from both ends. It means that when you reverse a given string, it should be the same as the original string.

Problem: 2

Write a C program that does the following according to user input. It's a

menu-driven program. The user is asked to enter a string. Then the program

displays the following menu:

A) Count the number of vowels in the string

B) Count both the vowels and consonants in the string

C) Display the most frequent character in the string.

D) Concatenate another string with the existing string.

E) Exit the program.

The program performs the operation selected by the user and repeats until

the user selects E to exit the program.

Problem: 3

A software house is looking for a programmer to write a program that does encryption and decryption of a message to securely transmit it over the network. Be the one who will write that program. Write a C program that takes a string as an input (including spaces). The string will be passed to a function named encrypt () as an argument. The function will encrypt the string and displays the encrypted version of the message. There should be another function named decrypt (), which will decrypt the message and displays the original message. Your program should be menu driven.

Implement Caesar cipher algorithm in a way that each character in the

original string should be replaced by its succeeding third letter.