Introduction to Programming

(CS-200)

Lab 1

Note:

1- Make sure to submit the lab by the end time on lms. Any late submissions will not be entertained.

2- Make sure that your lab has been checked by the TA before the end of the lab.

3- Any **cheating case** will be reported to **Disciplinary Committee** without any delay.

Problem 1: Lets Start Things Off (Marks: 10)

Write a program which takes a number as input and outputs that number plus 2.

Problem 2: Palindromes are Weird (Marks: 30)

Take an integer as input and print yes on the screen if it is a palindrome else print no.

Def: An integer which remains the same when read from either side is a palindrome, e.g. 363, 8668.

Note: You are not allowed to use char arrays or strings for this task.

Problem 3: Fibonacci Sequence (Marks: 30)

Take an integer n as input and print yes if it is part of the fibonacci sequence else print no.

Def: Fibonacci sequence is generated by the adding previous two numbers in the sequence, while the first two numbers are taken as 0 and 1. Here is the sequence up-to seven terms: 0, 1, 1, 2, 3, 5, 8, …….

Problem 4: Unity is Strength (Marks: 30)

Write a program which takes an integer as input and then performs one of the following mathematical operations after taking required inputs, with some additional constraints:

(Integral Multiplication (*), Integration Division (/))

Constraints: To write the code for Integral Multiplication and Division, you are not allowed to use '*' or '/' operators of cpp. You are only allowed to add 1 or -1 in a number.

You have to use **switch statement** to write this program.

Submission Instructions:

1- Make one file for each problem with the following format:

rollNumber_problemNumber.cpp

For example, if I have to make the file for problem 3 and my roll number is 18100xxx, so my file would be 18100xxx_3.cpp.

2- Zip/Archive all the files and name the archive as your roll number and submit it.

Best of Luck