Programming Fundamentals *Lab*

(BS-CS-F22 Morning)

Lab # 5

Instructions:

Attempt the following tasks exactly in the given order. For each task, you must create a separate file in **VSCode.**

You must complete all tasks individually. Absolutely NO collaboration is allowed.

Any traces of plagiarism/cheating would result in an **"F"** grade in this course.

Indent your code properly(There are special marks for this).

Use meaningful variable names. Use the **camelCase** notation to name variables.

Use meaningful prompt lines/labels for all input/output that is performed by your programs.

Don't use an online compiler.

Submission: Submit your lab on this email id: BCSF20M012@pucit.edu.pk

Time: 11:59 pm Saturday.

Write **C programs** for the following tasks:

Task1

Write a program to calculate the sum of the first and the second last digit of a 5 digit number entered by user.

Task2

Write a C program that takes a 4-digit number as input and displays a new number where each digit is increased by 2. For example, if the input is 5696, the output should be 7818.

Task3

Write a function to calculate power of a number raised to other (a^b).

Task4

Implement these built in functions:

- **double sqrt(double x);** (Square root)[Bonus Task]
- **double pow(double x, double y);** (Power: x raised to the power of y)
- **double fabs(double x);** (Absolute value)
- **double ceil(double x);** (Ceiling: smallest integer not less than x)
- **double floor(double x);** (Floor: largest integer not greater than x)

Task5

Given a number containing n digit distinct number (Range: 0 to 9) taken from the user find the all the number that are missing from the array.

Like , input=278 , output will be =1,3,4,5,6,9

Best of luck!