## PDS Lab 2 Section 3 Date: 15.04.2021

# Managing your files

- Preferably create a folder in your machine called PDS-Lab and save all your assignment and test codes in that folder so that you can look it up whenever required.
- Naming your submission files:

```
<Roll Number>_<Assignment/Test Number>_<Question Number>.c
```

Eg. 20QD30010\_A1\_Q1.c, 20QD30010\_A1\_Q1a.c, 20QD30010\_T2\_Q3.c

### **Tutorial 1**

#### Write a C program that:

- 1. Reads three integers from the key board,
- 2. Finds the largest among them,
- 3. Prints the input numbers and the largest number among them.

### **Tutorial 2**

Write a C program which takes as input the value of a floating-point variable called temp and prints one of the following messages, depending on the value assigned to temp:

- (a) ICE, if the value of temp is less than 0
- (b) WATER, if the value of temp lies between 0 and 100
- (c) STEAM, if the value of temp exceeds 100

### Question 1

Write a program that evaluates the following expressions by taking x, y and z as inputs and then printing out the results along with values of x, y and z after each expression evaluation.

- a) K = x++ + ++y
- b) H = ++x + y++ z--
- c) S = ++x + --y \* ++z

#### Output format:

$$x = ?$$
,  $y = ?$  and  $z = ?$ 

$$K = x+++++y = ?$$

$$H = ++x + y++ - z-- = ?$$

$$S = ++x + --y * ++z = ?$$

### Question 2

Write a C program that reads two positive real numbers. Now, enter an operator from the keyboard and perform the operation. The operator can be any of the following:

- 1. + (addition)
- 2. (subtraction)
- 3. \* (multiplication)
- 4. / (division) and
- 5. % (remainder)

#### Output Format:

- 134.78 + 256.09 = 390.87
- 150%18 = 6 etc.

## Question 3

Write a C code by using the Switch Case that reads an alphabet from the keyboard, determines whether it is a vowel or not and prints out the decision. Consider both upper and lower case letters. The number of switch cases in the program can be at most 15.

Output Sample 1:
Enter the alphabet: A
A is a vowel.
Output Sample 2:
Enter the alphabet: b
b is not a vowel.