# CL1002 – Programming Fundamentals Lab
## Exercise # 12

**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 C to find the maximum number between two numbers using a pointer.

## Problem: 2

Ask user to enter the table number and its limit. Take these values using pointer, then print the desire table using pointer.

**Note:**  make the use of pointers in each scanf and printf

**Sample Ouput**

```
Enter table: 5
Enter limit: 8
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
```

## Problem: 3

Write a c program that write in a file firstfile.txt your name, roll number and CGPA.

Example:

Name: XYZ

Roll Number: 22P-8743

CGPA:3.5

## Problem: 4

1. Write a c program that opens a already created file firstfile.txt (that you have created

in above question).

2. Now read the data of file and display it. (Read the data until you reach end of file).

## Problem: 5

The file names.txt contains a list of names, one per line.

1. Write a program that start printing the first 4 character of every name in a file (names.txt).

2. Write a program that prints the sum of the lengths of the names in names.txt.

3. Write a function that read names in names.txt and prints all the names that have the length given as a parameter e.g print_name(3)

**Input File**

```
Atif
Umer
Anna
Muhammad
Aimen
Farooq
Hamza
Ali
Ahmed
Ibrar
Saad
Hussain
Raza
```

**Input**

print_name(5)

**Output**

*Aimen*

*Hamza*

*Ahmed*

*Ibrar*

**Input**

print_name(4)

**Output**

*Atif*

*Umer*

*Anna*

*Saad*

*Raza*

4. Write a program that reads names in names.txt and writes out a file at name_subj.txt containing the names along with subject's name, one per line, in the corresponding order.

**Input File**

```
Atif
Umer
Anna
Muhammad
Aimen
Farooq
Hamza
Ali
Ahmed
Ibrar
Saad
Hussain
Raza
```

**Output File**

| names.txt | × | program.txt |
|---|---|---|

```
 1 Atif,Programming Fundamentals,Calculus,English Composition
 2 Umer,Programming Fundamentals,Calculus,English Composition
 3 Anna,Programming Fundamentals,Calculus,English Composition
 4 Muhammad,Programming Fundamentals,Calculus,English Composition
 5 Aimen,Programming Fundamentals,Calculus,English Composition
 6 Farooq,Programming Fundamentals,Calculus,English Composition
 7 Hamza,Programming Fundamentals,Calculus,English Composition
 8 Ali,Programming Fundamentals,Calculus,English Composition
 9 Ahmed,Programming Fundamentals,Calculus,English Composition
10 Ibrar,Programming Fundamentals,Calculus,English Composition
11 Saad,Programming Fundamentals,Calculus,English Composition
12 Hussain,Programming Fundamentals,Calculus,English Composition
13 Raza,Programming Fundamentals,Calculus,English Composition
```

# Problem: 6

Write a program to initialize 100 randomly generated numbers. Sort all numbers in ascending order. Write all sorted numbers in file sortedNumbers.txt