Tutorial 5 : Functions

September 9, 2019

Objective :

- This lab is intended to introduce functions in C.

Recommended Systems :

- Any Flavour of Linux - We will be using Ubuntu Systems in the lab 5042

References :

- Unix concepts and applications, Fourth Edition, Sumitabha Das, TMH.
- Brian W. Kernighan and Dennis M. Ritchie, The C Programming Language, Prentice Hall of India.
- Byron Gottfried, Schum's Outline of Programming with McGraw-Hill.

Getting Started

- Switch on your monitor.
- Switch on your PC.
- Allow the machine to boot.
- Wait until the log in prompt comes.
- Supply your log-in and password
  - Log in : iiita
  - Password : iiita123

  This opens your window manager (usually GNOME) with icons, the side panel, and so on. You are now ready to start your work
  - Click on the terminal icon to open a shell (command prompt)

Tutorials : Compiling simple C Programs

- Eight programs have been provided in the *Helpful resources Section* of this lab exercise. Run each of them to know how they work.
- To run each of the *c* files follow the steps given in Tut –0.

- *factorialRecursion.c :* C program to find factorial of given number using recursion
- *factorialUsingFunction.c :* C program to find factorial of given number using function
- *gcdIterative.c :* C program to find GCD of two numbers
- *gcdRecursive.c :* C program to find GCD of two numbers using recursion
- *ncr.c :* Compute ${}^{n}C_{r}$ using function
- *power.c* : Iterative C program to implement pow(x, n)
- *rand.c :* C program to generate random numbers
- s*wapFailure.c :* Establishes the impossibility of swapping two values using parameters and local variables of a function.