Integral University
Department of Computer Application
Programming in C (CA 101)

Unit 01
<u>Introduction of Programming in C</u>

The C programming language is a general-purpose, high-level language that was originally developed by Dennis M. Ritchie to develop the UNIX operating system at Bell Labs. C was originally first implemented on the DEC PDP-11 computer in 1972.In 1978, Brian Kernighan and Dennis Ritchie produced the first publicly available description of C, now known as the K&R standard. The UNIX operating system, the C compiler, and essentially all UNIX applications programs have been written in C. The C has now become a widely used professional language for

> ➢ Easy to learn
> ➢ Structured language
> ➢ It produces efficient programs.
> ➢ It can handle low-level activities.
> ➢ It can be compiled on a variety of computer platforms.

Facts about C

> ➢ C was invented to write an operating system called UNIX.
> ➢ C is a successor of B language, which was introduced around 1970.
> ➢ The language was formalized in 1988 by the American National Standard Institute.(ANSI)
> ➢ The UNIX OS was totally written in C by 1973.
> ➢ Today, C is the most widely used and popular System Programming Language.
> ➢ Most of the state-of-the-art software shave been implemented using C.
> ➢ Today's most][popular Linux OS and RBDMS MySQL have been written in C.

Why to use C?

C was initially used for system development work, in particular the programs that makeup the operating system. C was adopted as a system development language because it produces code that runs nearly as fast as code written in assembly language. Some examples of the use of C might be:

- ➢ Operating Systems
- ➢ Language Compilers
- ➢ Assemblers
- ➢ Text Editors
- ➢ Print Spoolers
- ➢ Network Drivers
- ➢ Modern Programs
- ➢ Databases
- ➢ Language Interpreters
- ➢ Utilities

C Programs

A C program can vary from 3 lines to millions of lines and it should be written into one or more text files with extension".c";for example,hello.c. You can use"vi","vim"or any other text editor to write your C program into a file