C Language - Overview

C 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 application programs have been written in C. C has now become a widely used professional language for various reasons −

* 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 the early 1970s.
* The language was formalized in 1988 by the American National Standard Institute (ANSI).
* The UNIX OS was totally written in C.
* Today C is the most widely used and popular System Programming Language.
* Most of the state-of-the-art software have been implemented using C.
* Today's most popular Linux OS and RDBMS MySQL have been written in C.

Why use C?

C was initially used for system development work, particularly the programs that make-up the operating system. C was adopted as a system development language because it produces code that runs nearly as fast as the 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.

This tutorial assumes that you know how to edit a text file and how to write source code inside a program file.