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WHAT IS C LANGUAGE

The C Language is developed by Dennis Ritchie for creating system applications that directly interact with the hardware devices such as drivers, kernels, etc.

C programming is considered as the base for other programming languages, that is why it is known as mother language.

It can be defined by the following ways:

1) Mother Language

C language is considered as the mother language of all the modern programming languages because most of the compilers, JVMs, Kernels, etc. are written in C language, and most of the programming languages follow C syntax, for example, C++, Java, C#, etc.

2) System Programming Language

C language is a system programming language because it can be used to do low-level programming (for example driver and kernel).
It is generally used to create hardware devices, OS, drivers, kernels, etc.
For example, Linux kernel is written in C.

3) Procedural Language

A procedural language specifies a series of steps for the program to solve the problem.
A procedural language breaks the program into functions, data structures, etc.
C is a procedural language. In C, variables and function prototypes must be declared before being used.

4) Structured Programming Language

A structured programming language is a subset of the procedural language.
Structure means to break a program into parts or blocks so that it may be easy to understand.
In the C language, we break the program into parts using functions.

5) Mid-Level Programming Language

C is considered as a middle-level language because it supports the feature of both low-level and high-level languages.
C language program is converted into assembly code, it supports pointer arithmetic (low-level), but it is machine independent (a feature of high-level).
