C PROGRAMMING

# What is C?

The C programming language is a computer programming language. It was initially developed by Dennis Ritchie in the year 1972. It was mainly developed as a system programming language.

# History of C:-

C programming language was developed in 1972 by Dennis Ritchie at bell laboratories of AT&T (American Telephone & Telegraph), located in the U.S.A.

**Dennis Ritchie** is known as the **founder of the c language**.

# Importance of C:-

## 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.

It provides the core concepts like the array, string, function etc.

## Robust Language:-

It is a robust language whose rich set of built-in functions and operators can be can be used to write any complex program.

## System programming language:-

A system programming language is used to create system software. 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.

## Procedure-oriented programming language:-

A procedure is known as a function, method, routine, subroutine, etc. 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.

## 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. It makes the program easier to understand and modify.

# Features of C Programming Language:-

1. Simple
2. structured programming language
3. Rich Library
4. Memory Management
5. Fast Speed
6. Pointers
7. Recursion
8. Extensible

## What is main()?

The main() is a special function used by the C system to tell the computer where the program starts. Every program must have exactly one main function. If we use more than one main function, the compiler cannot understand which one marks the beginning the program.

## WHAT IS printf ?

printf is predefined standard C function. It is use to print text on the screen.

## What is Header File?

Header File is a file which has some in-built function. Examples of some Header File :

stdio.h , conio.h, math.h, string.h etc.. #include<file>

#include”file”