

1. What is C Language?

Ans C Language is a high-level programming language is developed by Dennis Ritchie at Bell Labs in 1970s. C programs can run on many different platforms with little change. widely used in system and embedded programming. C is known for high performance because it gives direct access to memory and hardware. C program can run on different machines with minimal changes.

2. What are the applications for 'C' Language?

1. C is heavily used in developing operating systems. UNIX / Linux kernel, Windows OS components.
2. C is used to build system-level software. Such like Compilers, Assemblers.
3. C is used to implement network protocols and tools. Network monitoring system.
4. C is employed to create desktop applications. Notepad++.
5. C is used to create game engines.

3. What is Variable?

Variable acts as like a container which is used to store the information.

Can change this value during the execution of a program is called variable  $\rightarrow$  int, float, char.

4. What are the different types of datatypes in C programming?

They are three types of datatypes.

1. primary data type (Basic datatype)

2. Derived datatype.

3. User-defined datatype.

1. primary (Basic) data types.

int  $\rightarrow$  integer value  $\rightarrow$  Ex:- 10, -5

float  $\rightarrow$  Single-precision  
decimal numbers  $\rightarrow$  Ex:- 3.14.

double  $\rightarrow$  Double decimal  
numbers  $\rightarrow$  12.45678

Char  $\rightarrow$  Single  
Character  $\rightarrow$  'A'.

2. Derived datatypes.

Array  $\rightarrow$  Same items of data types.

pointer  $\rightarrow$  Memory address stored.

Structure  $\rightarrow$  Different datatypes combined.

Union  $\rightarrow$  Shares memory between members.

Function  $\rightarrow$  Code with a return type.

3. User-Defined data types.

Typedef  $\rightarrow$  It gives a nickname to an existing data type.

enum  $\rightarrow$  Set of named integer constants.



5. What is format specifier?

A format specifier in C is a symbol used inside `printf()` or `scanf()` to tell the compiler what type of data you want to print or read is called as format specifier.