

## 1 .What is c programming

C is a general-purpose programming language created by Dennis Ritchie at the Bell Laboratories in 1972. It is a very popular language, despite being old. The main reason for its popularity is because it is a fundamental language in the field of computer science. C is strongly associated with UNIX, as it was developed to write the UNIX operating system.

## 2. What are the application of c programming?

- It is a true fact that C is one of the oldest and most fundamental languages which is widely used across the world.
- C is fast, portable, and has a rich library.
- C is a middle-level language but it has benefits of low-level languages as well as high-level languages.
- C has left its mark in almost every domain.

## 3. What is variable

In the C programming language, a variable is a named storage location in the computer's memory that holds a value. This value can be modified and reused throughout the execution of a program.

## 4.what are different data types in C ?

Each variable in C has an associated data type. It specifies the type of data that the variable can store like integer, character, floating, double, etc. C is a statically type language where each variable's type must be specified at the declaration and once specified, it cannot be changed.

### Basic Data Types

These are the fundamental building blocks of data representation in C. They are built-in and directly used to declare variables.

Int - for integer

Char - for single

Float - for decimal number

Double - for more precise decimal

### Derived type

These data types are built or derived from the basic data types and are used to store a collection of values or manage memory addresses.

### Enumeration Types

Enumerations fall under the category of user-defined data types.

## 5. What are format specifier

The format specifier in C is used to tell the compiler about the type of data to be printed or scanned in input and output operations. They always start with a % symbol and are used in the formatted string in functions like printf(), scanf, sprintf(), etc.