

1) What is C Language?

A) C is a general-purpose, procedural, imperative Computer programming language developed in 1972 by Dennis Ritchie at Bell Lab's. It's one of the most popular and influential programming languages of all time.

→ C provides direct access to memory, allowing for efficient and flexible low-level memory programming

→ C code is compiled into machine code before execution, making it fast and efficient.

- 2) Applications of C programming?
- A) → C programming has a wide range of developing operating systems like Linux, Windows, and macOS.
  - C is widely used in embedded systems, such as:  
Ex: Medical devices, Robotics.
  - C is used in developing database systems like MySQL and PostgreSQL.
  - C is used in developing network devices like routers and switches.
  - C is used in scientific simulations, such as neural networks and Computer Vision.

3) What is variable?

- A) → A variable is a named storage location in memory that holds a value. It's a way to store and manipulate data in a program.
- Variable act like as a container, which is used to store the information.
- Data type decides what type of information or holds in the variable.

4) What are different data types in C programming?

- A) → C programming language supports various data types, which determine type of data can be stored in a variable.

Basic data type : int, char, float, double.

Enumeration data type : enum

Void data type : void

5) What is format Specifier?

A) format Specifiers tells what type information holds in the variable

→ flags : optional flags

ex: -, +, ',', '#'

→ width : minimum field width

→ length : optional length modifier

ex: l, h, L

→ Specifier : the format Specifier

ex: d, f, C