1) What is C language?

C is a general-purpose, procedural programming language developed by *Dennis Ritchie* in 1972 at Bell Labs. It is widely used for system software, operating systems, and embedded programming because of its efficiency and control over hardware.

2) What are the applications of C programming?

- Operating system development (like UNIX, Windows, Linux).

- Embedded systems and microcontroller programming.

- Game development.

- Compiler and interpreter design.

- Database systems and network drivers.

3) What is a variable?

A variable is a name given to a memory location that stores data which can change during program execution.

Example: int age = 20; → Here, age is a variable.

---

4) What are different data types in C programming?

- **Basic types:** int, float, char, double

- **Derived types:** array, pointer, structure, union

- **Enumeration type:** enum

- **Void type:** void

5) What is a format specifier?

A format specifier defines the type of data to be displayed or read in input/output functions like printf() and scanf().

Examples:

- %d → integer

- %f → float

- %c → character

- %s → string