

1) What is C language?

A) C is a general-purpose, procedural computer programming language developed in the early 1970s by Dennis Ritchie at Bell Labs. It was initially designed for developing the UNIX operating system and has since become a widely used language for system-level programming, embedded systems, and other applications where performance and control over hardware are crucial.

2) What are the applications of programming?

- A)
- operating systems
 - Embedded systems
 - Database
 - Ease of computation
 - Gaming
 - Assemblers
 - Google
 - GUI

3) What is variable

A) A variable in C is a named piece of memory which is used to store data and access it whenever required.

- It allows us to use the memory without having to memorize the exact memory address.
- To create a variable in C, we have to specify a name and the type of data it is going to store.

Example:

```
int number = 14;
```

Here, number is a variable storing the value 14.

4) What are the different data types in C programming?

A) These are fundamental, Built-in types that form the basis for other data types.

- `int` :- used to store integer values (whole numbers)
- `char` :- used to store single characters.
- `float` :- used to store single-precision floating-point numbers (numbers with decimal points).
- `double` :- used to store double-precision floating-point numbers, offering higher precision than `float`.
- `void` :- Represents the absence of a type, often used with functions that don't return a value or for generic pointers.

5) What is format specifier.

A) `%d` : Integer

`%f` : Floating-point number

`%c` : character

`%s` : String

`%u` : unsigned integer

`%x` : Hexadecimal integer.