Features of C Language

C is the widely used language. It provides a lot of **features** that are given below.

1. Simple
2. Machine Independent or Portable
3. Mid-level programming language
4. structured programming language
5. Rich Library
6. Memory Management
7. Fast Speed
8. Pointers
9. Recursion
10. Extensible

1) Simple

C is a simple language in the sense that it provides **structured approach** (to break the problem into parts), **rich set of library functions**, **data types** etc.

2) Machine Independent or Portable

Unlike assembly language, c programs **can be executed in many machines** with little bit or no change. But it is not platform-independent.

3) Mid-level prorgramming language

C is **also used to do low level programming**. It is used to develop system applications such as kernel, driver etc. It **also supports the feature of high level language**. That is why it is known as mid-level language.

4) Structured prorgramming language

C is a structured programming language in the sense that **we can break the program into parts using functions**. So, it is easy to understand and modify.

5) Rich Library

C **provides a lot of inbuilt functions** that makes the development fast.

6) Memory Management

It supports the feature of **dynamic memory allocation**. In C language, we can free the allocated memory at any time by calling the **free()**function.

7) Speed

The compilation and execution time of C language is fast.

8) Pointer

C provides the feature of pointers. We can directly interact with the memory by using the pointers. We **can use pointers for memory, structures, functions, array** etc.

9) Recursion

In c, we **can call the function within the function**. It provides code reusability for every function.

10) Extensible

C language is extensible because it **can easily adopt new features**.