# **Features of C Language**

**Desired Doc** 

... a way of learning

#### 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.