

C - 04 \Rightarrow Features of C language

Features of C:

- * High Level language \rightarrow because we focus on English words, mathematical notations like variables, keywords, operands, operators etc rather than focusing on low level details of hardware and hence has lower level of abstraction.
- * Small language having only 32 keywords
- * Core language, since many languages are dependent on C.
- * Portable \rightarrow pgms can run on different machine.
- * Built in functions \rightarrow These functions are already defined and there is C Library.
- * Structured Language
- * Supports the use of pointers which can directly interact with memory;
Pointers store address of a variable; using pointers we can access memory
- * Extensible language \rightarrow we can create our own functions and add to C Libraries.

* Compiler and execution is faster in C

* supports features of dynamic memory

allocation. [~~we~~ we can free the memory

at any time by calling the function

free(). [malloc(), calloc() → allocate & change memory]

* It supports modular programming; (ie)

we can break code to different functions

and looks more organized and chances of errors are less and easy to find.

Eg. To find area of square & rectangle, we can have separate functions to find areas for both.

* Case sensitive ['a' different from 'A']

* It is used to develop and operate embedded systems; hence called system program lang.

Eg. Fridge, Microwave [pgm is done written in C language]

* Object file of C is dependent on platform when we compile & execute file.

Eg. window extension is .exe, For mac is .dmg