C-01 ⟹ Introduction to Programming
In C Language

Need of Programming?

* Sequence of instructions given to the computer to perform a task.

* Sequence or set of instructions are written in programs or codings.

* Computer runs by programs

Computer Language :-

* Computer understands only binary language. (0's and 1's)

* We have bunch of 0's & 1's like,
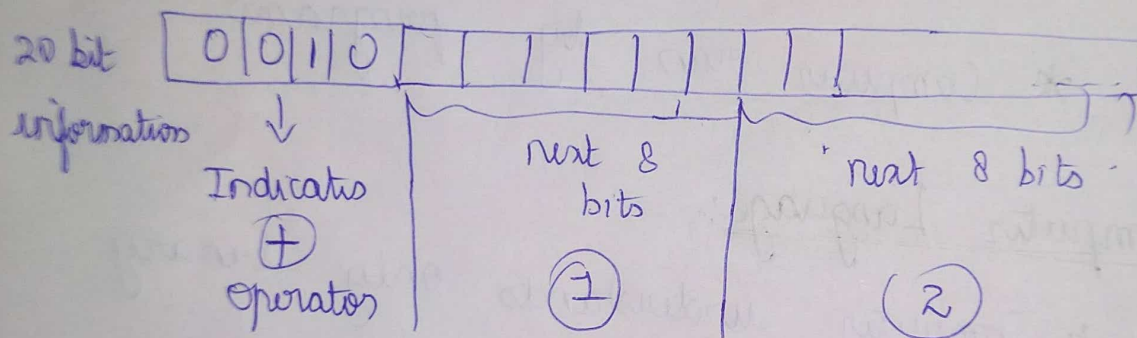
01001 010000   110000000   111111100 ...etc.

* So we learn ~~Compiler understandable~~ program like ~~(machine level language, assembly level languages, High level languages)~~ and

↑ This 0's and 1's are called Machine Level languages which follows some set of Architecture.

* Set of Architecture is machine dependent, each Architecture follows different rules

Eg: <u>CPU 1 Architecture</u>

$1 \oplus 2 \Rightarrow$ Sum of 2 numbers.

20 bit information

0	0	1	0																

↓
Indicates
$\oplus$
Operator

next 8 bits ①

next 8 bits ②

$1 \rightarrow 0000\ 0001$

$2 \rightarrow 0000\ 0010$

* May be in some other CPU Architecture + operator will have another bit of information eg. 0001

So from machine to machine program for addition or subtraction etc may differ.

* Here, machine level language is very difficult.

* To overcome these limitations, we learn high level language.

C languag Introduction :

* It was developed by Dennis Richie is 1972 at Bell Laboratories

* B language is successor of C Language.

* Kernel of UNIX operating system, Oracle, core libraries of android, major part of web browser, Device drivers like these many softwares are written in C language.

* 1989 C language was standardized by ANSI and called ANSI C.

Compiler :.

Compiler converts C code to object code (es machine level code)

C program ⟶ [Compiler] ⟶ object code.

(abc.c)
filename