

## C-language

Q why C Language is imp?

- ↳ build programming skills
- ↳ basic features of all programming language.
- ↳ popular language for hardware.

Q History of C language:-

1) Martin Richards.

→ Basic Combined Programming Language

→ 1966

2) Ken Thompson.

→ Developer of B language 1969.

→ Developer of UNIX operating System.

3) Dennis Ritchie

→ Developer of C language 1972

\* computer is a electronics device which takes input, process and give us output.

\* Hardware:- physical part of the computer & the software that provides instruction for the hardware to accomplish the tasks.

\* There is alot of data in our Computer or mobile or any other device which is saved in file

\* file is a data bundle.

\* In exe file these software data is stored.



✱ There are two types of Software :-

- Application software
- System Software

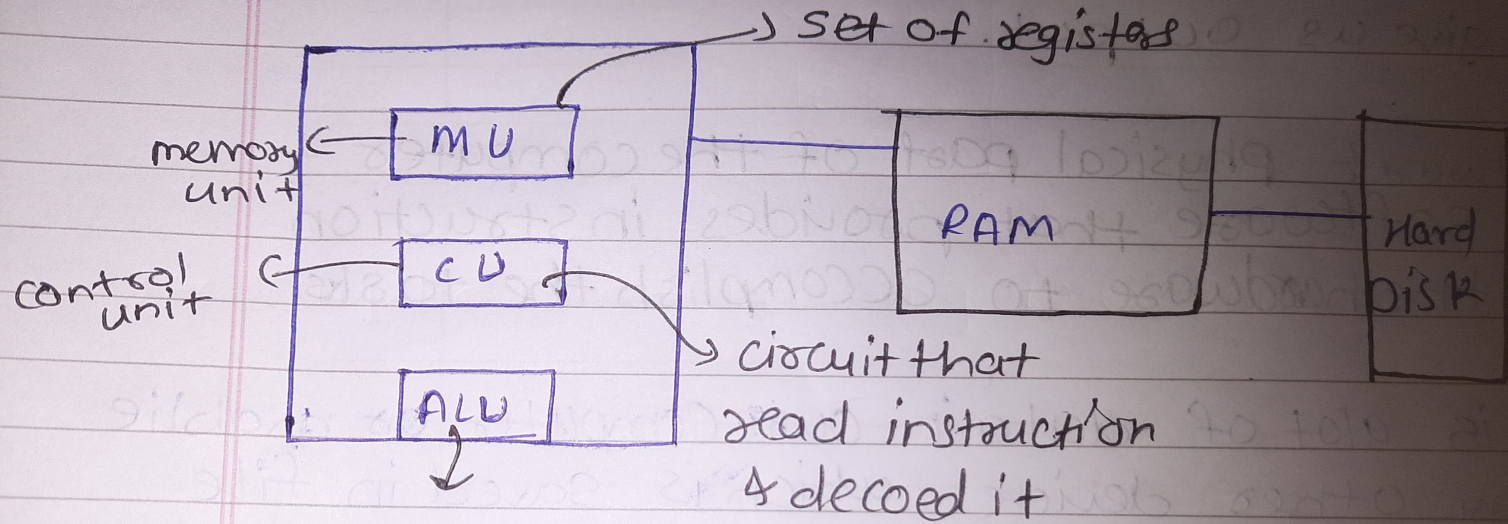
✱ Program :- A set of instructions is called 'Program'.

✱ Process :- execute the set of instructions or active set of a program is called 'process'.

✱ Operating System :-

- 1) It's a system software.
- 2) In any computer or electronics device it's important.
- 3) Act as management of the computer system.
- 4) It does process management, memory management, file management.
- 5) Ex - windows, Linux, Android, DOS.

## \* Execution of a program :-



responsible for  
all arithmetic  
& logical calculation

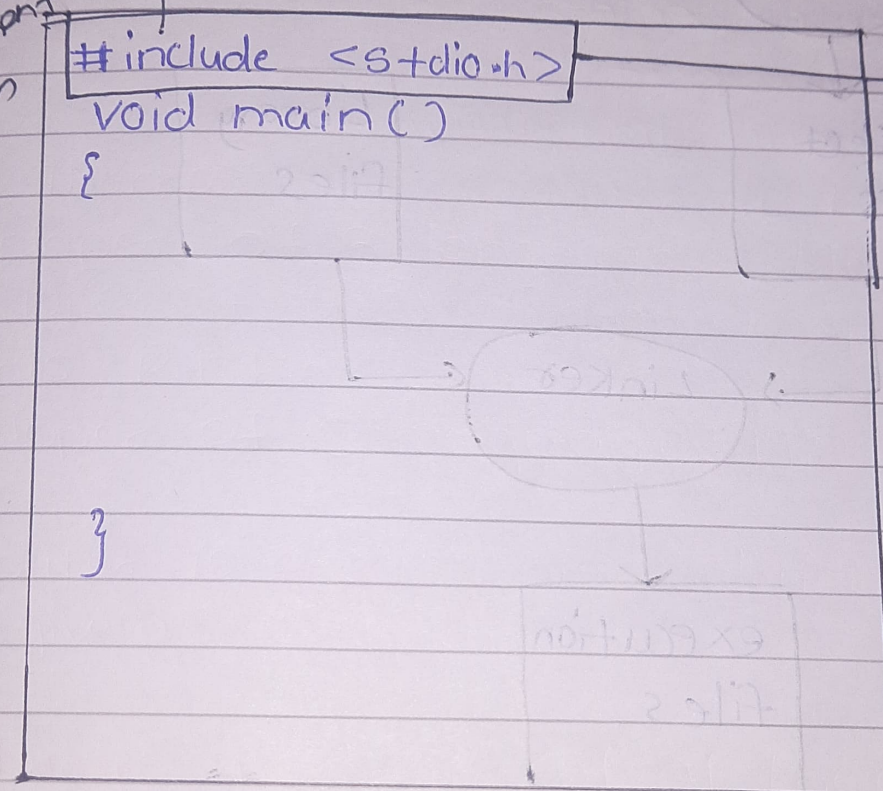


MU → set instruction  
CU → read that instruction  
ALU → apply that instruction } → work.

## Software development in C:

operating system  
understand exe file language  
not C language.

preprocessor  
handle all  
that statement  
starts from  
#



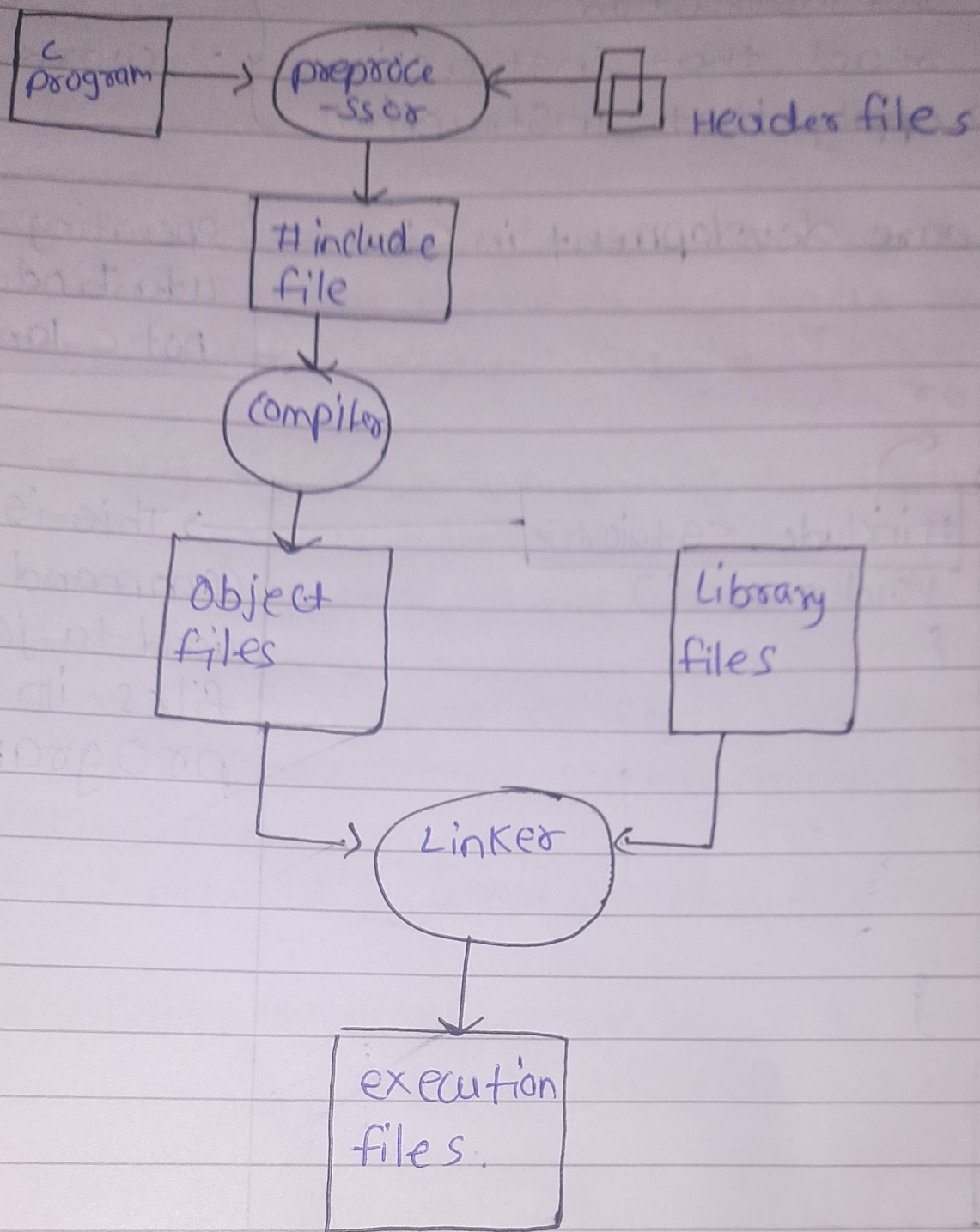
→ This is the  
command which is  
used to join header  
files in preprocessor  
program

\* compiler is used to translate our program file into object files

\* Library files is used to understand words in object files

\* Linker is used to connect object & library file & make new exe file.





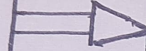
any

\* compiler is not necessary to execute<sup>any</sup> execution file.

Identifier

Instruction.

- 1) Constant
- 2) Variable
- 3) Keywords



- 1. Data type.  
Declaration  
Instruction

- 2. Input Output.
- 3 Arithmetic

4. control Instruction.

$\Rightarrow$  Program.



## 1] Constants:-

Any Information is constant.

### Primary

- Integer (number) ex- 25, 15, 13
- Real ex- 13.5, 27.7
- Character ex- 'a', 's', 't', '+'

### Secondary

- Array
- String
- Pointer
- Union
- Structure
- Enumerator

\* Space is also a character constant.

\* Only one symbol is necessary in character constant.

\* Secondary constants are those constants made from primary constants

## 2] Variable:-

- 1] variables are the names of memory locations where we store data.
- 2] variable name is any combination of alphabet, digit & underscore.



3) Keywords:-

Are those words computer is known.