Assemble (system software) 🡺 A program written in assembly language can be converted in to machine language by special type of system software called assemble.

ASSAMBLE LANGUAGE ASSAMBLED MACHINE LANGUAGE

PROGRAM PROGRAM

Source code Translator Objective code (executable code)

Assemble is a machine depended language that is a program retune in assembly language for one computer can not be run another computer.

Assemble is a system software this inbuilt assembler program is written by the high speed the program and manufactures

ALU 🡺 ARTHMATICAL LOGICAL UNIT

PC 🡺 PROGRAM COUNTER

ANALOG 🡺 जो Continues change हो EX. Speed meter

DIGITAL 🡺 इसकी value हमेशा change नहीं होती रहती | EX. Switch

HYBRID 🡺 ANALOG + DIGITAL = HYBRID EX. Petrol pump meter

CD 🡺 Compact Disc

DVD 🡺 Digital Versatile Disc

O.S (OPERATING SYSTEM)

1. GUI (GRAPHICAL USER INTERFACE) {windows, android}

2. CUI (COMMAND USER INTERFACE) {DOS, UNIX}

NOTE:- DOS:-Disc operating system.

COMPILER

Compiler is computer software that translate (compiles) Source code written in high level language in to is set of machine level language.

* That can we understood by digital computers.

SOURCE CODE TRANSLATER OBJECT CODE

High level language compiler machine language

* Compiler scene the entire program and translate the whole it in to machine language (code)at once.
* A compiler generates the error massage only after its scene the complete program.
* Compilers are used by programming languages Like: - c / c++.

ANALYSIS FACE: - The Compiler face is also knowing as front face a source code divided in to fundamental parts to check grammar, syntax and statements after the interpreter code generated.

SYNTHESIS FACE: - Synthesis face is hon as backend face in which interment code is optimized to generate in to target machine language.

Source code Compile Machine Code Output

Error Massage

INTERPRETER

Interpreter is also a software program on translate a source code in to machine code.

Interpreter convers high level language in to machine language line by line and running program.

\*It is single line of code or interaction.

\*It does not produce internal object code.

\*Compilation and execution take for simultaneauly.

\*It is solver than compiler.

\*It requires false memory as a close not crcale intermated object code.

\*Display error line by line.

\*PHP/PYTHON/RUBY a used interpreter.

\*It consumes more time than compiler.

SORCE CODE INTERPRETER OBJECT CODE OUTPUT

ERROR MASSAGE

(Line by line)