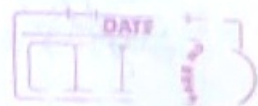


Source code - written by us.



Q1> Assembly Lang:-

Assembly lang. is low lang. b/c instructions are not given in 0's & 1's but instructions are given in mnemonics (verbs)

→ Low level lang. are not portable as h/w dependent.

Q2> High level lang:-

→ All high level prog lang. are in simple English.

→ High level prog lang. are hardware independent.

↳ using high level programming lang., programmer can develop & run applications on different h/w architecture.

eg- C, C++, COBOL, PASCAL, Java, python, .Net, JS.

Q2

What is translator?

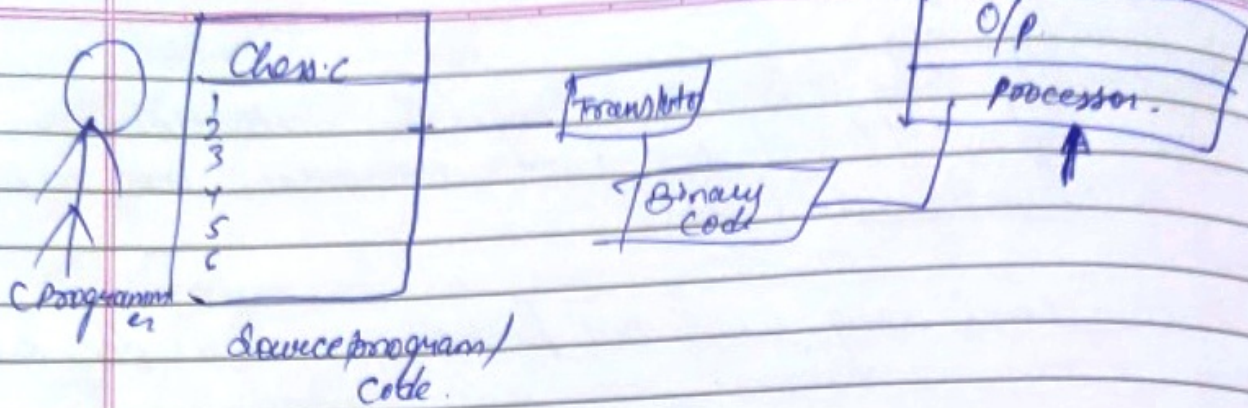
→ Translator is a software which convert instructions of one language to another language.

1) Interpreter.

2) Compiler.

1) Interpreter:- code execute line by line. (one by one) as code runs.

Debugging \rightarrow identifying the errors
Bugs \rightarrow are error.



Eg. $a=10$
 $b=20$

`print(a,b)`

`c=a+b`

`print(d)`

`print(e)`

`print(f)`

\rightarrow Interpreted will stop here & give error
 \uparrow translating & executing
 $\parallel (d)$ is not exists.

- * Interpreter stops translating & executing, if there is an error in one line. Interpreted code executed by machine directly. Interpreter displays one error at a time. Debugging program is complex.
- * Scripting lang. uses interpreter as a translator.

What is Compiler! - compilers are very large programs, with error-checking & other abilities.

\rightarrow like :- python, javascript, C, C++, etc..

\rightarrow compiler translate code from a high-level programming lang. into machine code before the program runs.