

C_03 \Rightarrow Language Translators

- * When program written in Assembly language or High Level Language; it is converted to Machine code
- * These High level & assembly level lang words like English words or PNEUMONICS
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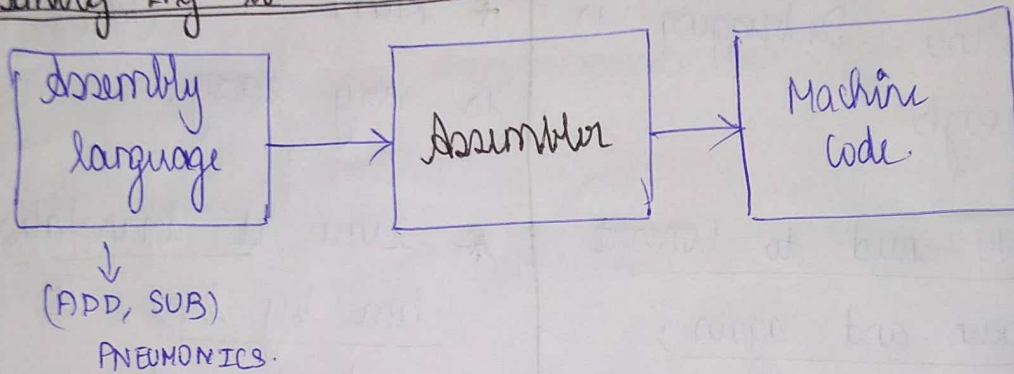
are translated by using Language Translators.

- * Language Translator translates high level code or PNEUMONICS to machine code.

3 Translators :

- * Assembler
- * Compiler
- * Interpreter.

Assembly Lang to Machine Code:



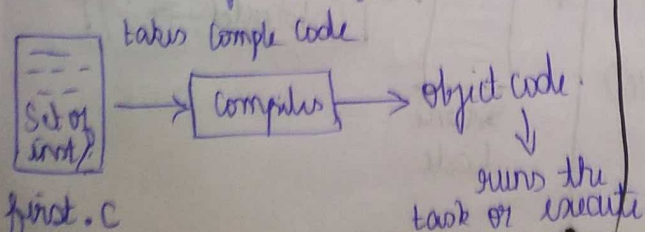
High level Lang to Machine Code:

Compiler

- * It converts source code to machine code.

- * HLL \rightarrow [Compiler] \rightarrow M/C code.

- * Compiler converts before execution of program.

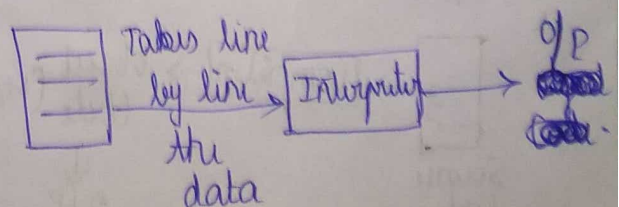


Interpreter

- * It also converts source code to machine code.

- * HLL \rightarrow [Interpreter] \rightarrow M/C code.

- * Interpreter converts while the program is executing.



Compiler

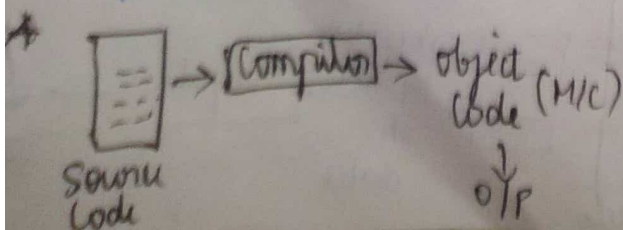
* If there is error, it will show only after executing whole code and list of errors are produced.

* If there is no error then gets object code i.e. exe files.

* Here Debugging is tough.

* No need to convert again and again; since at single time itself the whole code is converted to object code.

* Compiler produces object code and then executes and produce output.



Interpreter

* If there is error; it is shown ~~to~~ after completing first line itself.

* Here De-bugging is very easy.

* since it translates line by line; it need to do translation again and again for so many times.

* Interpreter produces ~~object code~~ directly output.

