

Programming Language

BBA | BBA-TT | BHCM

The language which is used to create programs is called a programming language. It is computer language with its own syntax and semantics which applies to write programs. Programming language comprises a set of instructions which are used to produce various kind of output. The programming language can be classified as below:



Machine level language (the mid-1940's)

The first-generation of language is machine level language. Similarly, it is also a low-level language. This language written using binary codes (1's and 0's) and unique to each computer. It is very difficult to understand by us or humans. Where it is a computer understandable language. Some advantages and disadvantages of this language as follows:

Advantages:

- Faster in execution. So, it has high efficiency.
- The translator is not necessary to convert the language.
- There is high security maintain due to a control of the hardware component.

Disadvantages:

- This language is machine dependent.
- Also, it is difficult to program.
- Similarly, it is time-consuming and expensive.

Assembly level language (1950's to 1958's)

It is second generation language or it is also low-level language. The requires language translator program in assembler. Where, assembler is used to convert assembly level language into machine level language i.e. source program into an object program. Frequently called symbolic

language. It is operated with the mnemonics and its parameter. Some advantages and disadvantages of this language as follows:

Advantages:

- This language is easy to program and understand.
- Also, easy to modify errors and mistakes.
- Similarly, it is easy to translate the language into machine language.

Disadvantages:

- Machine dependent.
- Time consuming due to translating.
- Translator is necessary to translate the program into machine code.

High level language (1958's to 1985's)

It is a third generation language or procedural language. And, also a structural oriented language and functional language. Used translator is compiler or interpreter. Some advantages and disadvantages of this language as follows:

Advantages:

- It is machine independent (portability).
- Easy to learn and use (reliability).
- Better communication.

Disadvantages:

- It has less efficiency.
- The translator is necessary to translate languages.
- Conversion time is slower than assembly level language.

For more notes visit tyonote