

Introduction to Computer

Lecture # 07

Characteristics of Computer
Programming Languages

Characteristics of Machine language

- The ONLY **characteristics of machine language** is that it is written in 1's and 0's. Everything else is a higher level **language**; even assembler is one step above **machine language**
- Machine Language are also known as Binary coded Language or Native Language , it is in 0 or 1 form.

Characteristics of Assembly language

- **Assembly Language** mainly consists of mnemonic processor instructions or data and other statements or instructions.
- Assembly Language is also known as symbolic language .Symbols are used in Assembly Language. These symbols are called mnemonics.

Assembly language

- Examples of Assembly language
- MOV
- ADD
- SUB
- MUL

Difference between Machine language and Assembly language

- The main **difference between machine code and assembly language** is that the **machine code** is a **language** consisting of binaries that can be directly executed by a computer while an **assembly language** is a low-level **programming language** that requires a software called an **assembler** to convert it into **machine code**

Continue....

- **Assembly language** is one level above machine language. It uses short mnemonic codes for instructions and allows the programmer to introduce names for blocks of memory that hold data.

Mnemonics in assembly language

- What are mnemonics in assembly language?
- In computer **assembler** (or **assembly**) **language**, a **mnemonic** is an abbreviation for an operation. ... Generally, a **mnemonic** is a symbolic name for a single executable machine **language** instruction and there is at least one **mnemonic** defined for each machine **language** instruction
- Examples MOV, ADD, SUB.....ect

Best of Luck

- Course Instructor

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