

consists of **binary code (0s and 1s)** that is **directly executed by a computer.**

- **Machine code** is expressed in binary (0s and 1s)
- It is **directly executed** by the hardware without any **need for translation.**

Example : 10110000 00000101 –binary instructions

Advantages:

- **Performance:** Offers the **fastest execution** because it is **executed directly** by the hardware.

Disadvantages:

- **Complexity:** Writing and debugging machine code is extremely complex and error-prone due to its low-level nature.
- **Assembly Language** is a type of **low-level programming language** that is **closely related to a computer's machine code.**
- It uses **symbolic names OR** alphanumeric codes (mnemonics) for instructions and operands, making it **more easy for human** when **compared to raw binary machine code.**

Example: the mnemonic 'MOV' stands for 'move' and is used to move data from one location to another.