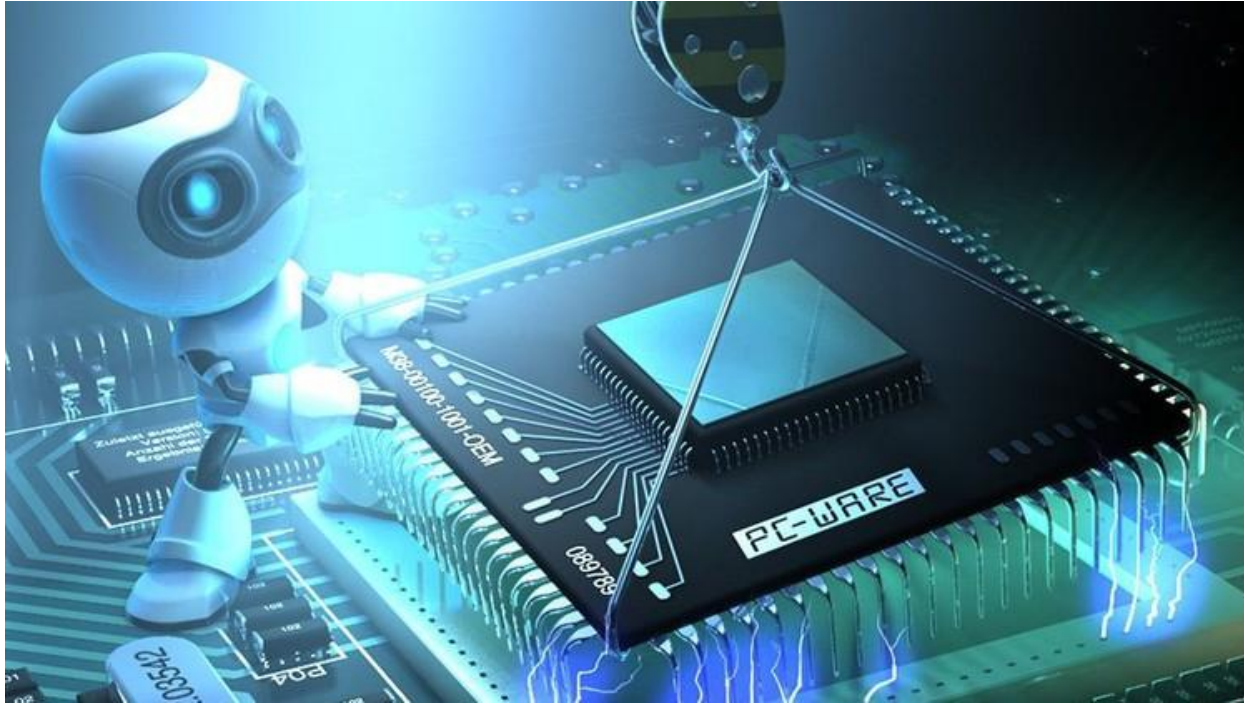


# Assembler Features



# Assembler Features



- **Basic data types**
  - **Integers**
    - data of 1, 2 or 4 bytes
    - data and directions (pointers)
  - **Reals** (floating point): 4, 8 or 10 bytes
  - Does not include structured types
    - They are encoded as contiguously stored data
    - It has addressing modes to manipulate them

# Assembler Features



- **Primitive Operations**

- Arithmetic/logical operations on registers and data in memory
- Data transfer between memory and register bank
- Conditional and unconditional jumps (to/from procedures)

# Programmer Vision



## ❑ What do we need to study?

- Memory space
- Available registers
- Set of instructions: what they do, how they are coded, how long they take...
- Types and representation of data
- Addressing modes
- Instruction sequencing
- Communication with the outside