

Simple commands of assembly language to understand how assembly language works by commands

1. Data Movement:

- `mov`: Moves data from one location to another.
- `push`: Pushes data onto the stack.
- `pop`: Pops data off the stack into a register or memory location.
- `lea`: Loads the effective address of a memory location into a register.

2. Arithmetic and Logical Operations:

- `add`: Adds two values.
- `sub`: Subtracts one value from another.
- `mul`: Multiplies two values.
- `div`: Divides one value by another.
- `and`: Performs a bitwise AND operation.
- `or`: Performs a bitwise OR operation.
- `xor`: Performs a bitwise XOR operation.
- `not`: Performs a bitwise NOT operation.

3. Conditional Branching and Jumps:

- `cmp`: Compares two values and sets the flags accordingly.
- `jje`, `jne`: Jump if equal, jump if not equal.
- `jg`, `jge`, `jL`, `jle`: Jump if greater, jump if greater or equal, jump if less, jump if less or equal.
- `jmp`: Unconditional jump to a specified label or memory address.

4. Looping:

- `loop`: Decrements the loop counter and jumps to a specified label until the counter reaches zero.
- `inc`: Increments the value of a register or memory location.
- `dec`: Decrements the value of a register or memory location.

5. Procedure Calls:

- `call`: Calls a subroutine or function.
- `ret`: Returns from a subroutine.

6. Input and Output:

- `in`: Reads a byte or word from an input port.
- `out`: Writes a byte or word to an output port.

7. String Manipulation:

- `movsb`: Moves a byte from the source string to the destination string.
- `stosb`: Stores a byte in the destination string.
- `cmpsb`: Compares a byte in the source string with a byte in the destination string.