① Register

Both operands are registers data's are specified using registers.

MOV AX, BX ;

② Immediate addr mode

Source operand is 8 or 16 bit data

dest. operand can never be immediate data

MOV AX, 2000

③ direct addr mode

EA is directly given in the instruction

addr of operand

MOV CL, [1050H]

(4) Register indirect

EA is in SI, DI or BX

mov AX, [DI]
mov AL, [BX]
mov AX, [SI]

(5) Base addr mode

Operand addr is calculated using one of base registers & 16 bit or 8 bit displacement

mov CL, [BX+04H]

(6) Indexed

EA is sum of index register & displacement

mov AX, [SI+2000]
mov AL, [DI+3000]

(7) Base indexed

EA is sum of index register, base register & displacement

mov AL, [SI+BP+2000]

(8) String

related to string instructions

Value of SI & DI auto incremented & decremented based on DF

MOVSB — copies content from one block of consecutive locations to other.
MOVSW

I/O port

relates with I/p operations

IN A, 45

OUT A, 50

Relative

EA is calculated with reference to Ip

JNZ 8 bit addr.

Ip = Ip + 8 bit address

Implied

Operands are implied and hence not specified in instruction

STC

CLC

HLT

→ breaking seq of operation