

# Addressing Modes in 8085

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# Addressing modes

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Different techniques used to specify data for instructions is called addressing mode

**OR**

Various ways of specifying the operands is called addressing mode

- ❖ Immediate Addressing
- ❖ Register Addressing
- ❖ Direct Addressing
- ❖ Register Indirect Addressing
- ❖ Implicit Addressing

## Immediate addressing

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Operand is specified within instruction itself

Ex:        1) MVI A,05

             3E,05

             2) ADI 06

             C6,06

             3) LXI H,2500

             21,00,25

## Register addressing

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Operand is in one of the general purpose registers

Ex:        1) MOV A,B

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2) ADD B

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## Direct addressing

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Address of the operand is specified within the instruction

Ex:        1) STA 2400H

             32,00,24

             2) IN 02

             DB,06

## Register indirect addressing

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Address of the operand is specified by a register pair

Ex:        1) LXI H,2500

          MOV A, M

          2) LXI H,2500

          ADD M

## Implicit addressing

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Operand address not required and operate on the contents of the accumulator

Ex: 1) CMA

2F

2) RAR

1F

3) RAL

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