

## 5/5/2020 Data transfer instructions in 8085 microprocessor

Data transfer instructions are the instructions which transfer data in the microprocessor. They are also called copy instructions.

Following is the table showing the list of logical instructions:

OPCODE	OPERAND	EXPLANATION	EXAMPLE
MOV	Rd, Rs	Rd = Rs	MOV A, B
MOV	Rd, M	Rd = Mc	MOV A, 2050
MOV	M, Rs	M = Rs	MOV 2050, A
MVI	Rd, 8-bit data	Rd = 8-bit data	MVI A, 50
MVI	M, 8-bit data	M = 8-bit data	MVI 2050, 50
LDA	16-bit address	A = contents at address	LDA 2050
STA	16-bit address	contents at address = A	STA 2050
LHLD	16-bit address	directly loads at H & L registers	LHLD 2050
SHLD	16-bit address	directly stores from H & L registers	SHLD 2050
LXI	r.p., 16-bit data	loads the specified register pair with data	LXI H, 3050
LDAX	r.p.	indirectly loads at the accumulator A	LDAX H
STAX	16-bit address	indirectly stores from the accumulator A	STAX 2050
XCHG	none	exchanges H with D, and L with E	XCHG
PUSH	r.p.	pushes r.p. to the stack	PUSH H
POP	r.p.	pops the stack to r.p.	POP H
IN	8-bit port address	inputs contents of the specified port to A	IN 15
OUT	8-bit port address	outputs contents of A to the specified port	OUT 15

In the table,

R stands for register

M stands for memory

r.p. stands for register pair