

# **8085 Instructions (78)**

## **1. Data Transfer Group (12)**

**MOV**

**MVI**

**LXI**

**LDA**

**LDAX**

**STA**

**STAX**

**IN**

**OUT**

**LHLD**

**SHLD**

**XCHG**

## **2. Arithmetic Group (14)**

**ADD**

**ADI**

**SUB**

**SUI**  
**INR**  
**DCR**  
**INX**  
**DCX**  
**ADC**  
**ACI**  
**SBB**  
**SBI**  
**DAD**  
**DAA**

### **3. Logical Group (15)**

**ANA**  
**ANI**  
**ORA**  
**ORI**  
**XRA**  
**XRI**  
**CMA**  
**CMP**  
**CPI**

**RLC**  
**RAL**  
**RRC**  
**RAR**  
**CMC**  
**STC**

#### **4. Branching Group (26)**

**JMP**  
**JC**  
**JNC**  
**JZ**  
**JNZ**  
**JP**  
**JM**  
**JPE**  
**JPO**  
**CALL**  
**CC**  
**CNC**  
**CZ**  
**CNZ**

**CP**  
**CM**  
**CPE**  
**CPO**  
**RC**  
**RNC**  
**RZ**  
**RNZ**  
**RP**  
**RM**  
**RPE**  
**RPO**

## **5. Stack, I/O & Machine Control Group (11)**

**PUSH**  
**POP**  
**XTHL**  
**SPHL**  
**PCHL**  
**DI**  
**EI**  
**SIM**

**RIM**  
**NOP**  
**HLT**

## **ADDRESSING MODES IN 8086 (5)**

- **Direct Addressing Mode**

**LDA 9500H**

**SHLD C050H**

**IN 80H**

- **Register Direct Addressing Mode**

**MOV A, B**

**ADD D**

**ORA C**

**XCHG**

- **Register Indirect Addressing Mode**

**STAX B**

**LDAX D**

**MOV A, M**

- **Immediate Addressing Mode**

**MVI A, 32H**

**LXI B, 4567H**

**SUI 95H**

**XRI 55H**

- **Implied or Inherent Addressing Mode**

**NOP**

**HLT**

**CMA**

**EI**