

```
;-----
;      8085 Opcodes
;-----
```

```
*I      -   Immediate
*X      -   16 bit Register pair
```

;Movement

```
;-----
```

```
MOV      r/M, r/M      ; mov      r/M, r/M
MVI      r/M, i        ; mov      r/M, i
LDA      addr          ; mov      a, [addr]
LDAX     B/D           ; mov      a, [BC/DE]
STA      addr          ; mov      [addr], a
STAX     B/D           ; mov      [BC/DE], a
LHLD     addr          ; mov      HL, [addr]
LXI      rp, i         ; mov      rp, i
PUSH     rp            ; push     rp
POP      rp            ; pop      rp
```

;Arithmetic

```
;-----
```

```
ADD      r/M           ; add      a, r/M
ADI      i             ; add      a, i
ADC      r/M           ; adc      a, r/M
ACI      i             ; adc      a, i
DAD      rp            ; add      HL, rp
DAA                          ; daa
INR      r/M           ; inc      r/M
INX      rp            ; inc      rp
DCR      r/M           ; dec      r/M
DCX      rp            ; inc      rp
```

;Bitwise

```
;-----
```

```
ANA      r/M           ; and      a, r/M
ANI      i             ; and      a, i
ORA      r/M           ; or       a, r/M
ORI      i             ; or       a, i
CMA                          ; not     a
RAL                          ; rcl     a, 1
RAR                          ; rcr     a, 1
RLC                          ; rol     a, 1
RRC                          ; ror     a, 1
```

;Flag Control

```
;-----
```

```
CMC                          ; not     CF
DI                          ; cli
EI                          ; sti
```

```

NOP                ; nop
HLT                ; hlt
RIM                ; mov     a, IF

```

;Branching

```
;-----
```

```

CMP    r/M        ; cmp     a, r/M
JMP    addr       ; jmp     addr
JZ     addr       ; jz      addr
JNZ    addr       ; jnz     addr
JC     addr       ; jc      addr
JNC    addr       ; jnc     addr
JP     addr       ; jns     addr
JM     addr       ; js      addr
PCHL                   ; jmp     [HL]
JPE    addr       ; jnp     addr
JPO    addr       ; jp      addr
CALL   addr       ; call    addr
CZ     addr       ; callz   addr
CNZ    addr       ; callnz  addr
CC     addr       ; callc   addr
CNC    addr       ; callnc  addr
CP     addr       ; callns  addr
CM     addr       ; calls   addr
CPE    addr       ; callnp  addr
CPO    addr       ; callp   addr
RET                    ; ret
RZ                    ; retz
RNZ                    ; retnz
RC                    ; retc
RNC                    ; retnc
RP                    ; retns
RM                    ; rets
RPE                    ; retnp
RPO                    ; retp
PUSH   PSW          ; push    psw
POP    PSW          ; pop     psw

```

;I/O

```
;---
```

```

IN     addr        ; in      a, addr
OUT    addr        ; out     addr, a

```