

Mnemonics	Hex codes	Mnemonics	Hex codes
MOV A, D	7A	MOV D, E	53
MOV A, E	7B	MOV D, H	54
MOV A, H	7C	MOV D, L	55
MOV A, L	7D	MOV D, M	56
MOV A, M	7E	MOV E, A	5F
MOV B, A	47	MOV E, B	58
MOV B, B	40	MOV E, C	59
MOV B, C	41	MOV E, D	5A
MOV B, D	42	MOV E, E	5B
MOV B, E	43	MOV E, H	5C
MOV B, H	44	MOV E, L	5D
MOV B, L	45	MOV E, M	5E
MOV B, M	46	MOV H, A	67
MOV C, A	4F	MOV H, B	60
MOV C, B	48	MOV H, C	61
MOV C, C	49	MOV H, D	62
MOV C, D	4A	MOV H, E	63
MOV C, E	4B	MOV H, H	64
MOV C, H	4C	MOV H, L	65
MOV C, L	4D	MOV H, M	66
MOV C, M	4E	MOV L, A	6F
MOV D, A	57	MOV L, B	68
MOV D, B	50	MOV L, C	69
MOV D, C	51	MOV L, D	6A
MOV D, D	52	MOV L, E	6B



Mnemonics	Hex codes	Mnemonics	Hex codes
MOV L, H	6C	ORA L	B5
MOV L, L	6D	ORA M	B6
MOV L, M	6E	ORI	F6
MOV M, A	77	OUT	D3
MOV M, B	70	PCHL	E9
MOV M, C	71	POP B	C1
MOV M, D	72	POP D	D1
MOV M, E	73	POP H	E1
MOV M, H	74	POP PSW	F1
MOV M, L	75	PUSH B	C5
MVI A	3E	PUSH D	D5
MVI B	06	PUSH H	E5
MVI C	0E	PUSH PSW	F5
MVI D	16	RAL	17
MVI E	1E	RAR	1F
MVI H	26	RC	D8
MVI L	2E	RET	C9
MVI M	36	RIM	20
NOP	00	RLC	07
ORA A	B7	RM	F8
ORA B	B0	RNC	D0
ORA C	B1	RNZ	C0
ORA D	B2	RP	F0
ORA E	B3	RPE	E8
ORA H	B4	RPO	E0



## APPENDIX-B

## B.11

Mnemonics	Hex codes	Mnemonics	Hex codes
RRC	0F	STAX D	12
RST 0	C7	STC	37
RST 1	CF	SUB A	97
RST 2	D7	SUB B	90
RST 3	DF	SUB C	91
RST 4	E7	SUB D	92
RST 5	EF	SUB E	93
RST 6	F7	SUB H	94
RST 7	FF	SUB L	95
RZ	C8	SUB M	96
SBB A	9F	SUI	D6
<u>SBB B</u>	98	<u>XCHG</u>	EB
SBB C	99	XRA A	AF
SBB D	9A	XRA B	A8
SBB E	9B	XRA C	A9
SBB H	<u>9C</u>	XRA D	AA
<del>SBB L</del>	9D	XRA E	AB
SBB M	9E	XRA H	AC
<del>SBI</del>	DE	XRA L	AD
<del>SHLD</del>	22	XRA M	AE
SIM	30	XRI	EE
<del>SPHL</del>	F9	XTHL	E3
STA	32		
STAX B	02		



(c) 8085 Instructions in the order of their Hex codes

Hex codes	Mnemonics	Hex codes	Mnemonics
00	NOP	1C	INR E
01	LXI B, 16-bit Data	1D	DCR E <del>X</del>
02	STAX B	1E	MVI E
03	INX B	1F	RAR <del>X</del>
04	INR B	20	RIM
05	DCR B	21	LXI H
06	MVI B, 8-bit Data	22	SHLD
07	RLC	23	INX H
09	DAD B	24	INR H
0A	LDAX B	25	DCR H
0B	DCX B	26	MVI H
0C	INR C	27	DAA
0D	DCR C	29	DAD H
0E	MVI C	2A	LHLD
0F	RRC	2B	DCX H
11	LXI D	2C	INR L
12	STAX D	2D	DCR L
13	INX D	2E	MVI L, 8-bit Data
14	INR D	2F	CMA
15	DCR D	30	SIM
16	MVI D	31	LXI SP, 16-bit Data ✓
17	RAL	31	LXI SP, 16-bit Data
19	DAD D	32	STA 16-bit address
1A	LDAX D	33	INX SP <del>X</del>
1B	DCX D	34	INR M



HEX	MNEMONIC	HEX	MNEMONIC
C2	JNZ 16-Bit	7D	MOV A,L
F2	<del>JP JNZ</del> 16-Bit	7E	MOV A,M ✓
EA	JPE 16-Bit	<del>84</del> 47	MOV B,A ✓
E2	JPO 16-Bit ✓	40	MOV B,B
CA	<del>JZ</del> 16-Bit	41	MOV B,C
3A	LDA 16-Bit	42	MOV B,D
0A	LDAX B	43	MOV B,E
1A	LDAX D	44	MOV B,H
2A	LHLD 16-Bit	45	MOV B,L
01	<del>LXI</del> B, 16-Bit	46	MOV B,M ✓
✓ 11	<del>LXI</del> D, 16-Bit	4F	MOV C,A
✓ 21	<del>LXI</del> H, 16-Bit	48	MOV C,B
31	LXI SP, 16-Bit	49	MOV C,C
X 7F	MOV A,A	4A	MOV C,D
X 78	MOV A,B	4B	MOV C,E
X 79	MOV A,C	4C	MOV C,H
X 7A	MOV A,D	4D	MOV C,L
✓ 7B	MOV A,E	4E	MOV C,M
7C	MOV A,H	57	MOV D,A
1F	RAR	50	MOV D,B
		51	MOV D,C

- NOTE :
1. Byte Instruction : Operand R,M or implicit
  2. Byte Instruction : Operand 8-Bit
  3. Byte Instruction : Operand 16-Bit

2001  
2002

200  
10

2009  
2007

main  
+1  
load