APPENDIX II B

Instruction Codes of Intel 8085 in Hexadecimal Order

Hex Code	Mnemonic		Hex Code	Mnemonic	
00	NOP		27	DAA	
01	LXI	B	29	DAD	H
02	STAX	B	2A	LHLD	
03	INX	B	2B	DCX	H
04	INR	B	2C	INR	L
05	DCR	B	2D	DCR	L
06	MVI	B	2E	MVI	L
07	RLC		2F	CMA	
09	DAD	B	30	SIM	
0A	LDAX	B	31	LXI	SP
0B	DCX	B	32	STA	
0C	INR	C	33	INX	SP
0D	DCR	C	34	INR	M
0E	MVI	C	35	DCR	M
0F	RRC		36	MVI	M
11	LXI	D	37	STC	
12	STAX	D	39	DAD	SP
13	INX	D	3A	LDA	
14	INR	D	3B	DCX	SP
15	DCR	D	3C	INR	A
16	MVI	D	3D	DCR	A
17	RAL	D	3E	MVI	A
19	DAD	D	3F	CMC	
1A	LDAX	D	40	MOV	B, B
1B	DCX	D	41	MOV	B, C
1C	INR	E	42	MOV	B, D
1D	DCR	E	43	MOV	B, E
1E	MVI	E	44	MOV	B, H
1F	RAR		45	MOV	B, L
20	RIM		46	MOV	B, M
21	LXI	H	47	MOV	B, A
22	SHLD		48	MOV	C, B
23	INX	H	49	MOV	C, C
24	INR	H	4A	MOV	C, D
25	DCR	H	4B	MOV	C, E
26	MVI	H			

Hex Code	Mnemonic		Hex Code	Mnemonic	
4C	MOV	C, H	78	MOV	A, B
4D	MOV	C, L	79	MOV	A, C
4E	MOV	C, M	7A	MOV	A, D
4F	MOV	C, A	7B	MOV	A, E
50	MOV	D, B	7C	MOV	A, H
51	MOV	D, C	7D	MOV	A, L
52	MOV	D, D	7E	MOV	A, M
53	MOV	D, E	7F	MOV	A, A
54	MOV	D, H	80	ADD	B
55	MOV	D, L	81	ADD	C
56	MOV	D, M	82	ADD	D
57	MOV	D, A	83	ADD	E
58	MOV	E, B	84	ADD	H
59	MOV	E, C	85	ADD	L
5A	MOV	E, D	86	ADD	M
5B	MOV	E, E	87	ADD	A
5C	MOV	E, H	88	ADC	B
5D	MOV	E, L	89	ADC	C
5E	MOV	E, M	8A	ADC	D
5F	MOV	E, A	8B	ADC	E
60	MOV	H, B	8C	ADC	H
61	MOV	H, C	8D	ADC	L
62	MOV	H, D	8E	ADC	M
63	MOV	H, E	8F	ADC	A
64	MOV	H, H	90	SUB	B
65	MOV	H, L	91	SUB	C
66	MOV	H, M	92	SUB	D
67	MOV	H, A	93	SUB	E
68	MOV	L, B	94	SUB	H
69	MOV	L, C	95	SUB	L
6A	MOV	L, D	96	SUB	M
6B	MOV	L, E	97	SUB	A
6C	MOV	L, H	98	SBB	B
6D	MOV	L, L	99	SBB	C
6E	MOV	L, M	9A	SBB	D
6F	MOV	L, A	9B	SBB	E
70	MOV	M, B	9C	SBB	H
71	MOV	M, C	9D	SBB	L
72	MOV	M, D	9E	SBB	M
73	MOV	M, E	9F	SBB	A
74	MOV	M, H	A0	ANA	B
75	MOV	M, L	A1	ANA	C
76	HLT		A2	ANA	D
77	MOV	M, A	A3	ANA	E

Hex Code	Mnemonic		Hex Code	Mnemonic	
A4	ANA	H	D1	POP	D
A5	ANA	L	D2	JNC	
A6	ANA	M	D3	OUT	
A7	ANA	A	D4	CNC	
A8	XRA	B	D5	PUSH D	
A9	XRA	C	D6	SUI	
AA	XRA	D	D7	RST	2
AB	XRA	E	D8	RC	
AC	XRA	H	DA	JC	
AD	XRA	L	DB	IN	
AE	XRA	M	DC	CC	
AF	XRA	A	DE	SBI	
B0	ORA	B	DF	RST	3
B1	ORA	C	E0	RPO	
B2	ORA	D	E1	POP	H
B3	ORA	E	E2	JPO	
B4	ORA	H	E3	XTHL	
B5	ORA	L	E4	CPO	
B6	ORA	M	E5	PUSH	H
B7	ORA	A	E6	ANI	
B8	CMP	B	E7	RST	4
B9	CMP	C	E8	RPE	
BA	CMP	D	E9	PCHL	
BB	CMP	E	EA	JPE	
BC	CMP	H	EB	XCHG	
BD	CMP	L	EC	CPE	
BE	CMP	M	EE	XRI	
BF	CMP	A	EF	RST	5
C0	RNZ		F0	RP	
C1	POP	B	F1	POP	PSW
C2	JNZ		F2	JP	
C3	JMP		F3	DI	
C4	CNZ		F4	CP	
C5	PUSH	B	F5	PUSH	PSW
C6	ADI		F6	ORI	
C7	RST	0	F7	RST	6
C8	RZ		F8	RM	
C9	RET		F9	SPHL	
CA	JZ		FA	JM	
CC	CZ		FB	EI	
CD	CALL		FC	CM	
CE	ACI		FE	CPI	
CF	RST	1	FF	RST	7
D0	RNC				

Total Mnemonics = 246.