

Sort given 10 numbers from memory location 2200H in the ascending order

Registers			
A/PSW	0x 00 02	1 LXI H,21FFH	Machine Code
BC	0x 00 00	2 MOV C,M	Line Address Machine Code Source Code
DE	0x 00 00	3 DCR C	1 0x0 21 FF 21 LXI H,21FFH
HL	0x 00 00	4	2 0x3 4E MOV C,M
SP	0x FF FF	5 REPEAT:	3 0x4 0D DCR C
PC	0x 00 00	6 MOV D,C	4
		7 LXI H,2200H	5 REPEAT:
		8	6 0x5 51 MOV D,C
		9 LOOP:	7 0x6 21 00 22 LXI H,2200H
		10 MOV A,M	8
		11 INX H	9 LOOP:
		12 CMP M	10 0x9 7E MOV A,M
		13 JC SKIP	11 0xA 23 INX H
		14	12 0xB BE CMP M
		15 MOV B,M	13 0xC DA 14 00 JC SKIP
		16 MOV M,A	14
		17 DCX H	15 0xF 46 MOV B,M
		18 MOV M,B	16 0x10 77 MOV M,A
		19 INX H	17 0x11 2B DCX H
		20	18 0x12 70 MOV M,B
		21 SKIP:	19 0x13 23 INX H
		22 DCR D	20
		23 JNZ LOOP	21 SKIP:
		24 DCR C	22 0x14 15 DCR D
		25 JNZ REPEAT	23 0x15 C2 09 00 JNZ LOOP
		26	24 0x18 0D DCR C
		27 HLT	25 0x19 C2 05 00 JNZ REPEAT
			26
			27 0x1C 76 HLT