**;A table contains ten 8-bit numbers from memory location 9500H; write a program to arrange in ascending order.**

**MVI B, 09H ;Counter = N - 1**

**L1: LXI H, 9500H**

**MOV C,B**

**L2: MOV A, M**

**INX H**

**CMP M ;Compare number with next number**

**JC L3 ;If less, don't interchange**

**JZ L3 ;If equal, don't interchange**

**MOV D, M**

**MOV M, A**

**DCX H**

**MOV M, D**

**INX H ;Interchange two numbers**

**L3: DCR C ;Decrement counter 2**

**JNZ L2 ;If not zero, repeat**

**DCR B ;Decrement counter 1**

**JNZ L1**

**HLT**

**;A table contains ten 8-bit numbers from memory location 9500H; write a program to arrange in descending order.**

**MVI B, 09H ;Counter = N - 1**

**L1: LXI H, 9500H**

**MOV C,B**

**L2: MOV A, M**

**INX H**

**CMP M ;Compare number with next number**

**JNC L3 ;If less, don't interchange**

**JZ L3 ;If equal, don't interchange**

**MOV D, M**

**MOV M, A**

**DCX H**

**MOV M, D**

**INX H ;Interchange two numbers**

**L3: DCR C ;Decrement counter 2**

**JNZ L2 ;If not zero, repeat**

**DCR B ;Decrement counter 1**

**JNZ L1**

**HLT**