ASCENDING ORDER

EXP NO: 12

AIM:

To compute ascending order of an array using 8085 processor.

ALGORITHM:

- 1) Initialize HL pair as memory pointer.
- 2) Get the count at memory and load it into C register
- 3) Copy it in D register (for bubble sort (N-1)) times required).
- 4) Get the first value in A register.
- 5) Compare it with the value at next location.

6) If they are out of order, exchange the contents of A register and memory.					
7)	Decrement D register content by 1				
8)	Repeat step 5 and 7 till the value in D register become zero.				
9)	Decrement the C register content by 1.				
10) Repeat steps 3 to 9 till the value in C register becomes zero.					
PROGRAM:					
LOOP: LXI H,3500					
MVI D,00					
MVI C,05					
LOOP1: MOV A,M					
INX H					
CMP M					

MOV M,A		
DCX H		
MOV M,B		
INX H		
MVI D,01		
LOOP2: DCR C		
JNZ LOOP1		
MOV A,D		
RRC		
JC LOOP		
HLT		

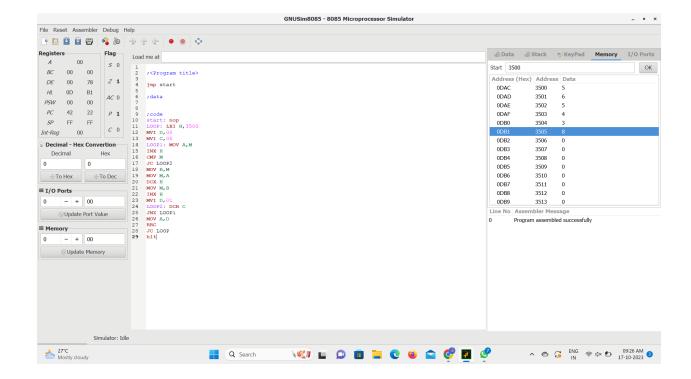
JC LOOP2

MOV B,M

INPUT:

& Data & Stack KeyPad							
Start 3500							
	Address (Hex)		Address	Data			
	0DAC		3500	5			
	0DA	AD.	3501	6			
	0DA	Λ Ε	3502	5			
	0DA	\ F	3503	4			
	0DE	30	3504	3			
	0DE	31	3505	8			
				-			

OUTPUT:



RESULT: Thus

the program was executed successfully using 8085 processor simulator.