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
JC LOOP2
MOV B,M
MOV M,A
```

DCX H

MOV M,B

INX H

MVI D,01

LOOP2: DCR C

JNZ LOOP1

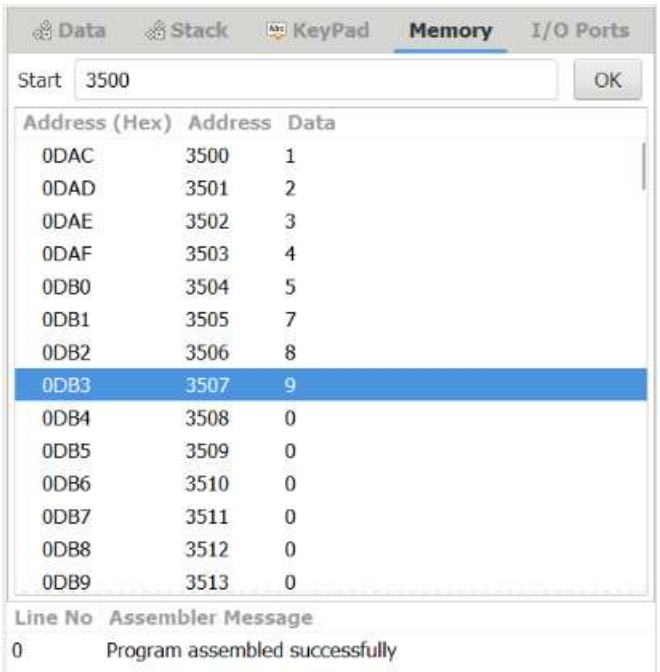
MOV A,D

RRC

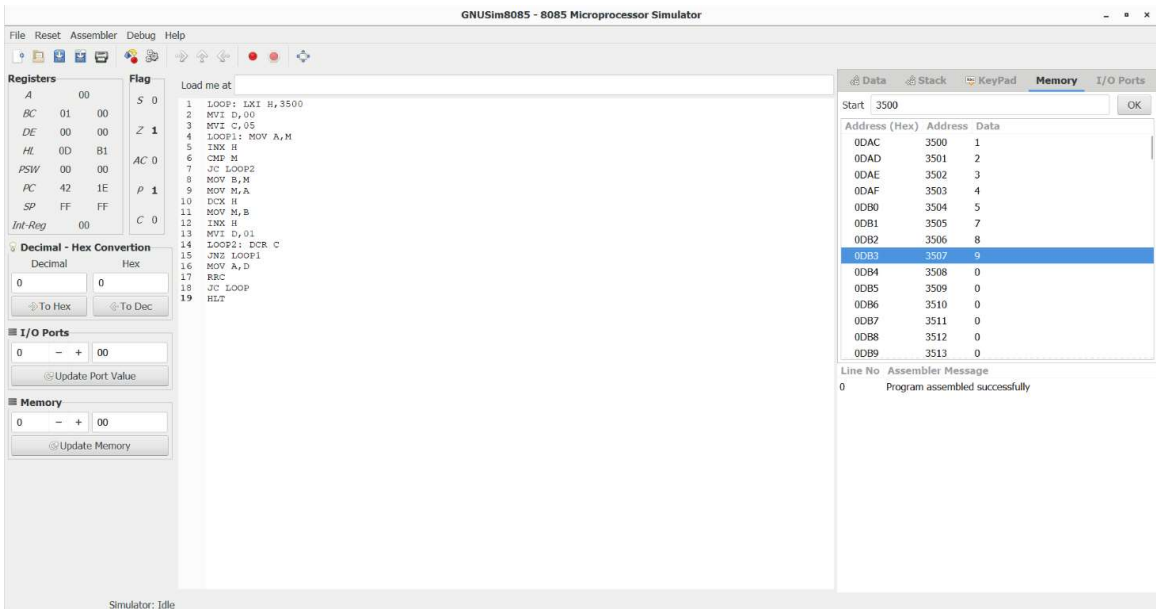
JC LOOP

HLT

INPUT:



OUTPUT:



RESULT: Thus the program was executed successfully using 8085 processor simulator.