LARGEST
NUMBER IN AN ARRAY

EXP NO: 10

AIM:
To find the largest number from an array
using 8085 processor.

ALGORITHM:

1) Load the address of the first element of the array in HL pair.

2) Move the count to B register.

3) Increment the pointer.

4) Get the first data in A register.

5) Decrement the count.

6) Increment the pointer.

7) Compare the content of memory addressed by HL pair with that of A register.

8) If carry=0, go to step 10 or if carry=1 go to step 9

9) Move the content of memory addressed by HL to A register.

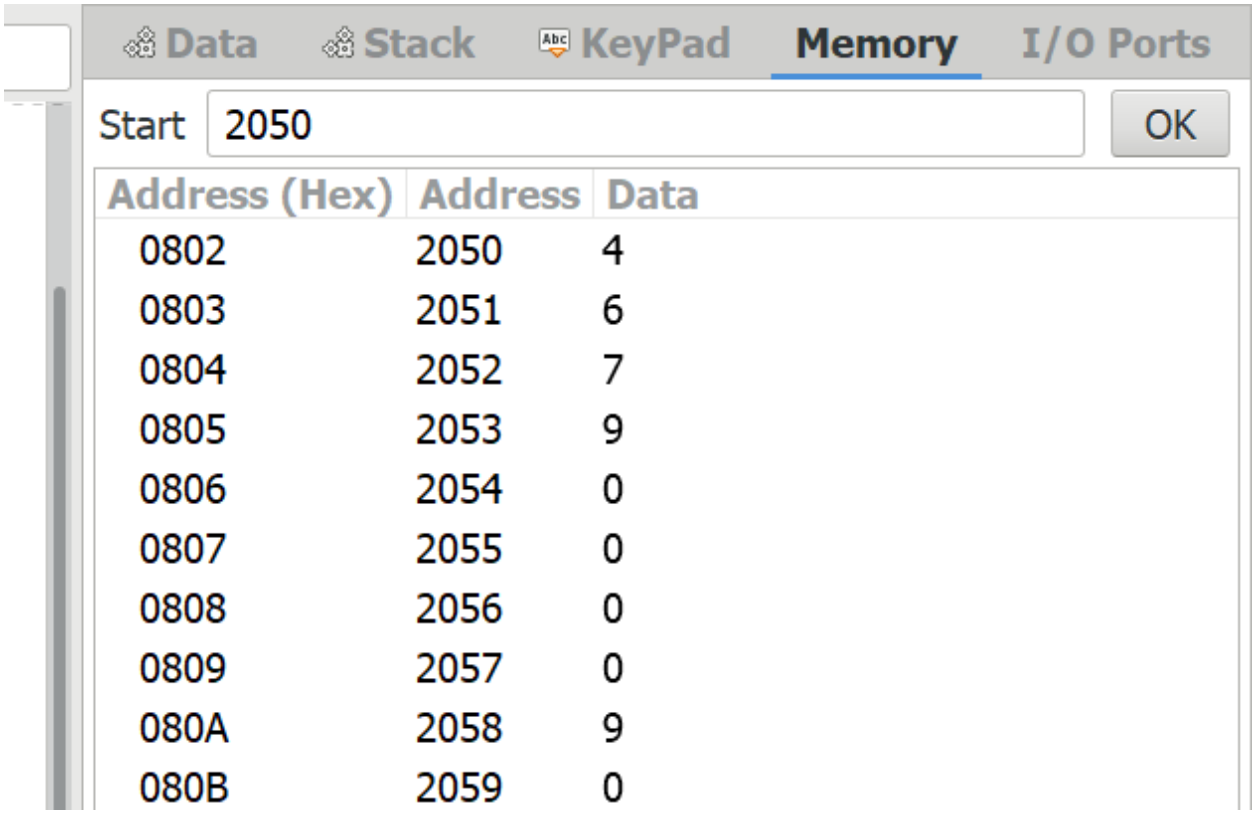
10) Decrement the count.

PROGRAM:

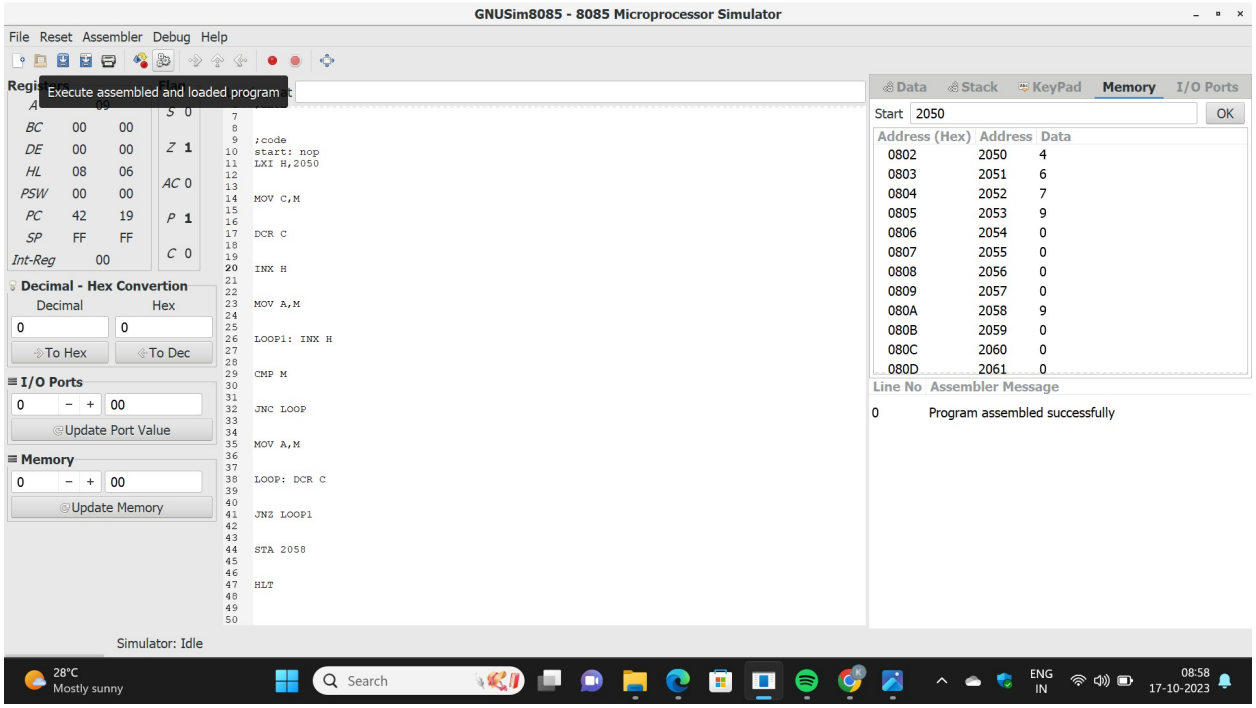
```
LXI H,2050

MOV C,M

DCR C

INX H

MOV A,M

LOOP1: INX H

CMP M
```

```
JNC LOOP

MOV A,M

LOOP: DCR C

JNZ LOOP1

STA 2058

HLT
```

INPUT:


Data
Stack
KeyPad
Memory
I/O Ports
Start
2050
OK
Address (Hex)
Address
Data
0802 2050 4
0803 2051 6
0804 2052 7
0805 2053 9
0806 2054 0
0807 2055 0
0808 2056 0
0809 2057 0
080A 2058 9
080B 2059 0

OUTPUT:



RESULT: Thus
the program was executed successfully using 8086 processor simulator.