

## **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

Abc

KeyPad

Memory

I/O Ports

Start

2050

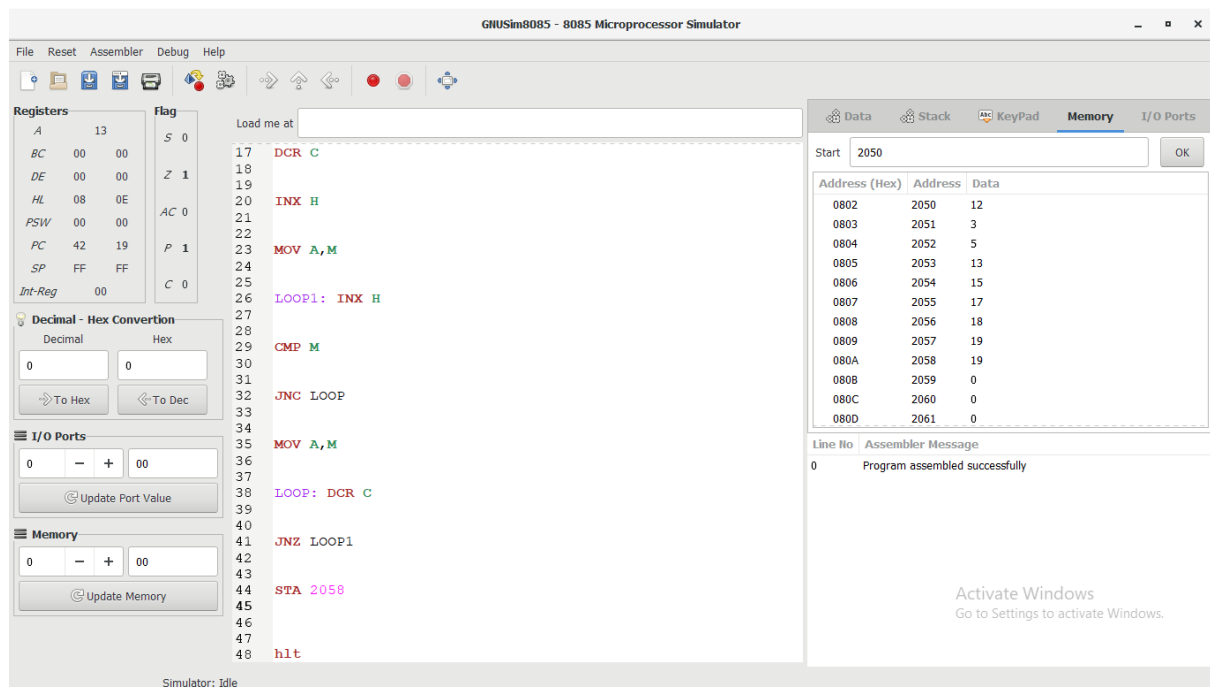
OK

Address (Hex)	Address	Data
0802	2050	12
0803	2051	3
0804	2052	5
0805	2053	13
0806	2054	15
0807	2055	17
0808	2056	18
0809	2057	19
080A	2058	19
080B	2059	0
080C	2060	0
080D	2061	0

Line No

Assembler Message

OUTPUT:



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