

## **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

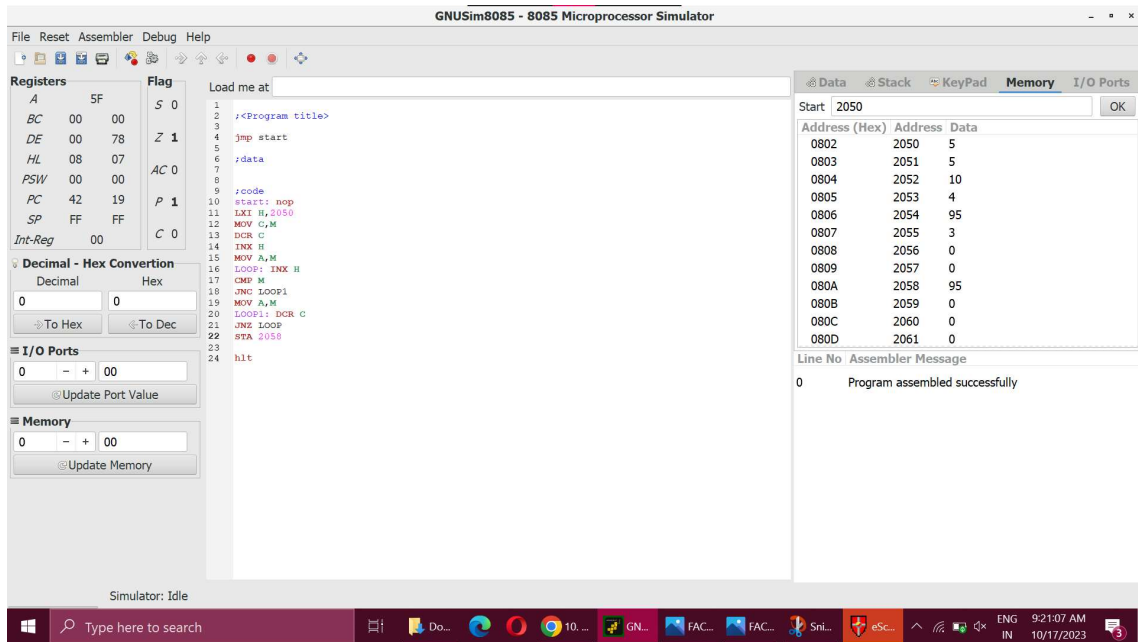
STA 2058

HLT

INPUT:

<div><div> Data</div><div> Stack</div><div> Keypad</div><div><b>Memory</b></div><div> I/O Ports</div></div>			
Start 2050			OK
Address (Hex)	Address	Data	
0802	2050	5	
0803	2051	5	
0804	2052	10	
0805	2053	4	
0806	2054	95	
0807	2055	3	
0808	2056	0	
0809	2057	0	

OUTPUT:



**RESULT:** Thus

the program was executed successfully using 8085 processor simulator.