

LARGEST NUMBER IN AN ARRAY

EXP NO: 10

AIM:

To find the largest number from an array using an 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

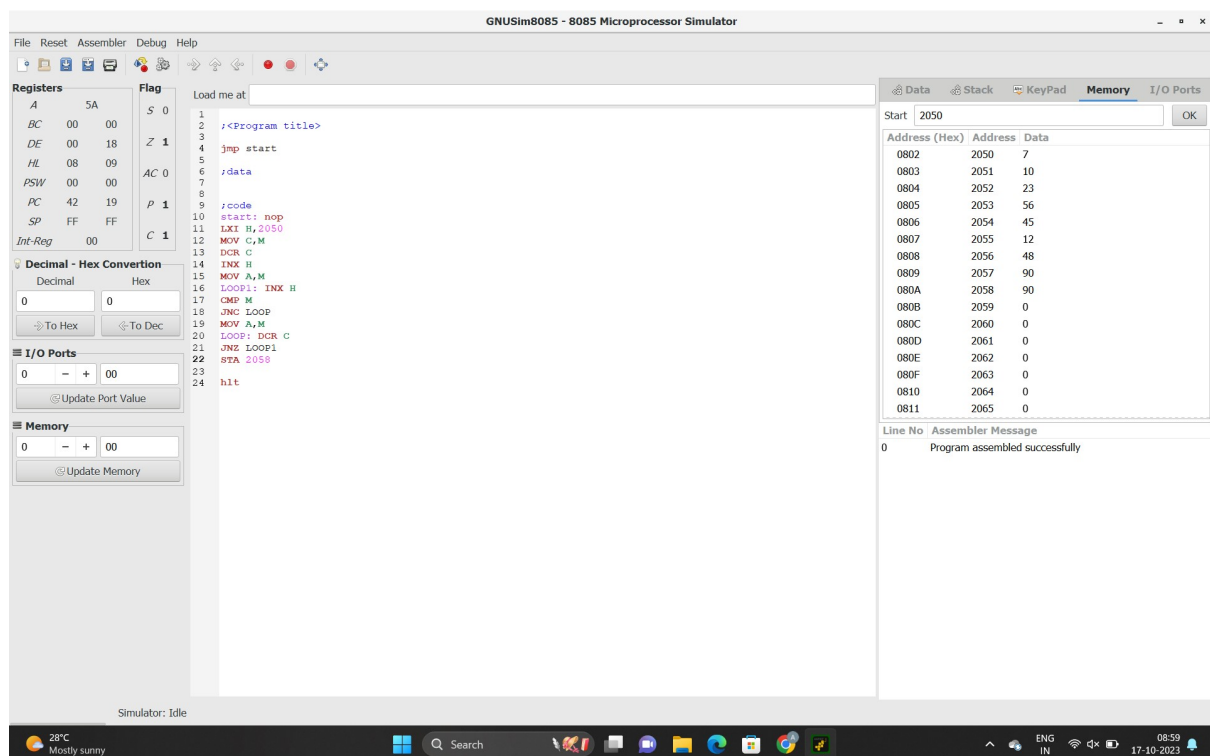
STA 2058

HLT

INPUT:

0802	2050	7
0803	2051	10
0804	2052	23
0805	2053	56
0806	2054	45
0807	2055	12
0808	2056	48
0809	2057	90

OUTPUT:



RESULT: Thus

The program was executed successfully using an 8085 processor simulator.