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.

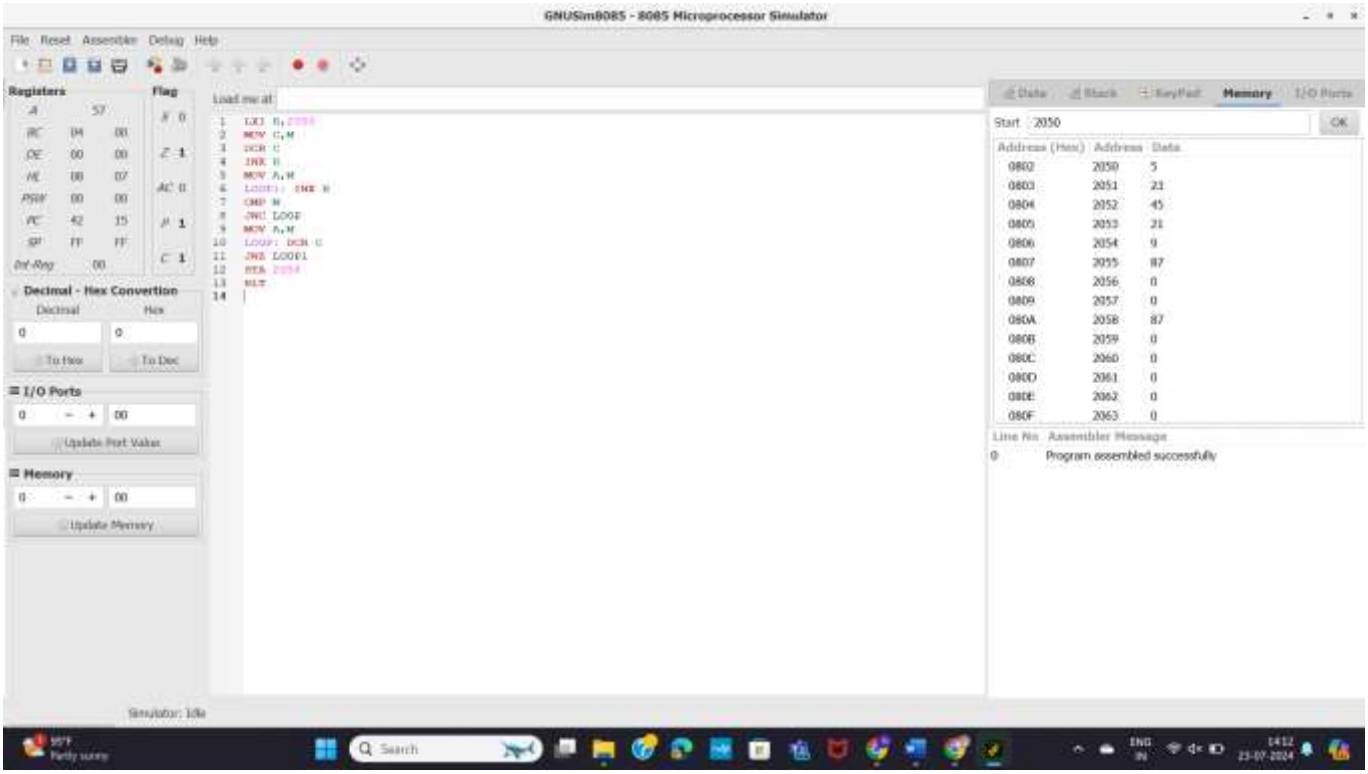
PROGRAM:

```
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:

Address (Hex)	Address	Data
0802	2050	5
0803	2051	23
0804	2052	45
0805	2053	21
0806	2054	9
0807	2055	87

OUTPUT:



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