ADDITION
OF N NUMBERS

EXP NO: 14

AIM:
To compute addition of N numbers using
8085 processor.

ALGORITHM:

1) Load the base address of the array in HL register pair.

2) Load the memory with data to be added.

3) Take it as count.

4) Initialize the accumulator with 00.

5) Add content of accumulator with content of memory.

6) Decrement count.

7) Load count value to memory location.

8) Repeat step 5.

9) Check whether count has become 0.

10) Halt.

PROGRAM:

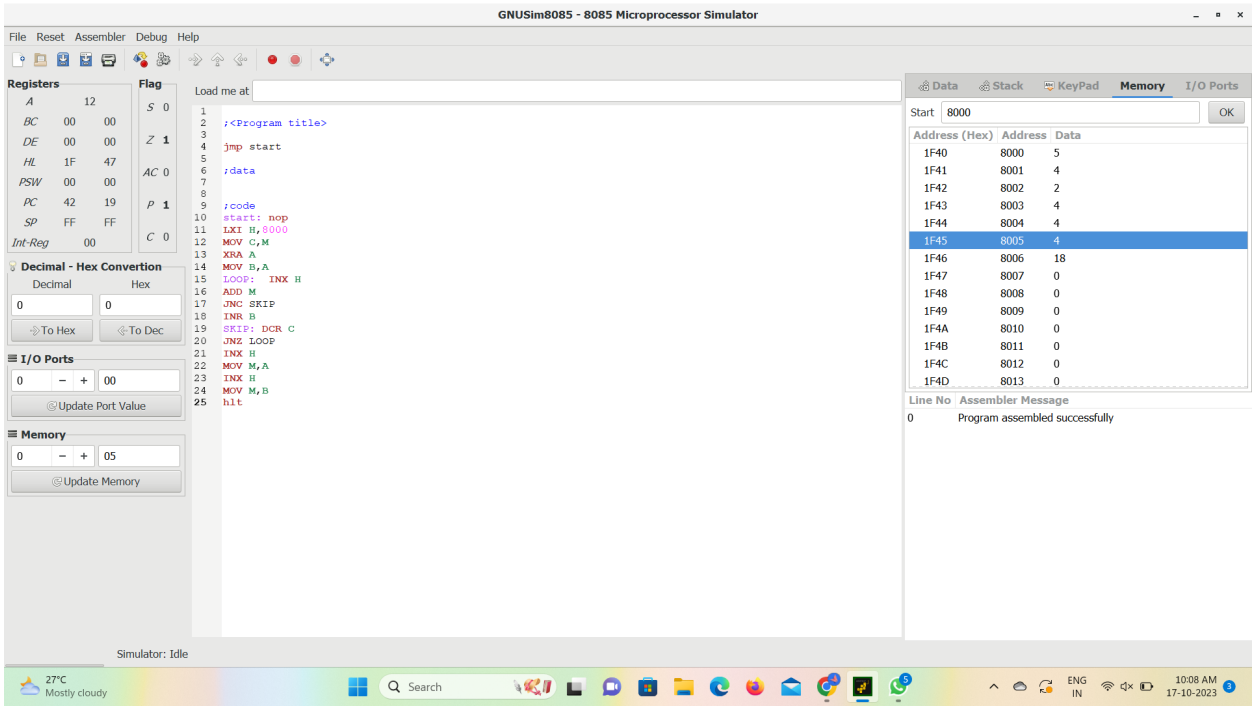
```
LXI
H,8000

        MOV C,M

        XRA A

        MOV B,A

LOOP:  INX H

        ADD M

        JNC SKIP

        INR B
```

```
SKIP:
DCR C

        JNZ LOOP

        INX H

        MOV M,A

        INX H

        MOV M,B

        HLT
```

INPUT:

Address (Hex)	Address	Data
1F40	8000	5
1F41	8001	4
1F42	8002	2
1F43	8003	4
1F44	8004	4
1F45	8005	4

OUTPUT:



RESULT: Thus
the program was executed successfully using 8085 processor simulator.