

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) Initialise the accumulator with 00.
- 5) Add the content of the accumulator with the content of memory.
- 6) Decrement count.
- 7) Load count value to memory location.
- 8) Repeat step 5.
- 9) Check whether the 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

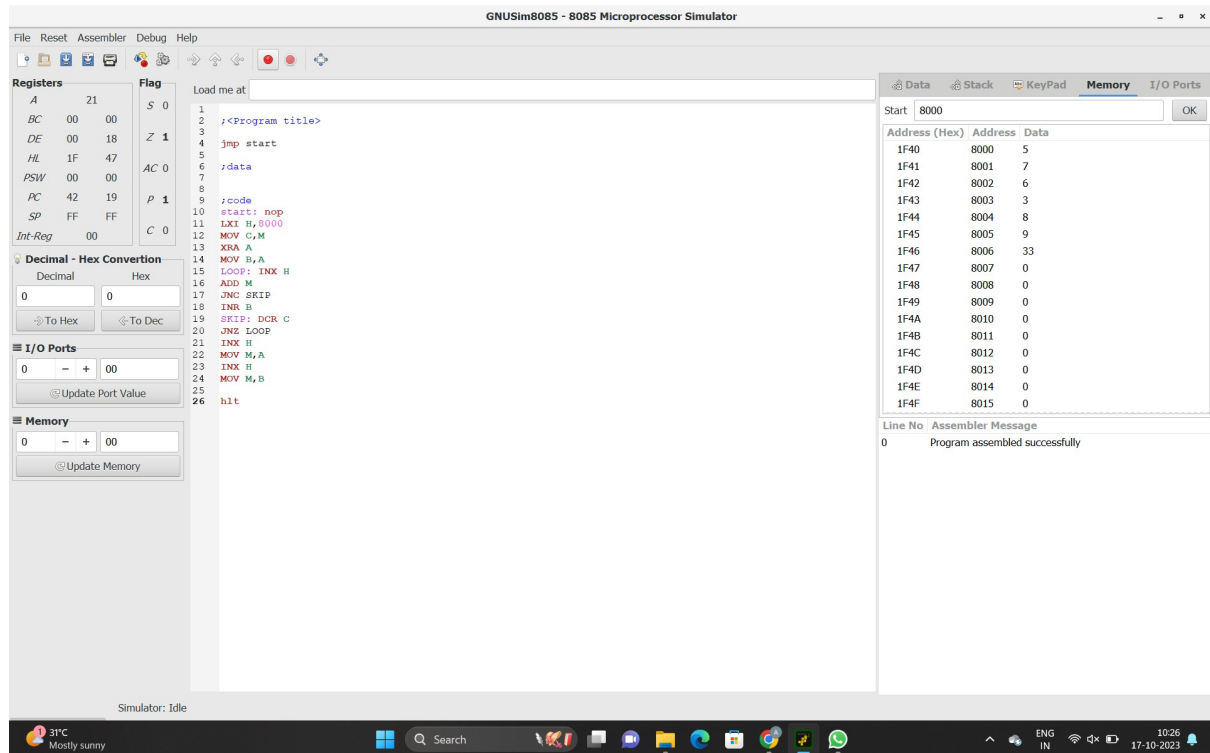
MOV M,B

HLT

INPUT:

1F40	8000	5
1F41	8001	7
1F42	8002	6
1F43	8003	3
1F44	8004	8
1F45	8005	9

OUTPUT:



RESULT: Thus

The program was executed successfully using an 8085 processor simulator.