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
```

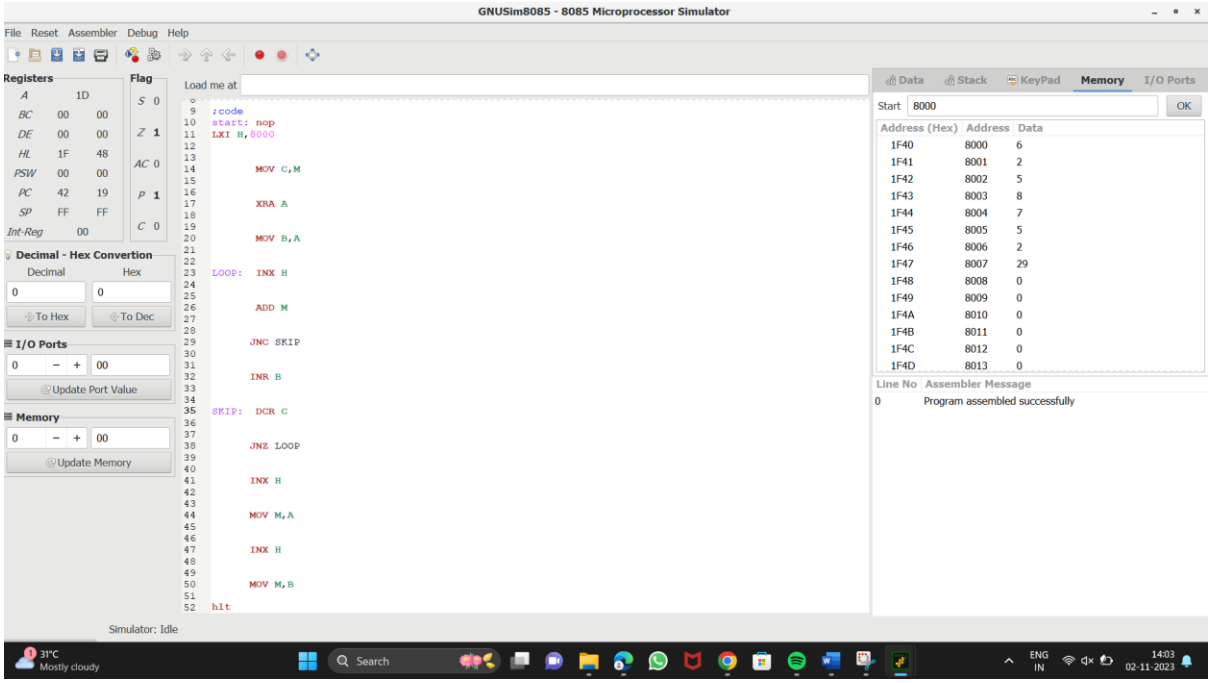
INPUT:

Data | Stack | KeyPad | **Memory** | I/O Ports

Start 8000 OK

Address (Hex)	Address	Data
1F40	8000	6
1F41	8001	2
1F42	8002	5
1F43	8003	8
1F44	8004	7
1F45	8005	5
1F46	8006	2
1F47	8007	29
1F48	8008	0
1F49	8009	0
1F4A	8010	0
1F4B	8011	0
1F4C	8012	0
1F4D	8013	0

OUTPUT



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