

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

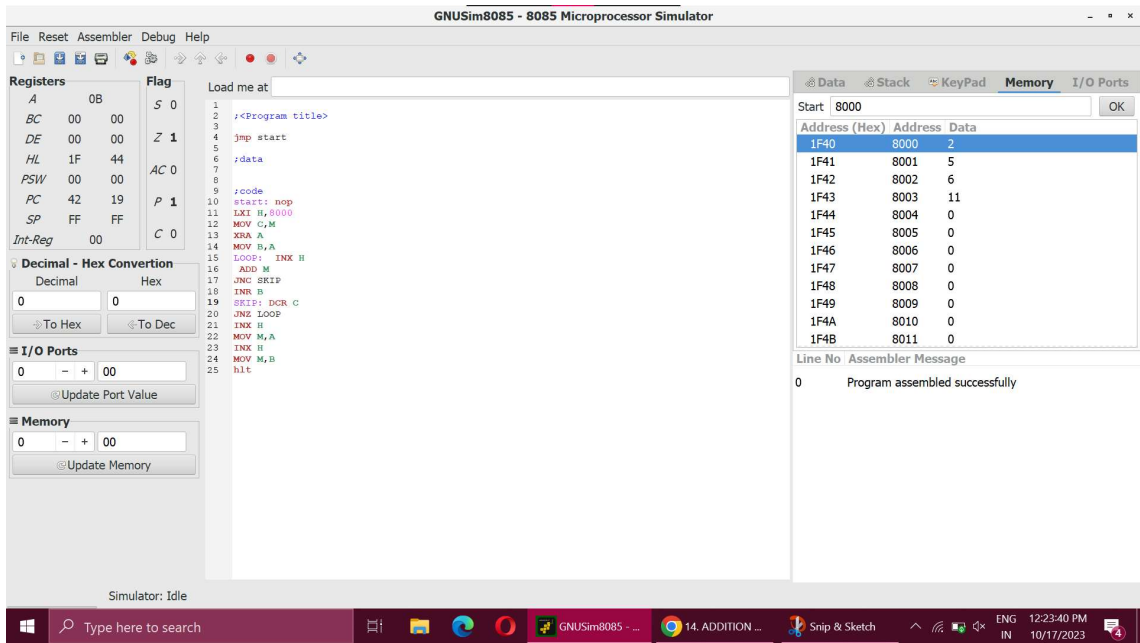
MOV M,B

HLT

INPUT:

Data Stack Keypad Memory I/O Ports			
Start	8000		OK
Address (Hex)	Address	Data	
1F40	8000	2	
1F41	8001	5	
1F42	8002	6	

OUTPUT:



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