

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
```

```
MVI A,00
```

```
MOV B,A
```

```
LOOP: ADD C
```

```
JNC SKIP
```

```
INR B
```

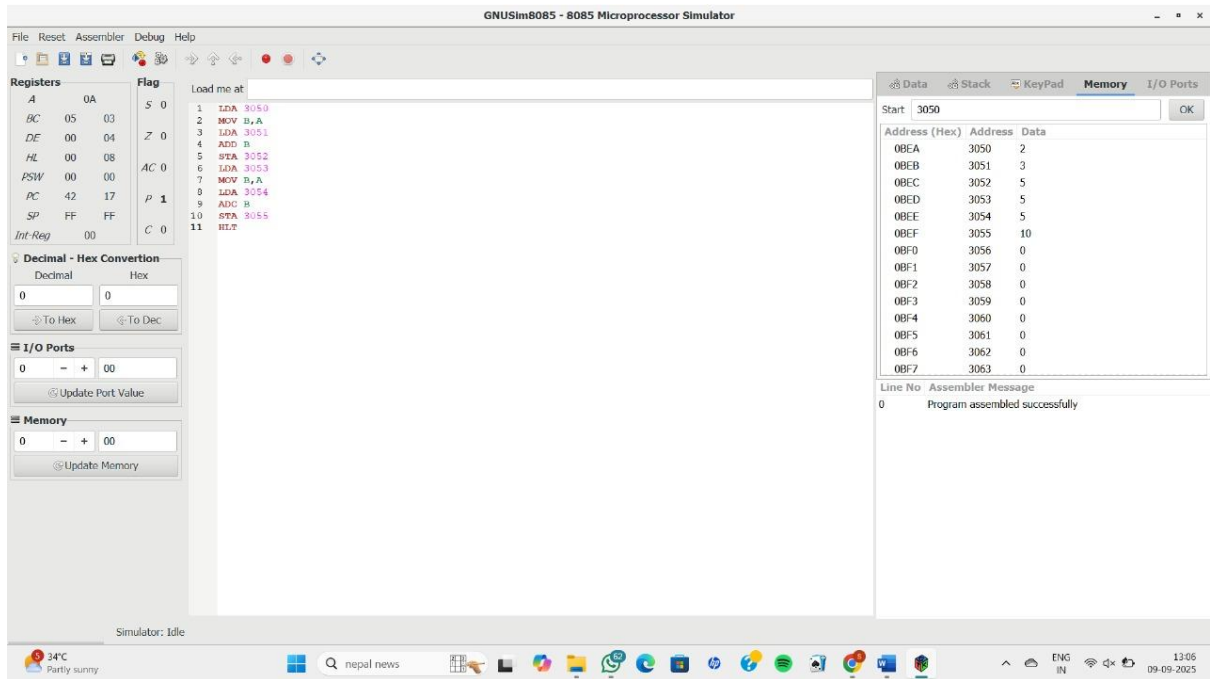
```
SKIP: DCR C
```

```
JNZ LOOP
LXI H,8007
MOV M,A
INX H
MOV M,B
HLT
```

INPUT:

2
3
5
5
5
10

OUTPUT:



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