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

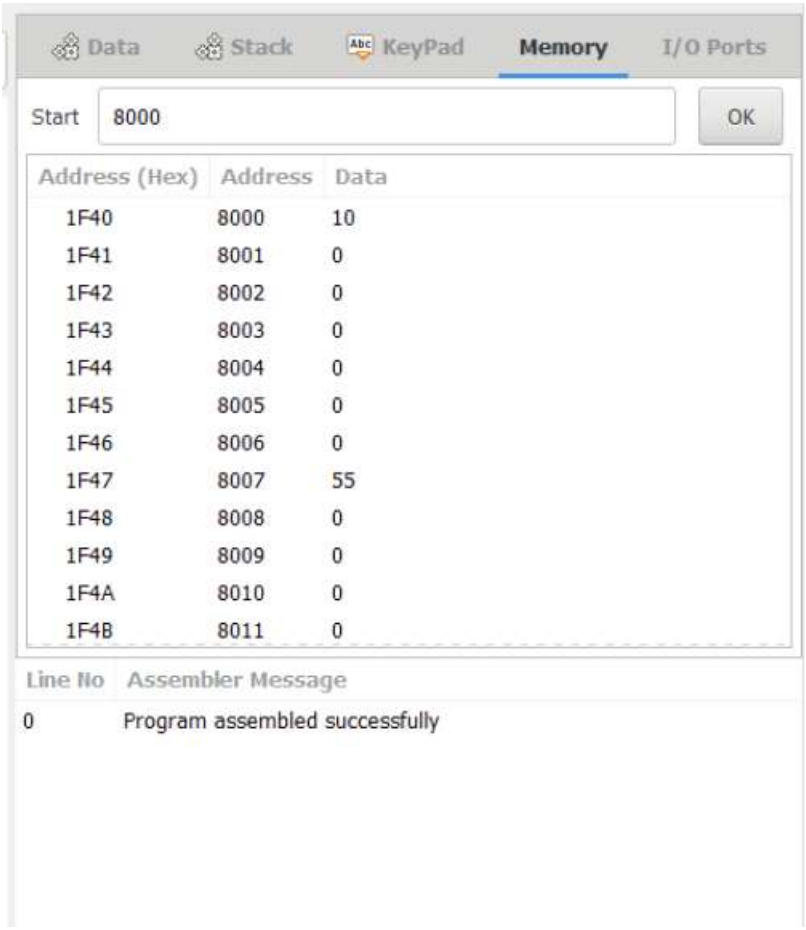
MOV M,A

INX H

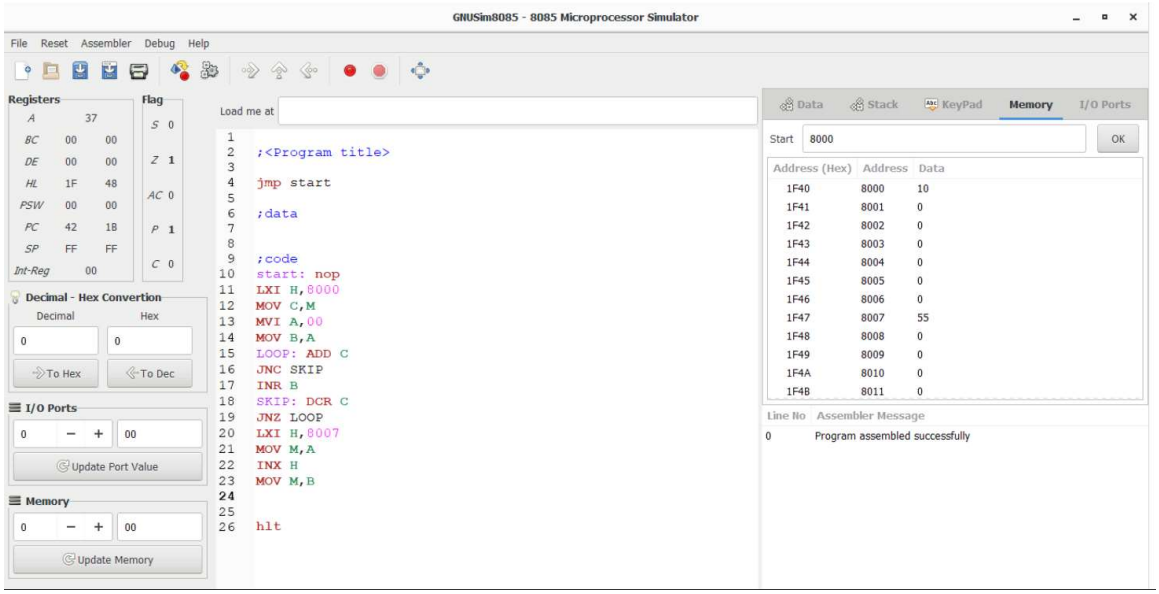
MOV M,B

HLT

INPUT :



OUTPUT:



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