

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:

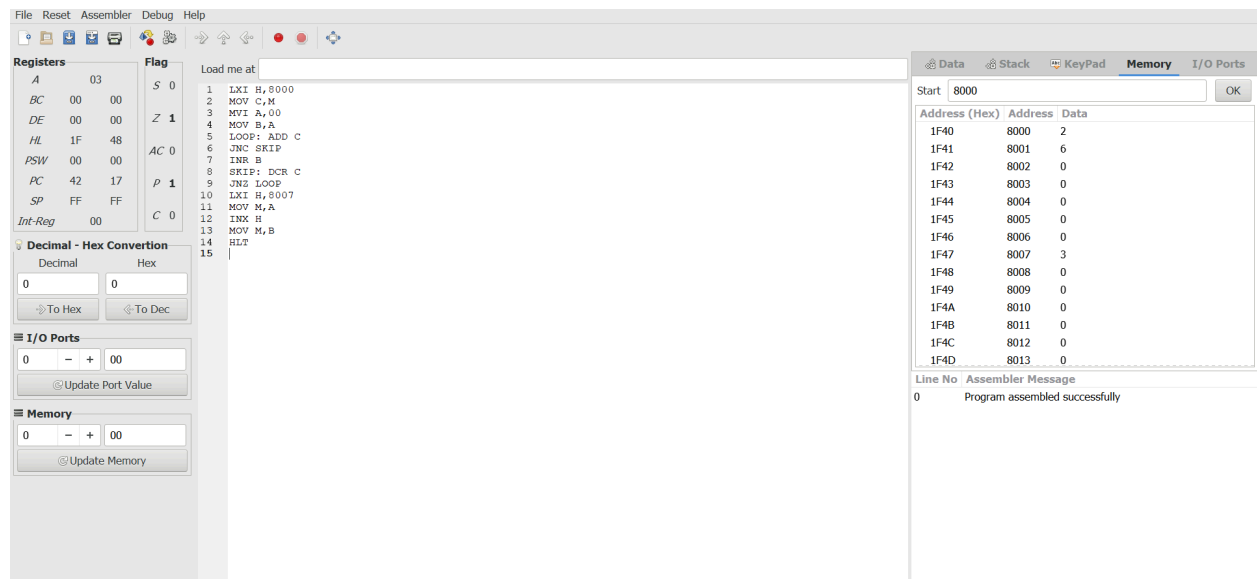
```
LXI H,8000
MOV C,M
MVI A,00
MOV B,A
LOOP: ADD C
JNC SKIP
INR B
SKIP: DCR C
JNZ LOOP
LXI H,8007
MOV M,A
INX H
MOV M,B
HLT
```

INPUT:

2

6

OUTPUT:



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