ADDITION OF N NUMBERS

EXP NO: 14

AIM: To compute addition of N numbers using the 8085 processor.

ALGORITHM:

1) Load the base address of the array in the HL register pair.
2) Load the memory with data to be added.
3) Take it as a count.
4) Initialise the accumulator with 00.
5) Add the content of the accumulator with the content of memory.
6) Decrement count.
7) Load count value to memory location.
8) Repeat step 5.
9) Check whether the count has become 0.
10) Halt.

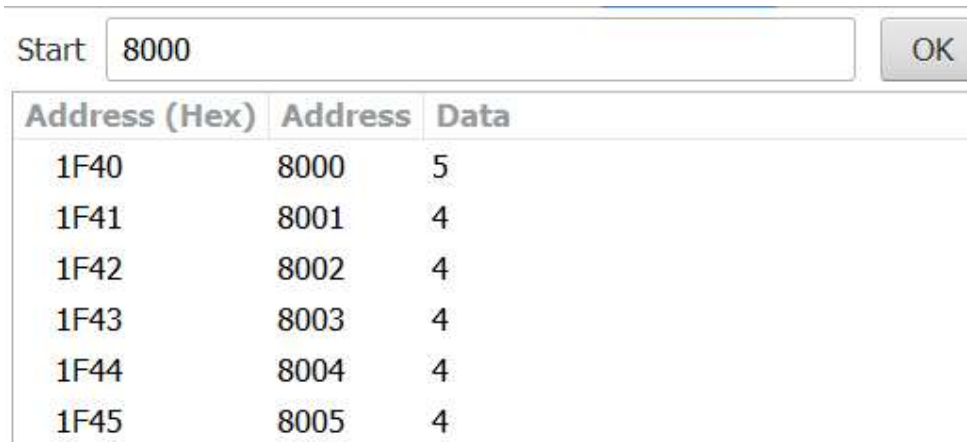
PROGRAM:

```
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
```

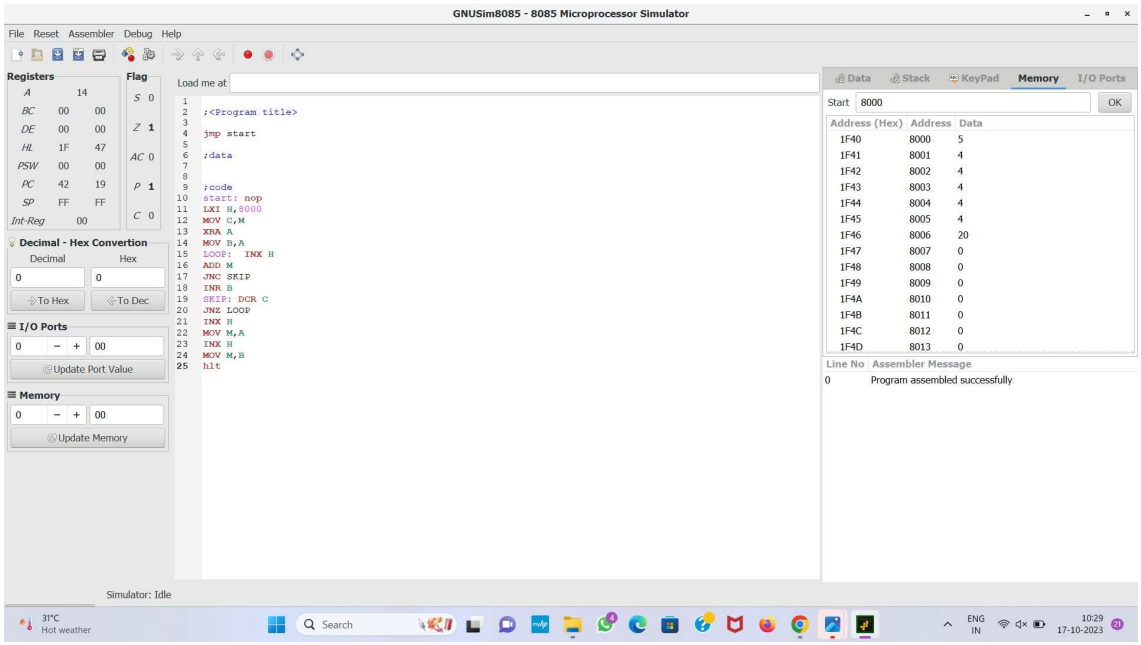
MOV M,B

HLT

INPUT:



OUTPUT:



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