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.

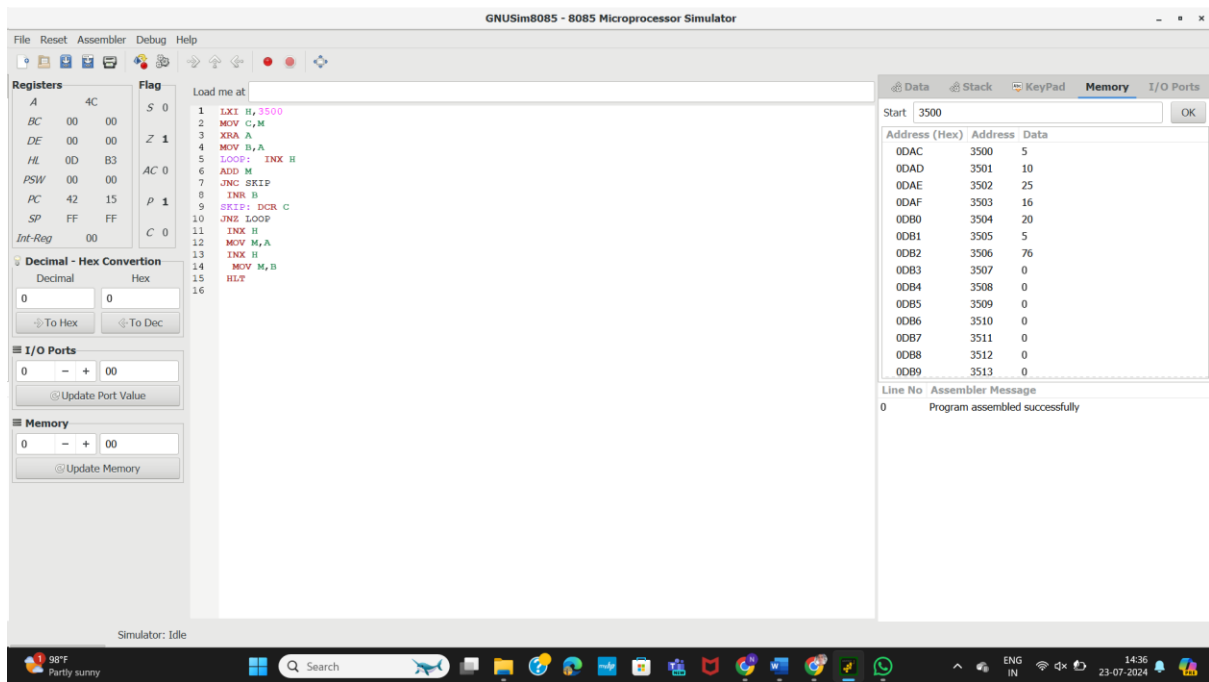**PROGRAM:**
LXI H,8000
MOV C,M
XRA A
MOV B,A
LOOP: INX H
ADD M
JNC SKIP
 INR B
SKIP: DCR C
JNZ LOOP
 INX H
 MOV M,A
 INX H
 MOV M,B
 HLT

INPUT :

Address (Hex)	Address	Data
0DAC	3500	5
0DAD	3501	10
0DAE	3502	25
0DAF	3503	16
0DB0	3504	20
0DB1	3505	5

OUTPUT:

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