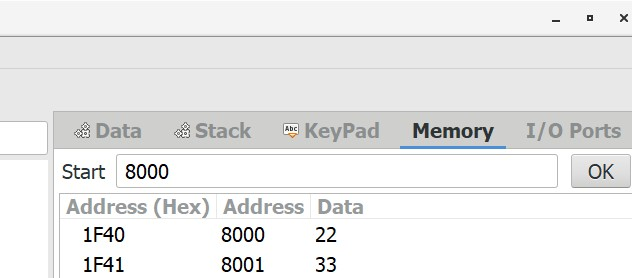
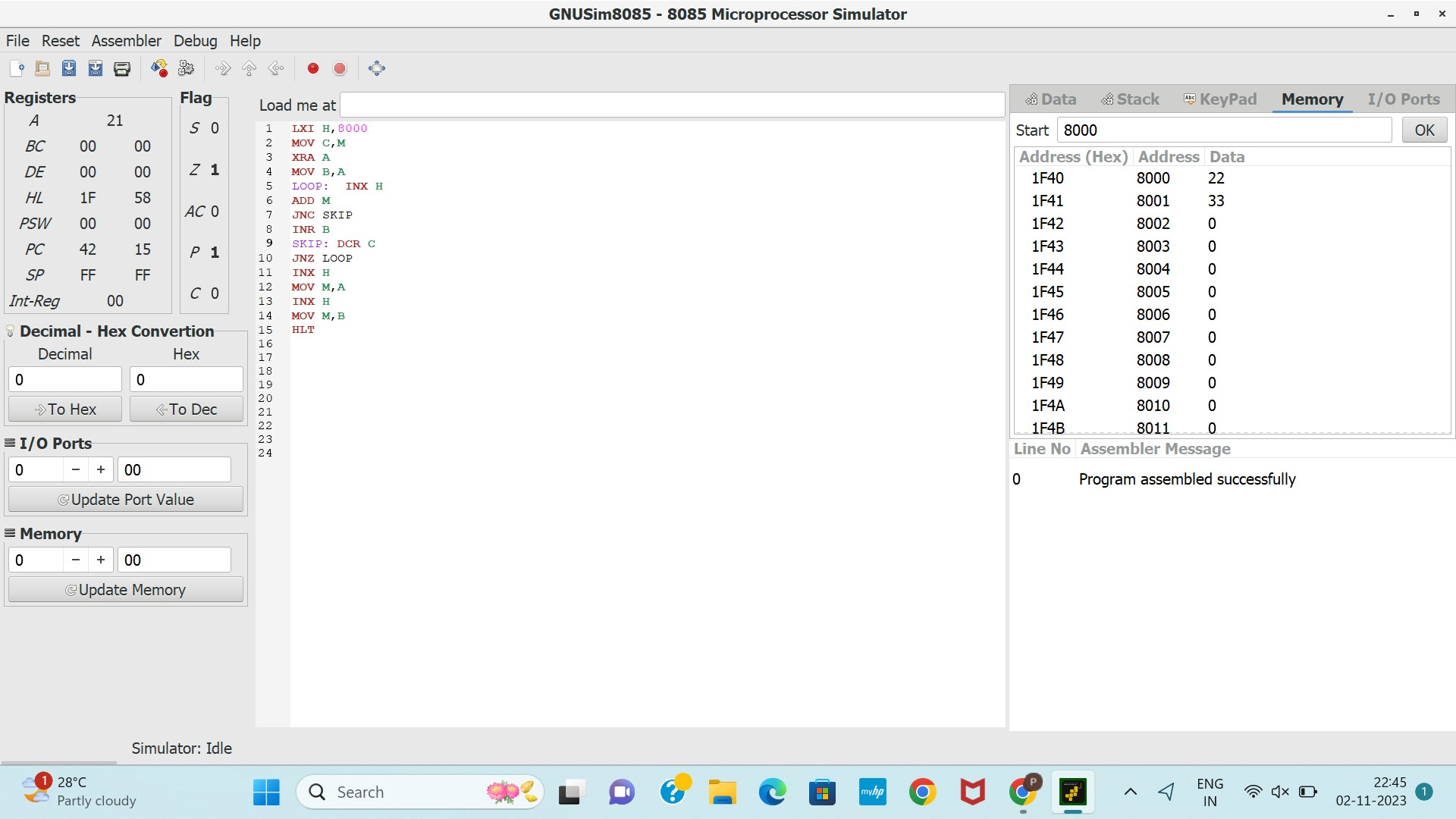
**ADDITION OF N NUMBERS**  
  
**EXP NO: 14**  
  
**AIM:**To compute addition of N numbers using 8085 processor

**SOFTWARE REQUIREMENTS:**

GNUSIM 8085.  
  
**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.