**EXP 6 : Write an assembly language program for subtracting two 16-bit data using 8085 processor**

**AIM:** To write an assembly language program to implement 16-bit subtraction using 8085 processor.

**ALGORITHM:**

1) Start the program by loading a register pair with address of 1st number.

2)     Copy the data to another register pair.

3)      Load the second number to first register pair.

4)     Subtract the two register pair contents.

5)      Check for borrow.

6)      Store the value of difference and borrow in memory locations.

7)      End.

**PROGRAM:**

LHLD 2050

XCHG

LHLD 2052

MVI C,00

MOV A, E

SUB L

STA 2054

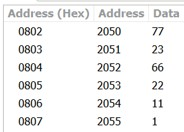
MOV A, D

SUB H

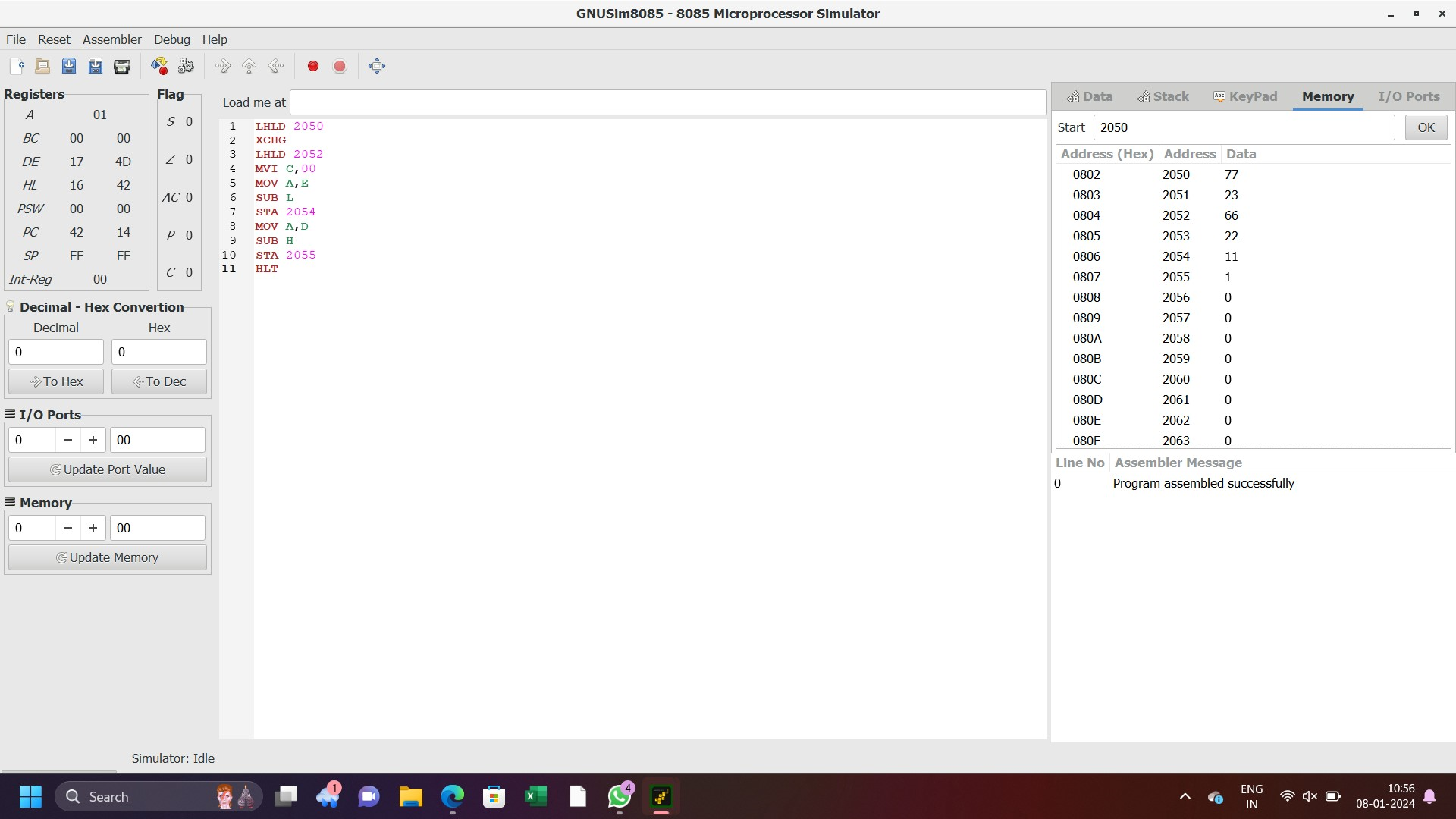
STA 2055

HLT

**INPUT:**



**OUTPUT:**



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