16-BIT SUBTRACTION

| EXP NO: 6 | |
|--|--|
| AIM: To write an assembly language program to implement 16-bit subtraction using 8085 processor. | |
| ALGORITHM: | |
| Start the program by loading a register pair with the address of 1st number. | |
| 2) Copy the data to another register pair. | |
| 3) Load the second number to the first register pair. | |
| 4) Subtract the two register pair contents. | |
| 5) Check for borrowings. | |
| 6) Store the value of difference and borrow in memory locations. | |
| 7) End. | |

PROGRAM:

2050 LHLD 2052

LHLD

XCHG

MVI C,00

MOV A, E

SUB L

STA 2054

MOV A, D

SUB H

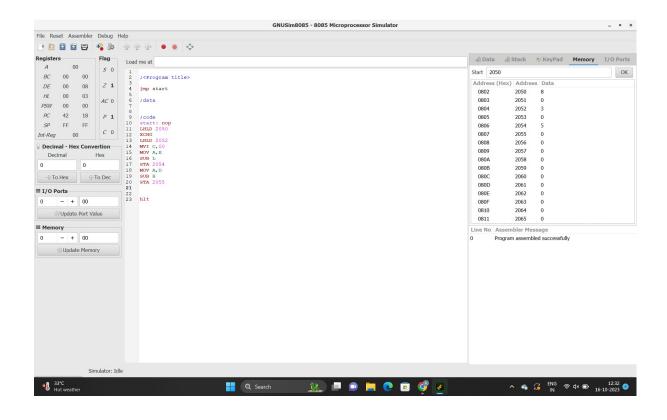
STA 2055

HLT

INPUT:

| 0802 | 2050 | 8 |
|------|------|---|
| 0803 | 2051 | 0 |
| 0804 | 2052 | 3 |
| 0805 | 2053 | 0 |

OUTPUT:



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