16-BIT SUBTRACTION

EXP NO: 6

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 registre 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
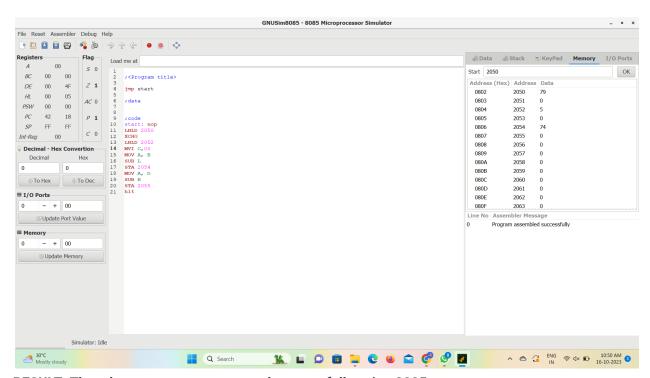
MOV A, E

SUB L

STA 2054

MOV A, D

SUB H

STA 2055

HLT

INPUT:

Address (Hex)	Address	Data
0802	2050	79
0803	2051	0
0804	2052	5
0805	2053	0

OUTPUT

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