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 register pair.
- 4) Subtract the two register pair contents.
- 5) Store the value of difference and borrow in memory locations.
- 6) End.

PROGRAM:

LHLD 2050

XCHG

LHLD 2052

MVI C,00

MOV A, E

SUB L

STA 2054

MOV A, D

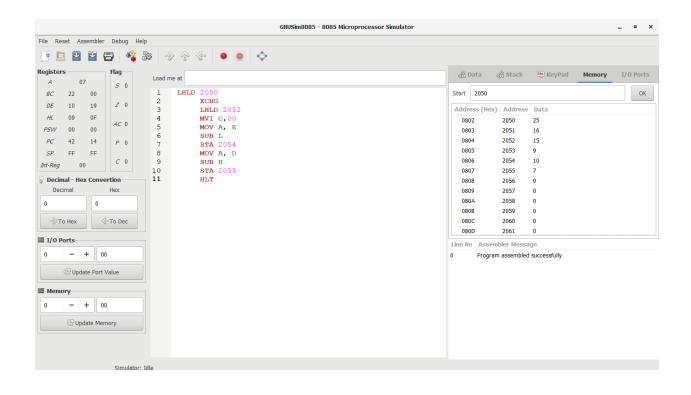
SUB H

STA 2055

HLT

INPUT & OUTPUT

Start	2050		ОК	
Address (Hex)		Address	Data	
0802		2050	25	
0803		2051	16	
0804		2052	15	
0805		2053	9	
0806		2054	10	
0807		2055	7	
0808		2056	0	
0809		2057	0	
080A		2058	0	
080B		2059	0	
080	C	2060	0	
080D		2061	0	



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