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

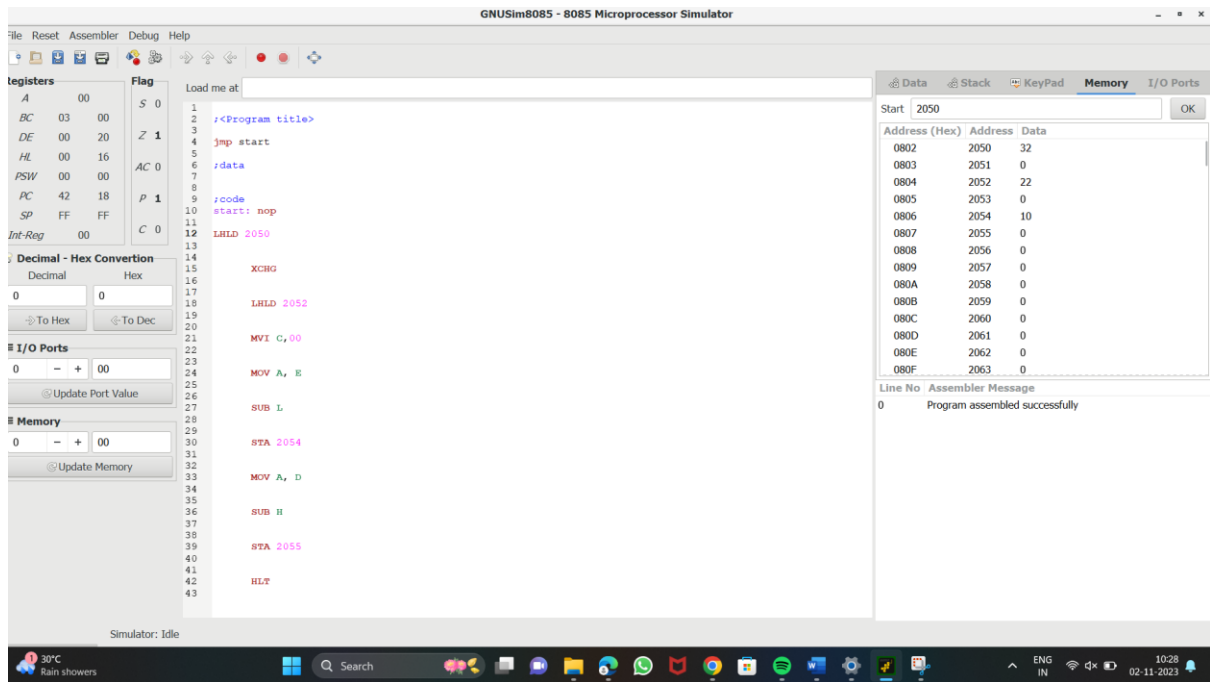LHLD 2052

MVI C,00

MOV A, E

SUB L

STA 2054

MOV A, D

SUB H

STA 2055

HLT

INPUT:

Data	Stack	KeyPad	**Memory**	I/O Ports

Start | 2050 | OK

Address (Hex)	Address	Data
0802	2050	32
0803	2051	0
0804	2052	22
0805	2053	0
0806	2054	10
0807	2055	0
0808	2056	0
0809	2057	0
080A	2058	0
080B	2059	0
080C	2060	0
080D	2061	0
080E	2062	0
080F	2063	0

Line No	Assembler Message

OUTPUT:

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