

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) Check for borrow.
- 6) Store the value of difference and borrow in memory locations.
- 7) End.

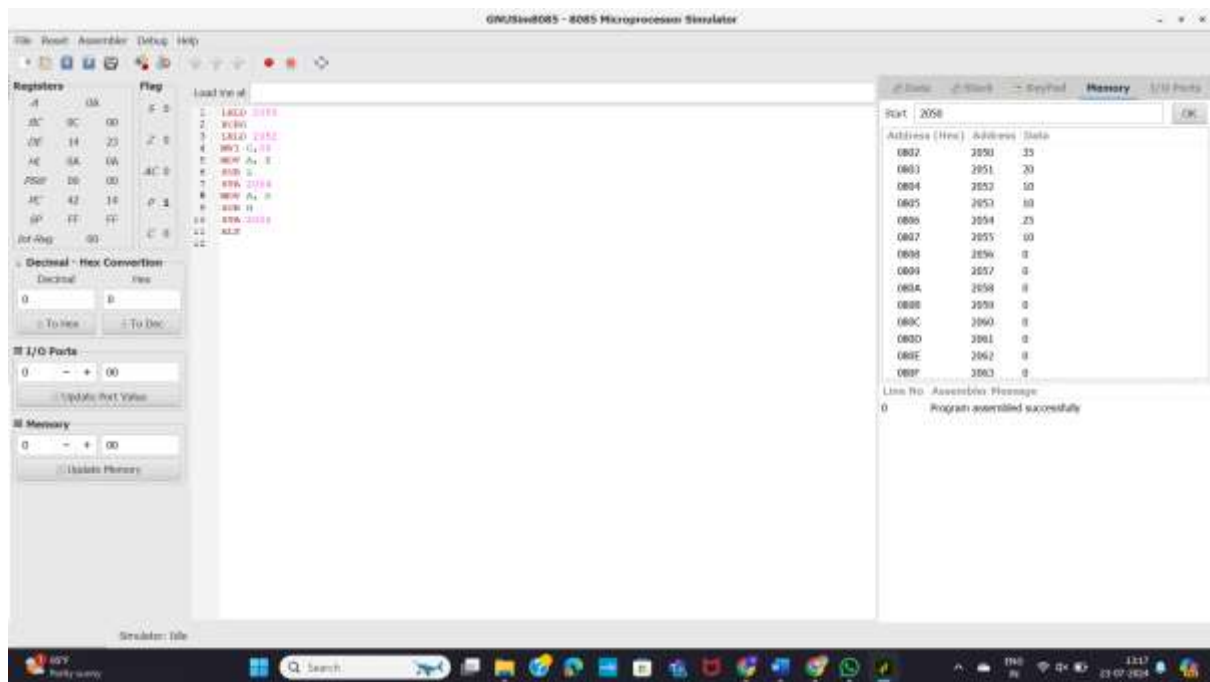
PROGRAM:

```
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	35
0803	2051	20
0804	2052	10
0805	2053	10
0806	2054	25
0807	2055	10
0808	2056	0

OUTPUT:



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