EXP NO: 6

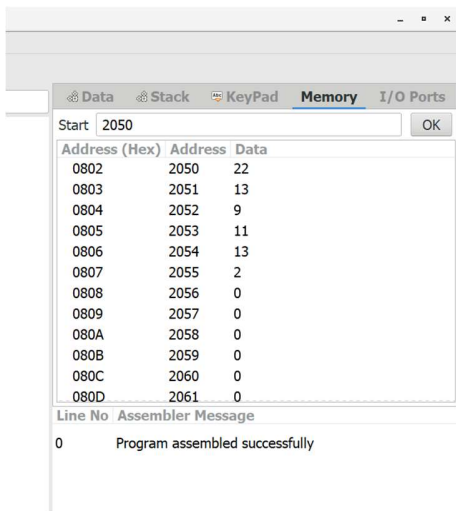**AIM:** To write an assembly language program to implement 16-bit subtraction using 8085 processor.

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:
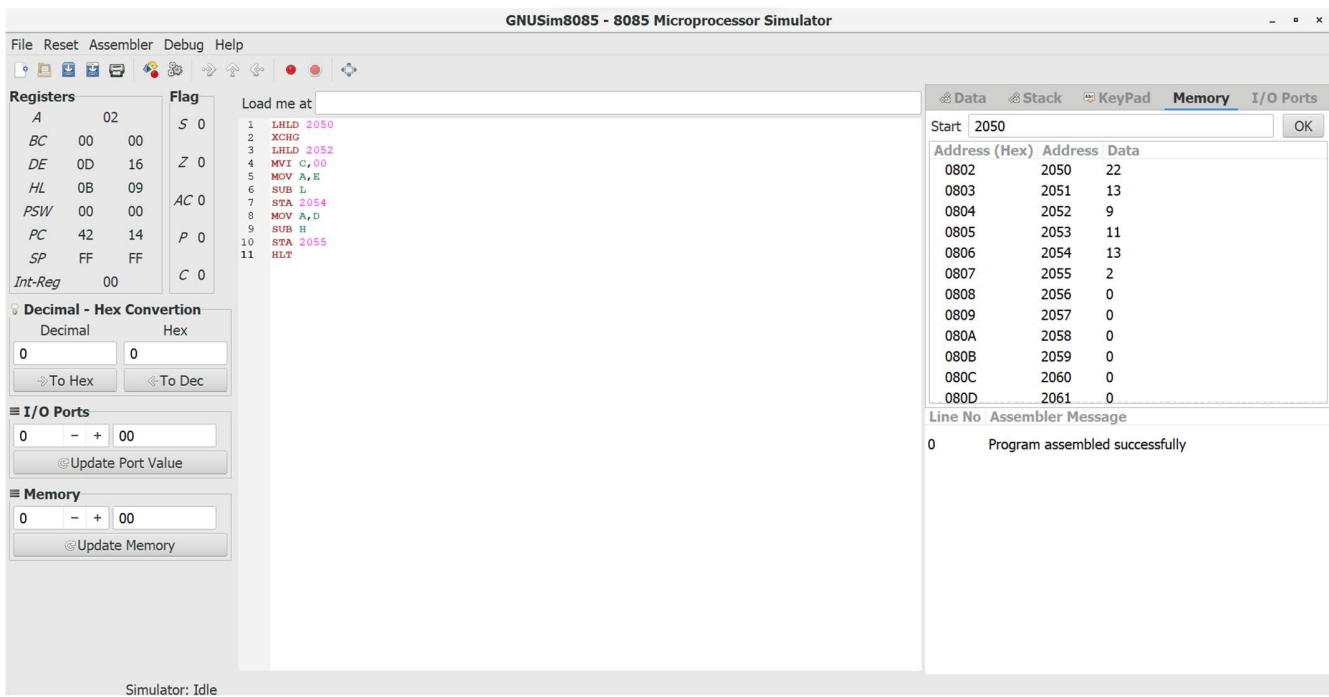
```
    LHLD 2050
XCHG
    LHLD 2052
    MVI C,00
    MOV A, E
    SUB L
    STA 2054
    MOV A, D
    SUB H
    STA 2055
    HLT
```

INPUT:

OUTPUT:

RESULT: Thus the program was executed successfully using 8085 processor simulator.   **16-BIT MULTIPLICATION**