6.Write an assembly language program for division of two 8-bit data A7 A6 A5 A4 A3 A2 A1 A0 and B7 B6 B5 B4 B3 B2 B1 B0 using 8085 processor.

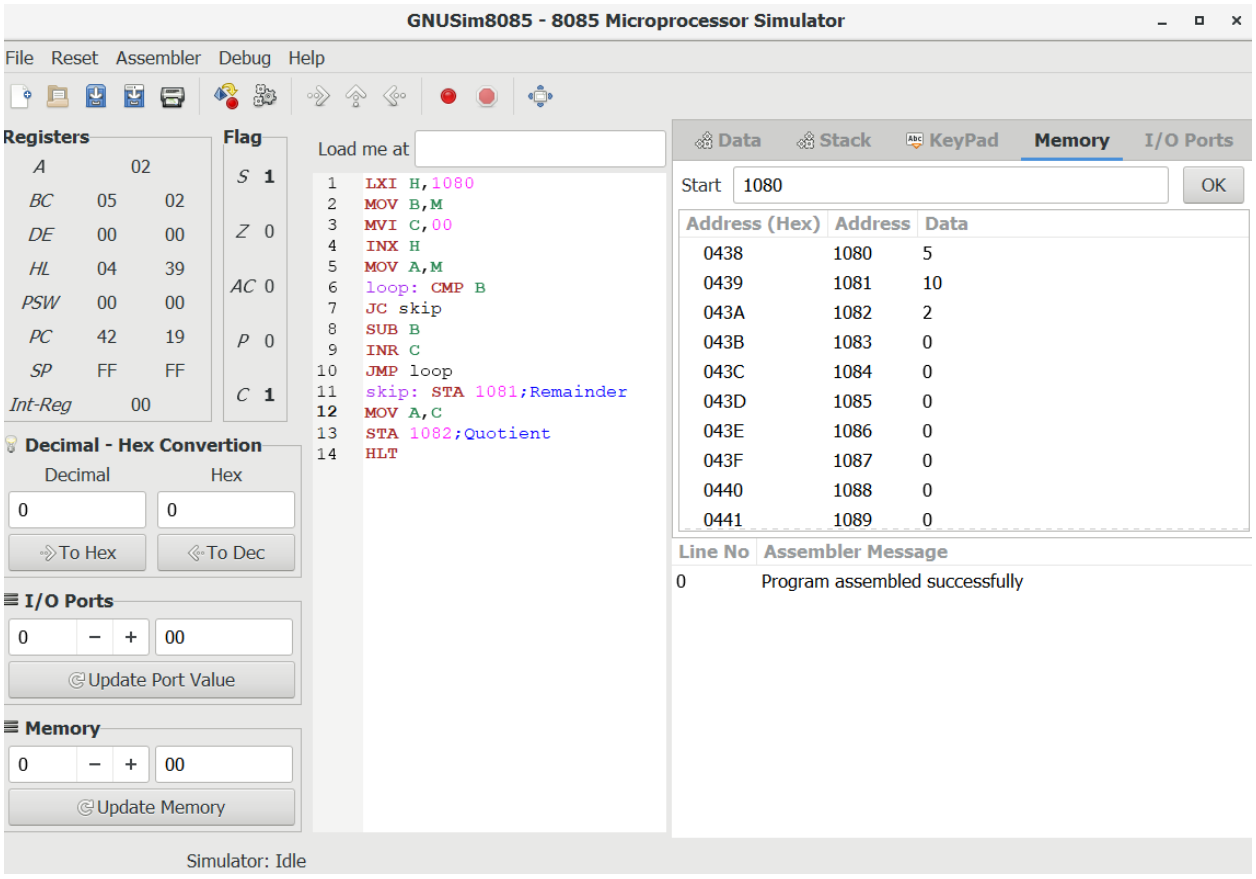
AIM: To perform the division of two 8 bit numbers using 8085.

ALGORITHM:

1) Start the program by loading HL register pair with address of memory location.
2) Move the data to a register(B register).
3) Get the second data and load into Accumulator.
4) Compare the two numbers to check for carry.
5) Subtract the two numbers.
6) Increment the value of carry .
7) Check whether repeated subtraction is over and store the value of product and carry in memory location.
8) Terminate the program.

PROGRAM:

```
LXI H,1080
MOV B,M
MVI C,00
INX H
MOV A,M
loop: CMP B
JC skip
SUB B
INR C
JMP loop
skip: STA 1081;Remainder
MOV A,C
STA 1082;Quotient
HLT
```



OBSERVATION:

INPUT:

5(1080)

10(1081)

OUTPUT:

2(1082)

RESULT: Thus the program to divide two 8-bit numbers was executed.