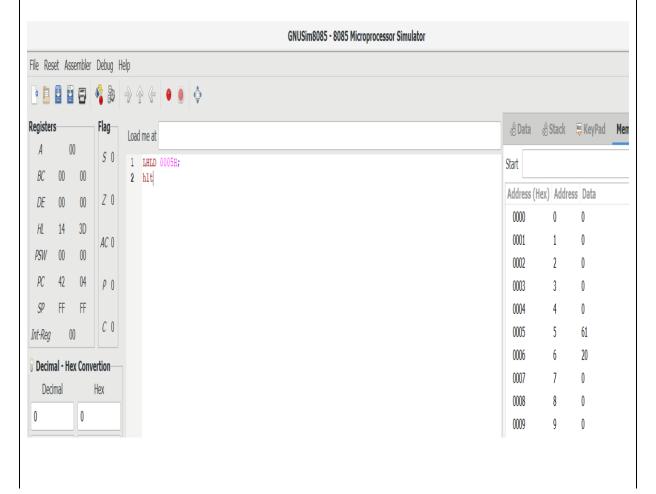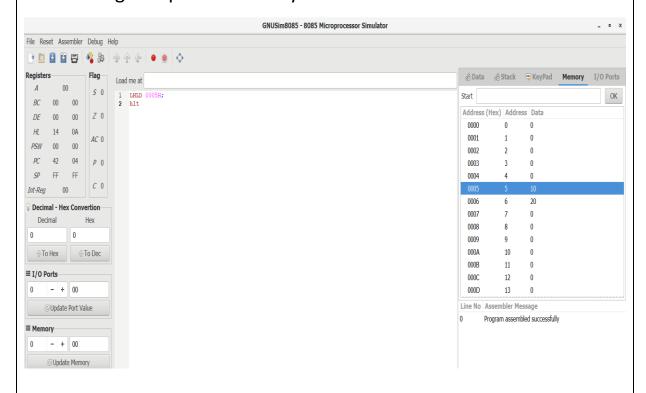# ASSIGNMENT 7

DCO -LAB

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2020CA007

Q1. Load the content of memory location 0005 and 0006 into the register pair HL directly.
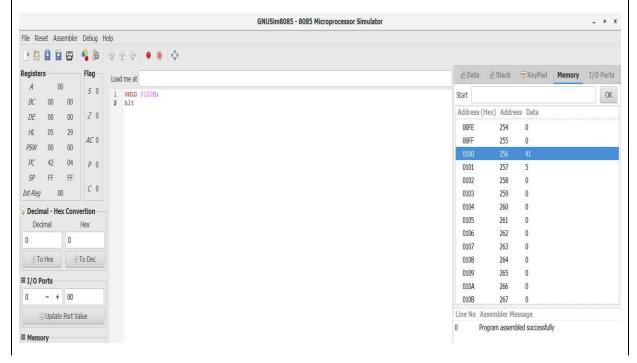
To store content of a memory location to HL pair directly we can use **LHLD** command as:
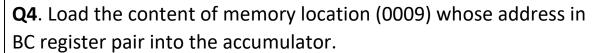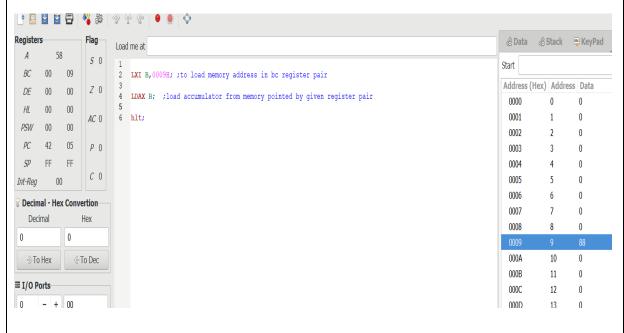
Q2. Store 10 at memory location 0005 and 20 at next memory location. Then Load the content of memory location 0005 and 0006 into the register pair HL directly.
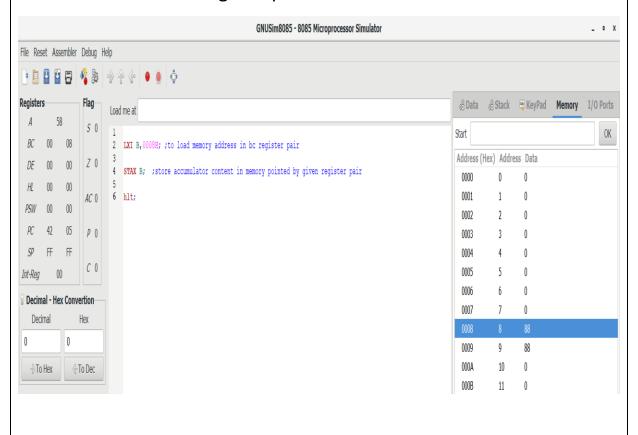

Q3. Store the content of HL register pair directly to the two consecutive memory locations starting from 0100.

Q4. Load the content of memory location (0009) whose address in BC register pair into the accumulator.

Q5. Store the content of accumulator to the memory location (0008) whose address in BC register pair.

Q6. Place 06 into DE register pair and 02 into HL register pair then swap the content of DE register pair with HL register pair.

To swap we can use **eXCHanGe (XCHG)** command as:

```
Registers               Flag      Load me at [_____]
   A          00          S  0     1
   BC     00     00                 2    LXI D,0006H; ;to load memory address in DE register pair
                          Z  0      3    LXI H,0002H;
   DE     00     02                 4
   HL     00     06                 5    XCHG; ;EXCHANGE
                          AC 0      6
   PSW    00     00                 7    hlt;
   PC     42     08        P  0
   SP     FF     FF
                           C  0
Int-Reg       00

 Decimal - Hex Convertion
   Decimal          Hex
```
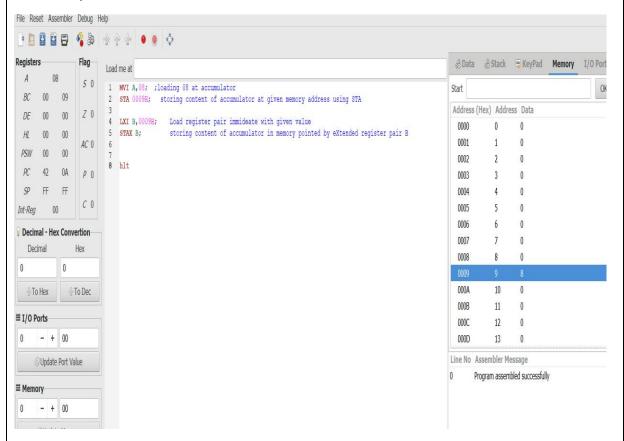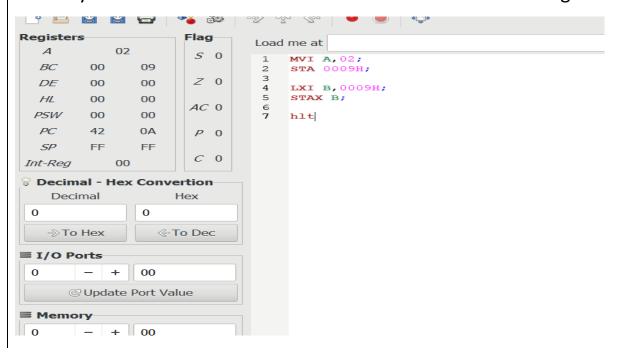
Q7. Place 10 in the register B, and then add the contents of register B with accumulator.

```
Registers               Flag      Load me at [_____]
   A          0F          S  0     1    ;before execution accumulator is holding value 05
   BC     0A     00                 2
                          Z  0      3    MVI B,10; ;Storing 10 at register B
   DE     00     00                 4    ADD B;
   HL     00     00                 5
                          AC 0      6    hlt;
   PSW    00     00                 7
   PC     42     04        P  1     8    ;after execution value at accumulator become 10+5=15 (0FH)
   SP     FF     FF
                           C  0
Int-Reg       00

 Decimal - Hex Convertion
```

Q8. Place 08 at memory location 0009, and the contents of this memory location to accumulator.

Q9. Place 02 at memory location 0009, and the contents of this memory location to accumulator. Also indicate the status of flag bits.

Q10. Place 09 in the register B, and then add the contents of register B with accumulator. Also indicate the status of flag bits.

Registers

A	11	
BC	09	09
DE	00	00
HL	00	00
PSW	00	00
PC	42	04
SP	FF	FF
Int-Reg	00	

Flag

S 0
Z 0
AC 1
P 1
C 0

Load me at

```
1    ;before execution the accumulator is having value 08 and C is having 09
2
3    MVI B,09; placing 09 in register B
4    ADD B;
5
6
7    hlt
8
9    ;after execution the accumulator will hold 08+09=17 (11H)
10   |
```