Quiz 9
(12 points)

1. Suppose we have declared these items:

   BYTE1 DC B'10101011'
   BYTE2 DC B'01101100'
   BYTE3 DC B'01100110'
   BYTE4 DS B

(a) (2 points) Suppose I execute this instruction:

   NI    BYTE2,B'10111101'

   What value is now in BYTE2?

(b) (2 points) Suppose I execute this instruction:

   XC    BYTE1(1),BYTE3

   What value is now in BYTE1?

(c) (2 points) I want to set the fifth bit of BYTE4 to 1 without changing any of its other bits. How can I do this? (Think about the available operations. Count bits from the left starting with 1.)

(d) (2 points) I want to set the third bit of BYTE4 to 0 without changing any of its other bits. How can I do this? (Think about the available operations. Count bits from the left starting with 1.)
2. Suppose register 7 contains the value X'ABCD5678' and a fullword variable called FWORD contains X'01EF23A4'.

(a) (2 points) Suppose we execute this instruction:

   IC  7,FWORD

What is now in register 7? Write the answer in hexadecimal digits, one per space.

Register 7: __ __ __ __ __ __ __ __

(b) (2 points) Suppose instead we execute this instruction:

   STCM  7,B'1011',FWORD

What is now in FWORD? Write the answer in hexadecimal digits, one per space.

FWORD: __ __ __ __ __ __ __