CS 218 Fall 2021 Assignment #1

Name: _____   Section: _____

For each of the following, make sure to show your work for full credit.

1. Convert the decimal value 901 to a word sized unsigned integer and show the result in hexadecimal. (5 Points)

2. Convert the decimal value -37 to a double word sized signed integer and show the result in hexadecimal. (5 Points)

3. Convert the decimal value 104 to a byte sized signed integer and show the result in hexadecimal. (5 Points)

4. What is the decimal value of the unsigned integer value 0x013F? (5 Points)

5. What is the decimal value of the signed integer value 0xFFF3? (5 Points)

6. What is the decimal value of the signed integer value 0x00000000000000E3? (5 Points)

7.   Assume that the RAX register has the value
0x00 00 00 00 FF FF FF 71.   If interpreted as signed
integers, what are the decimal values stored in rax, eax,
ax, ah, and al?   You do not have to show your work for this
question. (10 points, 2 points each)

8.   Extend the unsigned integer 0xF316 to 32 bits in
hexadecimal. (4 points)

9.   Extend the signed integer 0xF316 to 32 bits in
hexadecimal. (3 Points)

10.   Extend the signed integer 0x77D2 to 64 bits in
hexadecimal. (3 Points)