Assignment 1 (200 points)

A. Questions

(a) . Convert the following hexadecimal values to binary
        1. 0ABCD   2. 0ECE   3. 416
(b). Convert the following hexadecimal values to decimal
        4. 2020   5. 888   6. 0DAD
(c). Find the 16-bit expression of the following decimal numbers. Present in hexadecimal value.
        7. - 200   8. - 2020
(d). Find the 32-bit expression of the following decimal numbers. Present in hexadecimal value.
        9. - 18,870   10. - 136

(e). Find the decimal equivalent of the following 16-bit signed hexadecimal numbers
        11. 8080   12. ABBA

(f). Find the decimal equivalent of the following 32-bit signed hexadecimal numbers
        13. ABCDEF01   14. 789ABCDE

(g). Sign extend the following signed hexadecimal values from 16 bits to 32 bits.
        15. 80FF   16. 7F7F

(h). Need to search for HTML UTF-8 character table. And state how to find the table and indicate the source location. (*UTF = Unicode Transformation Format)
        17. If we perform SHR 4 on the character 'm' in the Unicode HTML UTF-8, what character will be produced?
        18. If we perform ROL 3 on the character 'm' in the Unicode HTML UTF-8, what character will be produced?

B. Score Distribution and Scoring Rubric: Total points = 200

pts	#1 - #16	#17 and #18
20		Correct with a description on how the HTML UTF-8 table is searched and found and with the source/resource location indicated.
15		Correct with the source/resource location indicated, but without a description on how the HTML UTF-8 table is searched and found.
10	Correct with calculation neatly displayed	Incorrect (partially correct) with a description on how the HTML UTF-8 table is searched and found and with the source/resource location indicated.
7	Partially correct with calculations neatly displayed	Incorrect (partially correct) with the source/resource location indicated, but without a description on how the HTML UTF-8 table is searched and found.
5	Correct without calculation	Correct with the final answer only
0	Incorrect without calculation	Incorrect with the final answer only

C. Submission: Electronic copy (file) of your work via email or Slack.   Name your file as follows: **Assign01_LastName.xxx** (xxx being file type such as docx, doc, pdf, png, etc.)

D. Submission due: 8:00pm Wednesday Sept. 8

E. Extension Request of Submission: Usually granted upon request. Note – the last day of the extended submission is Friday of the week of the original submission due date.