CSC 2010 – Fall 16 Homework #3 Due 09/26/2016 @11.59 pm

Submission Requirements

You must turn work at the SPECIFIED TIME so you can receive credit for Homework!

Homework must be submitted on desire2learn by the due date and time. Late homework will be subject to a penalty, as stated in the course grading policy. No email or hard copies of homework will be accepted.

You may discuss the assignments with other students in the class, but (as stated in the academic honesty policy) your written answers **must be your own**, and you must list the names of other students you discussed the assignment with.

How to Submit

Log into D2L (desire2learn.gsu.edu), select the class to view its drop box folders, select the correct folder for the given assignment and upload the file there.

You will get a confirmation email. Please <u>save the</u> <u>conformation email</u> in the event something goes wrong, for example work was submitted to the wrong folder etc...,

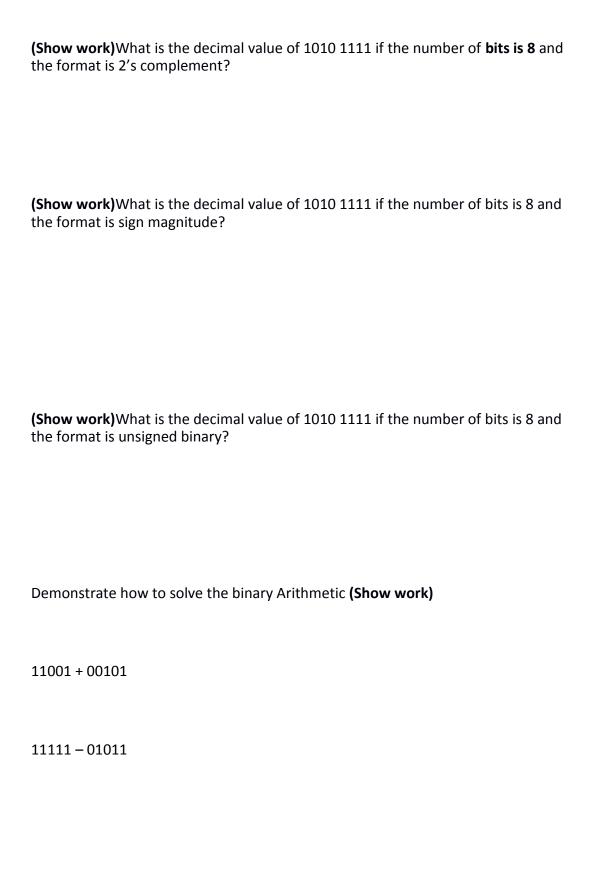
- 1. You can print homework do it by hand then
- 2. Upload work to D2L download
- 3. use this free phone app

4. CamScanner - Phone PDF Creator

Two's Complement

1. As it pertains to representing integers use a total of 7 bits to represent each number. Please demonstrate how to represent the integer values of 23 and -23 in signed magnitude and using 2's complement integers.
2. What are the 4-bit patterns used to represent each of the characters in the string "2010"? Only represent the characters between the quotation marks.) Note: There is space between 2010.
3. Demonstrate how to convert the following 2's complement binary numbers to decimal.
A) 0110
B) 01101111

4. Demonstrate how to convert the given decimal numbers to 10-bit 2's complement numbers:
A) 406
D) 406
B) -406
5. Demonstrate how to get the decimal values for the following 8-bit unsigned binary numbers:
A) 11010010
D) 01011001
B) 01011001
4. Decreased and a first and a
 Demonstrate how and give the decimal values for the following 8-bit 2's complement numbers:
a. 11010010
b. 01011001
J. 01011001



Demonstrate how to solve the hexadecimal Arithmetic (Show work)
1)
82CD
+ 1982
A31
+ E2C
E2C
- A31
Bonus
Show the unsigned binary number 1010 1010 1010.1010 in decimal? (Show work)