Homework 1
Due: Friday, September 6th

Note: HW is due by 4 pm and should be delivered to Ms. Edwina McKay @ LAR217.

1. What is 10101111 in decimal if the number of bits is 8 and the format is 1’s complement?
2. What is 10101111 in decimal if the number of bits is 8 and the format is 2’s complement?
3. What is 10101111 in decimal if the number of bits is 8 and the format is sign magnitude?
4. What is 10101111 in decimal if the number of bits is 8 and the format is unsigned binary?
5. What is 97 decimal expressed as a BCD number?
6. What is the unsigned binary number 101010101010.1010 in decimal?
7. What is 7052 decimal expressed as a hex number?
8. What is 7052 decimal expressed as a binary number?
9. What is 7052 decimal expressed as an octal number?
10. What is “Dr. Gugel” in ASCII code? Note: Only code what is inside the quotes.
11. How many possible combinations are there in 4 bits? 7 bits? 10 bits?
12. What are the largest possible unsigned binary numbers for the bit lengths given in #11?

M & M Problems: 2.2, 2.4, 2.5, 2.8, 2.11, 2.13

SHE Problems: 2.1, 2.4, 2.5 a,b,c, 2.6, 2.7, 2.10