ASSIGNMENT 1

1. What is the exact number of bytes in a system that contains (a) 32K bytes, (b) 64M bytes, and (c) 6.4G bytes?
2. The solutions to the quadratic equation $x^2 - 11x + 22 = 0$ are $x = 3$ and $x = 6$. What is the base of the numbers?
3. Express the following numbers in decimal:
   (a) $(10110.0101)_2$
   (b) $(16.5)_{16}$
   (c) $(26.24)_8$
4. Decode the following ASCII code:
1010011 1110100 1100101 1110110 1100101 0100000 1001010 1101111 1100010 1110011.
5. Given the two binary numbers X = 1010100 and Y = 1000011, perform the subtraction X - Y and Y - X by using 2's complement.