Assignment (Unit-1)

1. What is digital computer? Explain components of digital computer with block diagram.
2. Difference between analog and digital signals.
3. If A = 61.25 and B =32.75 then perform B-A using 1's and 2's complement.
4. Convert the following
   a. $(1893.22)_{10}$ to Octal
   b. $(603.25)_8 = (?)_{BCD}$
   c. (1110) gray=$(?)BCD$
   d. $(1430)_{10}=(?)$Excess-3
   e. $(101001001)_2=(?)_{gray}$
   f. $(93)_{10}=(?)$Excess-3
   g. $(AB.0F)_{16}$ to Binary
   h. $(67.51)_8$ to Hexadecimal
   i. $(1001.011)_{10}$ to Binary
   j. $(2040.0001953125)_{10}$ to binary, octal and hexadecimal
5. Subtract $675.6 - 456.4$ using both 10th and 9th complement.
6. What is the weight of 0 in binary number 10111?
7. Decimal numbers are weighted number. Justify it.
8. Why alphabets are used to represent number above 9 in hexadecimal number system?
9. Explain briefly about all binary codes with example.