EEE/CPE 64 PAL Worksheet

CODES WORKSHEET

1) Convert the decimal number $(6754)_{10}$ to Binary Coded Decimal (BCD).

2) Represent the unsigned decimal numbers $(7326)_{10}$ and $(9643)_{10}$ in BCD, and then perform their sum.

3) Is excess three a weighted or an unweighted code? What value is added to the binary value to obtain excess 3 code?

4) What is the advantage of gray code over binary number sequence?

5) What is the decimal equivalent of gray code 0100?

6) Represent the decimal number 745283 in excess-3 code.

7) What are weighted codes? Give examples of weighted codes.

8) Given a number: 0011 1001 0110.
   What is its value if it represents:
   (a) Three decimal digits in BCD?
   (b) Three decimal digits in the excess-3 code?
   (c) Three decimal digits in the 8-4-2-1 code?
   (d) A binary number?