# King Fahd Univesity of Petroleum \& Minerals Department of Electrical Engineering 

> EE200-03\&04

## Homework \# 2

1. Find the ( $\mathrm{r}-1$ )'s complements of the following numbers: $(24500.375)_{10},(\mathrm{~F} 96.8)_{16},(1011000)_{2}$, and $(100100.011)_{2}$.
2. Perform the binary subtraction $110110-10101.011$ using the 2's complement.
3. Represent the signed numbers (-75) and (+52) in binary using 8 bits. Then add the two numbers and convert the sum to decimal.
4. Represent the decimal number 482.5 using BCD and 84-2-1 codes.
5. Represent the message "Quiz 2 is next class" in ASCII using the hexadecimal representation.
