

EE302 Problem Set 16

1. Fill in the blanks by performing the necessary conversions: $\left\{ \begin{array}{l} \text{Binary} \\ \text{Decimal} \\ \text{Hexadecimal} \end{array} \right. \begin{array}{l} \blacktriangleright \text{Decimal or Hexadecimal} \\ \blacktriangleright \text{Binary or Hexadecimal} \\ \blacktriangleright \text{Binary or Decimal} \end{array}$

BINARY	DECIMAL	HEXADECIMAL
11	3	03
00001001	9	09
100001	33	21
101110	46	2E
01001010	74	4A
01111111	127	7F
10001001	137	89
11111111	255	FF

2. Perform the following BINARY calculations:

- a. $00000011 + 00001001 = 00001100$
- b. $00001111 + 00000001 = 00010000$
- c. $00101110 + 01001010 = 01111000$

3. Perform the following HEXADECIMAL calculations:

- a. $02 + 09 = 0B$
- b. $0F + 01 = 10$
- c. $2E + 4A = 78$