ASSIGNMENT 2
Number Systems and Boolean Algebra

1. Calculate hamming code for 1011011
2. Perform BCD addition for the following.
    1. 656 + 168
    2. 359 + 249
3. Find the following.
    1. 10's complement and 11's complement of $3A4_{11}$
    2. 5's complement and 6's complement of 435_{6}
4. Describe the block diagram of digital computer.
5. Perform the following conversion
    1. $(674.20)_8$ = (_____)$_{10}$
    2. $(8A5DE.7C)_{16}$ = (_____)$_2$
    3. $(754.4)_{10}$ = (_____)$_2$
6. Explain De Morgan Theorem with truth table.
7. Perform the following conversion
    1. $(667.20)_{10}$ = (_____)$_8$
    2. $(11100111001100.111100)_2$ = (_____)$_{16}$
    3. $(1101010.01)_2$ = (_____)$_{10}$
8. From the truth table below, determine the standard SOP and POS expression.

Inputs			Output
A	B	C	X
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0