

# DLD Sessional-04

# Design 4-bit Binary to Gray Converter

Q1 Design a 4bit Binary to Gray Converter

Truth Table :

<u>Input (Binary)</u>				<u>output (Gray Code)</u>			
A	B	C	D	W	X	Y	Z
0	0	0	0	0	0	0	0
0	0	0	1				

$$W = A$$

$$X = A \oplus B$$

$$Y = B \oplus C$$

$$Z = C \oplus D$$

# Design 4-bit 2's Complement

Q Design a 4 bit- 2's complement circuit

Truth Table:

<u>Input (Binary)</u>				<u>1's Complement</u>	<u>2's Complement</u>
A	B	C	D		W X Y Z
0	0	0	0		
0	0	0	1		