Experiment Name: Gray to Binary and Binary to Gray conversion.

Binary to Gray conversion.

Roll: 1710776121

Session: 2016-17

Course: CSE-2112

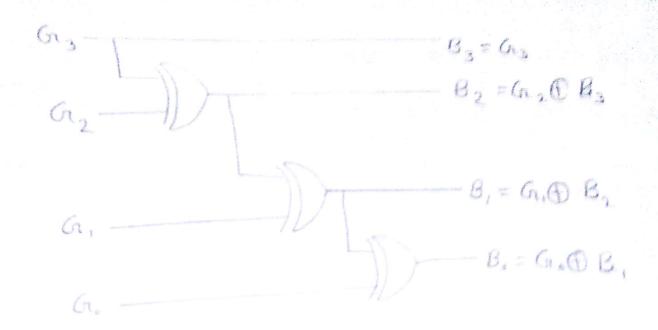
Date: 26-02-2018

Theory: Gray to Binary conversion.

Theory: Gray to Binary conversion is a his which a number conversion system by which we can convert a gray code to equivalent binary. In 4-bit gray to binary conversion we have to take four saperate inputs as MSB to LSB corresponding. Then we have to draw a circuit to get 4 out puts as 4 binary digit. Inputs and outputs will be verified while the binary will be some to equivalent gray code.

Instruments: wine, bread-board, power source and IC-7486.

circuit:



Truth Toble:

Gra	Gra	G_{1}	Gro	Verification	B3	B2	в,	в.
0	0	0	0	1	0	0	0	D
		0	1		0	0	0	1
0	0	1	1	1	0	0	١	0
	0	1	0	V	0	0	(1
0	0	- '-	0	1	0	1	0	0
0	1	1	1	2	0	1	0	1
0	1	O	1	1	0	1	1	O
00	1	0	0		0	0	0	0
1	1	0	0	V	1	The state of the s		1
1	1	0	1	V	and the second s	0	O	and the second
	L	1	1	2		0_		0
11	1	1	0	V		0		erage in the content
The second secon	0	1	0	V	_!_!		0	Alaman Sandagarinden
The state of the s	0	1	And Andrew	1	na staning in particular		U	e and the second
11	0	0	1	V		and the same of th		0
11	D	6	6	V		ence have been been a second	1	a reconstruction of

Result and discussion: From the circuit we have designed the results we got is similar to equivalent binary of the given gray code. So the circuit and equations are paight, right.

pre-coustion.

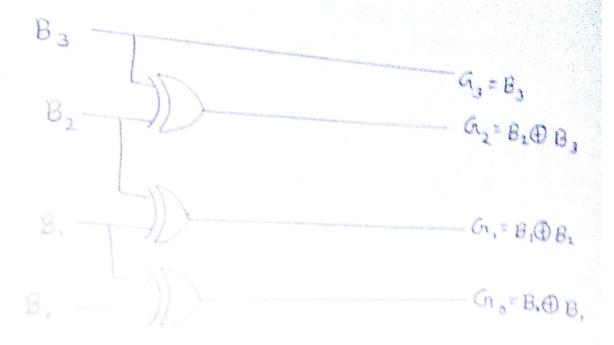
- 1. commect the circuit when design is complete.
- 2. Please cheack the circuit befor connecting.
 - 3. Ware shoes in the lab.
 - 4. After finishing experiment switch off the power source.

Enperiment: Binary to Gray conversion.

Theory: Binary to Gray conversion opose to gray to binary conversion. By binary to gray conversion we can get equivalent equivolent gray code of given binary. In 4-bit & binary to gray conversion we have to take 4 separate inputs as MSB to LSB corresponding. Then we have to see if the results are equivalent.

Instruments. wife, bread-board. power source and IC-7486.

Circuit:



Truth Table:

B_3	B3	B,	Bo	Verification	1	-	0	
0	0	0	0	11101101		G1 2	G,	G,
0	0	The same of the sa			0	0	0	0
0	0	0			0	0	D	1
With the Co. of the Co.	and the same of the same of	1	0		0	0	1	1
0	0	(1	0	0	1	0
0	1	0	D	Landan	0	1	-	0
0	1	0	1	L		1	-	10
O	1	1	0	_	0		^	
0	1	1	(1	00	-	0	-
1	0	0	0	The second secon	1	and the same of th		0
1	0	0		A STATE OF THE PARTY OF THE PAR			0	0
1	0	1	D	A second		4	0	
i	0	1	1	Name of the last o	-			. !
1	1	0	0	of materials were designed as a second of the second of th	- Constant			0
1	1	0	1	The state of the s	· ·	0	o es Îsta Î	0
1	one was required to	and the same of		retrooperation of the sequence	ones, dic	U	1	1
11		1	0	Control of the Contro	1	O	0	1
emassis d	an electrical designation of the		11	Laminoralin	1	0	0	0

Result and discussion: From the circuit we have designed the results we got is similar to equivalent gray code of given binary. So the circuit and equations are all right.

Pre-coustion:

- 1. Connect the circuit when design is complete.
 - 2. Please cheach the circuit before connecting.
 - 3. Ware shoes in the lab.
 - 4. After finishing experiment swith off the power source.