Pre-lab Part 3 Truth tables

c3	c2	c1	c0	HEX0	HEX1	HEX2	HEX3	HEX4	HEX5	HEX6	Character
0	0	0	0	0	0	0	0	0	0	1	0
0	0	0	1	1	0	0	1	1	1	1	1
0	0	1	0	0	0	1	0	0	1	0	2
0	0	1	1	0	0	0	0	1	1	0	3
0	1	0	0	1	0	0	1	1	0	0	4
0	1	0	1	0	1	0	0	1	0	0	5
0	1	1	0	0	1	0	0	0	0	0	6
0	1	1	1	0	0	0	1	1	1	1	7
1	0	0	0	0	0	0	0	0	0	0	8
1	0	0	1	0	0	0	1	1	0	0	9
1	0	1	0	0	0	0	1	0	0	0	A
1	0	1	1	1	1	0	0	0	0	0	b
1	1	0	0	0	1	1	0	0	0	1	C
1	1	0	1	1	0	0	0	0	1	0	d
1	1	1	0	0	1	1	0	0	0	0	E
1	1	1	1	0	1	1	1	0	0	0	F

K-map for Hex0

	c1'c0'	c1'c0	c1c0	c1c0'
c3'c2'	0	1	0	0
c3'c2	1	0	0	0
c3c2	0	1	0	0
c3c2'	0	0	1	0

$$\bar{C_3}\bar{C_2}\bar{C_1}C_0 + \bar{C_3}C_2\bar{C_1}\bar{C_0} + C_3C_2\bar{C_1}C_0 + C_3\bar{C_2}C_1C_0$$

K-map for Hex1

	c1'c0'	c1'c0	c1c0	c1c0'
c3'c2'	0	0	0	0
c3'c2	0	1	0	1
c3c2	1	0	1	1
c3c2'	0	0	1	0

$$C_3C_2\bar{C_0} + \bar{C_3}C_2\bar{C_1}C_0 + C_3C_1C_0 + C_2C_1\bar{C_0}$$

Pre-lab Part 3 Truth tables

K-map for Hex2

	c1'c0'	c1'c0	c1c0	c1c0'
c3'c2'	0	0	0	1
c3'c2	0	0	0	0
c3c2	1	0	1	1
c3c2'	0	0	0	0

$$C_3 C_2 C_1 + C_3 C_2 \overline{C_0} + \overline{C_3}\,\overline{C_2} C_1 C_0$$

K-map for Hex3

	c1'c0'	c1'c0	c1c0	c1c0'
c3'c2'	0	1	0	0
c3'c2	1	0	1	0
c3c2	0	0	1	0
c3c2'	0	1	0	1

$$\overline{C_2} C_1 C_0 + C_2 C_1 C_0 + \overline{C_2} C_2 \overline{C_1}\,\overline{C_0} + C_3 \overline{C_2} C_1 \overline{C_0}$$
$$\equiv$$

K-map for Hex4

	c1'c0'	c1'c0	c1c0	c1c0'
c3'c2'	0	1	1	0
c3'c2	1	1	1	0
c3c2	0	0	0	0
c3c2'	0	1	0	0

$$\overline{C_1} C_2 \overline{C_3} + \overline{C_3} C_0 + \overline{C_2}\,\overline{C_1} C_0$$

K-map for Hex5

	c1'c0'	c1'c0	c1c0	c1c0'
c3'c2'	0	1	1	1
c3'c2	0	0	1	0
c3c2	0	1	0	0
c3c2'	0	0	0	0

$$\overline{C_3}\,\overline{C_2} C_0 + \overline{C_3} C_1 C_0 + \overline{C_3}\,\overline{C_2} C_1 + C_3 C_2 \overline{C_1} C_0$$

K-map for Hex6

	c1'c0'	c1'c0	c1c0	c1c0'
c3'c2'	1	1	0	0
c3'c2	0	0	1	0
c3c2	1	0	0	0
c3c2'	0	0	0	0

$$\overline{C_3}\,\overline{C_2}\,\overline{C_1} + \overline{C_3} C_2 C_1 C_0 + C_3 C_2 \overline{C_1}\,\overline{C_0}$$