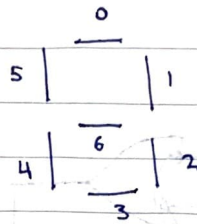


# Lab 9

## Part 4:

$\square \rightarrow 1, 2, 3, 4, 6$   
 $\equiv \rightarrow 0, 3, 4, 5, 6$   
 $| \rightarrow 1, 2$



(Its all complemented)  $d \rightarrow \overline{C_1} \overline{C_0} \rightarrow \overline{C_1} \cdot \overline{C_0} \rightarrow C_1 + C_0$   
 $E \rightarrow \overline{C_1} C_0 \rightarrow C_1 + \overline{C_0}$   
 $I \rightarrow C_1 \overline{C_0} \rightarrow \overline{C_1} + C_0$

## Part 5:

		Hex		1		0	
SW <sub>9</sub>	8	2	cc				
0	0	d	00	E	01	1	<del>10</del>
0	1	E	00	1	01	d	10
1	0	1	00	d	01	E	10

$$M(i) = (\overline{S_0} \overline{S_1}) V(i) + (\overline{S_0} S_1) W(i) + (S_0 \overline{S_1}) V(i)$$

Mux 2bit 3to1 (S, U, V, W, M)

$\rightarrow \text{HEX0} \rightarrow S_{9-8}, \overline{S_{1-0}}, S_{5-4}, S_{3-2}, M$

$\rightarrow \text{HEX1} \rightarrow S_{9-8}, S_{5-4}, S_{3-2}, S_{1-0}, M$

$\rightarrow \text{HEX1} \rightarrow S_{9-8}, S_{3-2}, S_{1-0}, S_{5-4}, M$