

Report for Comp 242 Assignment 2

Truth Table

Input			Output						
E_2	E_1	E_0	S_1	S_2	S_3	S_4	S_5	S_6	S_7
0	0	0	0	1	1	1	1	1	1
0	0	1	0	0	0	1	0	0	1
0	1	0	1	0	1	1	1	1	0
1	0	0	1	1	0	1	0	0	1
0	1	1	1	0	1	1	0	1	1
1	0	1	1	1	1	0	0	1	1
1	1	0	1	1	1	0	1	1	1
1	1	1	0	0	1	1	0	0	1

$$S_1 = E_2 E_1 + E_2 \bar{E}_1 + \bar{E}_2 E_2$$

$$S_2 = E_2 \bar{E}_1 + E_1 \bar{E}_0 + \bar{E}_0 \bar{E}_1$$

$$S_3 = E_1 + E_2 \bar{E}_0 + E_1 E_0$$

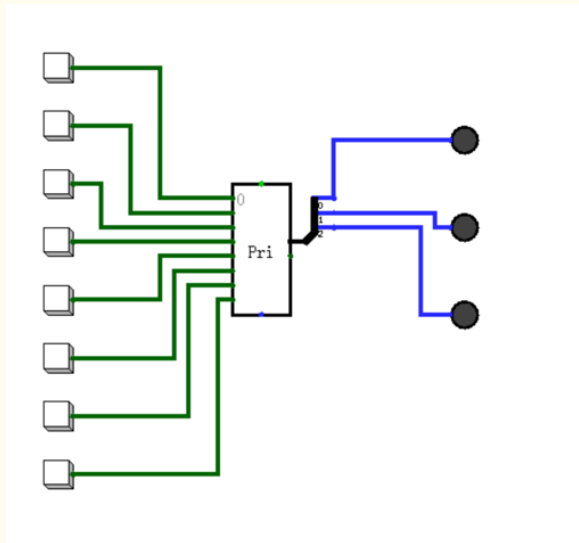
$$S_4 = E_1 + \bar{E}_0 \bar{E}_1 + E_2 E_1$$

$$S_5 = \bar{E}_0 \bar{E}_2 + \bar{E}_0 E_1$$

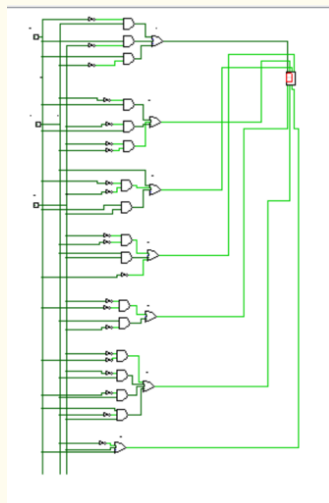
$$S_6 = E_2 E_1 E_0 + \bar{E}_2 E_1 + \bar{E}_0 E_1 + \bar{E}_0 \bar{E}_2$$

$$S_7 = \bar{E}_0 + \bar{E}_1 + \bar{E}_2$$

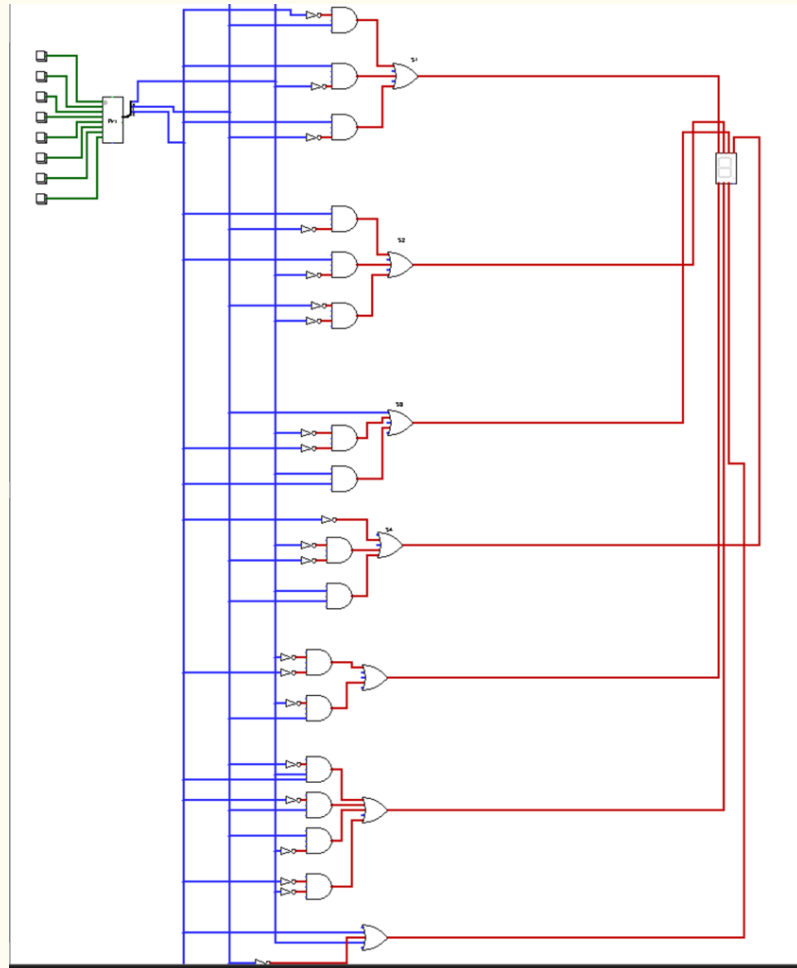
Subtask 1 :



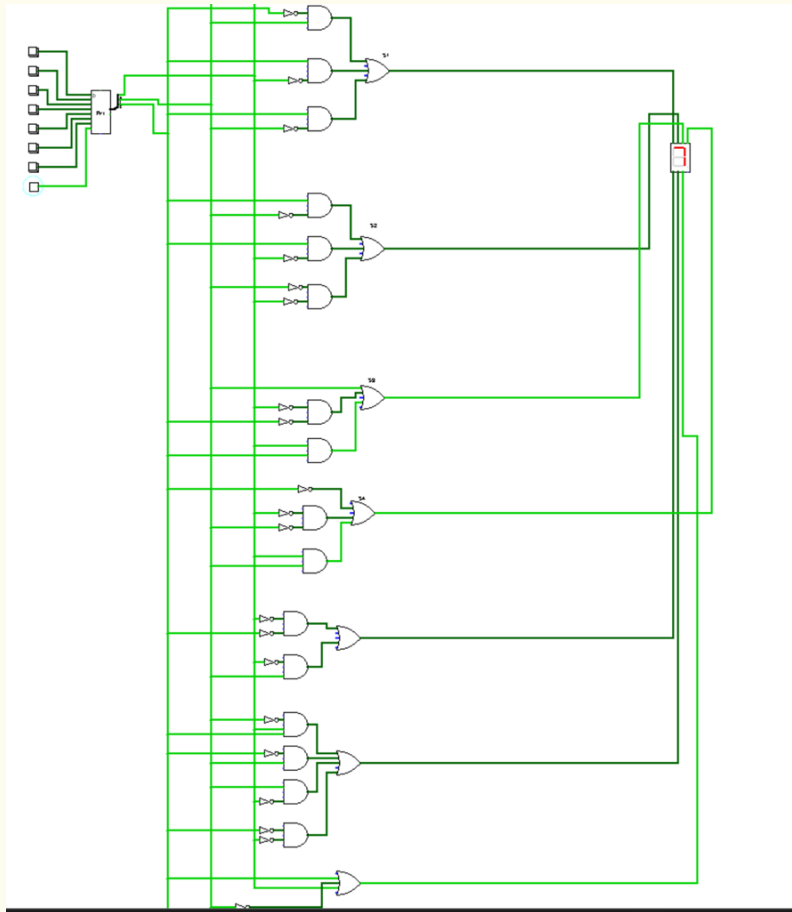
Subtask 2 :



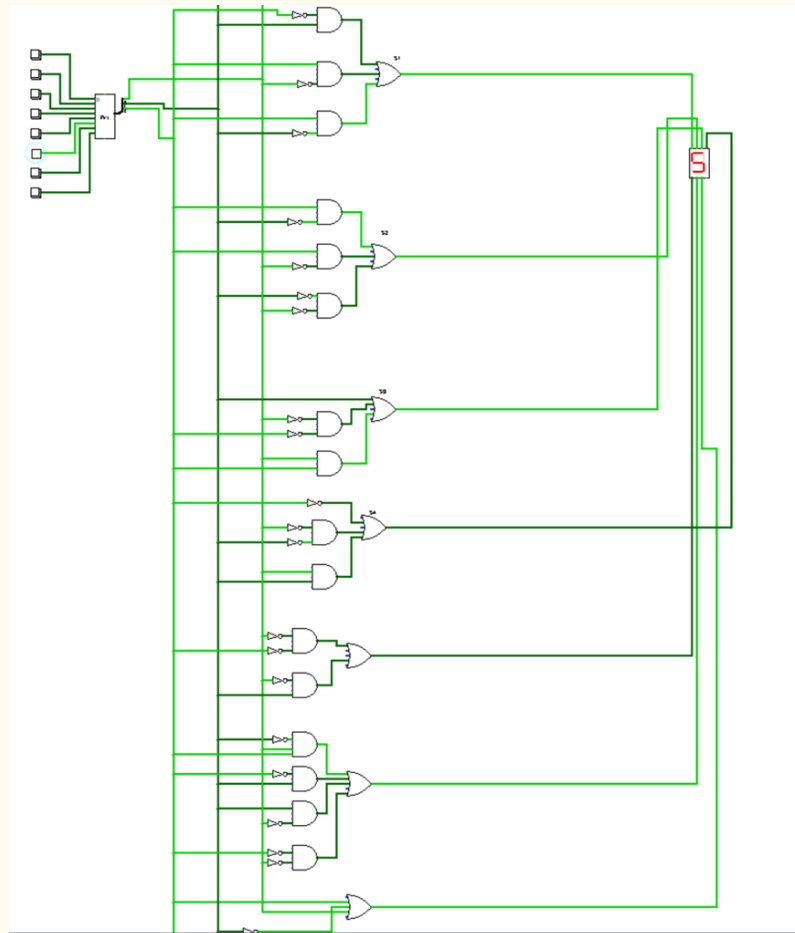
Subtask 3



Test Case 1



Test Case 2



Test Case 3

