Assignment 01

Team 44

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Course Code CSE 231.L

Section- 04

Let,

Study Table=A

Couches = B

Shelf= C

Desk= D

A	B	C	D	X	Min Term
0	0	0	0	0	
0	0	0	1	0	
0	0	1	0	0	
0	0	1	1	1	
0	1	0	0	0	
0	1	0	1	1	
0	1	1	0	0	
0	1	1	1	0	
1	0	0	0	0	
1	0	0	1	1	
1	0	1	0	0	
1	0	1	1	0	
1	1	0	0	0	
1	1	0	1	0	
1	1	1	0	0	
1	1	1	1	0	

Here We Find, Min Term= $Y(A,B,C,D) = \sum m (3,5,9)$

By using K Map We Find,

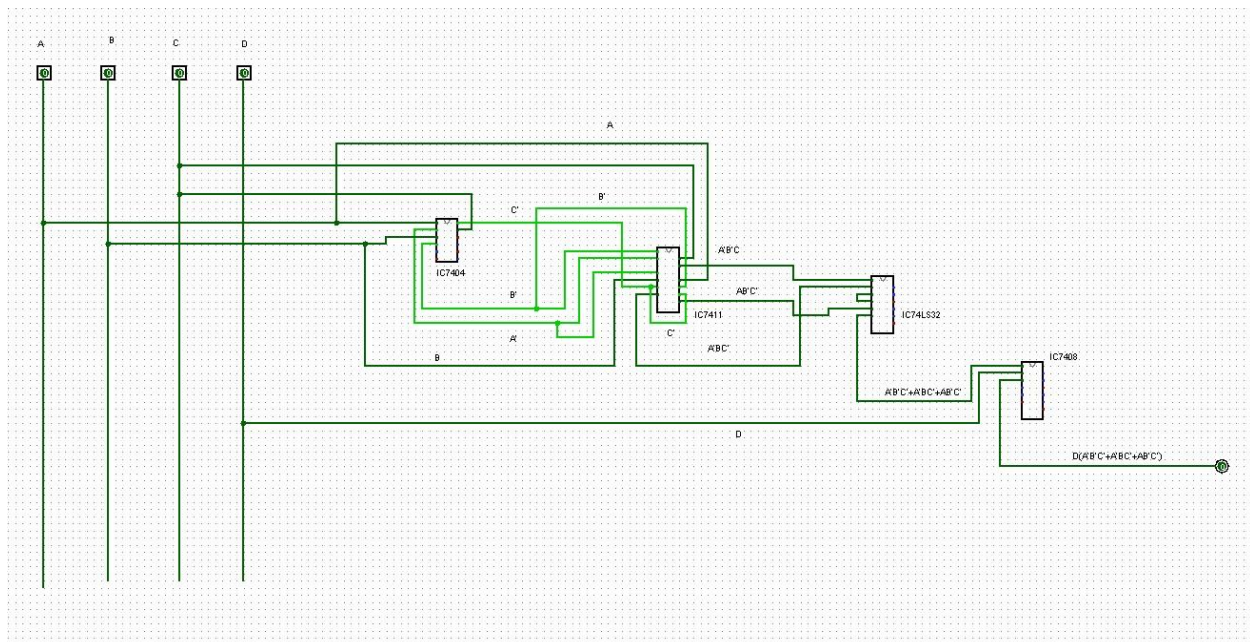| CD	00		01		11		10	
AB								
00	0	m0	0	m1	1	m3	0	m2
01	0	m4	1	m5	0	m7	0	m6
11	0	m12	0	m13	0	m15	0	m14
00	0	m8	1	m9	0	m11	0	m10

From This K Map, we get,

F = I+II+III

= A'B'CD+A'BC'D+AB'C'D

=D (A'B'C+A'BC'+AB'C')

Logisim Diagram

Draft Report:- Here I make the truth table based on the question. After that, I used a k map to find the equation. Then I implemented the equation in Logisim.