

DIGITAL SYSTEM LABORATORY WORK
MOUL 10 : IMPLEMENTASI DECORDER



BY:

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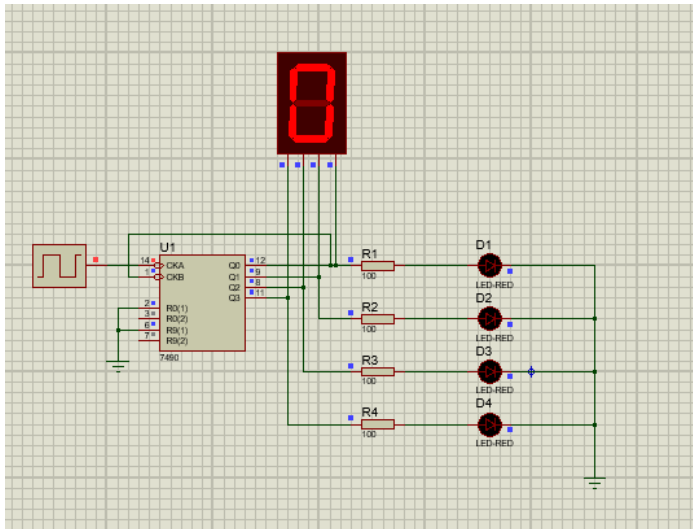
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Assistent Name : Salsa Sasmita Mukti

Date of Day : May 31, 2019

ATTEMPT 1

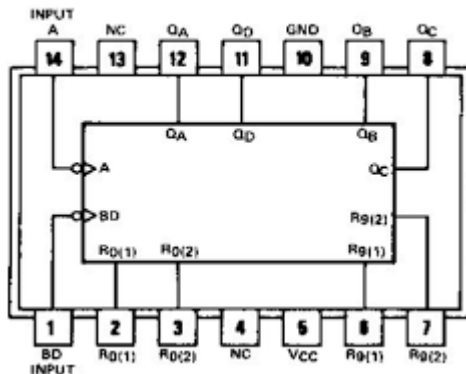


INPUT CLOCK	OUTPUT LED				OUTPUT SEVEN SEGMENT
	D1	D2	D3	D4	
1.	0	0	0	0	0
2.	1	0	0	0	1
3.	0	1	0	0	2
4.	1	1	0	0	3
5.	0	0	1	0	4
6.	1	0	1	0	5
7.	0	1	1	0	6
8.	1	1	1	0	7
9.	0	0	0	1	8
10.	1	0	0	1	9
11.	0	0	0	0	0
12.	1	0	0	0	1
13.	0	1	0	0	2

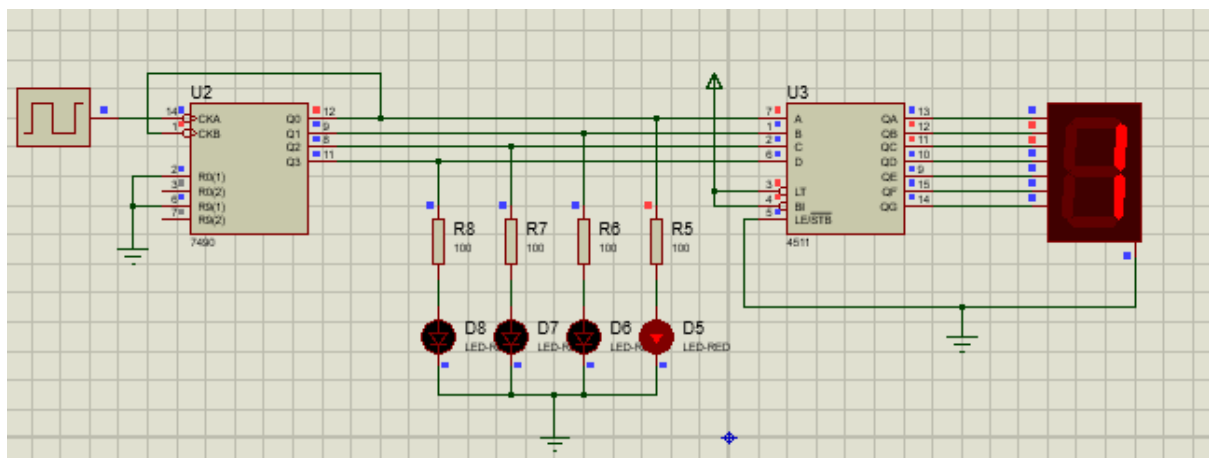
ASSIGMENT

Reference about IC 7490 of the data sheet

7490



ATTEMPT 2

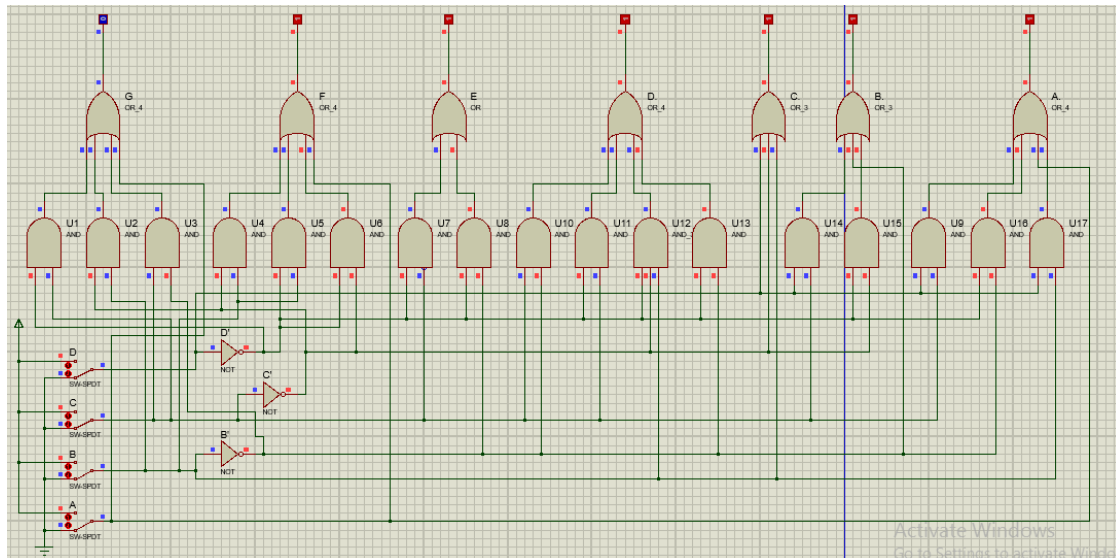


INPUT CLOCK	OUTPUT LED				OUTPUT SEVEN SEGMENT
	D1	D2	D3	D4	
1.	0	0	0	0	0
2.	1	0	0	0	1
3.	0	1	0	0	2
4.	1	1	0	0	3
5.	0	0	1	0	4
6.	1	0	1	0	5
7.	0	1	1	0	6
8.	1	1	1	0	7
9.	0	0	0	1	8
10.	1	0	0	1	9

Whether that 7seg-BCD same with BCD-to-7segment decoder? (yes / not)

From attempt 1 and attempt 2 is available sameness the output because the circuit in the attempt 1 is more simple then attempt which use BCD-to-7segment

ATTEMPT 3



DECIMAL DIGIT	INPUT					OUTPUT							DISPLAY OUTPUT
	LT	D	C	B	A	A	B	C	D	E	F	G	
0.	H	L	L	L	L	H	H	H	H	H	H	L	0
1.	H	L	L	L	H	L	H	H	L	L	L	L	1
2.	H	L	L	H	L	H	H	L	H	H	L	H	2
3.	H	L	L	H	H	H	H	H	H	L	L	H	3
4.	H	L	H	L	L	L	H	H	L	L	H	H	4
5.	H	L	H	L	H	H	L	H	H	L	H	H	5
6.	H	L	H	H	L	L	L	H	H	H	H	H	6
7.	H	L	H	H	H	H	H	H	L	L	L	L	7
8.	H	H	L	L	L	H	H	H	H	H	H	H	8
9.	H	H	L	L	H	H	H	H	L	L	H	H	9
LT	L	X	X	X	X	H	H	H	H	H	H	H	8

INPUT				OUTPUT						
A	B	C	D	A	B	C	D	E	F	G
L	L	L	L	H	H	H	H	H	H	L
H	L	L	L	H	H	H	H	H	H	H
L	H	L	L	H	H	H	H	L	H	H
H	H	L	L	H	H	H	H	L	H	H
L	L	H	L	H	H	L	H	H	L	H

H	L	H	L	H	H	L	H	H	H	H
L	H	H	L	H	L	H	H	H	H	H
H	H	H	L	L	L	H	H	H	H	H
L	L	L	H	L	H	H	L	L	L	L
H	L	L	H	H	H	H	L	L	H	H