

Ejercicio 1:

Estados futuros:

Logic Friday

File Operation Truthtable Equation Gates View Help

Funci...	Inputs	Outputs	True	False	DC	PI	Gates
SN0-SN1	3	2	4, 4	4, 4	0, 0	Unmini...	Not mapped
SN1-SN0	3	2	4, 4	4, 4	0, 0	5	Not mapped

S1	S0	SALIDA	=>	SN1	SN0
1	0	X		1	
1	X	0		1	
0	1	1		1	
X	0	1			1
X	1	0			1

Entered by truthtable:

$$SN1 = S1' S0 SALIDA + S1 S0' SALIDA' + S1 S0' SALIDA + S1 S0 SALIDA';$$

$$SN0 = S1' S0' SALIDA + S1' S0 SALIDA' + S1 S0' SALIDA + S1 S0 SALIDA';$$

Minimized:

$$SN1 = S1 S0' + S1 SALIDA' + S1' S0 SALIDA;$$

$$SN0 = S0' SALIDA + S0 SALIDA';$$

Salidas:

Logic Friday

File Operation Truthtable Equation Gates View Help

Funci...	Inputs	Outputs	True	False	DC	PI	Gates
LED2-L...	2	3	1, 2, 3	3, 2, 1	0, 0, 0	3	Not mapped

S1	S0	=>	LED2	LED1	LED0
1	1		1		
X	1			1	
1	X			1	1

Entered by truthtable:

$$LED2 = S1 S0;$$

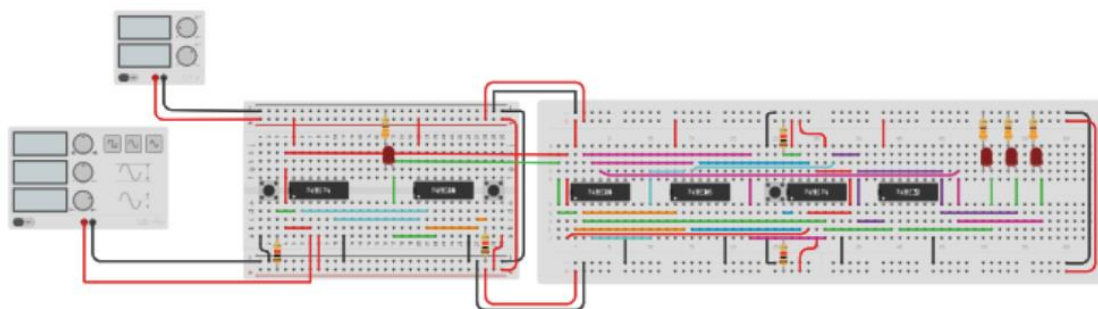
$$LED1 = S1 S0' + S1 S0;$$

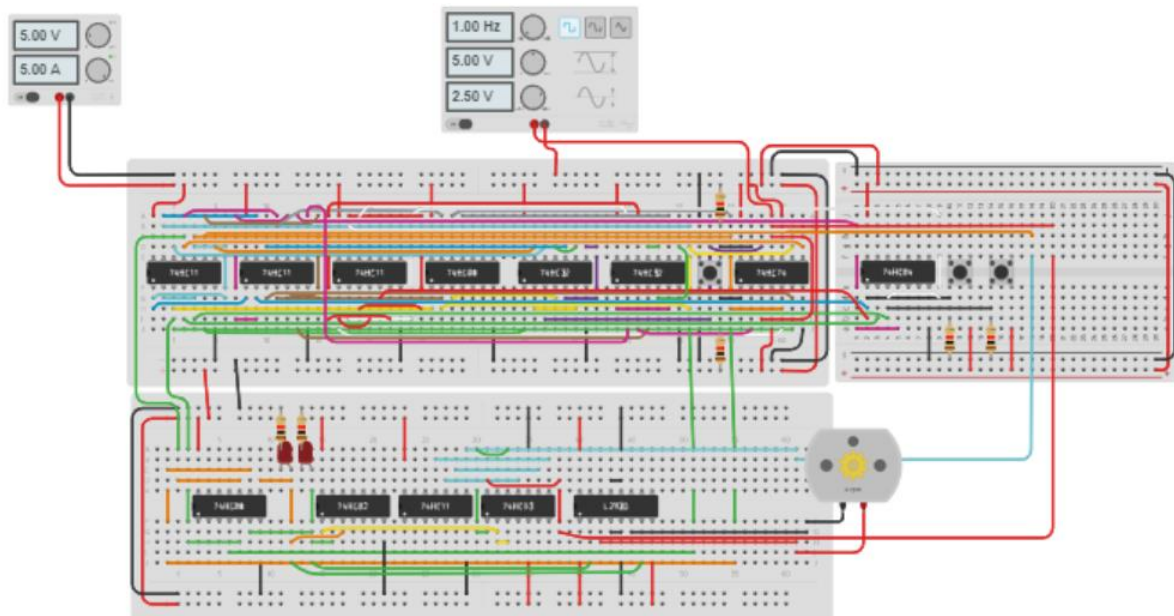
$$LED0 = S1' S0 + S1 S0' + S1 S0;$$

Minimized:

$$LED2 = S1 S0;$$

$$LED1 = S1 ;$$

$$LED0 = S0 + S1 ;$$
Circuito en tinkercad: <https://www.tinkercad.com/things/4x5A2bdkXku>



Ejercicio 3:

Estados:

Logic Friday

Funci...	Inputs	Outputs	True	False	DC	PI	Gates
SN1-SN0	4	2	8, 8	8, 8	0, 0	2	Not mapped

S1	S0	TN1	TN0	=>	SN1	SN0
X	X	X	1			1
X	X	1	X		1	

Entered by truthtable:
 $SN1 = S1' S0' TN1 TN0' + S1' S0'$
 $SN0 = S1' S0' TN1' TN0 + S1' S0'$

Minimized:
 $SN1 = TN1$;
 $SN0 = TN0$;

Salidas:

Logic Friday

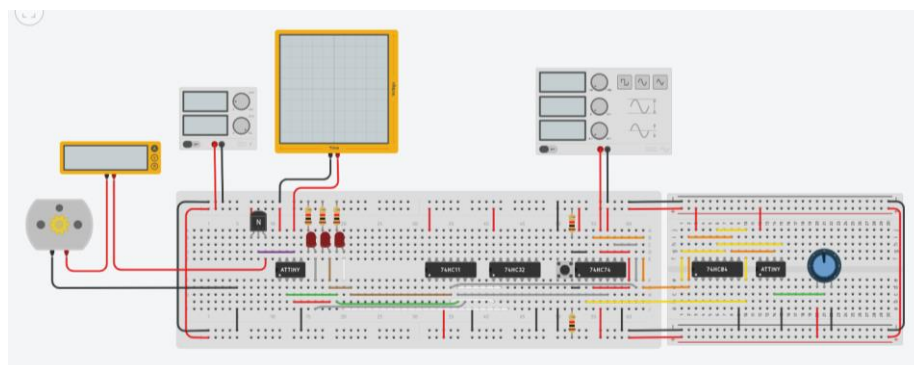
Funci...	Inputs	Outputs	True	False	DC	PI	Gates
SN1-SN0	4	2	5, 5	11, 11	0, 0	5	9
LED2-TI...	2	5	1, 2, ...	3, 2, ...	0, 0, ...	3	Not mapped

S1	S0	=>	LED2	LED1	LED0	TINY2_1	TINY2_0
1	1		1				
X	1			1			1
1	X			1	1	1	

Entered by truthtable:
 $LED2 = S1 S0$;
 $LED1 = S1 S0' + S1 S0$;
 $LED0 = S1' S0 + S1 S0' + S1 S0$;
 $TINY2_1 = S1 S0' + S1 S0$;
 $TINY2_0 = S1' S0 + S1 S0$;

Minimized:
 $LED2 = S1 S0$;
 $LED1 = S1$;
 $LED0 = S0 + S1$;
 $TINY2_1 = S1$;
 $TINY2_0 = S0$;

Circuito en tinkercad: <https://www.tinkercad.com/things/e109C50cCfY>



Link del repositorio: https://github.com/gil19443/Digital_1.git

