



UNIVERSIDAD DE SAN CARLOS DE GUATEMALA
FACULTAD DE INGENIERIA
ESCUELA DE CIENCIAS Y SISTEMAS
ORGANIZACIÓN COMPUTACIONAL
ING. ÁLVARO HERNÁNDEZ
AUX. ROBINSON PÉREZ

PRÁCTICA NO. 1

NOMBRE: DANNY HUGO BRYAN TEJAXÚN PICHYA

CARNET:

2	0	1	9	-	0	8	3	5	5
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FECHA: 09/12/2022

MAPA DE KARNAUGH

A \ BC	00	01	11	10
0	0	0	0	1
1	1	0	1	0

$\bar{A}\bar{B}\bar{C}$

ABC

$\bar{A}B\bar{C}$

$$f(A, B, C) = \bar{A}\bar{B}\bar{C} + \bar{A}B\bar{C} + ABC$$

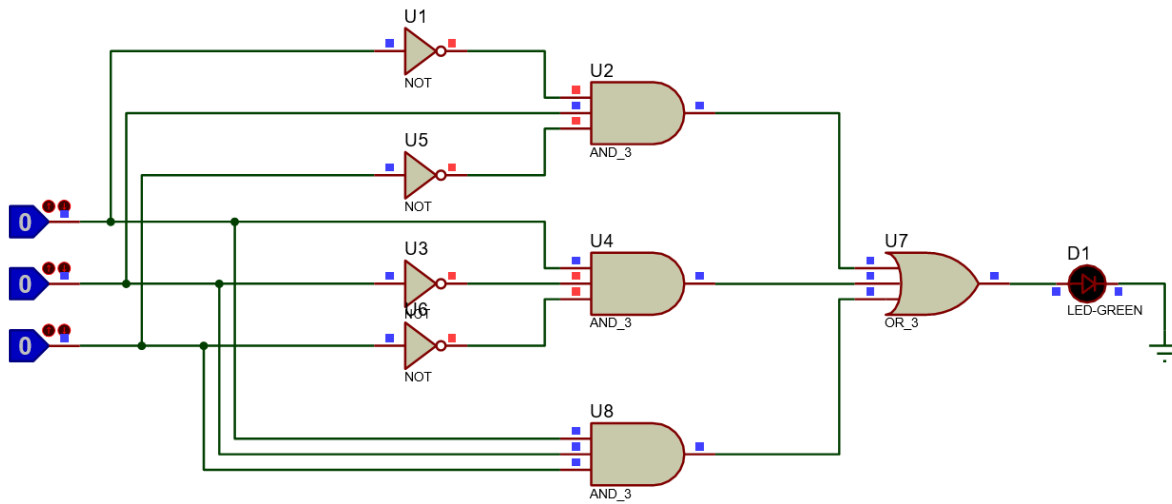
MINITÉRMINOS Y MAXITÉRMINOS

				FORMA NORMAL DISYUNTIVA	FORMA NORMAL CONJUNTIVA
A	B	C	SALIDA	MINITÉRMINOS	MAXITÉRMINOS
0	0	0	0		$A + B + C$
0	0	1	0		$A + B + \bar{C}$
0	1	0	1	$\bar{A}\bar{B}\bar{C}$	
0	1	1	0		$A + \bar{B} + \bar{C}$
1	0	0	1	$A\bar{B}\bar{C}$	
1	0	1	0		$\bar{A} + B + \bar{C}$
1	1	0	0		$\bar{A} + \bar{B} + C$
1	1	1	1	ABC	

$$f(A, B, C) = \bar{A}\bar{B}\bar{C} + \bar{A}B\bar{C} + ABC$$

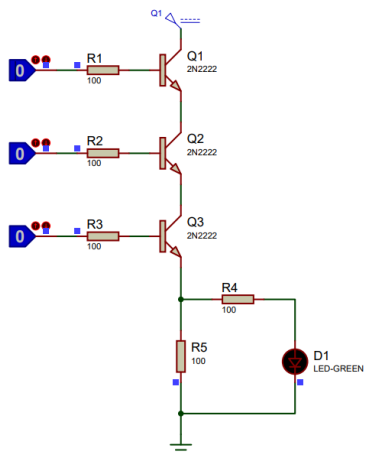
$$f(A, B, C) = (A + B + C)(A + B + \bar{C})(A + \bar{B} + \bar{C})(\bar{A} + B + \bar{C})(\bar{A} + \bar{B} + C)$$

DIAGRAMA DEL CIRCUITO CON COMPUERTAS LÓGICAS

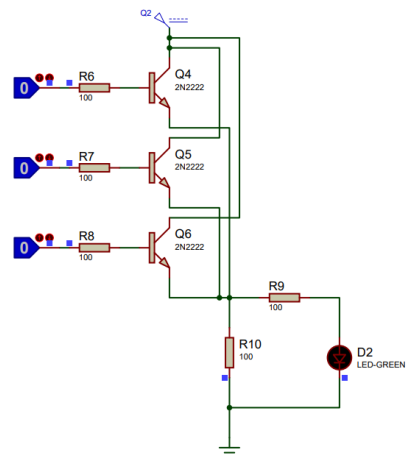


COMPUERTAS LÓGICAS CON TRANSISTORES

AND



OR



NOT

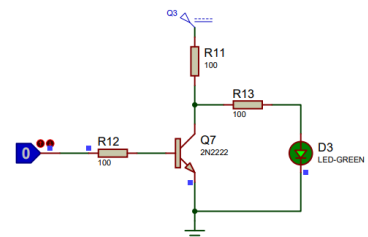
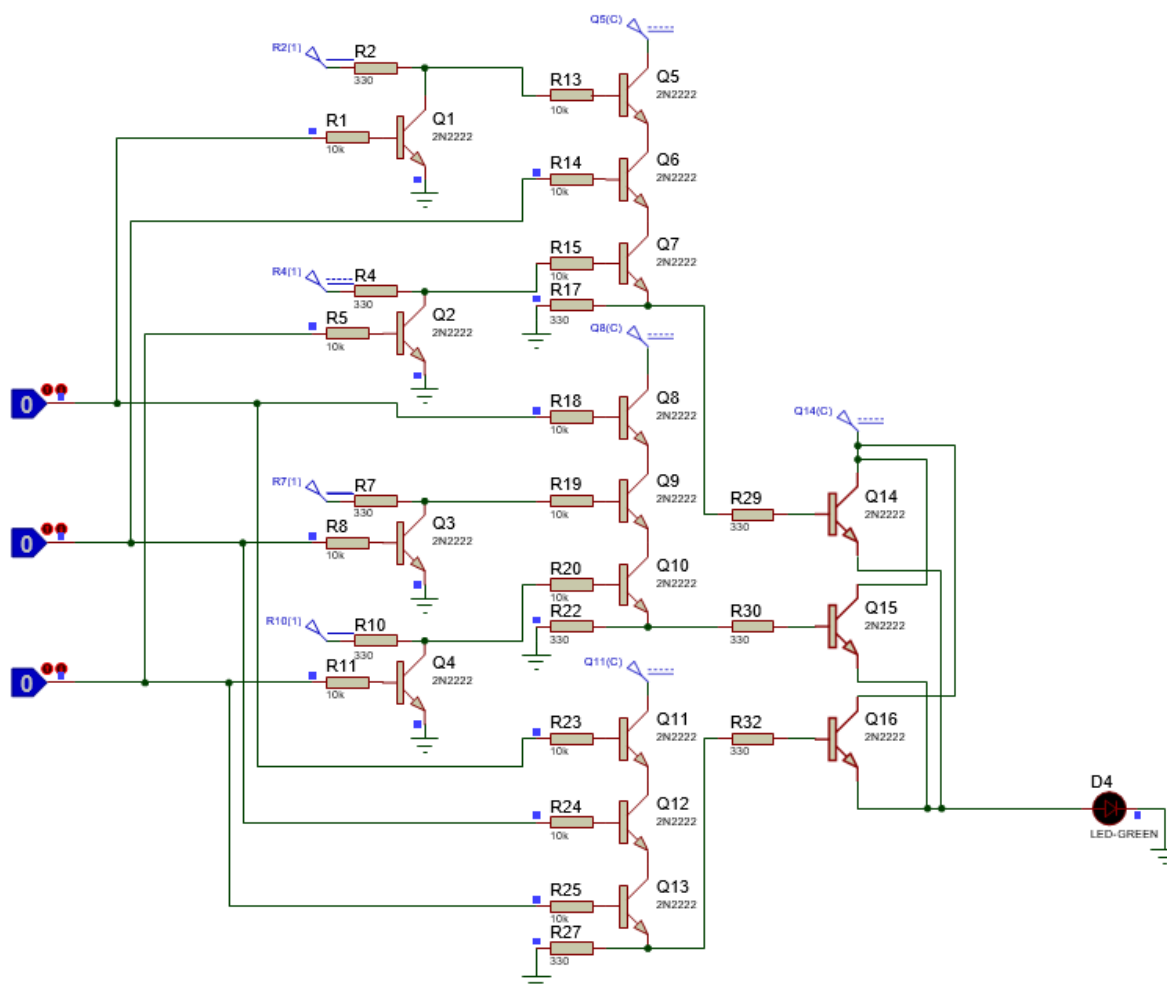
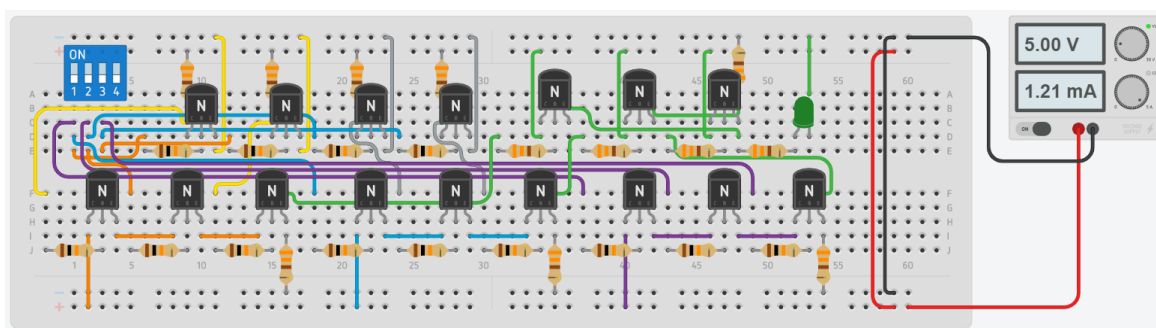


DIAGRAMA DEL CIRCUITO CON TRANSISTORES



SIMULACIÓN DEL CIRCUITO



REPOSITORIO DE GITHUB

https://github.com/bryan967132/Orga_Practica1.git

SIMULACIÓN DEL CIRCUITO

<https://www.tinkercad.com/things/8sfWyPogGOj?sharecode=EMXmGOINTK33ZrOUUcy7ztfuRoRfS7-Fw6509SurUV8>