

Exercício Prático 1

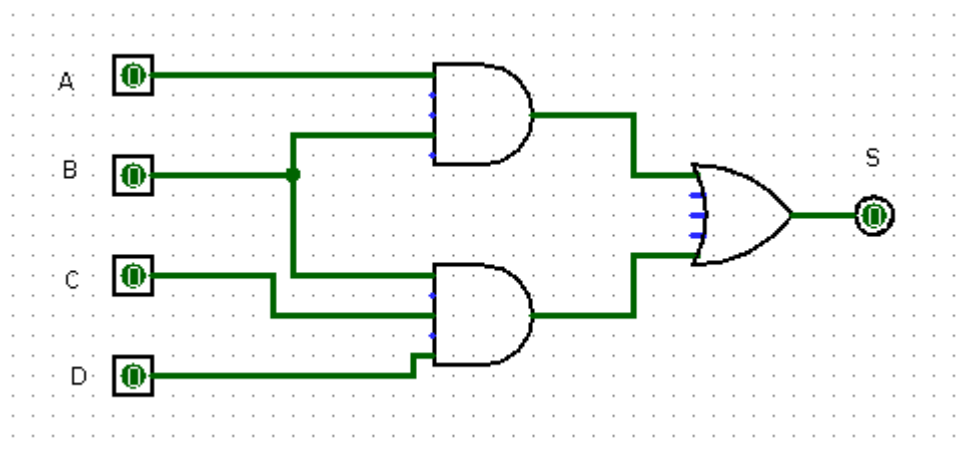
QUESTÃO 1:

TABELA VERDADE				
A	B	C	D	S
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	1
1	0	0	0	0
1	0	0	1	0
1	0	1	0	0
1	0	1	1	0
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

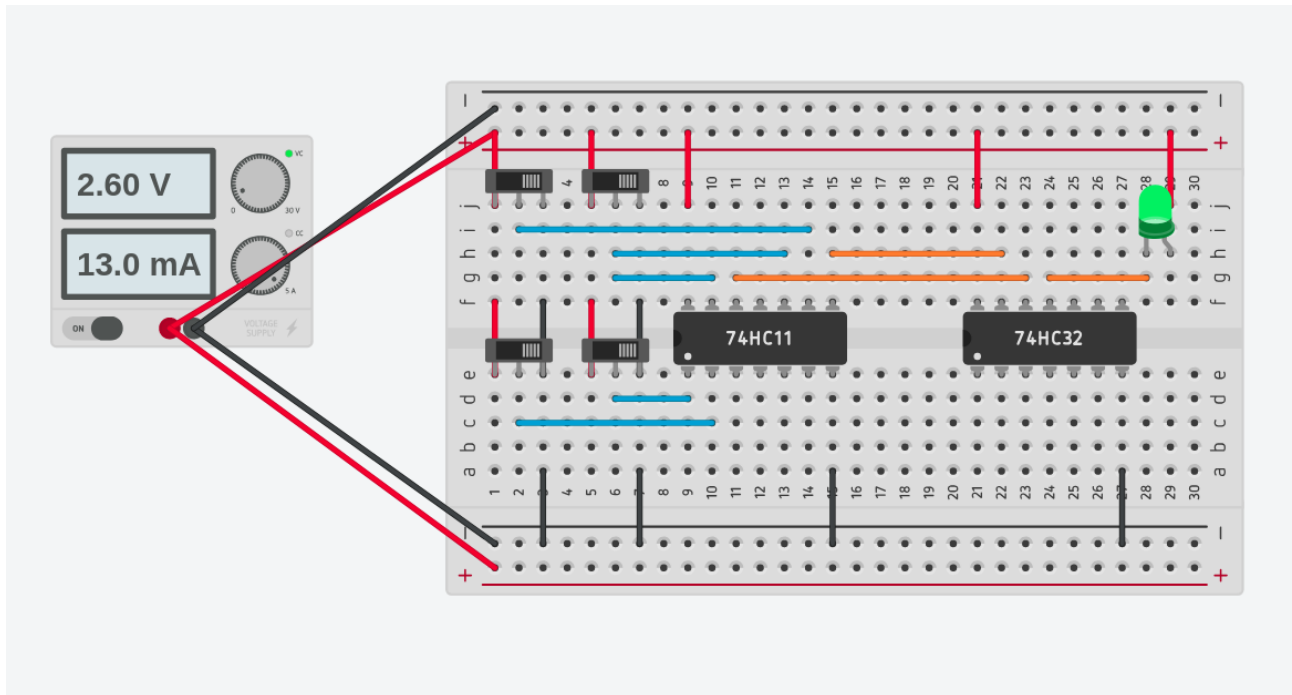
Expressão:

$$S = AB + BCD$$

Circuito:



Circuito no TinkerCad:



Link: <https://www.tinkercad.com/things/8VKPvl57TQO-bodacious-blad/editel>

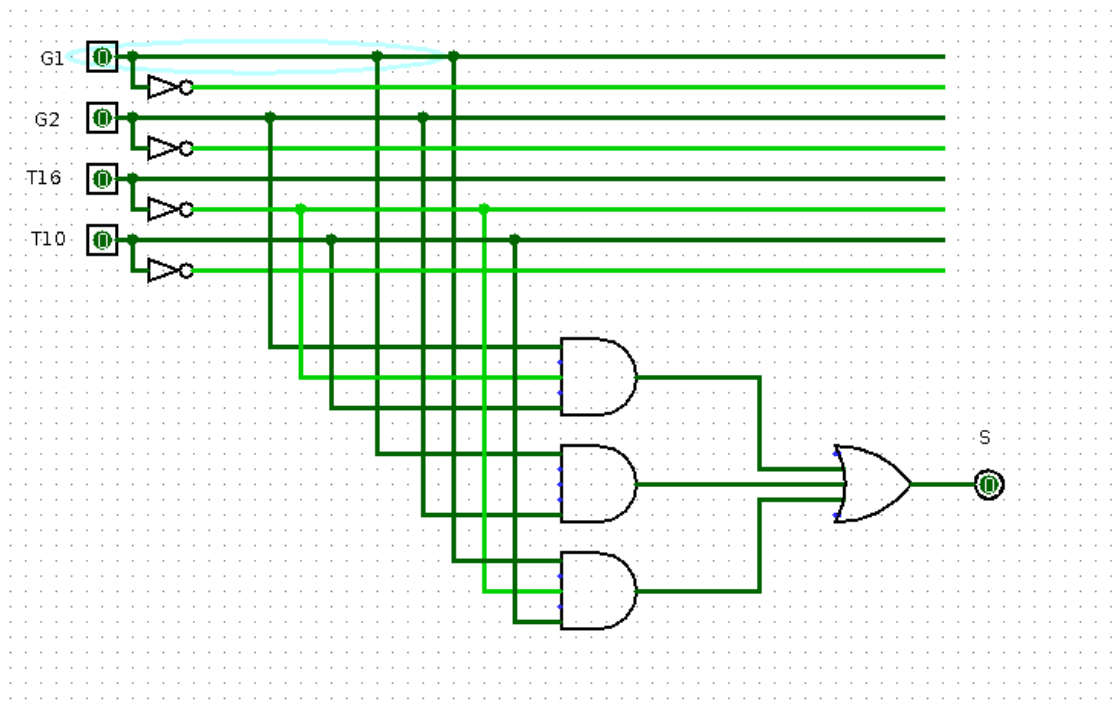
QUESTÃO 2:

TABELA VERDADE				
G1	G2	T16	T10	S(Cofre abre)
0	0	0	0	0
0	0	0	1	0
0	0	1	0	X
0	0	1	1	0
0	1	0	0	0
0	1	0	1	1
0	1	1	0	X
0	1	1	1	0
1	0	0	0	0
1	0	0	1	1
1	0	1	0	X
1	0	1	1	0
1	1	0	0	1
1	1	0	1	1
1	1	1	0	X
1	1	1	1	1

Expressão:

$$S = (G2.T16'.T10 + G1.G2 + G1.T16'.T10)$$

CIRCUITO:

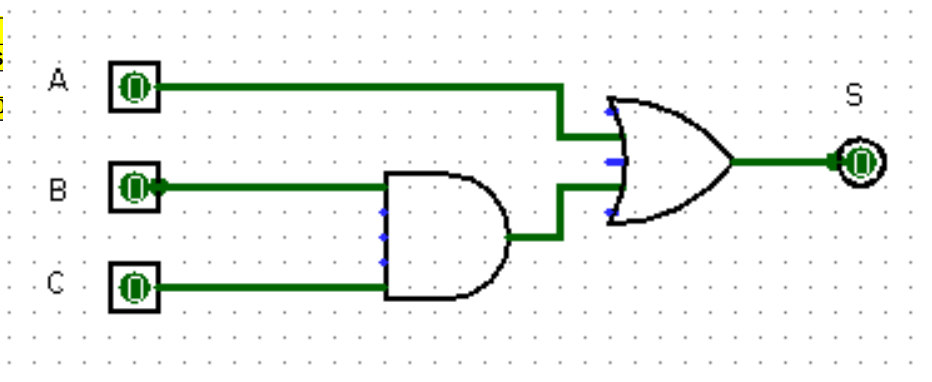


QUESTÃO 3:

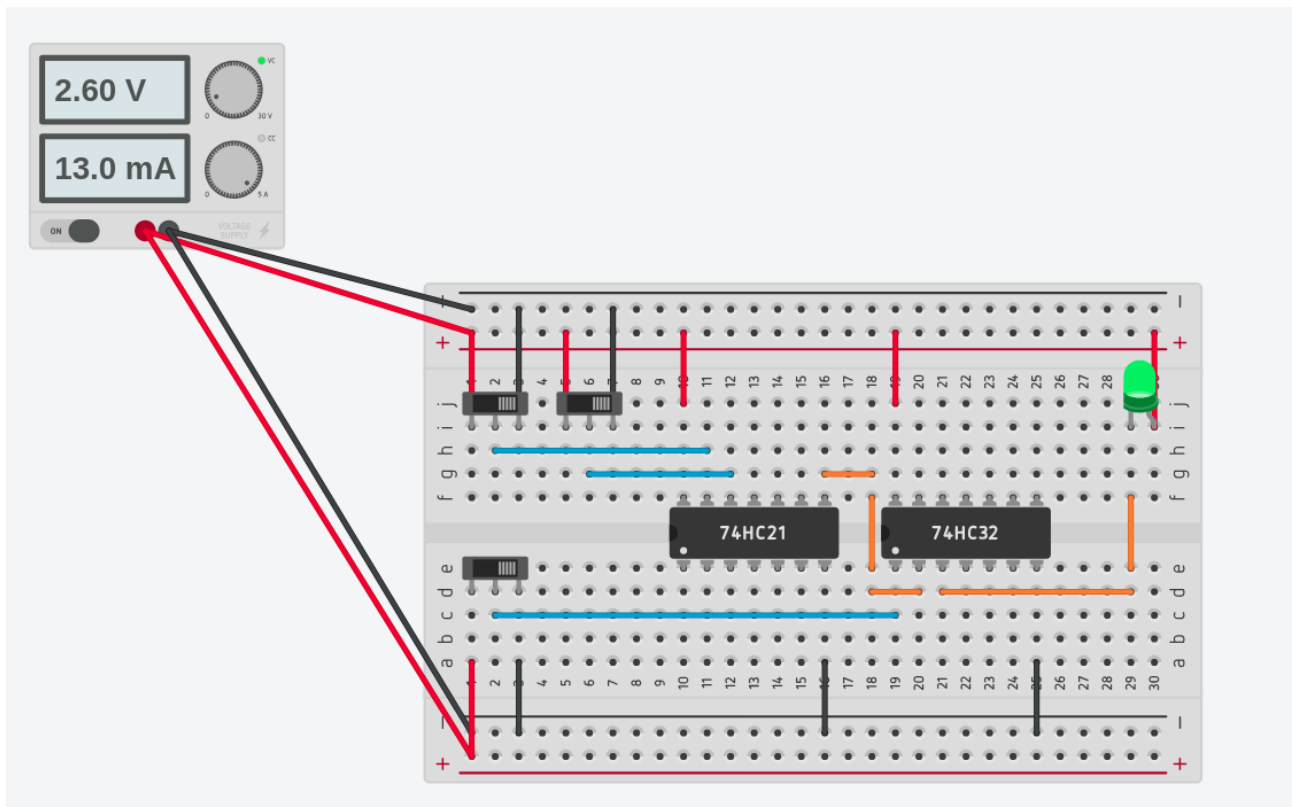
TABELA VERDADE												
A	B	C	D	S	a	b	c	d	e	f	g	DISPLAY
0	0	0	0	0	1	1	1	1	1	1	0	0
0	0	0	1	0	0	1	1	0	0	0	0	1
0	0	1	0	0	1	1	0	1	1	0	1	2
0	0	1	1	0	1	1	1	1	0	0	1	3
0	1	0	0	0	0	1	1	0	0	1	1	4
0	1	0	1	0	1	0	1	1	0	1	1	5
0	1	1	0	1	1	0	1	1	1	1	1	6
0	1	1	1	1	1	1	1	0	0	0	0	7
1	0	0	0	1	1	1	1	1	1	1	1	8
1	0	0	1	1	1	1	1	0	0	1	1	9
1	0	1	0	x	x	x	x	x	x	x	x	x
1	0	1	1	x	x	x	x	x	x	x	x	x
1	1	0	0	x	x	x	x	x	x	x	x	x
1	1	0	1	x	x	x	x	x	x	x	x	x
1	1	1	0	x	x	x	x	x	x	x	x	x
1	1	1	1	x	x	x	x	x	x	x	x	x

Expressão:
S

CIRCUITO



Circuito no TinkerCad:



LINK: <https://www.tinkercad.com/things/4bWkZqXRPVN-epic-wolt/editel?tenant=circuits>