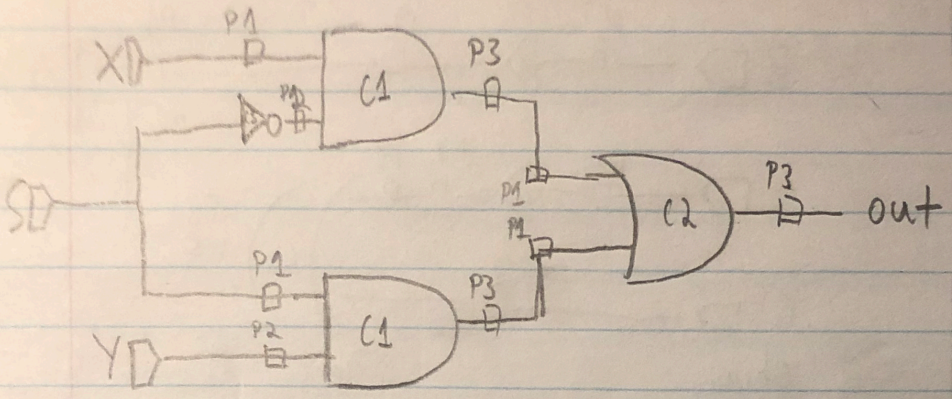
Prelab 1

Patrick Ren

P1: $f = xs' + ys$



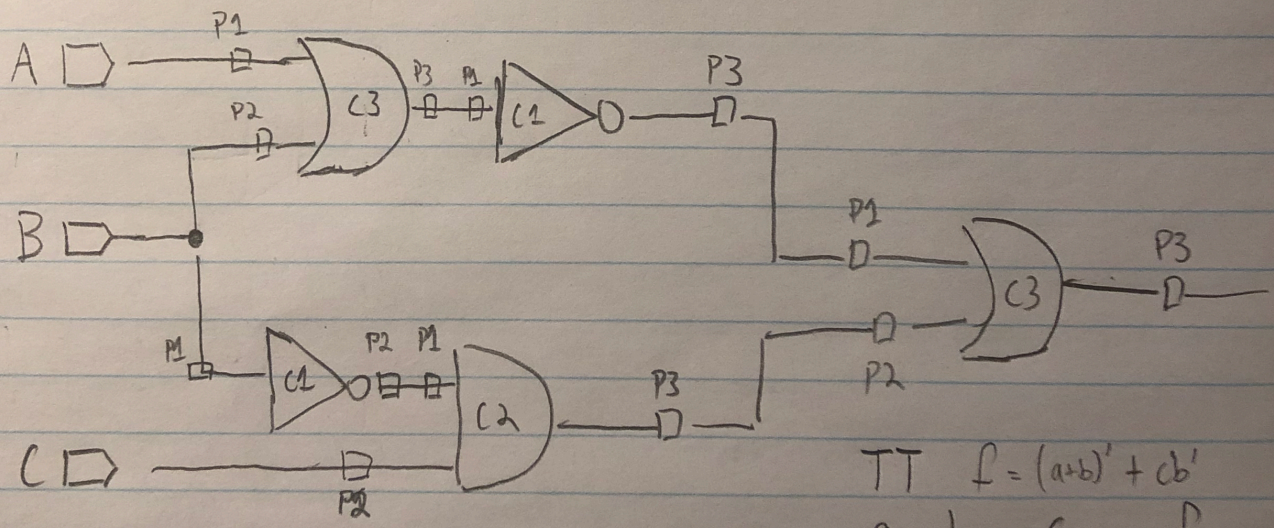
Truth table ($f = xs' + ys$)

S	X	Y	f
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1

Chips used
C1 - 74LS08
C2 - 74LS32
C3 - 74LS04

Connect All chips:
P7 : GND
P14 : VCC

Part 2: $f = (a+b)' + cb' = a'b' + cb' = b' \cdot (a' + c)$



Chips:
C1 - 74LS04 (NOT)
C2 - 74LS08 (AND)
C3 - L4LS32 (OR)

Pins : All chips connected to:
P7 - GND
P14 - VCC

TT $f = (a+b)' + cb'$

a	b	c	f
0	0	0	1
0	0	1	1
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	0