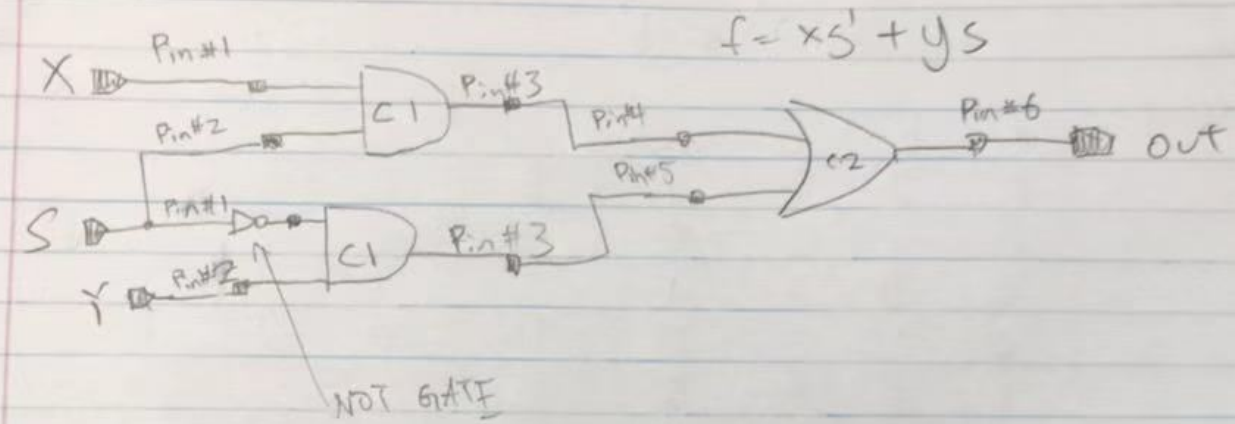
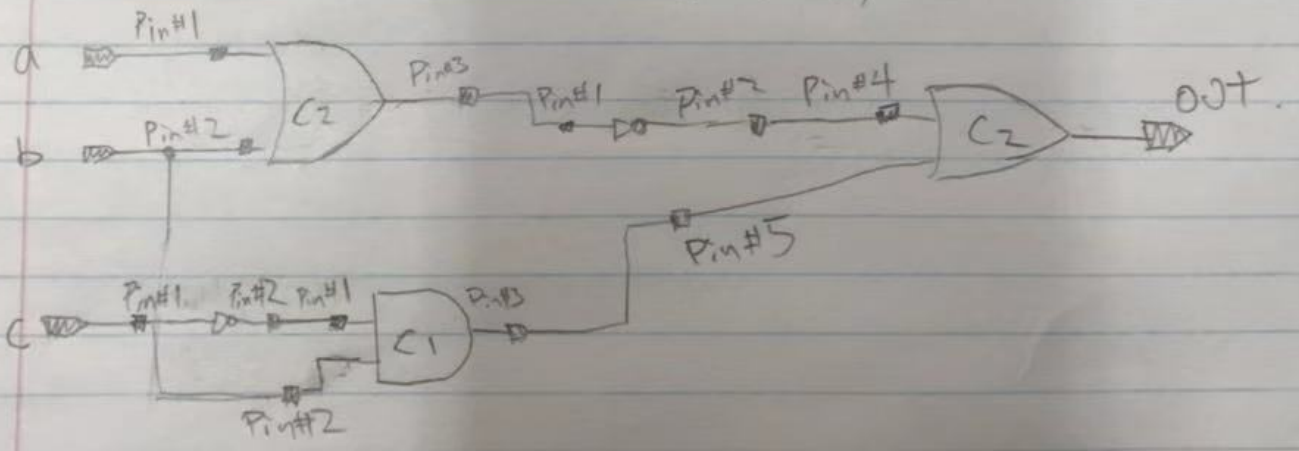
CS0258 Lab 1 (prelab)

$f = xs' + ys$



X	S	y	f
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1

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



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

a	b	c	$(a+b)'$	cb'	f
0	0	0	1	0	1
0	1	0	0	0	0
0	0	1	1	1	1
0	1	1	0	0	0
1	0	0	0	0	0
1	1	0	0	0	0
1	0	1	0	1	1
1	1	1	0	0	0

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

$= a'b' + cb'$ ← Demorgan

$= b' \cdot (a+c)$ ← Distributive law.