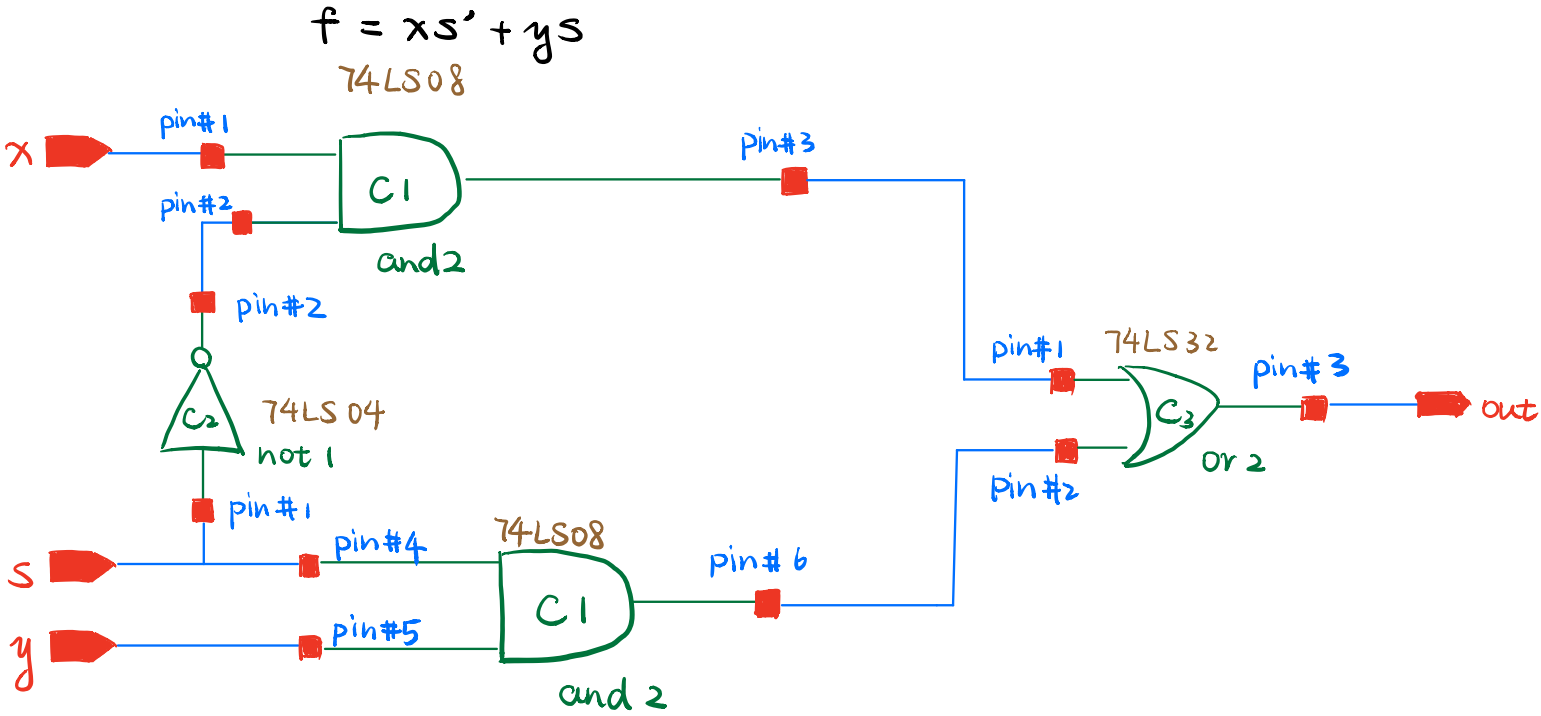
CSC 258 Lab 1 Prelab

5.1



CHIPS USED:

C1 – 74LS08

C2 – 74LS04

C3 – 74LS32

CONNECTED TO ALL CHIPS:

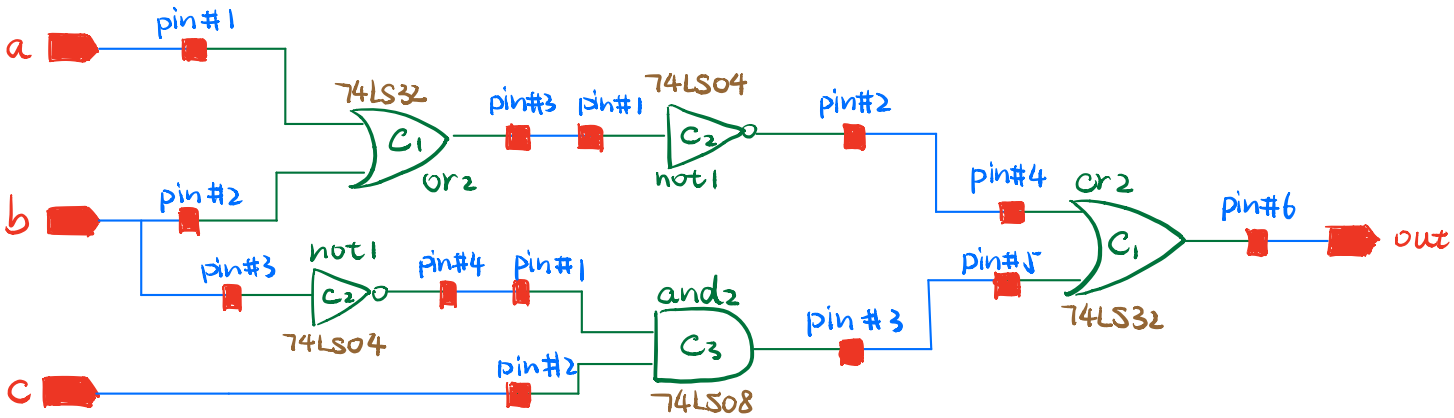
PIN #7 – Gnd

PIN #14 – Vcc

5.2

x	y	s	out
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	1

6.1 $f = (a+b)' + cb'$



CHIPS USED :

C1 – 74LS32

C2 – 74LS04

C3 – 74LS08

CONNECTED TO ALL CHIPS :

PIN #7 – Gnd

PIN #14 – Vcc

6.2

a	b	c	out
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

6.4 There is a cheaper design using fewer gates (1 or gate fewer)

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

$\Leftrightarrow \quad f = a'b' + cb'$

$\Leftrightarrow \quad f = b'(a'+c)$