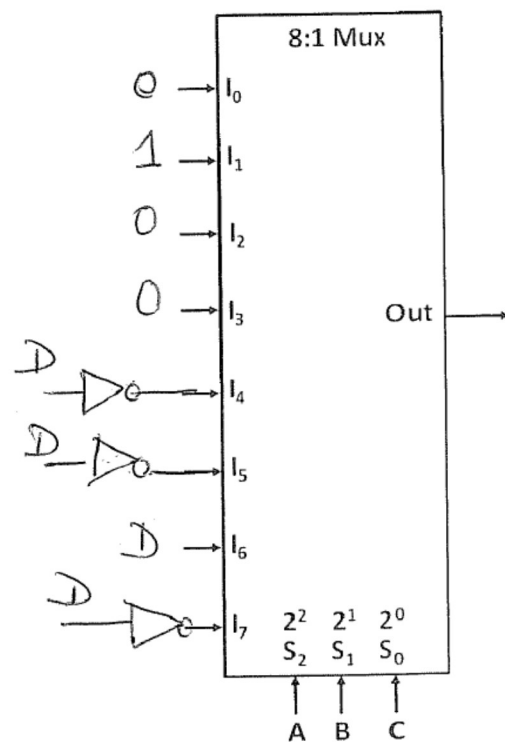


Homework Questions **Circuits and Electronics** **Week 2**

Solutions
 Q1

A	B	C	D	F	
0	0	0	0	0	I_0
0	0	0	1	0	I_0
0	0	1	0	1	I_1
0	0	1	1	1	I_1
0	1	0	0	0	I_2
0	1	0	1	0	I_2
0	1	1	0	0	I_3
0	1	1	1	0	I_3
1	0	0	0	1	I_4
1	0	0	1	0	I_4
1	0	1	0	1	I_5
1	0	1	1	0	I_5
1	1	0	0	0	I_6
1	1	0	1	1	I_6
1	1	1	0	1	I_7
1	1	1	1	0	I_7

$I_0 = 0$
 $I_1 = 1$
 $I_2 = 0$
 $I_3 = 0$
 $I_4 = \overline{D}$
 $I_5 = D$
 $I_6 = D$
 $I_7 = \overline{D}$

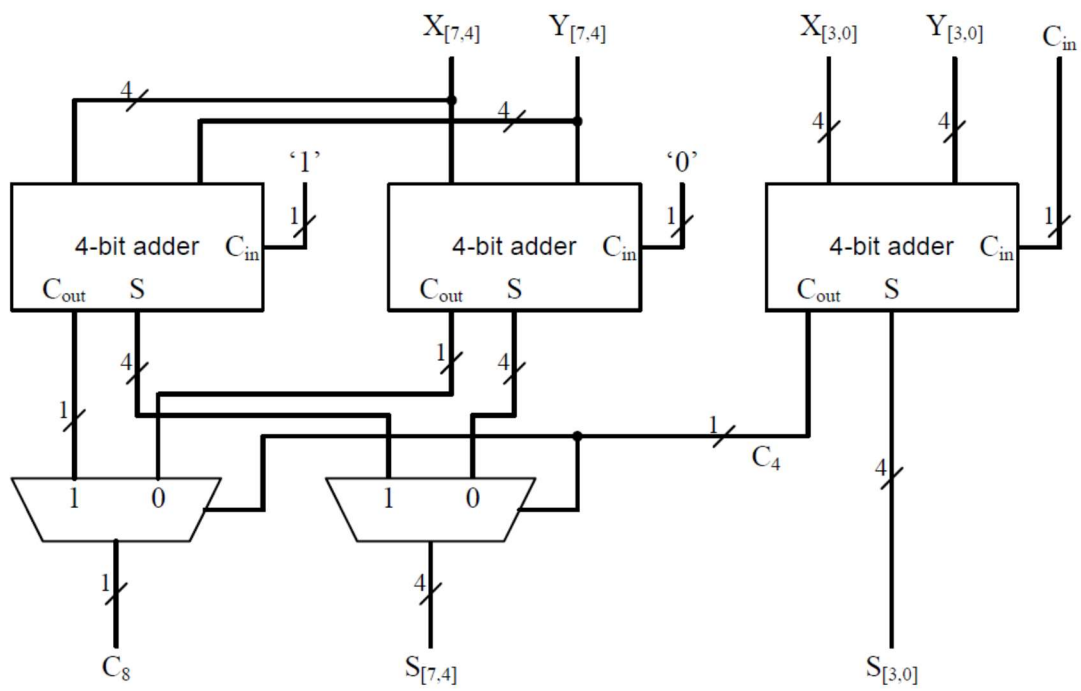


Q2

J	K	CLK	Q^{n+1}
X	X	0	Q^n
0	0	1	Q^n
0	1	1	0
1	0	1	1
1	1	1	Q^n

—

Q3



Q4

