Prelab and Lab Quiz

Experiment 3

Jacob Howard
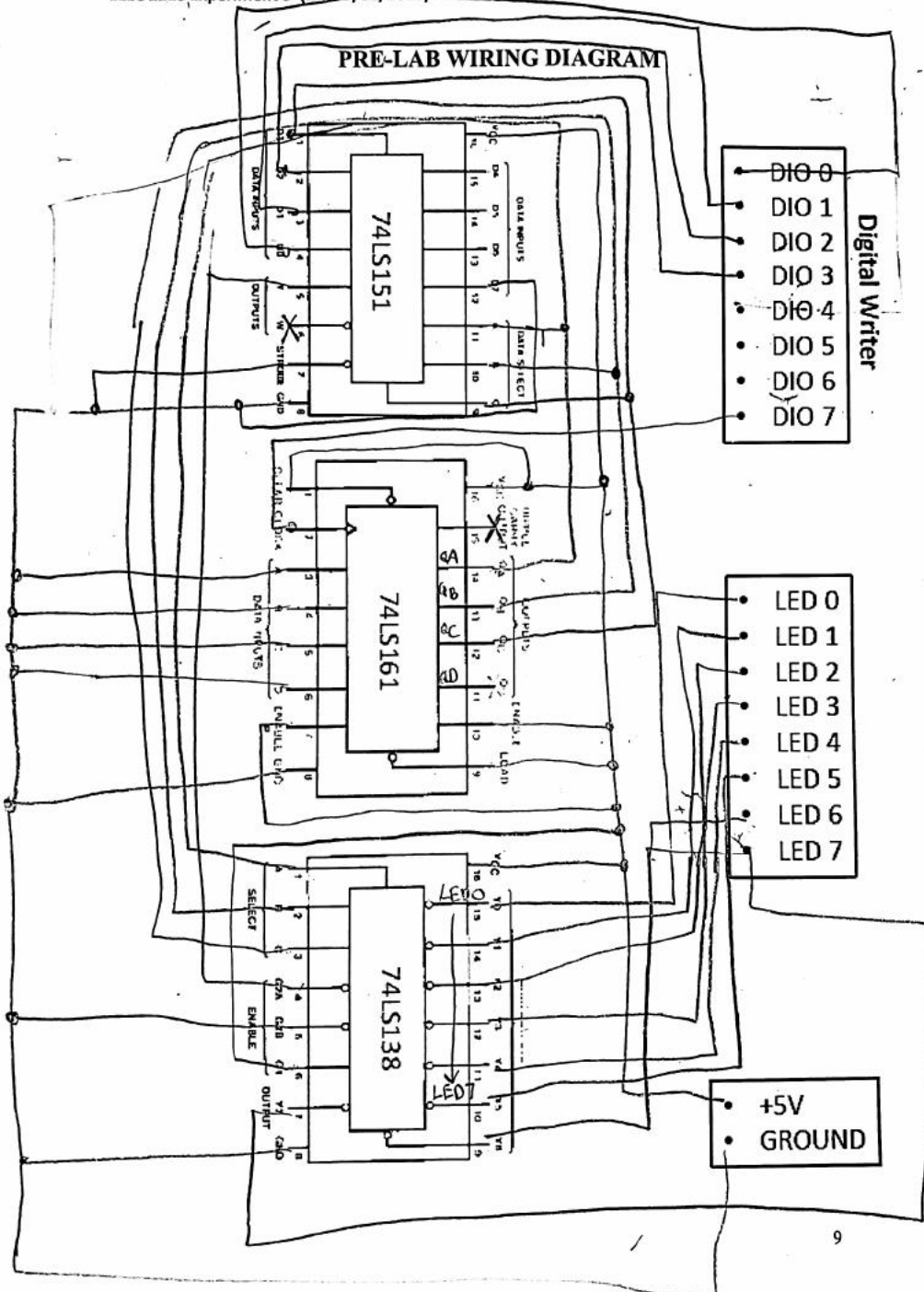
Prelab

i)   Multisim Circuit
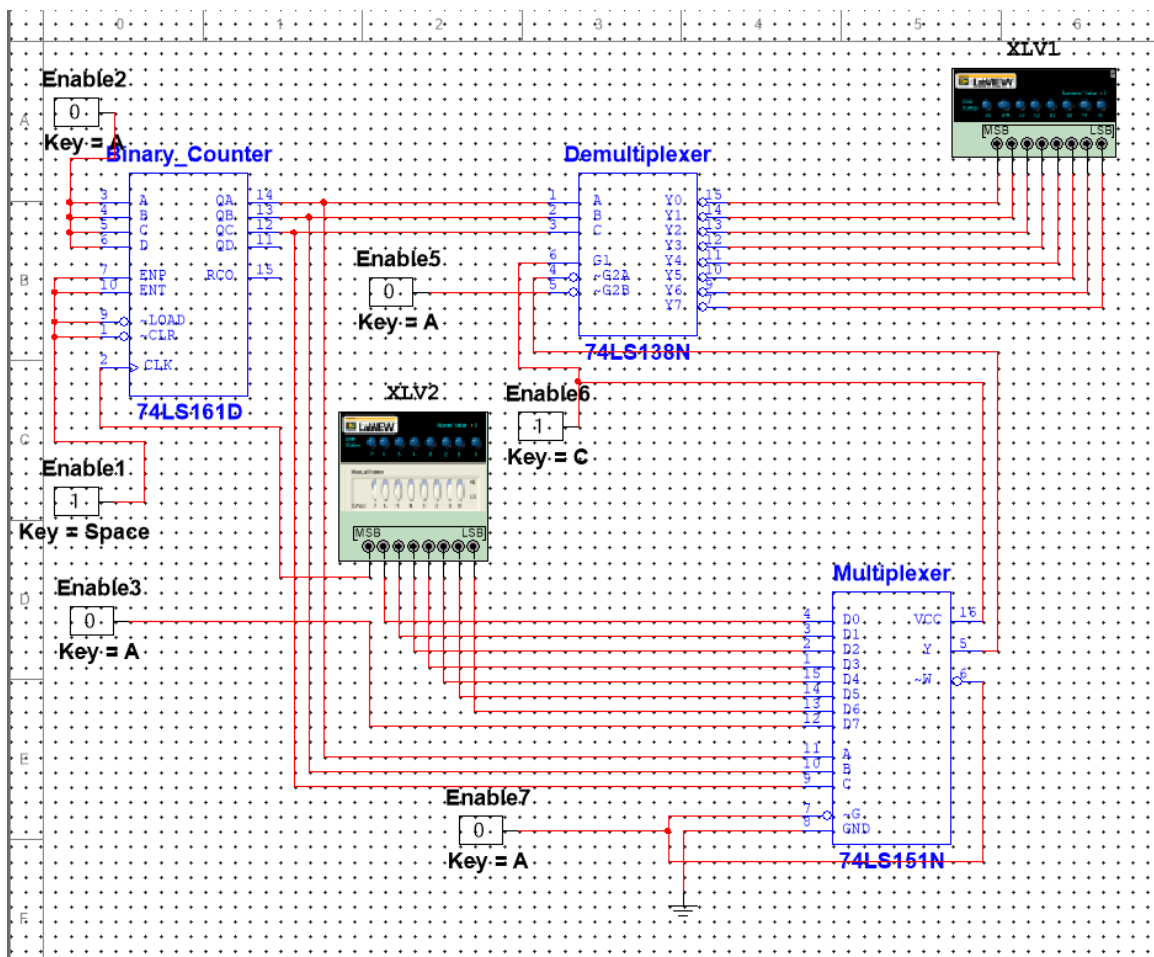
ii)   Prelab Drawn Circuit Design

Lab Quiz

LAB Quiz

1) a)

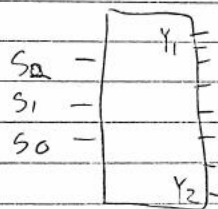| A B C	Y
0 0 0	D_0
0 0 1	D_1
0 1 0	D_2
0 1 1	D_3
1 0 0	D_4
1 0 1	D_5
1 1 0	D_6
1 1 1	D_7

$A = 1$
$B = 0$
$C = 1$

← D_5 is Converted to Y

b) Y

$$\bar{A}\bar{B}C + \bar{A}\bar{B}C + \bar{A}BC + A\bar{B}\bar{C} + A\bar{B}C + AB\bar{C} + ABC$$

②

S_0 —
S_1 —
S_0 —

Y_1
Y_2

S_2 S_1 S_0	Y
0 0 0	Y_0
0 0 1	Y_1
0 1 0	Y_2
0 1 1	Y_3 →
1 0 0	Y_4
1 0 1	Y_5
1 1 0	Y_6
1 1 1	Y_7

$S_2 = 0$
$S_1 = 1$
$S_0 = 1$