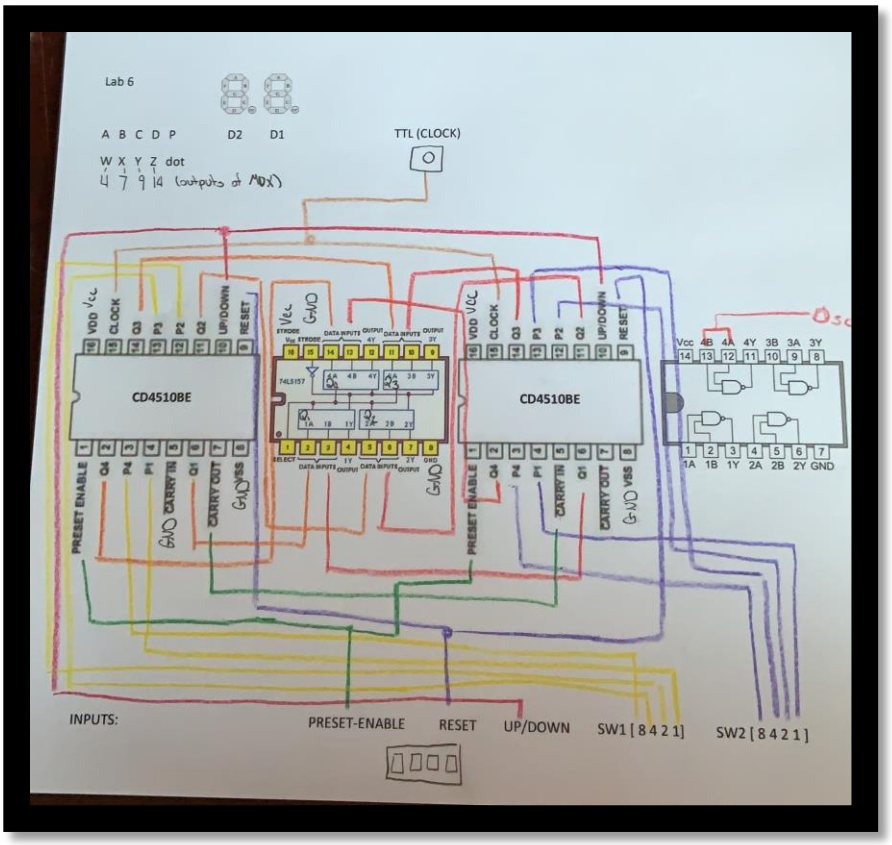
Kyle Frudakis

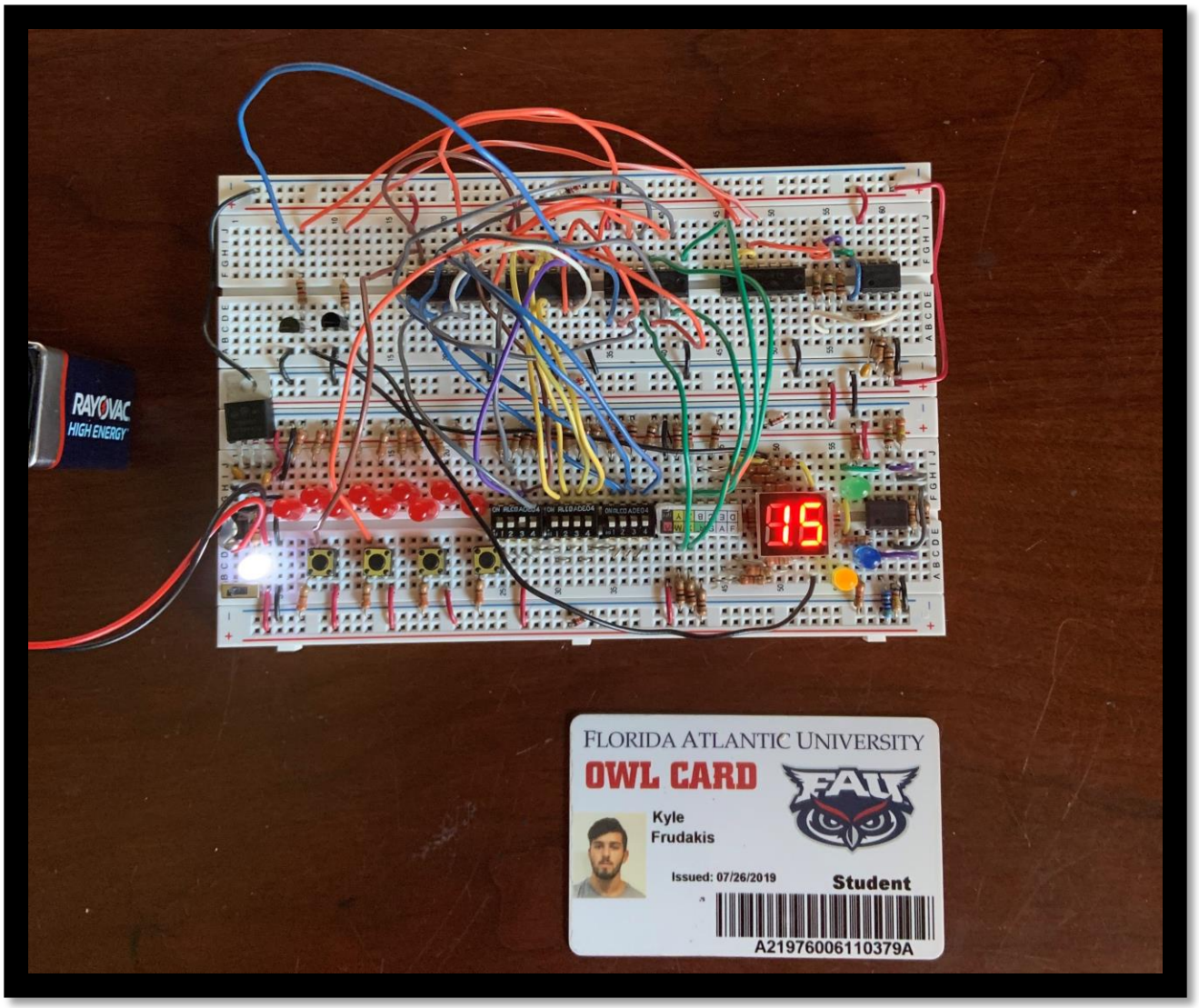
Logic and Design

Lab 6

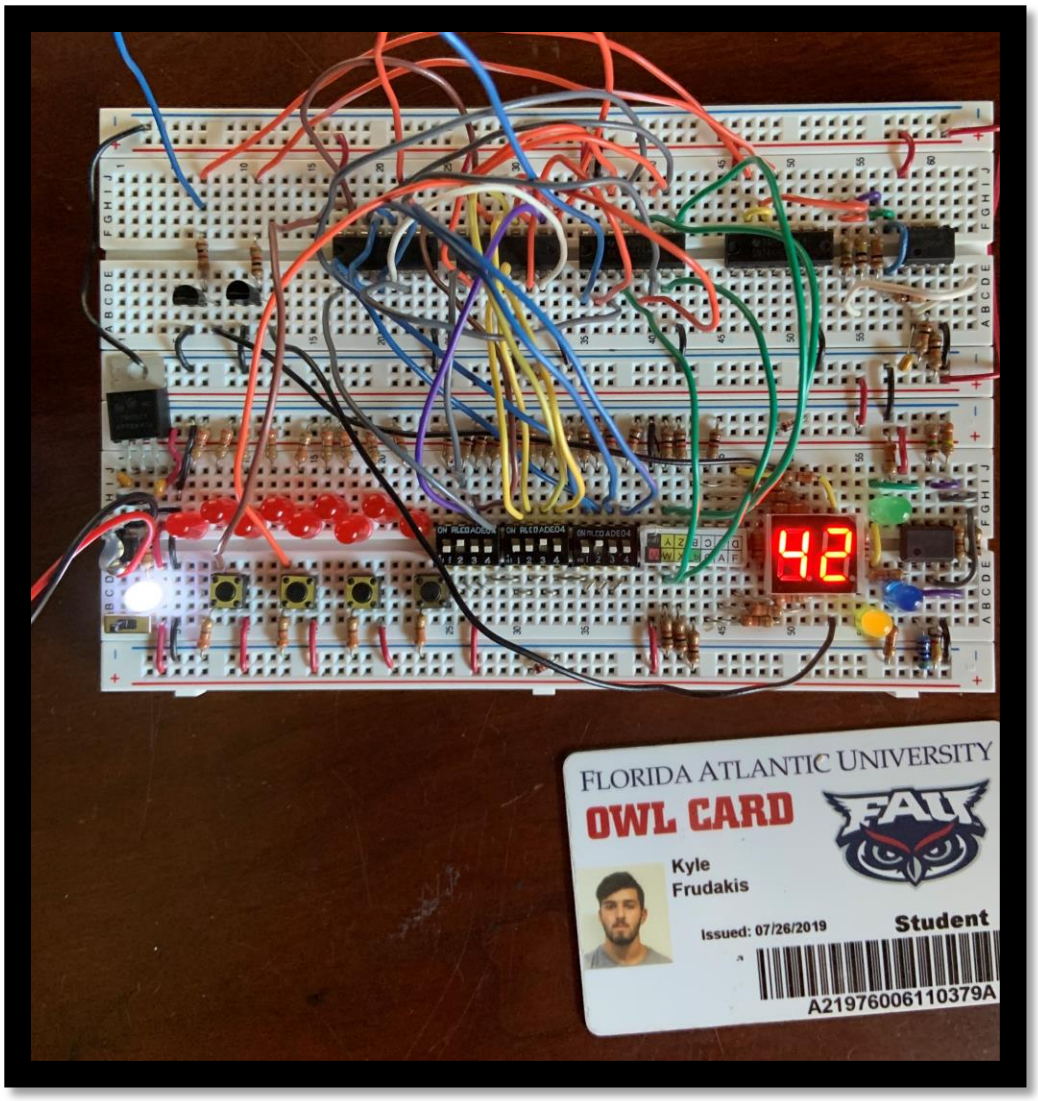
No Quartus II



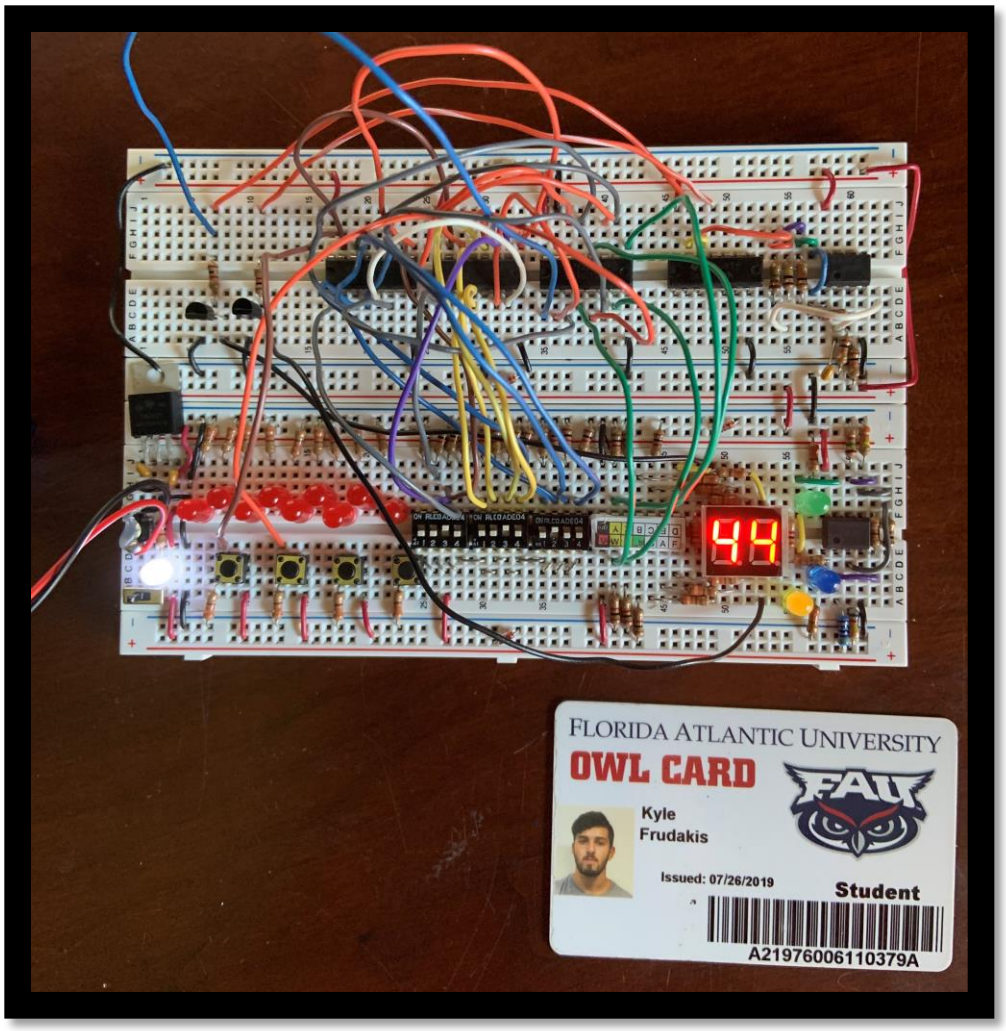
This is the planning of my wiring for lab 6. The goal was to make a counter that could go up to 99 as well as count down to 0 from 99. I would also be able to preset a number and count up or down from that position. The oscillator is not shown because that was not given in the paper layout.



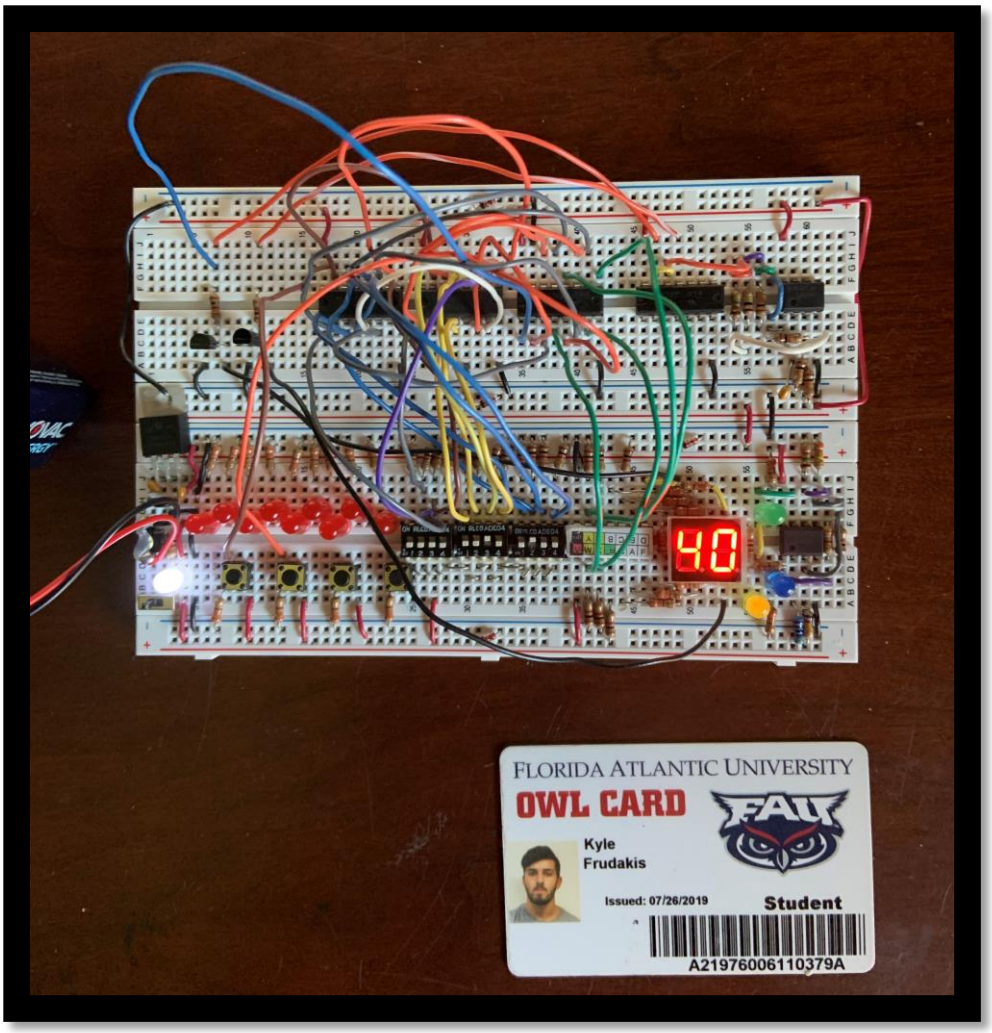
This is the fully wired breadboard. As you can see, it is at 15 to prove that it can count. In other pictures you can see it at different numbers through different methods.



In this instance, you can see it preset to 42. The MSB is the switch table to the far right (I got it a little unorganized) and the LSB is the middle switch table. The switches count in binary. The left most switch table has the 3rd switch up, which is the preset enabler.



Here I show that I can count up from a preset position…



And here I show I can count down from a preset position by having the up/down switch (2nd from right on far-left switch table) down at the moment.