Lab 4 Report

In this lab, we were introduced to simulating our programs on the breadboards, rather than on the i/o viewer on Atmel. We were reusing our old programs from previous labs in this lab. The challenges we faced in this lab ranged from getting familiar with the breadboard, understanding the parts we had to use, debugging not only software but hardware as well, and understanding short circuits. We first got familiar with each part in our parts kit. We then followed the lab to understand how to properly power led's and the microcontroller itself. We then started doing the sample code given in the lab manual. Once we understood all this, we started the lab. The lab went smoothly except for two problems. We first realized we had to invert the bits since the button is 1 when not pressed and 0 when it is. We also had to fix our wiring since we ended up wiring the wrong led's. Once we fixed these problems, the lab was really straightforward. In this lab, Abraham coded all the exercises and Rogelio did the hardware. We were able to complete the lab in the allotted time as it made sense once we figured out the new hardware components.