

## Lab 6 Report

In this lab, we were introduced to the speaker. This lab required us to play around with output B4 on the microcontroller. The first part of the lab was very straightforward. We simply had to toggle B4 on and off and it was really easy. The second part of the lab was a little bit harder as we had to change the frequency by pressing buttons to adjust it up and down. We were confused at first at what to do but we eventually figured out to use the timer to check button presses at fixed intervals. We called our Tick() function depending on how many times the user pressed the up or down button. By adjusting when we call the function to toggle B4, we were able to adjust the frequency and make it sound higher or lower pitched. In this lab, Abraham did the coding for the state machines and Rogelio did the wiring for the breadboards.