1. What gain parameters did you end up using for your PI controller?
   1. Describe the response of the system to speed changes.

I found that using a Ki and Kp of 1 worked the best and got results incredibly quickly and accurately. As I raised Kp it worked the same way raising speed but undershot and struggled with lowering speed. Rasing Ki created an issue of overshooting for both raising and lowering speeds. I did notice that no matter what I set the Ki and Kp to the motor could only reach 95 rpm even though theoretically it should be able to reach higher the motor would stop at 95.