

Work Report Summary

Date Assigned: 8th April, 2019

Date Submitted: 13th April, 2019

Name: Simran Malhotra

Subsystem: Coding

WRO 2019 Progress:

➤ Encoder Motor

- Worked with Encoder Motor(RMCS-2284) and wrote a code to test its functionality but there were some issues.

<https://github.com/RoboManipal-9-0/Coding-FirstYears/blob/Simran/Encoder.ino>

➤ Getting Encoder Values using Multiplexer

- Understood the working of a multiplexer and wrote a code to get encoder values from four different motors connected to the input pins on the multiplexer.
- Testing needs to be done.

<https://github.com/RoboManipal-9-0/Coding-FirstYears/blob/Simran/Multiplexer.ino>

➤ PID(Proportional-Integral-Derivative) Controller

- Understood the working principle of a PID Controller and went through the PID Library on GitHub.

ROS (Issue #1):

<https://github.com/RoboManipal-9-0/Coding-FirstYears/issues/1>

- Installed ROS and I have gone through a few topics in the Documentation.

Issues Faced

ROS (Issue #1):

- Was unable to install ROS initially on my Mac but the issue was resolved. I installed Ubuntu on Virtual box.

Encoder Motor:

- The code was working but the encoder value resets to zero after a specified rotation.