ENPM809T Assignment #7

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Course code: ENPM809T Autonomous Robotics

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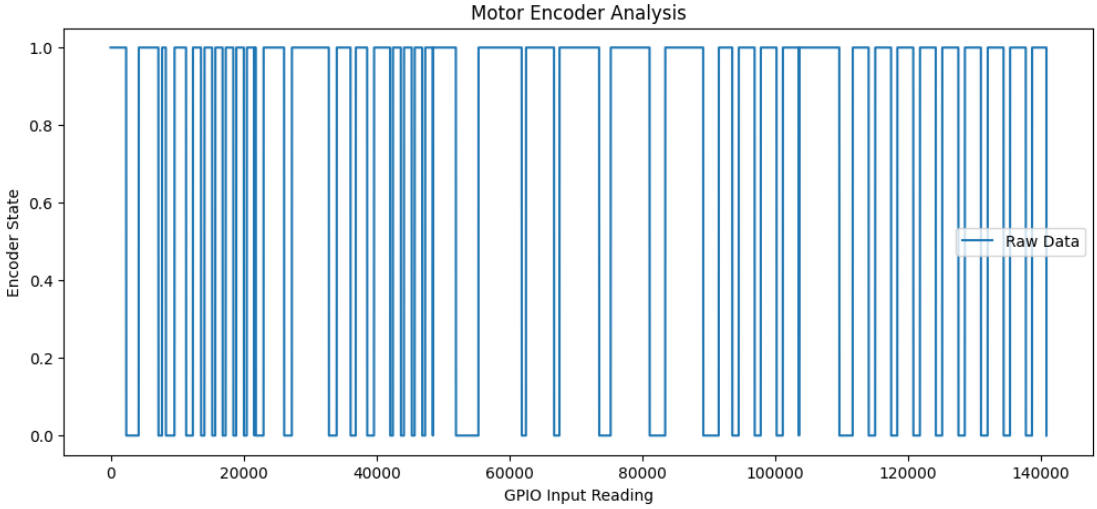
Question 0.1: (No submission)

Question 1:

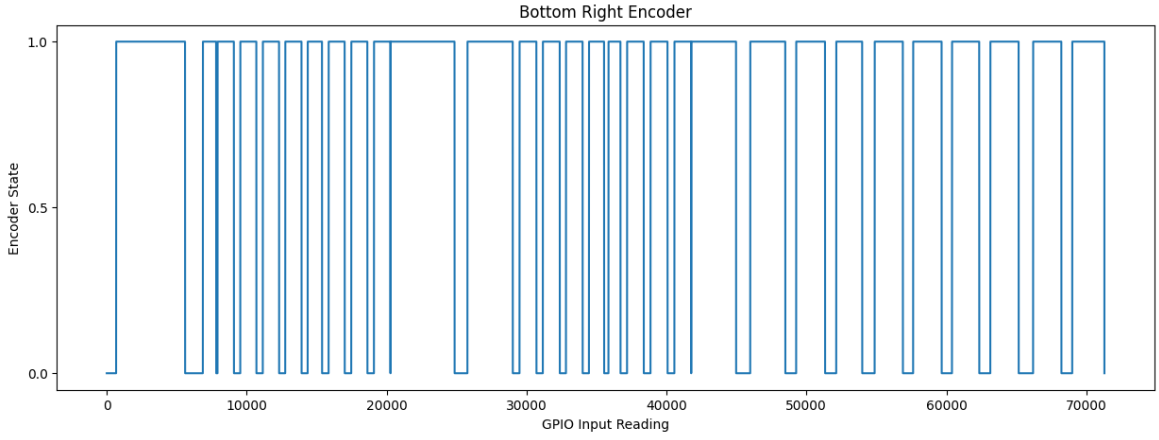
1: encodercontrol01.py-encodercontrol04.py

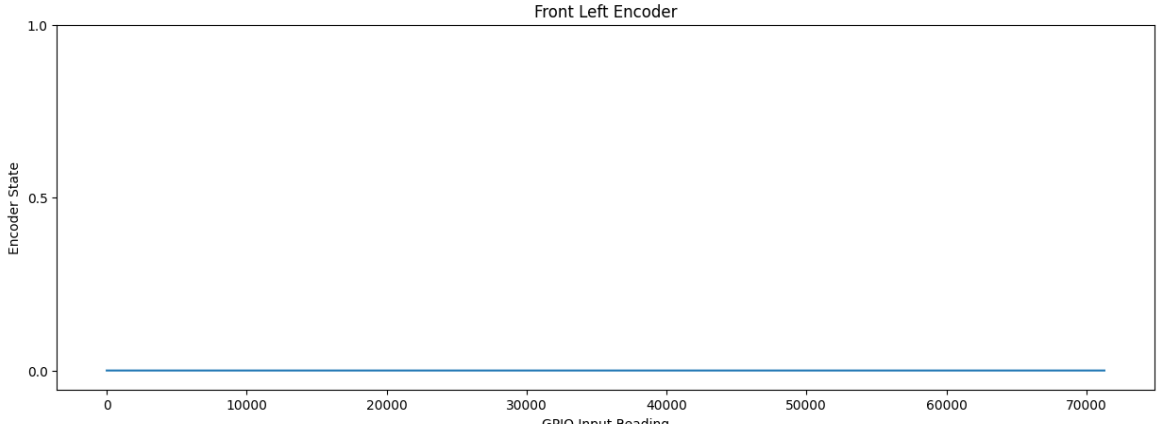
Robot Platform: Baron

encodercontrol02.py output:

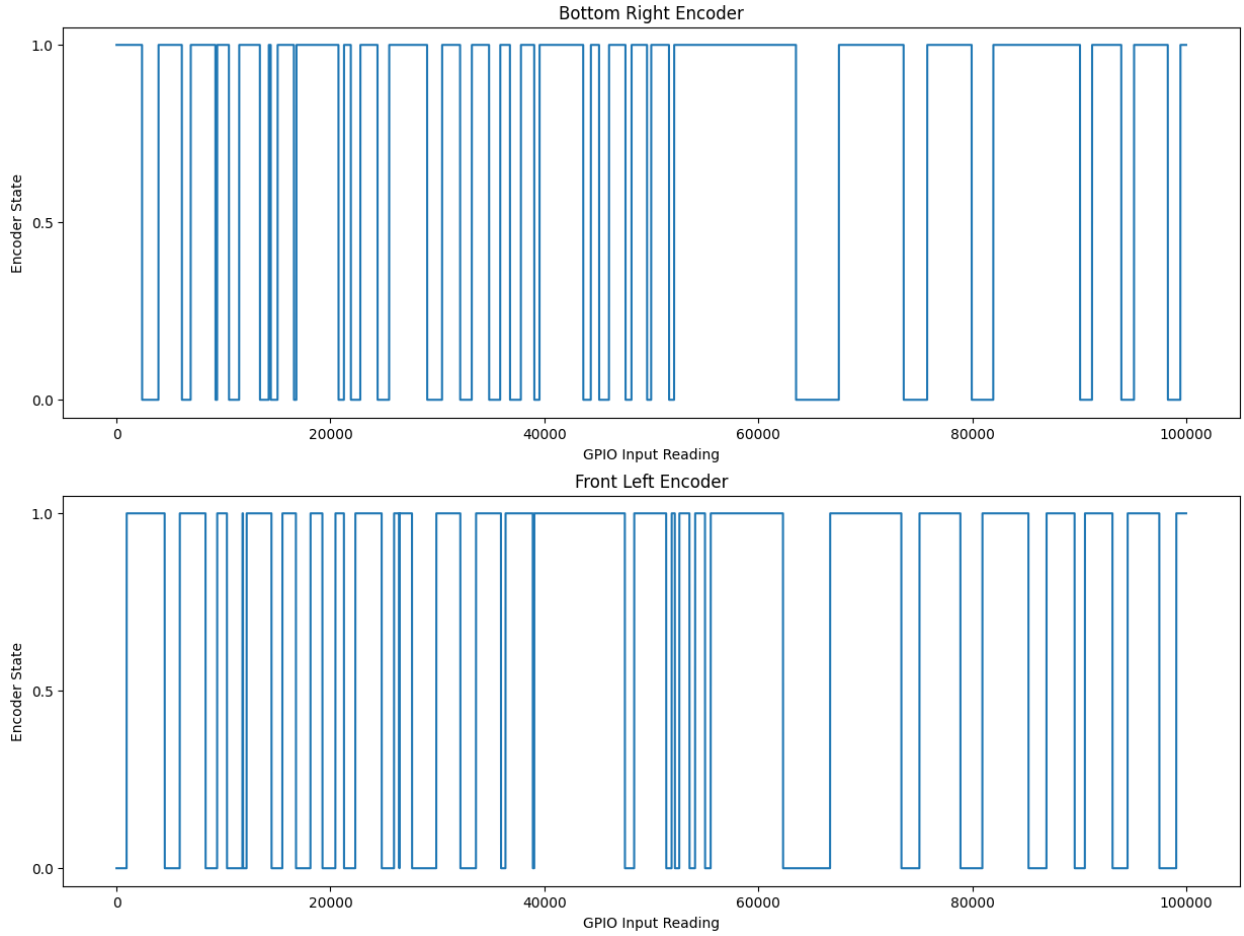


Encodercontrol03.py output:



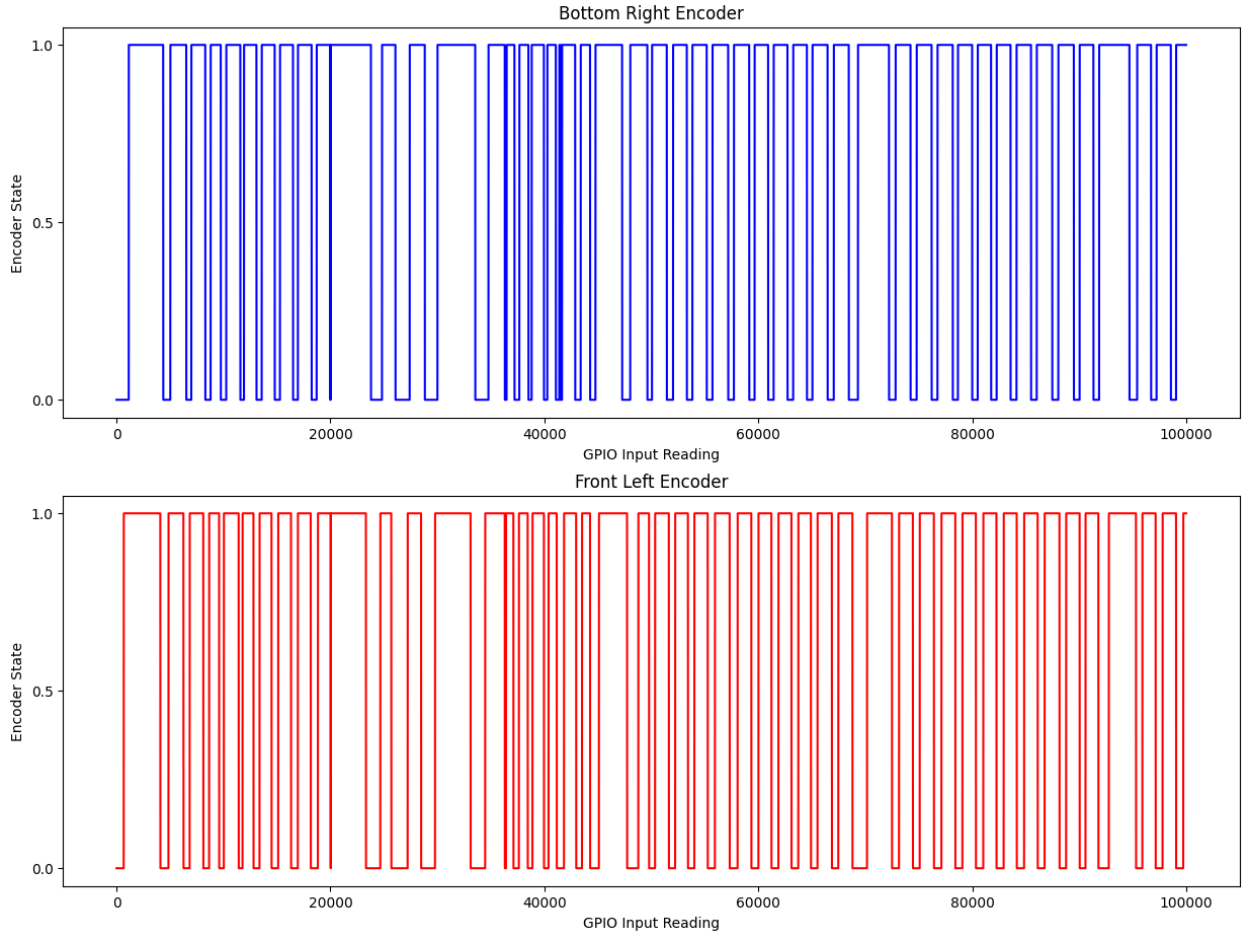


encodercontrol04.py output:



2: In Class Exercise:

encodercontrol05.py output:



We notice that the encoder state output is very similar for both the encoders, since they both track the robot moving forward in s straigth line. The non-uniformity of the encoder states is due to the wheel slipping while rotating. The optical encoder for my Baron platform registers 20 ticks for every 1 wheel revolution.

Link to Youtube Video: https://youtu.be/PSq32Q810Gc

3: Updating encodercontrol05.py to count encoder ticks for reverse,pivotleft, and pivotright:

Link to youtube video: https://youtu.be/iW-blGb-ftI