2022/05/19

- Steering angle issue fixed itself; removed steering angle offset
- New warning showing up when running CarlaUE4.sh (server side, carla engine)
 - New warning that I have not seen before: 'WARNING: lavapipe is not a conformant vulkan implementation, testing use only'
 - This warning appears after the line: 'Disabling core dumps'
 - This warning did not appear before, began appearing randomly
 - Takes much longer to start up the server side engine now for some reason
 - Server side engine starts up after long time but now freezes, making no client side code runnable (they run but the pygame window remains black or connection to server side times out)
 - Online resource states updating graphics driver may help: https://github.com/carla-simulator/carla/discussions/4644
 - Began by updating the Linux distribution through the Ubuntu provided Software Updater
 - Update download and install took quite a long time (~45 minutes)
 - Updating the Linux Distribution fixed the issue
 - Server side carla engine now runs and does not freeze
 - Client side code is now running properly again
 - Warning message no longer appears
- First step to getting speed and rpms to read on gauge cluster is to first be able to read speed and rpms.
 - Was able to obtain vehicle speed using carla interface and a speed formula found on the previous capstone team's documentation. Printed speed to terminal for viewing temporarily
- Was able to get a serial connection to the gauge cluster (The buzzing sound plays every time the code is run). Now need to get speed to send correctly to the gauge cluster. May need to look through arduino ino files and/or search through previous capstone group's client_MODIFIED.py file to find out how they did it.
- Spent an extensive period of time looking through previous files and resources trying to find out how the previous capstone team sent the speed and rpms to the gauge cluster
- From trial and error, it was discovered that the speed and rpms are sent to the gauge cluster within the uses of the get_speed function as well as the ser and ser2 connections
- Seems to me that the key to getting proper communication the gauge cluster is establishing a correct connection to COM3 and COM4, access to those coms are most likely different in Linux