

Lab 7 Alpha
Kevin Bradner
Ammar Nahari
Will Nourse

See youtube video here: <https://youtu.be/-A1QobH1UZc>

We successfully tested Jinx with the open loop control, which is of course unable to dynamically adjust to the environment. We have code for the other sections, for running with just odom as well as odom and amcl, however upon startup the robot behaves erratically and unpredictably.

We used the same code we used in the problem sets, which worked for those submissions, and we remapped topics accordingly. However, we could not get the robot to behave in a predictable manner. Specifically, we have found that the robot resumes motion upon the release of an estop, even when there is nothing being published to /cmd_vel, as verified by a rostopic echo on that topic. In addition, this motion is fast enough to cause the wheels to pop up off of the ground, which should not be commanded by our code. This leads us to believe that there may be some issue with Jinx itself, or else that we missed something unrelated to the assignment itself.

We have code for stopping from a lidar alarm, and correcting the movement according to data from amcl and odometry.