IEOR 140: Project 2 Milestone 2

Team 6: MoonSoo Choi & Sherman Siu

**Sherman**: coder for steps 2 and 3, coder for Tracker

**MoonSoo**: coder for steps 4 and 5, report writer

**Time spent:** 3 hours for both (during laboratory on September 7th)

**Project Description:**

We programmed our robot to trace a square in clockwise and counter-clockwise manner, and also programmed our robot to make several roundtrips between different coordinates.

**Most interesting/challenging/difficult part of the project:**

Milestone 2 was a good opportunity for both of us to understand and practice how to implement Classes and instances. Clearly, in comparison with few homework assignments that we turned in during past few days (e.g. BankAccount and M&M), implementing classes and instances for our robot project was bigger of a challenge, since there are more methods and variables to take care of. Difficult part of the project actually was not because we could not make the robot to work, but rather because we needed to organize our programming codes in a way that looks nice and clean.

**Additional Questions**

Include a graph in your report that shows the left and right sensor readings (after calibration) as a function of the distance from the center line (copy from the report of milestone 1) but on the same graph show the calculated center line distance using the algorithm of you tracker code.

**Interpretation:**

From above four graphs, we can clearly see that as light sensors are located higher from the ground, the differences between the left and the right eye will be smaller, hence making the robot trace the line in a smoother manner.

**Programs:**

Tracker.java

Milestone2.java