# Homework Assignment 9

Problems:

1. The .zip file LIDAR\_360\_degrees contains range measurements, in centimeters, taken at 85 Prescott Street. Range Measurements are taken every 100ms varying 10 degrees in azimuth in each file. Each file contains approximately one minute of sample data.
   1. Analyze this data to produce a 2-D plot with range on the horizontal axis and standard deviation on the y axis. Does the standard deviation of the data seem to have any dependence on the range being measured? (5 points)
   2. Assuming that the mean of the sample data for each azimuth is the best estimate of range, draw a map of the room based on the sample data. (5 points)