

## Project 2 (Due on 11.30pm Thursday, October 5)

### Notes:

- Write comments on each step. Submit report in class if your taking the class face to face. Others submit the report by email (You are welcome to submit printed copy).
- **You are supposed to work on this project entirely on your own. So, do not consult with anyone within or outside the class.**
- You are welcome to ask me questions. However, first, try to find the answer on your own. Don't be afraid to google! Google is the best friend of a graduate student!!
- **The cars and Iris datasets come with R by default.**

#### 1. The cars dataset.

- (a) Make scatterplots, summary statistics and descriptive analysis.
- (b) Fit a simple linear regression model
- (c) Test the hypothesis of the parameters
- (d) Compute 95% confidence and prediction intervals.

#### 2. The Iris Data set.

- (a) Present a complete summary of the Iris Data set.
- (b) Subset the data for Species versicolor
- (c) Fit a linear regression of Sepal.Width on Sepal.Length for only Species versicolor
- (d) Test the hypothesis of the parameters
- (e) Compute 95% confidence and prediction intervals.