## **Project 2**

## Due on Sunday, February 5 by 11:30PM

Follow the instructions in Topic 3 and the general guidelines in Topic 2. As the **minimum requirements**, your report **must include** 

- 1. A meaningful and clear title
- 2. Summary (report what have been done briefly)
- 3. Introduction (describe the purpose of this project)
- 4. Data Collection (state the **protocol** and the **steps** the data were obtained)
- 5. Data Cleaning (in addition to meeting your data collection protocol, make sure that the cleaned data set is a 90 by 4 matrix where column 1 is ID [do not make any change to this column], column 2 is weight (accurate to gram), column 3 is radius (accurate to mm) and column 4 is length (accurate to mm).
- 6. Analysis (your model building process, including what models are studied, how the model parameters are estimated, what are the MAE and MPAE for each model you fitted, comparison of the MAE and MPAE values among the models fitted)
- 7. Recommendation (state clearly what is **your best way** of predicting banana weight)
- 8. Provide a 95% confidence interval estimation of the density for the kind of bananas used in this project.

In addition, each student must prepare a (Power Point) presentation that meets the following requirements:

- 1. Each student will be required to give a presentation.
- 2. No more than 3 ppt slides. (Focus on data collection and cleaning, and banana weight predictions.)
- 3. Show your best way of predicting banana weight.
- 4. Come early on Tuesday, February 7, to test that you can share your ppt slides on screen **before the class begins**.