STA 135 Final project (Due 3/19)

Read the following instructions carefully:

 You should work individually, not in a group.

 You are not allowed to discuss your project with anyone other than the instructor or TA.

 Any outside help beyond that from the instructor or TA is considered plagiarism. This includes asking a tutor, your classmates (for example, comparing answers), posting the questions to homework help sites, etc. Should we believe you have sought outside help, you will be reported to the Student Judicial Affairs office.

 You are allowed to use or modify your previous functions, or the instructors functions that are posted online.

 Do not share answers, or specific values for calculations.

If you want to ask clarifying questions about code and general approach, or have difficulty in finding a dataset to work with, go to the office hours of the instructor or TA.

Guidelines:

You should find datasets at first and conduct proper data analysis that you have learned from STA 135. Your results should be written in report form, including a cover page and an appendix of your R code at the end of the report.

You should analyze three datasets (which can be selected from e.g, the Wichern datasets) in the project:

Dataset 1: Conduct multiple linear regression;

Dataset 2: Conduct two-sample test and LDA;

Dataset 3: Conduct PCA.

For each data analysis, you should write in full sentences, and have the

following sections for the body of your report.

1. Introduction: Briefly summarize the goal of the analysis in your own words;
2. Summary: Summarize your data by plots or sample estimates;
3. Analysis: Implement the analysis based on what you have done in homework;
4. Conclusion: Describe and interpret your findings.

**Details:**

1. A title page including your name, the name of the class, and the name of your instructor.
2. Do not include R code in the body of your report. R code used to produce the results should all go to the appendix.
3. Typed.
4. Double-sided pages.

For example, your project should be put together in the following order (stapled):

Cover page;

Introduction, summary, analysis, and conclusion;

Code appendix.