The purpose of this project is to demonstrate your ability to use the statistical techniques we learned in class to analyze a topic of your own and to communicate your conclusions. To this end, you must provide a detailed discussion of which techniques you chose to use on your data, and why those techniques were the most appropriate. We expect to see a wide variety of techniques used (not just graphing), including at least two of the inference techniques covered in the second half of the class. There must also be a detailed discussion of the results of the techniques and the conclusions you draw from those results.

**Format For The Report**

Give your report a short descriptive title. Your title should appear on the cover of your report.

**Abstract**:

Provide a brief summary of your report. It should be one or two paragraphs: state the problem simply, identify the methodology (e.g., "The primary analytic tool was regression analysis."), and summarize the conclusions.

**Table of Contents**:

This is a list of the sections of your report along with the number of the page on which they start. This provides the reader with a road map to your report.

**Problem Statement**:

A brief description of the problem you are presenting in this paper. This should also include a statement as to the reason why you chose this problem. Use nontechnical language for this part. If you know of pertinent history, you may explain it briefly to establish a context for your research. One or two paragraphs are usually sufficient.

**Procedures**:

This is where you tell your reader the sources of your data and how you manipulated them before you performed your statistical analysis. You should also provide your reader with a summary of the procedures you used in your analysis and your reasons for choosing those procedures.

**Results**:

This is where you summarize the results of your analysis. Summary tables and graphs should be included here; detailed printouts should be included in an appendix to your report. For example, if your project involved selecting the explanatory variable most strongly correlated with a response variable, you should present the correlation coefficients between the response variable and each of the explanatory variables here. However, the Excel output providing the correlation coefficients of all of the variables with each other would be included in an appendix.

You should also include a description of what the reader should be looking for in your results. Using the example from above, you could point out which variables have strong correlation with the response variable.

**Conclusions**:

This section contains your interpretation of the results and ties them back to the original problem. (You should note that many readers will read this section immediately after they read the problem statement.) Use nontechnical language for this part of your report.

**Discussion**:  
Give a discussion of any problems you faced in doing the research or interpreting the results.  If you have ideas for moving to the next level in researching the topic, you may give them here also.

**Citations**: