Write a 1-2 page report summarizing your data collection project. This should be written as a report and **<u>not a</u> <u>response to the prompts below</u>**.

Your report should include the following:

- A description of your statistical question.
- A summary of your data collection process (who is your population? How did you collect a random sample?)
- A description of your data, including a histogram, mean and standard deviation for each group.
- A use of normal distribution probability calculations to describe differences or similarities between your groups and to answer your statistical question.
- A discussion of the appropriateness of using the normal distribution to analyze your data.

Scoring Rubric:

7 or 6 = Full description of statistical question and summary of data collection process. Correct mean, standard deviation and histograms with written descriptions relevant to data. Correct normal distribution calculations that are relevant and useful for answering statistical questions. Appropriate evaluation of the use of normal distribution for your data. Report is well written, organized and draws thoughtful conclusions.

5 = Full description of statistical question and summary of data collection process. Correct mean, standard deviation and histograms with written descriptions relevant to data. Correct normal distribution calculations that are somewhat relevant and useful for answering statistical questions. Some evaluation of the use of normal distribution for your data. Report is written in paragraph form, somewhat organized and attempts to draw conclusions.

4 = Presentation of statistical question and summary of data collection process. Correct mean, standard deviation and histograms. Correct normal distribution calculations that are partially relevant and useful for answering statistical questions. Attempted evaluation of the use of normal distribution for your data. Statistical question is clearly answered.

3 = Presentation of statistical question and summary of data collection process attempted. Mostly correct mean, standard deviation and histograms. Mostly correct normal distribution calculations that are somewhat relevant and useful for answering statistical questions. Attempt to answer statistical question.

1 or 2 = Incomplete or insufficient description of statistical question and summary of data collection process. Mean, standard deviation and histograms are incorrect. Incorrect or irrelevant normal distribution calculations. Statistical question is not answered.