Your Intermediate Analysis needs at least the following items, inclusive of the code required to do these things. For your first homework an RMarkdown document is probably most appropriate.

1. A paragraph describing your dataset and from where you got it such that someone else could find it.

2. Import the data set and tidy it if necessary. Tidy data should follow the guidelines of Data Organization in Spreadsheets and tidy.txt – read these if you don't know what they say.

3. At least one plot to highlight the variables you'll consider in your analysis.

4. At least one sentence describing each of the plots you make.

5. A few summary statistics: mean/median, and standard deviation/IQR.

6. A English sentence describing each summary statistic in the context of your data.

7. Don't forget by the end of the semester you need to pick up at least five of the Extra Homework Requirements found in the syllabus.

Plus the stuff that makes this more difficult than Simple Analysis.

1. Fit simple linear regression to two numerical variables within your data set.

2. Explain to your Boss what the simple linear regression model tells you in the context of your data. Draw an informative conclusion.

3. Make two predictions from your simple linear regression model, one should be extrapolation and the other a prediction within the range of your data. Explain in complete sentences each.

4. One of your plots should contain at least two variables. A logical choice here would be to plot the simple linear regression model.

5. Put a confidence interval on your summary statistics above. Interpret the confidence interval in context of the data. If you new a refresher on the bootstrap procedure, check out University of Washington's short bootstrap tutorial or UCLA's short bootstrap tutorial.