Statistical Programming – Spring 2017
Homework #2 – due Feb 6

Recall that homework will be graded for completion. Please include your answers to question 0 at the beginning, so that I can most effectively provide feedback. These will be included on each assignment. As far as turning the assignment in, you are welcome to include a printout of the file, with output. You can just copy your console window into a work processing file and annotate it, as appropriate.

0. Evaluate your own homework.
   c. Did you code work? (yes or no)
   d. If no, what sections did not work? For each section, explain what problems you had. Be specific.

1. Read in the file BaseballSalaries.xlsx (from the course website) using read.xlsx(). [Note, if after some attempts you can't get your computer to load rJava, you can save this file as a csv and then read it in] The variable in the file are:
   - Year – the year in which the player played
   - Team – the team for which the player played
   - League – American League (AL) or National League (NL)
   - Player – the ID of the player
   - Salary – the salary of the player for that year

2. Use the head(), dim(), and str() functions to confirm that the dataset is read in properly.

3. Create a table to determine how many players per year are in the dataset.

4. There is one value that was entered incorrectly. It's the only non-zero salary that is less than 1000. Identify the specific row where this occurs.

5. Change the value of the incorrect data point in #4 above to be 1000 times the current value to correct it.

6. Let's adjust all the data to be 2013 dollars. There was an average inflation rate of 2.7% per year over that time period. Inflate the salary amounts to be in 2013 dollars.

7. (Optional) Part #6 was an approximation of the real inflation rates, which can be found at http://usinflation.org/us-inflation-rate/. Use these data to determine the actual salary of each player adjusted to 2013 dollars.

8. Using the inflation adjusted values, calculate a summary() of the salaries, separately by league. What do you learn from this?