1 Introduction

The date you are going to be using in these exercises comes from
http://www.seanlahman.com/baseball-archive/statistics/, more specifically the 2017 csv version. If you want to get the full dataset you can get it all from there.
What you will be using in these exercises is a reduced and pre-filtered version of this data set.

2 Reading the data

The data is included for you in a txt or csv file format.

The txt data is organized such that each line has the name of the data as its first word, and then each data point is separated by a space, the last having a newline at the end of it.

The csv data is organized such that the first row has the column names, and each subsequent row contains a row of data. The columns are separated by commas, and the first value in each row is the index of that row.

3 Exercise 1

Using the file Sheet1E1 create a scatter plot of the number of hits per at base (HPAB) and plot them versus the number of games played.

1. Create a hits per at base variable
2. Create a figure named HPAB, with size 8,8
   (a) **Note:** In the sample solution the figure was named HPABY
3. Add an axis to the figure
4. Plot the HPAB against the number of games
5. Make the size of the points appropriately small so you can see a good separation between the data
6. Have all points plotted in green
7. Show the plot

4 Exercise 2

Using the file Sheet1E2 create a line plot that plots the hits per at base versus the year they occurred at.

1. Create a hits per at base variable
2. Create a figure named HPABY, with size 10,10
3. Add an axis to the figure

4. Plot the HPAB against the year it occurred at
5. Have the line shown in green
6. Show the plot

Create a second line plot that plots the at base versus the year they occurred at.

1. Using the above figure, add an a second axis to the figure, and re-format the first subplot so that they stack on top of each other in two rows.
2. Plot the AB against the year it occurred at
3. Have the line shown in purple
4. Show the plot

Now we're going to adjust the figure to make both of the axes about square looking.

1. Adjust the figure height or width so that both axes look about square