## Daily Homework

## Read, from the Lock5 text

- Section 1.1, in full
- Section 2.1, pp. 46–49 up to "Two Categorical Variables: Two-Way Tables"
- Section 2.2, pp. 60–64 up to "The Center of a Distribution"

## **Exploration**

- Watch the video at <a href="http://scofield.site/courses/s145/videos/RStudioIntro.mp4">http://scofield.site/courses/s145/videos/RStudioIntro.mp4</a>. Have another browser window or tab open, and carry out the steps you see performed in the video, as completely as possible.
- After watching the video, use RStudio to carry out these tasks. There is no formal write-up required of you, but you are required to submit a question to the class forum as described below.
  - 1. Make RStudio display the data of **StudentSurvey** (a Lock5 data set; make sure you have the "Lock5withR" package loaded) that appears much the same as Table 1.1 on p. 4 in the Lock5 text.
  - 2. Determine the names of the variables in the **NutritionStudy** data frame (another Lock5 data set)
  - 3. Produce a frequency table for the Eversmoke variable from the **NutritionStudy** data frame.
  - 4. Find another non-binary categorical variable (i.e., one with 3 or more values) in **NutritionStudy** other than EverSmoke. Display its distribution using a bar graph.
  - 5. Produce a graph displaying the distribution of the quantitative variable Cholesterol in **NutritionStudy**. Which word/phrase most accurately describes this distribution among these choices: *symmetric*, *skewed to the right*, or *skewed to the left*?
  - 6. Determine the minimum value of the Cholesterol variable among "Current" smokers. (Hint: Use the filter() command. The answer is 78.3.)

**Reporting**: As you worked through the video or the tasks following it, most likely questions arose about the software. Submit <u>one</u> question in the <u>class forum</u> as a reply to the thread titled <u>First experience in RStudio</u>.