0: How to do this assignment

This exercise will teach you basic commands and types of data objects in R. By the end, you will be able to perform the following tasks in R.

- Create and save a new R script;
- assign values to variables;
- create and manipulate vectors;
- create and perform computations on matrices;
- create, subset, and compare factors;
- create data frames, extract data from rows, columns, and cells; and
- create and manipulate lists.

How this works

First, create a folder called hw02 inside your local repo (the folder you created for this course). It should be in the same folder as your project file.

Next, choose File > New File > R Script from the menu to create a new script. Choose File > Save As... to save the script as hw02-1.R inside the hw02 folder you just created. Use this script for part 1: Intro to Basics. You'll make a separate script for each part. Save each script in your hw02 folder.

This assignment consists of six parts:

- 1: Intro to Basics (HTML | PDF)
- 2: Vectors (HTML | PDF)
- 3: Matrices (HTML | PDF)
- 4: Factors (HTML | PDF)
- 5: Data frames (HTML | PDF)
- 6: Lists (HTML | PDF)

Each part has a set of instructions (in HTML and PDF) to guide you through the exercises. I'll release the parts over 2-3 days to give us all time to work out any kinks with setup and getting comfortable in RStudio.

After you complete each assignment, you must push your script to your remote repository. Follow these steps:

- 1. Choose Tools > Version Control > Commit... from the menu.
- 2. You should see an entry on the left that looks like hw02/hw02-1.R or similar. The exact file name will depend on the the part you just completed. Click the checkbox to the left. If you see only hw02, then click that checkbox. That should show your script, already checked.
- 3. In the Commit message box on the right type "Finished Part 1." and press the Commit button. Change the part number to match the part you just completed.

4. Close the confirmation box, then click the Push button with the green, upward-pointed arrow (upper right in RStudio). This will place your completed notebook on your remote repo (GitHub) for me to view.

Notes 03 will cover what is actually going on when you do these steps.