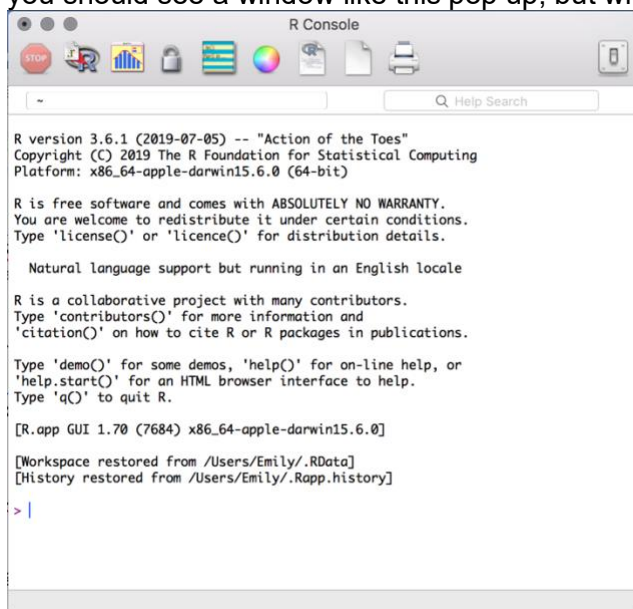**Please come to class with (1) RStudio installed and (2) the dataset loaded and ready to go. If you are having issues following the instructions below, email Emily (ejl37@duke.edu) before class.**

If you already have R and RStudio installed on your computer or if you have an online RStudio account, load the dataset (baboon_data.csv) before class. If this is new to you, follow these instructions for installing R & RStudio and loading your dataset. This should take 10-20 minutes.

Installing R - R is the program that will run your code.

1. Go to http://archive.linux.duke.edu/cran/ - this is the Duke CRAN site
2. In the "Download and Install R" box at the top, select the link that corresponds to the computer you have (Windows, Mac)
3. If Windows:
    a. Select *base*
    b. Select *Download R 3.6.1 for Windows*. Clicking the hyperlink will automatically download the installer.
4. If Mac:
    a. Select *R-3.6.1.pkg*. Clicking the hyperlink will automatically download the installer.
5. Follow the installer directions. R should end up in your Applications folder. If you open it, you should see a window like this pop up, but with your name instead of Emily's:

Installing RStudio – Rstudio is the program that will make a nice user interface for R

1. Go to https://rstudio.com/
2. Select *Download RStudio*
3. Select *Download* under RStudio Desktop Free
4. Under "Installers," select the correct option – likely macOS 10.12+ or Windows 10/8/7. Clicking the hyperlink will download the installer.
5. Follow the installer directions. RStudio should end up in your Applications folder. When you open it, you should see a window like this (though probably a little different):
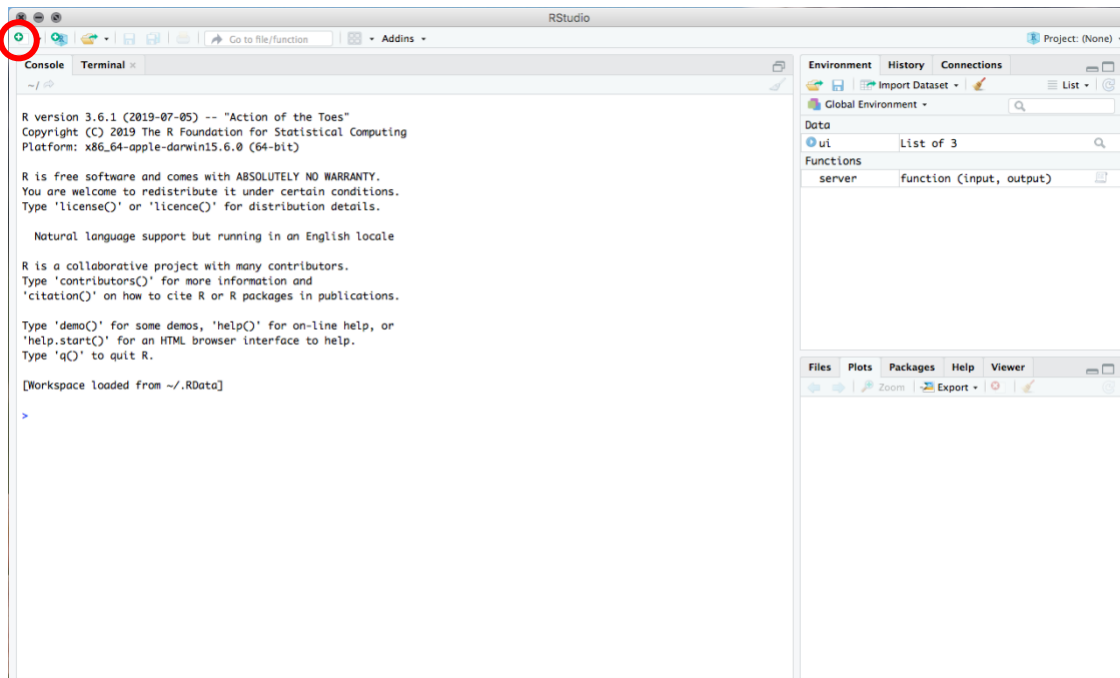
6. In the Console window, after the >, try typing something simple like 2+2. Press Enter.
7. Select the top left button that looks like a small white rectangle with a green and white plus sign in the corner (circled in red above). It will open up a new script. Try typing 2+2 into that script. To run that line of code, either click the Run button (circled in red below) or press Command+Enter (Mac) or Control+Enter (Windows).
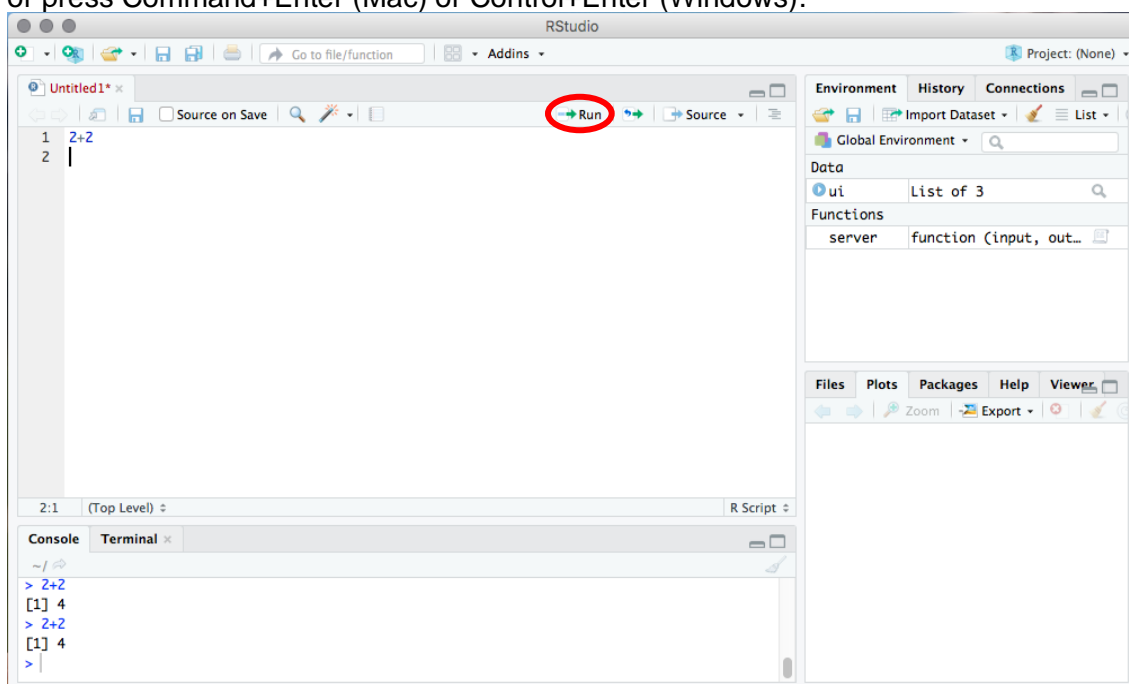
8. You're ready to load the dataset!

**<u>Loading your datasets</u>** – Introducing RStudio to the .csv file

1. Download the two .csv files that we emailed you (*baboon_data.csv and baboon_data_2.csv*).

2. Save the files in an easy-to-find folder, such as your Desktop. Make sure the name is exactly as written: baboon_data.csv and baboon_data_2.csv
3. Open RStudio
4. In the bottom right corner (highlighted in red below), click on the tab on the top that says *Files*.
5. Click on *Desktop* (which is where your data file is).
6. Click *More*, and in the drop-down menu select *Set as Working Directory*. (Yellow oval below)
7. After you do that, the console will have added a line that says something like *setwd("~/Desktop")*. That's good! To read in the file, RStudio needs to know which folder to look in. This folder is called the working directory, and you just set the working directory to your Desktop.
   a. If that's not working, see the troubleshooting tip at the end of this document.
8. Now, load the data! In your script in RStudio (top left window in the picture), type the following:
   bab = read.csv("baboon_data.csv")
   bab2 = read.csv("baboon_data_2.csv")
   Highlight the lines and press *Run*.
9. If it worked, you'll see bab and bab2 show up in Global Environment (top right window).
10. To make extra sure, type the line below and *Run*. This will tell you how many rows of data there are, and it should spit out 843 in the Console (bottom left window):
    nrow(bab)
11. If that didn't work, see below for an alternate routes. You can also try a bit of googling or re-tracing. **If you're still having trouble, email Emily (see email at top of document) to make sure you're ready to go for class on Wednesday**.
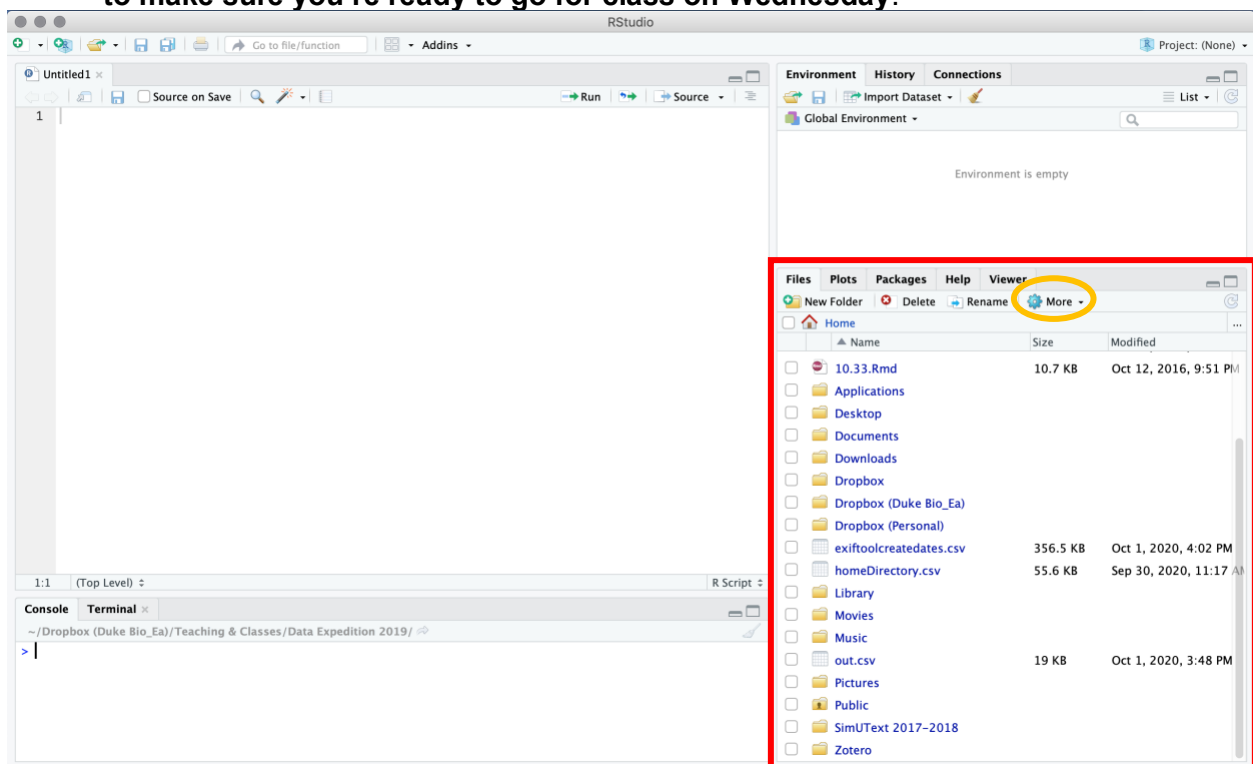
Troubleshooting: Loading your dataset
Trouble setting the working directory or loading the dataset? Try a direct import:

1. Click Import Dataset (top right window). In the drop-down, select *From Text (base)*.
2. A window will pop up. Select the baboon_data.csv file and click Open.
3. Use these presets, and click *Import*.

Import Dataset

Name

baboon_data

Encoding	Automatic
Heading	● Yes ○ No
Row names	Automatic
Separator	Comma
Decimal	Period
Quote	Double quote (")
Comment	None
na.strings	NA

☑ Strings as factors

Input File

```
female,cycle_day,estrogen,swelling_size,alpha_consort,nonal
1,1,65.05,1,0,0
1,-2,504.42,5,0,0
1,-4,78.75,5,1,0
1,3,41.76,2,0,0
1,-15,68.77,2,0,0
1,-1,68.51,6,0,0
1,5,33.52,1,0,0
1,8,27.48,0,0,0
1,12,104.87,0,0,0
1,-2,205.61,7,1,0
1,12,46.94,0,0,0
1 10 27 03 0 0 0
```

Data Frame

female	cycle_day	estrogen	swelling_size	alpha_c
1	1	65.05	1	0
1	-2	504.42	5	0
1	-4	78.75	5	1
1	3	41.76	2	0
1	-15	68.77	2	0
1	-1	68.51	6	0
1	5	33.52	1	0
1	8	27.48	0	0
1	12	104.87	0	0
1	-2	205.61	7	1
1	12	46.94	0	0
1	10	27.03	0	0

Import   Cancel