Getting R, etc., installed

Installing R:
1) Go to this website.
2) Click on the link for your operating system and download the latest package that's compatible.

> Download and Install R
>
> Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:
>
> - Download R for Linux
> - Download R for (Mac) OS X
> - Download R for Windows
>
> R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

3) Install the package on your computer.

Installing RStudio:
1) Go to this website.
2) Follow the links to download & install the RStudio Desktop that is recommended for your system.

Installing some basic packages:
1) We'll be using 3 basic packages during the tutorial. These are "ggplot2" (for making nice graphs), "reshape2" (for manipulating data), and "knitr" (for making HTML output files).
2) To install, you first need to open up RStudio. Then, in the Console you can run the command (type + press Return):

```
> install.packages("ggplot2")
```

and repeat this for each package. We recommend installing each package separately for now, to make sure they've all installed correctly.

3) To use an installed package in RStudio, run the command:
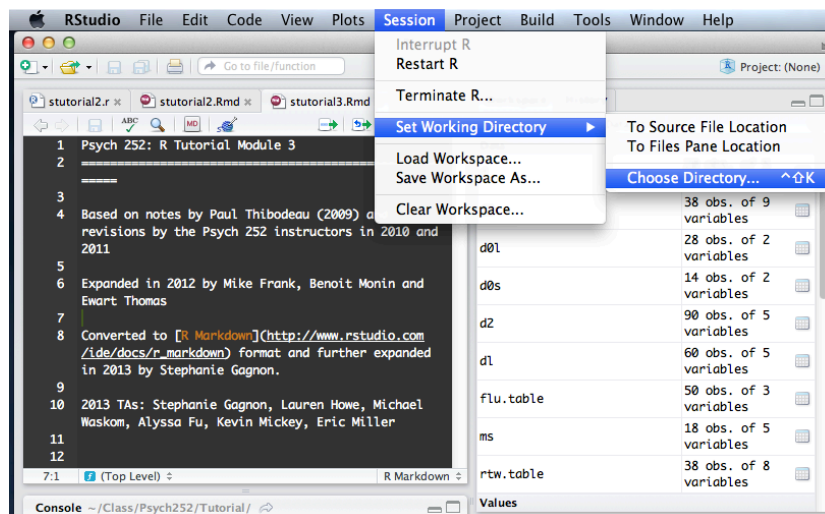
```
> library("ggplot2")
```

Checking out the Tutorials

Setting your working directory (wd):

1) When using R, it's helpful to tell R where your datafiles and scripts are located. This location is called your "working directory". Before setting up your working directory, we'd recommend creating a folder for Psych252, and within the folder having separate folders for each week where you can store the relevant data files and scripts that you've downloaded from Coursework.

2) To set your working directory, run the following command (make sure the address in quotes is the location where you stored the tutorial files on *your* computer):

```
> setwd("~/Class/Psych252/Tutorial/")
```

If you're not sure what the "address" for your folder is, you can manually set it by clicking on **Session | Set Working Directory | Choose Directory**:

Opening a tutorial SOURCE file (.Rmd):

1) To open up a tutorial source file (i.e., the code, in "markdown" format), click on **File | Open**

2) If you set the working directory, you should automatically be within the tutorial folder; here, you can click on any of the .Rmd files (e.g., "stutorial1.Rmd"). Go ahead and open that up.

3) This will open in the file window in RStudio. You can scroll down to the first "chunk" of code, which is defined by:

```
```{r chunk_name}
code is here
```
```

4) To run a line of code, put your cursor somewhere in that line, and then press Command+Enter. You can also copy and paste or type a line into the Console.

Opening a tutorial HTML file (.html):

1) Go into your folder where the files are stored, and open up the .html file. This should open up in your browser. The HTML file is a version of the .Rmd file created using the package "knitr". Once you have knitr installed, you can create your own HTML from the .Rmd files by clicking on "Knit HTML" in RStudio.