Getting Started and R Nuts and Bolts

This week is all about getting started with R and learning some of the basic details of the language. If you haven't already installed R, you should go to the R web site and download R for your platform (Windows, Mac, or Unix/Linux). Also, if you want, you can download RStudio, which is a free interactive development environment designed for R that is very useful and we use quite a bit in the Data Science Specialization. I've made some videos to help you along with the installation process:

- Installing R on Windows
- Installing R on a Mac
- Installing R on RStudio (on a Mac)

Before you start using R, one key concept is the **working directory**. This is the directory/folder on your computer where you will store project files, data, and code. It's important that you tell R where the working directory is that you will be using so that it knows where to find the appropriate file (the working directory can be any directory on your computer). These videos tell you how to set your working directory:

- Setting your working directory (Windows)
- Setting your working directory (Mac)

Learning Objectives

By the end of week 1 you should be able to:

- Install the R and RStudio software packages
- Download and install the swirl package for R
- Describe the history of the S and R programming lectures
- Describe the differences between atomic data types
- Execute basic arithmetic operations
- Subset R objects using the "[", "[[", and "$" operators and logical vectors
- Describe the explicit coercion feature of R
- Remove missing (NA) values from a vector