

Lab 1: Getting Started with R

Introduction

The goal of this lab is to introduce you to the fundamental building blocks of the programming language R. You will start by going through some Swirl tutorials/lessons. Each lesson will take anywhere from 10-30 minutes and you can stop and restart them at any time (It will not save your spot mid-lesson). At the end of the lesson you will have the option to send me an email letting me know you have completed the lesson. **Do this so I can give you credit!**

Basic Building Blocks

Each time you start a new session you will need to load the swirl package by typing `library(swirl)` in the console. Then type `swirl()` to start the tutorial. Follow the instruction prompts and enter your name, then choose the **Basic Building Blocks** lesson.

Practice

1. Use `sample(0:100, size=5)` to create vector of 5 random numbers between 1 and 100. Store this result as a variable `x`.
2. Calculate the following

$$\frac{(x-5)^2}{\sqrt{(50-1)}}$$

Assessment

Complete the **Basic Building Blocks** quiz on BBLearn.

Sequences of Numbers

Next you're going to learn how to generate sequences of numbers. These objects you'll create are also called **vectors**. Complete the **Sequences of Numbers** swirl lesson.

Practice

1. List the even numbers from 1 to 12.
2. List the numbers from 10 to 1 in descending order.
3. Create this sequence using R: ("A", "B", "C", "A", "B", "C")
4. Create this sequence using R: ("A", "A", "B", "B", "C", "C")

Assessment

Complete the **Sequences of Numbers** quiz on BBLearn.