Week 3: Loop Functions and Debugging

This week is what I call "loop functions" in R, which are functions that allow you to execute loop-like behavior in a compact form. These functions typically have the word "apply" in them and are particularly convenient when you need to execute a loop on the command line when using R interactively. These functions are some of the more interesting functions of the R language. This week we also cover the debugger that comes with R and how to interpret its output to help you find problems in your programs and functions. The lecture videos for this week are:

* Loop functions: lapply, apply, tapply, split, mapply
* Debugger, Parts 1-3

Learning Objectives

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

* Define an anonymous function and describe its use in loop functions [see lapply]
* Describe how to start the R debugger for an arbitrary R function
* Describe what the traceback() function does and what is the function call stack

Quizzes

* Quiz 3 - at least 80% to pass
* Programming Assignment 2: Lexical Scoping - at least 80% to pass. Please note that **this assignment is graded via peer assessment**.