Advanced R Programming

<https://www.coursera.org/learn/advanced-r/home/welcome>

# Week 1 – Functions Overview

Functions are used to **encapsulate** a sequence of expressions that are executed together to achieve a specific goal. A single function typically does "one thing well"---often taking some input and the generating output that can potentially be handed off to another function for further processing. Drawing the lines where functions begin and end is a key skill for writing functions. When writing a function, it's important to ask yourself *what do I want to encapsulate*?

# Week 3 – Debugging

This section describes the tools for debugging your software in R. R comes with a set of built-in tools for interactive debugging that can be useful for tracking down the source of problems. These functions are

* browser(): an interactive debugging environment that allows you to step through code one expression at a time
* debug() / debugonce(): a function that initiates the browser within a function
* trace(): this function allows you to temporarily insert pieces of code into other functions to modify their behavior
* recover(): a function for navigating the function call stack after a function has thrown an error
* traceback(): prints out the function call stack after an error occurs; does nothing if there’s no error

1. Running the traceback() function immediately after getting this error:

traceback()