Day 2 Cheatsheet

Basic R

Major concepts

- Package a package in R is a bundle or "package" of code (and or possibly data) that can be loaded together for easy repeated use or for sharing with others.
- The R console is a full calculator:
 - -+,-,/,* are add, subtract, divide and multiply
 - ^ or ** is power
 - parentheses (and) work with order of operations
 - %% finds the remainder
- # is the comment symbol; nothing to its right is evaluated.

Functions

Library/Package	Piece of code	Example of usage	What it does
Base R Base R Base R Base R Base R Base R	<pre><- c() str(x) class(x) print(x) length(x)</pre>	<pre>x <- 1 x <- c(1, 3) str(x) class(x) print(x) length(x)</pre>	Assigns a name to something in the R environment. Combines values into a vector or list. Gets a summary of the object x structure. Returns the type of the values in object x. Prints out contents of x. Returns how long the object x is.

Data Input/Output

Major concepts

- **Delimited file** columns within the file have boundaries created with some type of punctuation for example, a csv file stands for comma separated values, thus the columns are delimited or separated by commas. txt files often use tabs.
- tibble a rectangular data frame, where data are split into rows and columns.
- File path where a file lives on your computer (or on the internet) File paths can be relative or absolute.
- Getting help For any function, you can write ?FUNCTION_NAME, or help("FUNCTION_NAME") to look at the help file for that function.
- R Projects set the working directory where the .Rproj file is.
- R Markdown files look for file paths relative to where the .Rmd file is located

Functions

Library/Package	Piece of code	Example of usage	What it does
readr	read_csv()	df <- read_csv(" <url>")</url>	Reads in a TSV file from a specified file path. This function can be tailored to read in other common types of files. i.e. read_csv(), read_rds(), etc.
readxl Base R	<pre>read_excel() getwd()</pre>	<pre>read_excel("dataset.xls getwd()</pre>	Read in an excel file. Finds the current working directory.

Library/Package	Piece of code	Example of usage	What it does
Base R	setwd()	setwd("Desktop")	Changes the current working directory.

 $^{\ ^{*}}$ This format was adapted from the cheat sheet format from AlexsLemonade.