Day 3 Cheatsheet

Subsetting Data in R

Functions

Library/Package	Piece of code	Example of usage	What it does
Base R	`nrow(x)`; `ncol(x)`	`nrow(x)`; `ncol(x)`	Get the number of rows and the number of columns in an object `x`, respectively.
Base R	`dim(x)`	`dim(x)`	Get the number of rows *and* number of columns in an object `x`
`dplyr`	`glimpse(x)`	`glimpse(mtcars)`	Get an overview of data frame `x`
Base R	`data.frame()`	`df <- data.frame(1:3)`	Creates a data frame where the named arguments will be the same length.
Base R	`tibble()`	`tibble(mtcars)`	Creates a tibble from a data.frame or matrix.
`dplyr`	`rename()`	`df <- rename(df, MPG = mpg)`	Renames designated columns while keeping all variables of the data.frame
`dplyr`	`pull()`	`pull(df, 'existing_variable_name')`	Extract a column as a vector
`dplyr`	`select()`	`select(df, 'existing_variable_name')`	Selects columns that match the specified argument
`dplyr`	`filter()`	`filter(df, mpg > 20)`	Returns a subset of rows matching the conditions of the specified logical argument
Base R	`==, <=, >=, !=`	`filter(df, mpg > 20)`	These are binary operators which allow for the comparison of values in an object. They are handy for use with `filter()`
Base R	`%in%`	`filter(df, mpg %in% c(20,21,22))`	Checks if the given value(s) on the left side of the operator are in the vector or other R object defined on the right side of the operator. It returns a logical `TRUE` or `FALSE` statement.
`dplyr`	`%>%`	`df <- df %>% select('new_variable_name')`	Funnels a data.frame through tidyverse operations

Library/Package	Piece of code	Example of usage	What it does
`dplyr`	`mutate()`	`df <- mutate(df, newcol = wt/2.2)`	Adds a new column that is a function of existing columns
`dplyr`	`recode()`	`df <- mutate(df, mpg = recode(mpg, oldval = newval)`	This function allows you to recode based on conditions.
`dplyr`	`case_when()`	`df <- mutate(df, mpg = case_when(mpg, mpg > value ~ newvalue)`	This function allows you to recode based on conditions. Anything not specified will become an NA.

- See tidyselect helpers for handy things to use with `select()`.

* This format was adapted from the cheatsheet format from AlexsLemonade.