

Day 6 Cheatsheet

Data Manipulation

Major concepts:

- Wide data - multiple columns per individual, values spread across multiple columns
- Long data - multiple rows per observation, a single column contains the values

Functions

Library/Package	Piece of code	Example of usage	What it does
dplyr	separate()	df %>% separate(x, c("A", "B"))	Separate a character column into multiple columns with a regular expression or numeric locations
dplyr	unite()	df %>% unite("z", x:y, remove = FALSE)	Unite multiple columns together into one column
tidyr	pivot_longer()	df %>% pivot_longer(!col_to_keep, names_to = "new_col_with_labels", values_to = "new_col_with_values")	Lengthens a data frame by increasing the number of rows and decreasing the number of columns.
tidyr	pivot_wider()	df %>% pivot_wider(names_from = "col_with_names", values_from = "col_with_values")	Widens a data frame by decreasing the number of rows and increasing the number of columns.
dplyr	?_join()	inner_join(x, y)	Joins data from two data frames. inner_join - only rows that match for x and y are kept. full_join - all rows of x and y are kept. left_join - all rows of x are kept even if not merged with y. right_join - all rows of y are kept even if not merged with x. anti_join - all rows from x not in y keeping just columns from x.
Base R	duplicated()	duplicated(x)	Determines and removes duplicate elements from x.

Library/Package	Piece of code	Example of usage	What it does
Base R	<code>t()</code>	Transpose	Returns the transpose of a matrix or data frame. If given a data frame, returns a matrix.

Data Visualization with **esquisse**

Major concepts

- The **esquisse** package can help you to test out plots and get familiar with the syntax required to make plots

Functions

Library/Package	Piece of code	Example of usage	What it does
esquisse	<code>esquisser()</code>	<code>esquisser(Orange)</code>	Start an esquisse interactive session to create a plot of the given <code>data.frame</code> or <code>tibble</code>

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