

# Day 5 Cheatsheet

## Data Cleaning

### Major concepts

- **Most important rule of data handling - Always be looking at your data!**
- **NA** - general missing data
- **NaN** - stands for “Not a Number”, happens when you do 0/0.
- **Inf** and **-Inf** - Infinity, happens when you take a positive number (or negative number) by 0.

### Functions

Library/Package	Piece of code	Example of usage	What it does
Base R	<code>is.na(x)</code>	<code>is.na(x)</code>	checks if <code>x</code> is <b>NA</b> .
Base R	<code>is.nan(x)</code>	<code>is.nan(x)</code>	checks if <code>x</code> is <b>NaN</b> .
Base R	<code>is.infinite(x)</code>	<code>is.infinite(x)</code>	checks if <code>x</code> is <b>Inf</b> or <b>-Inf</b> .
naniar	<code>pct_complete(x)</code>	<code>pct_complete(x)</code>	Reports the percentage of data that is complete in <code>x</code> .
naniar	<code>gg_miss_var(x)</code>	<code>gg_miss_var(x)</code>	Reports as a plot the percentage of data that is complete in <code>x</code> .
tidyr	<code>drop_na(df)</code>	<code>drop_na(df)</code>	Drops rows of <b>NA</b> from a given data frame/tibble
dplyr	<code>case_when()</code>	<code>df &lt;- arrange(df, mpg)</code>	This function allows you to vectorise multiple <code>if_else()</code> statements. If no cases match, <b>NA</b> is returned.
dplyr	<code>mutate()</code>	<code>df &lt;- mutate(df, newcol = wt/2.2)</code>	Adds a new column that is a function of existing columns
dplyr	<code>separate()</code>	<code>df %&gt;% separate(x, c("A", "B"))</code>	Separate a character column into multiple columns with a regular expression or numeric locations
dplyr	<code>unite()</code>	<code>df %&gt;% unite("z", x:y, remove = FALSE)</code>	Unite multiple columns together into one column
stringr	<code>str_detect</code>	<code>df %&gt;% filter(str_detect(col_name, "string_pattern"))</code>	Returns logical vector to indicate if string pattern was detected
stringr	<code>str_replace</code>	<code>str_replace(vector, "replace_me", "with_me")</code>	Replaces all instances of one specified string with another specified string

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