# Day 4 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 |
| --- | --- | --- | --- |
| `tidyr` | `pivot_longer()` | `df %>%`<br>`pivot_longer(!column_to_not_touch,`<br>`names_to =`<br>`"new_col_with_labels",`<br>`values_to =`<br>`"new_col_with_values")` | Lengthens a data frame by increasing the number of rows and decreasing the number of columns. |
| `tidyr` | `pivot_wider()` | `df %>%`<br>`pivot_wider(names_from`<br>`= "col_with_names",`<br>`values_from =`<br>`"col_with_values")` | Widens a data frame by decreasing the number of rows and increasing the number of columns. |

## 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` | `esquisser()` | `esquisser(Orange)` | Start an `esquisse` interactive session to create a plot of the given `data.frame` or `tibble` |

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