R for MINNESOTA

Online @ **github.com/tidy-mn/cheatsheets**

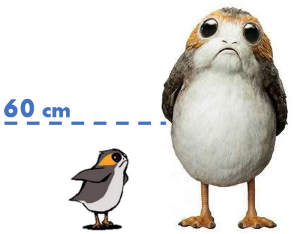
Remember porgs are not for dinner.

SELECT COLUMNS

```
# Keep only 2 columns
select(porgs, id, age)
# Drop the mass column
select(porgs, -mass)
# Put the age column first, but
# keep everything else the same
select(porgs, age, everything())
```

SORT ROWS

```
# Sort by age w/ YOUNGEST on top
arrange(porgs, age)
# Sort by age w/ ELDEST on top
arrange(porgs, desc(age))
# Sort by colors and then by age
arrange(porgs, color, desc(age))
```



DATES

Convert text to Date

Function	Order of Input	Output
`mdy()`	Month-Day-Year :: `05-18-2019`	`2019-05-18`

`mdy_hm()`	Month-Day-Year
	Hour:Minutes ::
	`05-18-2019 8:35`
		`2019-05-18`
		`08:35:00 UTC`

`mdy_hms()`	Month-Day-Year
	Hour:Mins:Secs ::
	`05-18-2019 8:35:22`
		`2019-05-18`
		`08:35:22 UTC`

Date parts

Function	Date element
`year()`	Year
`month()`	Month as *1,2,3*
`day()`	Day of the month
`wday()`	Day of the week
`hour()`	Hour of the day *(24hr)*
`tz()`	Time zone

IFELSE: YES / NO DECISIONS

Use `ifelse()` to create new values that depend on the value of another column. For example, to only label the porgs with a height over *60 cm* as "tall".

```
# When a porg's height is > 60 cm label it as "tall",
# otherwise label it as "short"
mutate(porgs, label = ifelse(height > 60, "tall", "short"))
```

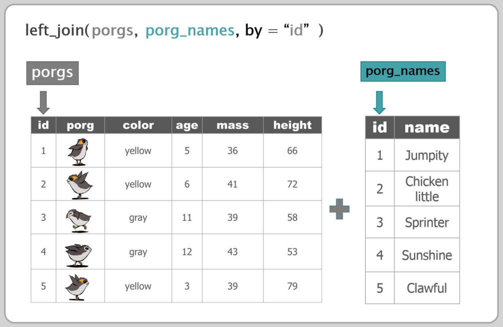
JOIN TABLES

`left_join()` **keeps all rows and columns in the left table, and joins rows in the right table with matching IDs.**

```
# Table w/ porg ages and heights
porgs

# Table w/ porg names
porg_names

# Join together by id columns
together <- left_join(porgs,
                      porg_names,
                      by = "id")
```



left_join(porgs, porg_names, by = "id")

porgs

id	porg	color	age	mass	height
1		yellow	5	36	66
2		yellow	6	41	72
3		gray	11	39	58
4		gray	12	43	53
5		yellow	3	39	79

+

porg_names

id	name
1	Jumpity
2	Chicken little
3	Sprinter
4	Sunshine
5	Clawful

SAVE DATA

Data tables

```
library(readr)
# Save data to a CSV text file
write_csv(porgs, "my_porg_data.csv")
```

Plots and images

```
library(ggsave)
# Save the last plot you made
ggsave("most_recent_plot.png")
# Save earlier plot stored to variable
best_plot <- ggplot()
ggsave(best_plot, "best_plot.png")
```

HELP!

Online

- Google: `r` or `rstats` + `"question"`
- Stackoverflow.com + `[r]` tag
- TEAMS Channel - Help requests!

From R

- Go to: `Help > Cheatsheets`
- Type `?` in the *Console*

```
# Function help
?read_csv
# Search help
help.search("boxplot")
```

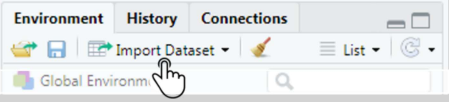
R COMMUNITY

- `#rstats` on 🐦
- ROpenSci.org
- Rweekly.org
- RLadies.org
- R-Bloggers.com
- TidyTuesdays
- **useR** Conferences

SHORTCUTS

- Run line: `CTRL` + `ENTER`
- Save script: `CTRL` + `S`
- Tidy code: `highlight` + `CTRL` + `Shift` + `A`

Find data



R Support Crew Barbara.Monaco Kristie.Ellickson Dorian.Kvale Carl.Stenoien Andrea.Borich Derek.Nagel