

# Searching for help

- Coding is not about memorizing commands – it is about searching
  - Learn the lingo of the error messages and help files
  - Select certain terms and search for them
    - “a numeric vector, matrix or data frame”, weighted covariance computation
  - When you don’t know which function to use – use natural language
    - “How do you calculate gamma correlations in R?”
- Searching Stackoverflow.com
  - All R posts are tagged with [R]
    - [R] ggplot2 remove legend
- Searching Google
  - R ggplot2 remove legend
  - Use “” to force a certain spelling or make sure the search engine reads it literally
  - Google gets better with training!

# Errors and Warnings

Warnings: Can be ignored, but contain information

```
x <- c(1, 2, "A")
as.numeric(x)
[1] 1 2 NA
Warning message:
NAs introduced by coercion
```

If you have a lot of warnings – check them with `warnings()`  
Ggplot gives a lot of warnings that can be ignored

```
mean(CBS)
Error in mean(CBS) : object 'CBS' not found
```

Don't search for the specific

Search string: R Error in mean object not found

Search string: R "Error in" object "not found"

# Not Errors just NA

```
data(starwars)
cor(starwars$height, starwars$mass)
[1] NA
```

Try finding a solution to this problem. Use either ? Or stackoverflow