A new chapter

*If you haven't yet read the getting started Wiki pages; start there

Every chapter needs to start out with this chunk of code:

Learning Objectives

*Every chapter also needs Learning objectives that will look like this:

This chapter will cover:

- {You can use https://tips.uark.edu/using-blooms-taxonomy/ to define some learning objectives here}
- {Another learning objective}

Libraries

For this chapter, we'll need the following packages attached:

*Remember to add any additional packages you need to your course's own docker image.

```
library(magrittr)
```

Topic of Section

You can write all your text in sections like this!

Subtopic

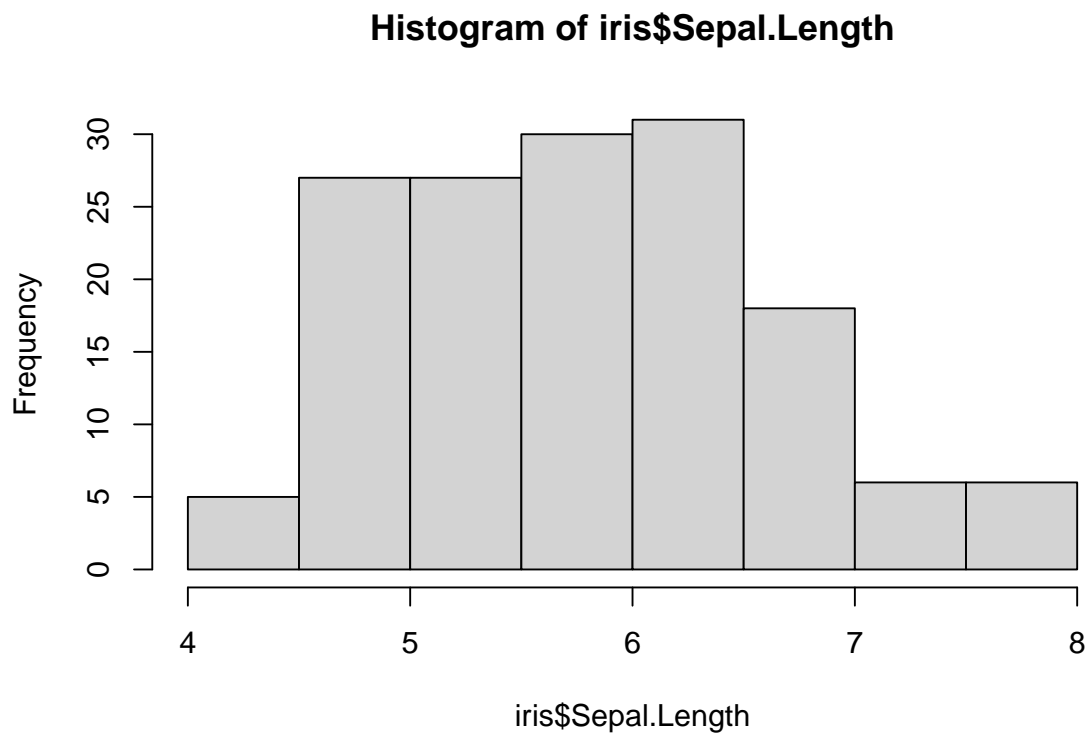Here's a subheading and some text in this subsection!

Code examples

You can demonstrate code like this:

```
output_dir <- file.path("resources", "code_output")
if (!dir.exists(output_dir)) {
  dir.create(output_dir)
}
```

And make plots too:

```
hist_plot <- hist(iris$Sepal.Length)
```

Histogram of iris$Sepal.Length

You can also save these plots to file:

```
png(file.path(output_dir, "test_plot.png"))
hist_plot
```

```
$breaks
[1] 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0

$counts
[1]   5 27 27 30 31 18  6  6

$density
[1] 0.06666667 0.36000000 0.36000000 0.40000000 0.41333333 0.24000000 0.08000000
[8] 0.08000000

$mids
[1] 4.25 4.75 5.25 5.75 6.25 6.75 7.25 7.75
```

```
$xname
[1] "iris$Sepal.Length"

$equidist
[1] TRUE

attr(,"class")
[1] "histogram"
```

```
  dev.off()
```

```
pdf
  2
```

Image example

How to include a Google slide. It's simplest to use the `ottrpal` package:

But if you have the slide or some other image locally downloaded you can also use html like this:

Video examples

To show videos in your course, you can use markdown syntax like this:

[A video we want to show](#)

Alternatively, you can use `knitr::include_url()` like this: Note that we are using `echo=FALSE` in the code chunk because we don't want the code part of this to show up. If you are unfamiliar with [how R Markdown code chunks work, read this](#).

OR this works:

Links to files

This works:

[This works](#).

Or this:

Links to websites

Examples of including a website link.

This works:

Citation examples

We can put citations at the end of a sentence like this [@rmarkdown2021]. Or multiple citations [@rmarkdown2021, @Xie2018].

but they need a ; separator [@rmarkdown2021; @Xie2018].

In text, we can put citations like this @rmarkdown2021.

FYI boxes

Please click on the subsection headers in the left hand navigation bar (e.g., 2.1, 4.3) a second time to expand the table of contents and enable the `scroll_highlight` feature (see more).

Dropdown summaries

You can hide additional information in a dropdown menu

Here's more words that are hidden.

Print out session info

You should print out session info when you have code for reproducibility purposes.

```
devtools::session_info()
```

```
- Session info ----------------------------------------------------------------
 setting  value
 version  R version 4.1.2 (2021-11-01)
 os       macOS Big Sur 10.16
 system   x86_64, darwin17.0
 ui       X11
 language (EN)
 collate  en_US.UTF-8
```

```
ctype     en_US.UTF-8
tz        America/New_York
date      2022-04-22
pandoc    2.14.1 @ /usr/local/bin/ (via rmarkdown)


- Packages ---------------------------------------------------------------
package      * version date (UTC) lib source
cachem         1.0.6   2021-08-19 [1] CRAN (R 4.1.0)
callr          3.7.0   2021-04-20 [1] CRAN (R 4.1.0)
cli            3.1.0   2021-10-27 [1] CRAN (R 4.1.0)
crayon         1.5.0   2022-02-14 [1] CRAN (R 4.1.2)
curl           4.3.2   2021-06-23 [1] CRAN (R 4.1.0)
desc           1.4.0   2021-09-28 [1] CRAN (R 4.1.0)
devtools       2.4.3   2021-11-30 [1] CRAN (R 4.1.0)
digest         0.6.29  2021-12-01 [1] CRAN (R 4.1.0)
ellipsis       0.3.2   2021-04-29 [1] CRAN (R 4.1.0)
evaluate       0.14    2019-05-28 [1] CRAN (R 4.1.0)
fansi          0.5.0   2021-05-25 [1] CRAN (R 4.1.0)
fastmap        1.1.0   2021-01-25 [1] CRAN (R 4.1.0)
fs             1.5.2   2021-12-08 [1] CRAN (R 4.1.0)
glue           1.6.0   2021-12-17 [1] CRAN (R 4.1.0)
hms            1.1.1   2021-09-26 [1] CRAN (R 4.1.0)
htmltools      0.5.2   2021-08-25 [1] CRAN (R 4.1.0)
httr           1.4.2   2020-07-20 [1] CRAN (R 4.1.0)
jsonlite       1.7.2   2020-12-09 [1] CRAN (R 4.1.0)
knitr          1.37    2021-12-16 [1] CRAN (R 4.1.0)
lifecycle      1.0.1   2021-09-24 [1] CRAN (R 4.1.0)
magrittr     * 2.0.1   2020-11-17 [1] CRAN (R 4.1.0)
memoise        2.0.1   2021-11-26 [1] CRAN (R 4.1.0)
ottrpal        1.0.1   2022-03-03 [1] CRAN (R 4.1.2)
pillar         1.6.4   2021-10-18 [1] CRAN (R 4.1.0)
pkgbuild       1.3.1   2021-12-20 [1] CRAN (R 4.1.0)
pkgconfig      2.0.3   2019-09-22 [1] CRAN (R 4.1.0)
pkgload        1.2.4   2021-11-30 [1] CRAN (R 4.1.0)
prettyunits    1.1.1   2020-01-24 [1] CRAN (R 4.1.0)
processx       3.5.2   2021-04-30 [1] CRAN (R 4.1.0)
ps             1.6.0   2021-02-28 [1] CRAN (R 4.1.0)
purrr          0.3.4   2020-04-17 [1] CRAN (R 4.1.0)
R6             2.5.1   2021-08-19 [1] CRAN (R 4.1.0)
readr          2.1.1   2021-11-30 [1] CRAN (R 4.1.0)
remotes        2.4.2   2021-11-30 [1] CRAN (R 4.1.0)
rlang          0.4.12  2021-10-18 [1] CRAN (R 4.1.0)
rmarkdown      2.11    2021-09-14 [1] CRAN (R 4.1.0)
```

```
rprojroot     2.0.2   2020-11-15 [1] CRAN (R 4.1.0)
sessioninfo   1.2.2   2021-12-06 [1] CRAN (R 4.1.0)
stringi       1.7.6   2021-11-29 [1] CRAN (R 4.1.0)
stringr       1.4.0   2019-02-10 [1] CRAN (R 4.1.0)
testthat      3.1.1   2021-12-03 [1] CRAN (R 4.1.0)
tibble        3.1.6   2021-11-07 [1] CRAN (R 4.1.0)
tzdb          0.2.0   2021-10-27 [1] CRAN (R 4.1.0)
usethis       2.1.5   2021-12-09 [1] CRAN (R 4.1.0)
utf8          1.2.2   2021-07-24 [1] CRAN (R 4.1.0)
vctrs         0.3.8   2021-04-29 [1] CRAN (R 4.1.0)
webshot       0.5.2   2019-11-22 [1] CRAN (R 4.1.0)
withr         2.4.3   2021-11-30 [1] CRAN (R 4.1.0)
xfun          0.29    2021-12-14 [1] CRAN (R 4.1.0)

[1] /Library/Frameworks/R.framework/Versions/4.1/Resources/library

--------------------------------------------------------------------------------
```