The Examples Book

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Introduction

You can label chapter and section titles using `{#label}` after them, e.g., we can reference Chapter . If you do not manually label them, there will be automatic labels anyway, e.g., Chapter **??**.

Figures and tables with captions will be placed in `figure` and `table` environments, respectively.

```
par(mar = c(4, 4, .1, .1))
plot(pressure, type = 'b', pch = 19)
```

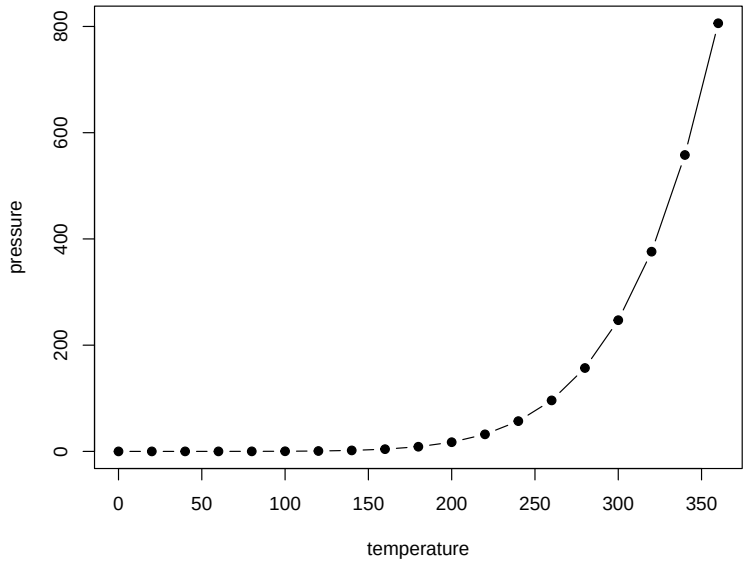

Figure 1: Here is a nice figure!

Reference a figure by its code chunk label with the `fig:` prefix, e.g., see Figure 1. Similarly, you can reference tables generated from `knitr::kable()`, e.g., see Table 1.

Table 1: Here is a nice table!

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa
5.4	3.7	1.5	0.2	setosa
4.8	3.4	1.6	0.2	setosa
4.8	3.0	1.4	0.1	setosa
4.3	3.0	1.1	0.1	setosa
5.8	4.0	1.2	0.2	setosa
5.7	4.4	1.5	0.4	setosa
5.4	3.9	1.3	0.4	setosa
5.1	3.5	1.4	0.3	setosa
5.7	3.8	1.7	0.3	setosa
5.1	3.8	1.5	0.3	setosa

```
knitr::kable(
  head(iris, 20), caption = 'Here is a nice table!',
  booktabs = TRUE
)
```

You can write citations, too. For example, we are using the **bookdown** package (Xie 2020) in this sample book, which was built on top of R Markdown and **knitr** (Xie 2015).

bash

Getting started

Basic commands

`awk`

`grep`

Writing scripts

R

Getting started

RStudio

RStudio server

Lists

Data.frames

Apply functions

`apply`

`sapply`

`lapply`

`tapply`

Writing functions

Plotting

`ggplot`

RMarkdown

Tidyverse

Data.table's

`shiny`

Python

Getting started

Lists & Tuples

Dicts

`numpy`

`scipy`

`pandas`

Jupyter notebooks

Writing scripts

`argparse`

Plotting

`matplotlib`

`plotly`

`plotnine`

`pygal`

`seaborn`

`bokeh`

Classes

Xie, Yihui. 2015. *Dynamic Documents with R and Knitr*. 2nd ed. Boca Raton,

Florida: Chapman; Hall/CRC. http://yihui.name/knitr/.

———. 2020. *Bookdown: Authoring Books and Technical Documents with R Markdown*. https://github.com/rstudio/bookdown.