A Minimal Book Example

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Prerequisites

This is a sample book written in Markdown. You can use anything that Pandoc's Markdown supports, e.g., a math equation $a^2 + b^2 = c^2$.

The **bookdown** package can be installed from CRAN or Github:

```
install.packages("bookdown")
# or the development version
# devtools::install_github("rstudio/bookdown")
```

Remember each Rmd file contains one and only one chapter, and a chapter is defined by the first-level heading #.

To compile this example to PDF, you need XeLaTeX. You are recommended to install TinyTeX (which includes XeLaTeX): https://yihui.name/tinytex/.

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)
```

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

```
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 (?) in this sample book, which was built on top of R Markdown and **knitr** (?).

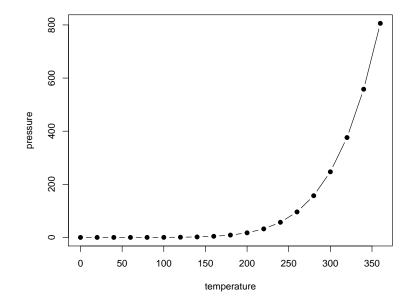


Figure 2.1: Here is a nice figure!

Table 2.1: 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

Literature

Here is a review of existing methods.

Methods

We describe our methods in this chapter.

Case study – Are diets more diverse in more democratic countries?

5.1 About this case study

This case study is primarily meant to supplement the material in the book *Insights from Data* by Petchey, Beckerman, Childs, and Cooper. If you don't understand something in the case study, have a look at that book (perhaps again), or search for help, or get in touch with us.

5.2 Introduction to the study and data

In this case study we will look at the diversity of food available to people living in countries around the world. And we will explore one potential influence of this diversity—the political system (e.g. democratic) of the country. Why this? Why not? There are likely lots of factors governing the diversity of food available to the population of a country, and political system is just one. We could also look at gross domestic product, location, population size, and so on. But let's keep things relatively simple and straightforward for the moment. You can make things more complex if you choose to look further into the question, and it may be essential to do so. Just wait until after you've mastered the simpler though perhaps still challenging material in this case study.

To be clear, we are asking the question of whether the diversity of food available to the population of a country is associated with the political system of that