### A Minimal Book Example

Yihui Xie 2019-08-13

## Contents

1	Prerequisites	5
2	Introduction	7
	2.1 Intro 1	7
3	Methods	9
4	Final Words	11

4 CONTENTS

### 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

#### 2.1 Intro 1

You can label chapter and section titles using {#label} after them, e.g., we can reference Chapter 2. If you do not manually label them, there will be automatic labels anyway, e.g., Chapter 3.

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 2.1. Similarly, you can reference tables generated from knitr::kable(), e.g., see Table 2.1.

```
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, 2019) in this sample book, which was built on top of R Markdown and **knitr** (Xie, 2015).

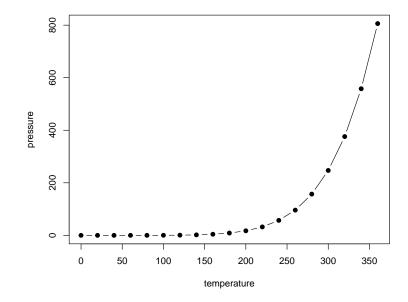


Figure 2.1: Here is a nice figure!

Table 2.1: Here is a nice table!

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	

## Methods

We describe our methods in this chapter.

## Final Words

We have finished a nice book.

# **Bibliography**

Xie, Y. (2015). Dynamic Documents with R and knitr. Chapman and Hall/CRC, Boca Raton, Florida, 2nd edition. ISBN 978-1498716963.

Xie, Y. (2019). bookdown: Authoring Books and Technical Documents with R Markdown. R package version 0.12.