

R

R

® ,

2018-09-17

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Chapter 1

`@Studio Shiny`¹

- `@Studio`
- `@Studio`

² 2005 Excel 2008 **Scicom (MSC) Bhd** R R

R `@Studio` DigitalOcean.com

Successful Algorithmic Trading R Python C++ **Michael**

Halls³

`bookdown::gitbook` bookdown: Authoring Books and Technical Documents with R Markdown

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¹ `@Studio Shiny`

² ®, ENG LIAN HU

³ Struggling To Make Profitable Algo Trading Strategies?

Chapter 2

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 ??.

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, 2018) in this sample book, which was built on top of R Markdown and **knitr** (Xie, 2015).

2.1 R RStudio

2.2 Shiny

2.3

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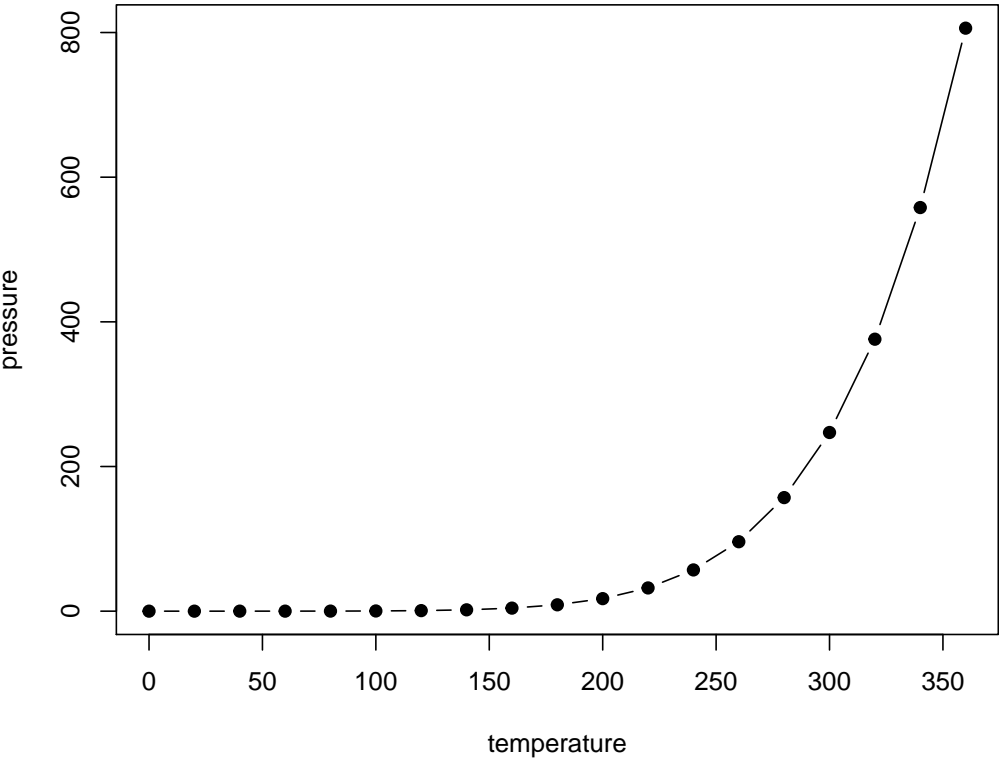


Figure 2.1: Here is a nice figure!

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

Chapter 3

3.1

3.1.1

3.1.2

3.2

3.2.1

3.2.2 API

3.2.3 Web Driver

3.3

3.3.1

3.3.2

3.3.3

3.4 2.3

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Chapter 4

4.1

4.1.1

4.1.2

4.1.3

4.2

4.2.1

4.2.2

4.2.3

4.2.4

4.2.5

4.3

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Chapter 5

5.1

5.1.1

5.1.2

5.1.3

5.2

5.2.1 LASSO ElasticNet RIDGE

5.2.2 Arima

5.2.3

5.2.4 GARCH

5.3

5.3.1 GARCH

5.3.2

5.4

5.4.1 MIDAS

5.4.2 MIDAS-GARCH

5.4.3 GARCH

5.5

5.5.1 Levy Process

5.5.2 Wavelet Tranforms

Chapter 6

6.1

6.1.1

6.1.2

6.1.3

6.2

6.2.1

6.2.2

6.2.3 Logistic

6.2.4

6.3

6.3.1

6.3.2

6.3.3 OHLC GARCH

6.4

6.5

Chapter 7

7.1

7.1.1

7.1.2

7.2

7.2.1

7.2.2

7.3

7.3.1

7.3.2

7.4

7.4.1

7.4.2

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Chapter 8

8.1

- The fastest way to convert numeric to character in R
- The `fst` package
- `splitstackshape`
- Using Sparse Matrices in R
- Fast data loading from files to R

8.2

- `binary.com` I - GARCH ARIMA(p,d,q)

8.3 R

- Efficient R programming
- Advanced R

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Chapter 9

9.1

9.1.1

9.1.2

9.2

9.2.1

9.2.2

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Chapter 10

10.1

10.1.1

10.1.2

10.1.3

10.1.4

10.2

10.2.1

10.2.2

10.3

1. Calculating the house edge of a slot machine, with R¹
2. Russians Engineer a Brilliant Slot Machine Cheat-and Casinos Have No Fix
3. Data Science: Theories, Models, Algorithms, and Analytics
4. Job Application - Quantitative Analyst
5. Real Time FXCM
6. Rmodel
7. Odds Modelling and Testing Inefficiency of Sports Bookmakers

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¹DON'T DRINK AND GAMBLE:Analyzing and Simulating a Slot Machine - So You Don't Have To and Predicting a Slot Machine's PRNG

Bibliography

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

Xie, Y. (2018). *bookdown: Authoring Books and Technical Documents with R Markdown*. R package version 0.7.