

R Programming in Data Science For Beginners: From Zero to Pro

Sheep Studio

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Chapter 1

Installation of R, RStudio and R Packages

1.1 Introduction to R codes

```
1 + 1
```

1.2 Installation of R Packages

```
install.packages("learnr")  
#install.packages(learnr) ##WRONG
```

1.3 Exercise setup

You can run the following code to do the exercise.

```
install.packages("devtools")  
install.packages("learnr")  
library(devtools)  
library(learnr)  
install_github("sheepstudio007/r02pro")  
run_tutorial("01", "r02pro")
```


Chapter 2

Basic Calculations & Variable Assignment

2.1 Use R as a calculator

```
1 + 2
1 - 2
2 * 4
2 / 4
(3 + 4) * 5
10^2
sqrt(100)
log(100)
log10(100)
log(100, 10)
log(125, 5)
```

Introduction to R codes

2.2 Variable Assignment

```
x_numeric <- 5
y_numeric <- 6
x_numeric * y_numeric
x_numeric <- c(1,2,3,4)
x_numeric
x_numeric <- 1:4
x_numeric * 3
```

```
x_numeric / 5
sheepstudio <- "sheep"
sheepstudio <- "sheep"
animals <- c("sheep", "pig", "monkey")
animals #letters, numbers, underscore, and period
```


Chapter 3

Introduction to datasets and Getting help

3.1 Introduction to the mpg dataset

```
1 + 2
1 - 2
2 * 4
2 / 4
(3 + 4) * 5
10^2
sqrt(100)
log(100)
log10(100)
log(100, 10)
log(125, 5)
```

3.2 Get help on a dataset with help()

3.3 view() function

3.4 head() function

Chapter 4

Applications

Some *significant* applications are demonstrated in this chapter.

4.1 Example one

4.2 Example two

Chapter 5

Final Words

We have finished a nice book.

Chapter 6

Installation of R, RStudio and R Packages

6.1 Introduction to R codes

```
1 + 1
```

6.2 Installation of R Packages

```
install.packages("learnr")  
#install.packages(learnr) ##WRONG
```

6.3 Exercise setup

You can run the following code to do the exercise.

```
install.packages("devtools")  
install.packages("learnr")  
library(devtools)  
library(learnr)  
install_github("sheepstudio007/r02pro")  
run_tutorial("01", "r02pro")
```


Chapter 7

Introduction to datasets and Getting help

7.1 Introduction to the mpg dataset

```
1 + 2
1 - 2
2 * 4
2 / 4
(3 + 4) * 5
10^2
sqrt(100)
log(100)
log10(100)
log(100, 10)
log(125, 5)
```

7.2 Get help on a dataset with help()

7.3 view() function

7.4 head() function