R für quantitative Forschungsmethoden

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Contents

Chapter 1

Einleitung

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/.

Chapter 2

Skalenniveau

- Nominal
- Ordinal
- Interval
- Ratio

2.1 Nominal

```
city <- c("Berlin", "Hamburg", "Dresedn", "NY")

country <- c("Germany", "Germany","Germany", "USA")

gender <- c("male", "male", "female", "male")
```

```
city <- c("Berlin", "Hamburg", "Dresedn", "NY")

city
```

```
[1] "Berlin"  "Hamburg" "Dresedn" "NY"
```

```
class(city)
```

```
[1] "character"
```

2.2 Ordinal

```
rank <- c(4, 2, 3, 1, 6, 5)

temp <- c("High", "Low", "High", "Medium")
```

```
rank <- c(4, 2, 3, 1, 6, 5)

rank
```

```
[1] 4 2 3 1 6 5
```

```
class(rank)
```

```
[1] "numeric"
```

```
rank <- c(4, 2, 3, 1, 6, 5)

rank.f <- factor(rank)

rank.f
```

```
[1] 4 2 3 1 6 5
Levels: 1 2 3 4 5 6
```

```
class(rank.f)
```

```
[1] "factor"
```

```
rank <- c(4, 2, 3, 1, 6, 5)
rank.f <- factor(rank,
                 order = TRUE,
                 labels = c("One", "Two",
                            "Three", "four",
                            "five", "six"))
rank.f
```

```
[1] four  Two   Three One   six   five
Levels: One < Two < Three < four < five < six
```

```
class(rank.f)
```

```
[1] "ordered" "factor"
```

```
temp <- c("High", "Low", "High", "Medium")

temp
```

```
[1] "High"   "Low"    "High"   "Medium"
```

```
class(temp)
```

```
[1] "character"
```

```
temp <- c("High", "Low", "High", "Medium")

temp.f <- factor(temp)

temp.f
```

```
[1] High   Low    High   Medium
Levels: High Low Medium
```

```
class(temp.f)
```

```
[1] "factor"
```

```
temp <- c("High", "Low", "High", "Medium")
temp.f <- factor(temp,
                 order = TRUE,
                 labels = c("Low", "Medium", "High"))
temp.f
```

```
[1] Low    Medium Low    High
Levels: Low < Medium < High
```

```
class(temp.f)
```

```
[1] "ordered" "factor"
```

2.3 Interval

```
celsius <- c(19 , 20, 23, 27, 35, 30)

celsius
```

```
[1] 19 20 23 27 35 30
```

```
class(celsius)
```

```
[1] "numeric"
```

2.4 Ratio

```
kelvin <- c(0 , 273, 200, 350, 354, 300)

population <- c(3610156, 1774242, 543825, 8550405)

class(kelvin)
```

```
[1] "numeric"
```

```
class(population)
```

```
[1] "numeric"
```