

# First Assignment

Sebastian Feist

07/31/2024

Please complete all the tasks listed below. After completing the tasks download the .Rmd file and upload in the peer review item for grading.

Additionally please write text between the code chunks explaining what each code chunk is about

1.a bulleted list with sub-bullets under at least one item (10 pt)

- Peugeot
  - 208
  - 308
- Volkswagen
  - Polo
  - Golf
- Skoda
  - Fabia
  - Octavia

Unordered list items need to start with \*, -, or +.

2.a numbered list (10 pt)

1. Fidelio
2. Chili
3. Luzie

Ordered list items start with the numbers.

3.some words italicized (5 pt)

*Rome Venice Florence*

To write words in italics you have to use either asterisks \* or underscores \_.

4.some words in bold print (5 pt)

**Chengdu Chongqing Guangdong**

To make text bold you can use double asterisks \*\* or double underscores \_\_.

5. two levels of headers (10 pt)

## First-level header

### Second-level header

The number of # symbols you use at the beginning of the line determines the level of the header.

6.the results of some R code without showing the code (10 pt)

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

With the chunk option echo you can choose to show or not to show the code. So with echo=false it shows only the value which I assigned x.

7.a table of text at least 3 columns wide and 3 rows long

```
# this creates a data frame with 3 columns and 3 rows
data <- data.frame(
  Column1 = c("1", "2", "3"),
  Column2 = c("One", "Two", "Three"),
  Column3 = c("Eins", "Zwei", "Drei")
)
# this uses the knitr package to generate the table
knitr::kable(data)
```

Column1	Column2	Column3
1	One	Eins
2	Two	Zwei
3	Three	Drei

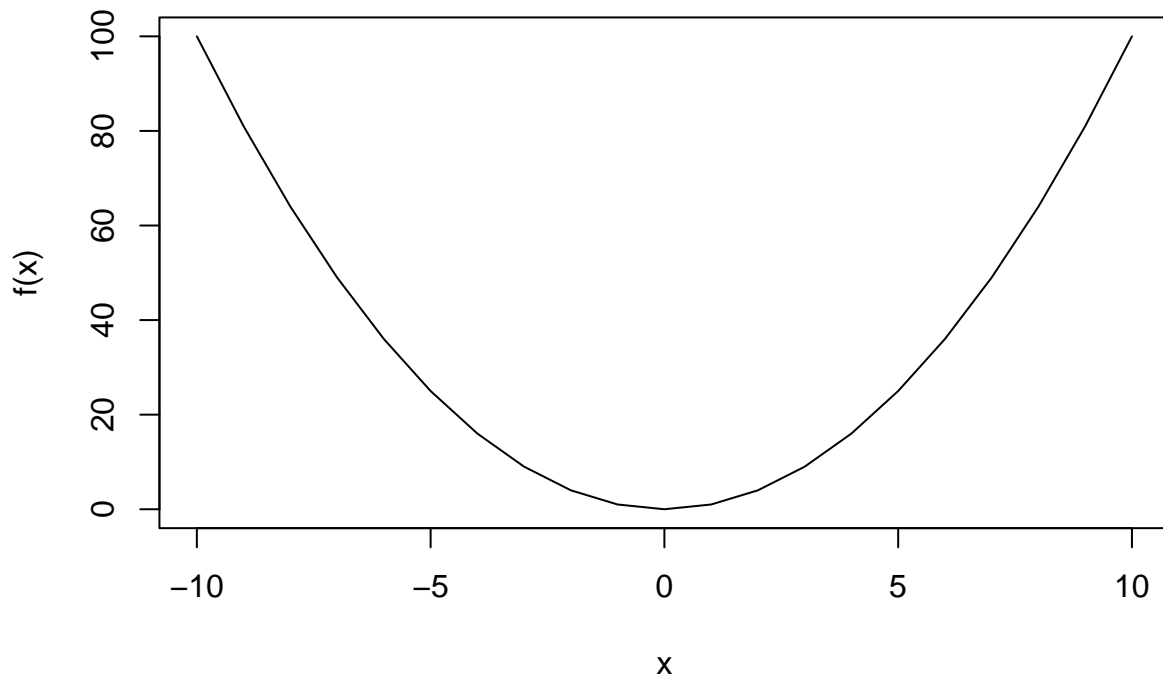
8.a plot (show the code that generates the plot) (10 pt)

```
# this defines the function
f <- function(x) {
  x^2
}

# now I generate a sequence of x values
x <- seq(-10, 10)

# this plots the function
plot(x, f(x), type = "l", xlab = "x", ylab = "f(x)", main = "Plot of x^2")
```

**Plot of  $x^2$**



9. your session info (as output from R) (10 pt)

```
# this command gets the session info from my system  
sessionInfo()
```

```
## R version 4.4.1 (2024-06-14 ucrt)  
## Platform: x86_64-w64-mingw32/x64  
## Running under: Windows 11 x64 (build 22631)  
##  
## Matrix products: default  
##  
##  
## locale:  
## [1] LC_COLLATE=German_Germany.utf8 LC_CTYPE=German_Germany.utf8  
## [3] LC_MONETARY=German_Germany.utf8 LC_NUMERIC=C  
## [5] LC_TIME=German_Germany.utf8  
##  
## time zone: Europe/Berlin  
## tzcode source: internal  
##  
## attached base packages:  
## [1] stats      graphics  grDevices  utils      datasets  methods   base  
##  
## loaded via a namespace (and not attached):  
## [1] compiler_4.4.1 fastmap_1.2.0 cli_3.6.3      tools_4.4.1  
## [5] htmltools_0.5.8.1 rstudioapi_0.16.0 yaml_2.3.9      rmarkdown_2.27
```

```
## [9] highr_0.11      knitr_1.48      xfun_0.46      digest_0.6.36
## [13] rlang_1.1.4     evaluate_0.24.0
```

10. Execution of .Rmd file (10 pt)

11. Upload and execution of knitted pdf (10 pt)