

# testfile

Jakob

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## How to Start

1. You should have a working version of RStudio (From within RStudio, go to Help > Check for Updates to install newer version of RStudio (if available).)
2. Install and load Rmarkdown with `install.packages("Rmarkdown")` and `library(rmarkdown)`
3. You will be asked to give some information, that information will show up in your YAML header (which is some kind of human readable non-markup format)
  - Important: the header can tell `render()` what to output -> html for example

## Basics

### Flavor

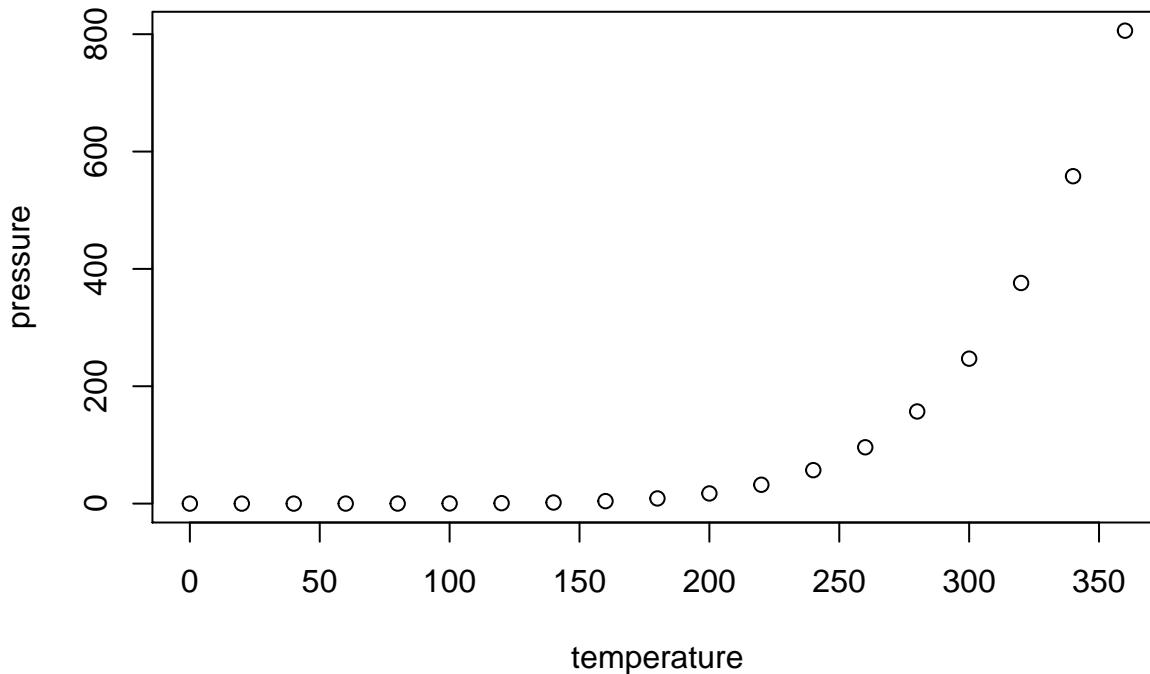
Rmarkdown has not the same “flavor” as GitHub Markdown... So unfortunately you will have to use a slightly different syntax for some things. - you have to use 4 spaces to indent a list element.

### Code blocks:

- create code-blocks as you would do in normal Markdown.
- The difference is, that you can have actual executable code blocks in your R-Markdown file and decide if to render everything, just the results, just the plots or nothing.
- You have to declare a language in a `{r}` curly brackets syntax for this.

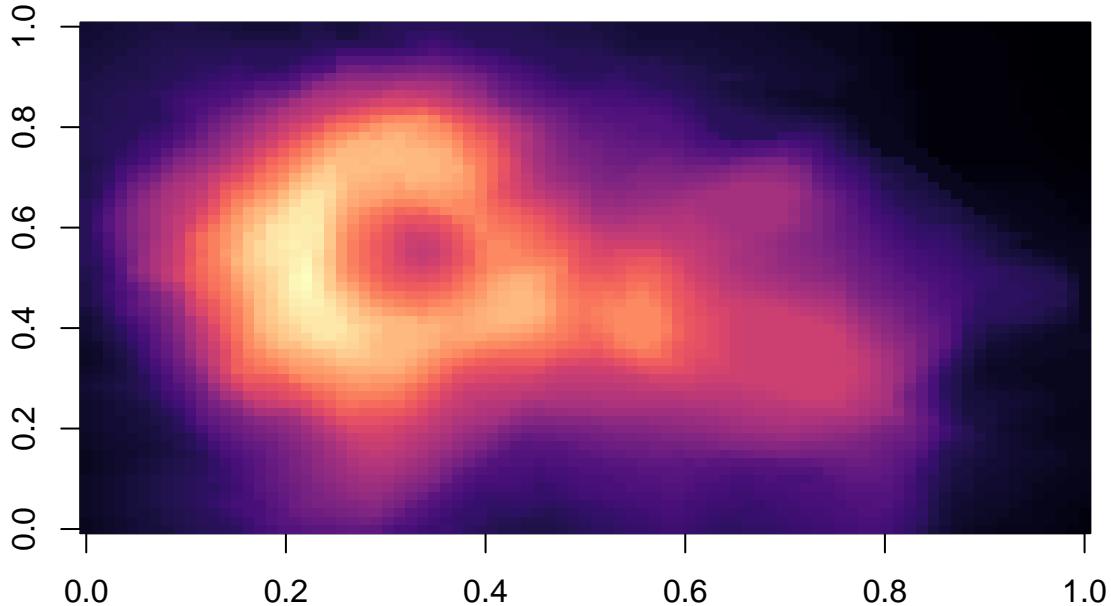
```
```{r, include=True, echo=False}
# This is an R code block, which will be included in the rendered output file.
# ... It would not show the source code but the result/output/plot
# ... you only need three ```, the first one is necessary here
# ... to escape within the actual code block.
````
```

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```
## Loading required package: viridisLite
```



## Rendering

- Rendering will make a pdf, TeX, HTML, notebook, ... or whatever-you-chose-file from your \*.Rmd file.
  - You can Render from the command line (or from an R code block) with ‘`render(markdownfile.Rmd)`’
  - To render your current Rmd File, use the shortcut: SHIFT+command+K (macOS) or CTRL+SHIFT+K (Windows)
- Now the Header comes in Handy, we can tell it to make a Html document by writing:

```

title: "testfile"
author: "Jakob"
date: "3/25/2021"
output: html_document

```

### get a TeX file

4. • For example you can use: {}      title: "testfile"      author: "Jakob"      date:  
       "3/25/2021"      output: pdf\_document      keep\_tex: true  
       citation\_package: biblatex      bibliography: bibliography.bib

### Math Block

- as you know it from Markdown

$$\longrightarrow c_1 + c_2 * h \Sigma_{bottom}^{top}$$

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```

##      speed          dist
##  Min.   : 4.0   Min.   : 2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00

```