

# R Markdown examples

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2024-03-31

## Child and master files

This file is the master file, at any point, you may reference a child file which contains part of the report, to make the whole more clear. This is done with a R-chunk that has “r child = 'insert\_rmd\_file\_name\_here.rmd” in the chunk options. For example;

## Dummy introduction

This is an introduction!

Will put the contents of the introduction file bellow the header.

When knitting, it follows the order in which the chunks are presented. Thus you could make variables in this file

```
aap <- 1:10
```

## Dummy results

## Results

And use them in the child file

```
aap
```

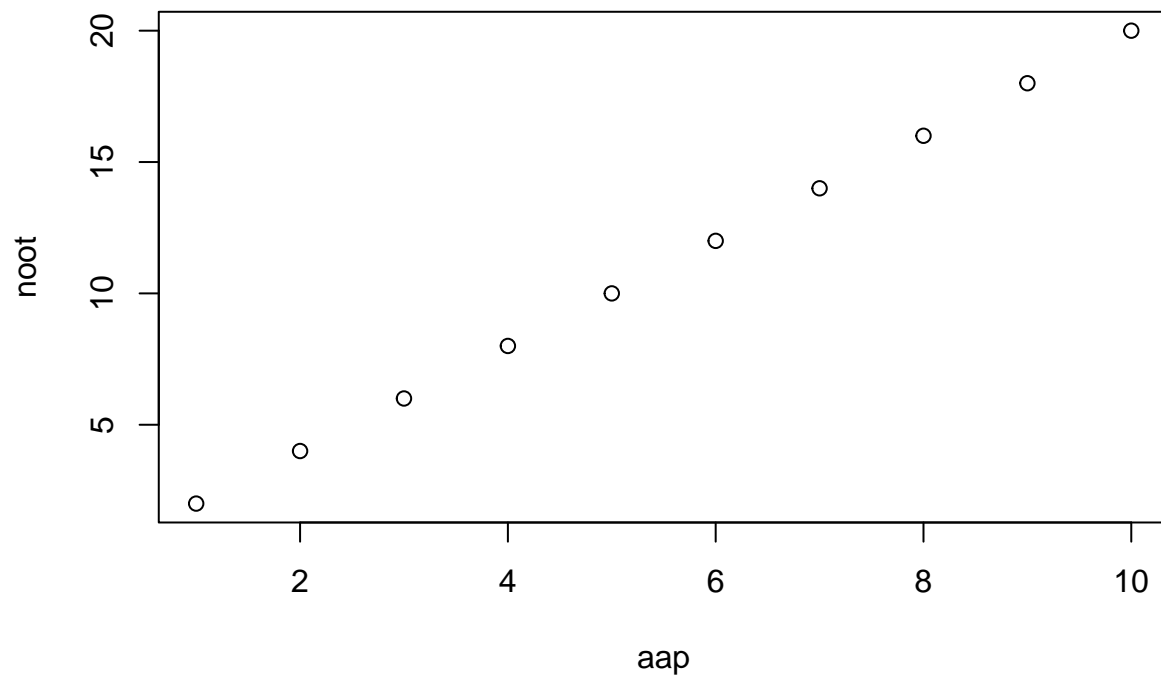
```
## [1] 1 2 3 4 5 6 7 8 9 10
```

```
noot <- aap * 2  
noot
```

```
## [1] 2 4 6 8 10 12 14 16 18 20
```

and vice versa

```
plot(aap, noot)
```



## Figures and figure captions and outputs

Figure captions can be included in the chunk options in the following way:

```
plot(cars)
```

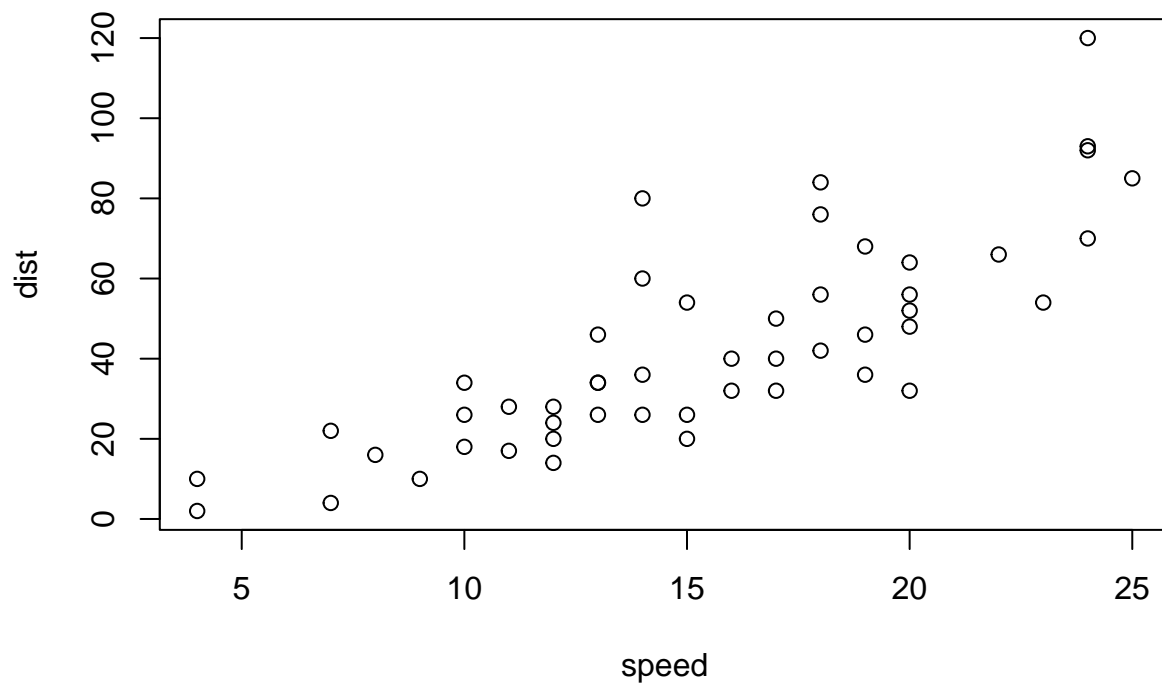


Figure 1: Stopping distance for cars with different speed

You can also insert images, give them captions and change their size and position in the chunk options:

```
knitr::include_graphics("Picture_Diatoms.jpeg")
```

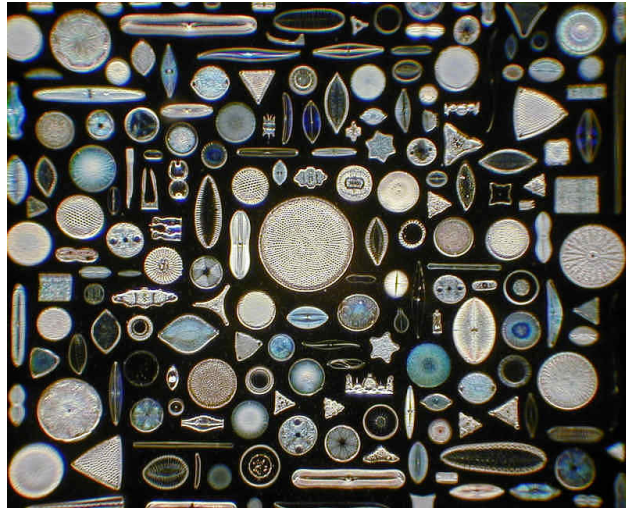


Figure 2: Picture of different kind of diatoms

As you can see figure numbering is done automatically based on the order they appear.

If you do not want the output of a chunk to appear in the document, you can do this with “include=FALSE”

```
# Doing the thing you actually want to show  
d
```

```
## [1] 900
```

Alternatively, you can only hide the source code but do show the code output:

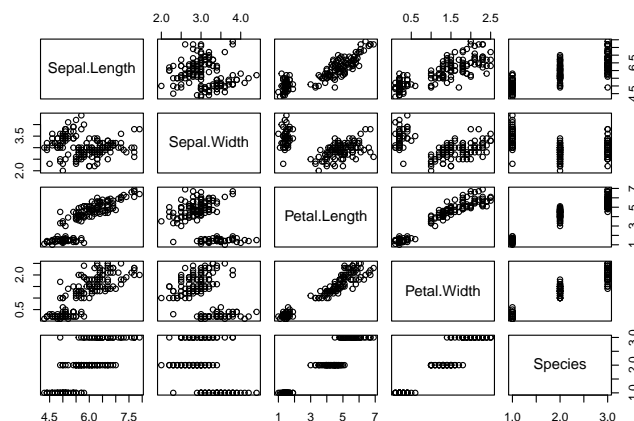


Figure 3: Some flower data

Other chunk options can be found at *bookdown*

## Text formatting

- Use an asterisks or underscore to get *italic text*
- Use double asterisks for **bold text**
- Use tildes for s<sub>subscript</sub>
- Use carets for s<sup>superscript</sup>
  - NO<sub>3</sub><sup>-</sup>
- Let something appear as code using backticks `code`

## Citing

For citing, use an “@”-sign and then the key; the last name of the first author of the paper, succeeded by the year of publication and put the whole in square brackets; “[ ]”. If you reference inline, do not use the square brackets. For example;

It is said in Serugendo et al. (2005) that purple is blue. However, other sources say it is red instead (Favis-Mortlock, 2004).

This will then automatically show up in the bibliography in the bottom of the document.

You will need to set up a bibliography file beforehand, here I used the example file “test\_sources.bib”, but any .bib file will work. You may need to add a key manually.

By default, the bibliography appears at the bottom of the document, but you can force its positioning with the following if need be:

Favis-Mortlock, D. (2004). Self-organization and cellular automata models. In J. Wainwright & M. Mulligan (Eds.), *Environmental Modelling: Finding Simplicity in Complexity* (pp. 349–369). John Wiley & Sons Ltd. <https://www.researchgate.net/publication/318594976>

Serugendo, G. D. M., Gleizes, M.-P., & Karageorgos, A. (2005). Self-organization in multi-agent systems. *The Knowledge Engineering Review*, 20, 165–189. <https://doi.org/10.1017/S0269888905000494>

And now it should appear in between.