



Norwegian
Meteorological
Institute

RMarkdown

An R based tool for report writing

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Classification: Open

What is RMarkdown?

A notebook interface for the programming language R.

Combine text and code.

Can be used to produce reports with statistical analysis and plots.

Instead of pasting plots and tables into a word document, include code and produce the plots right there.

GREAT FOR VERIFICATION REPORTS!!

How to get started

- 1) Open Rstudio
- 2) Install the rmarkdown package:

```
install.packages('rmarkdown')
```

- 3) Create a new RMarkdown document or open an existing one.

bmd_example.Rmd x

Knit on Save

Knit

Run

Outline

Source Visual

```
1 ---
2 title: "Example for BMD"
3 author: "Kajsa Parding"
4 date: "2023-02-28"
5 output: html_document
6 ---
7
8 {r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10
11
12 ## R Markdown
13
14 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
15 Markdown see <http://rmarkdown.rstudio.com>.
16
17 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
18 document. You can embed an R code chunk like this:
19
20 {r cars}
21 x <- c(1,2,3,4,5)
22 y <- c(6,7,8,9,10)
23 sum(x)
24
25
26 ## Including Plots
27
28 You can also embed plots, for example:
29
30 {r pressure, echo=FALSE}
31 plot(x,y)
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34 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.
```

Knit will make the RMarkdown script into a document (html, pdf or word)

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Example for BMD

Kajsa Parding

2023-02-28

R Markdown

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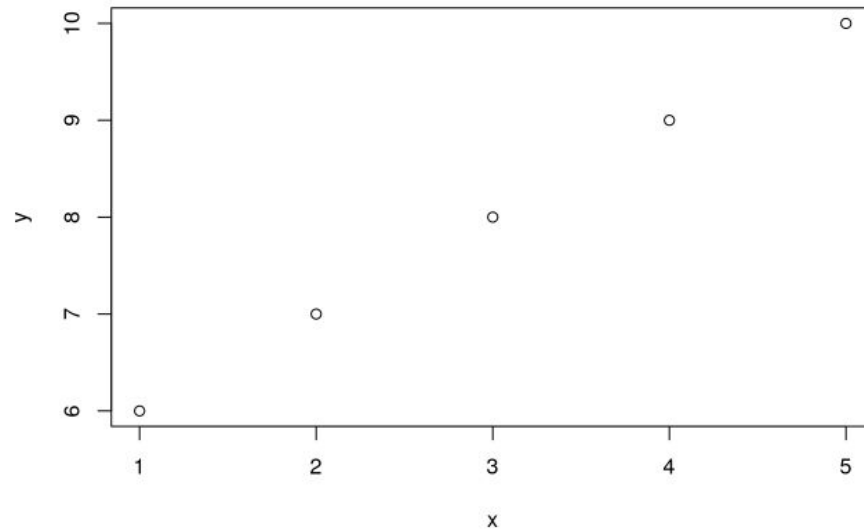
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
x <- c(1,2,3,4,5)
y <- c(6,7,8,9,10)
sum(x)
```

```
## [1] 15
```

Including Plots

You can also embed plots, for example:



bmd_example.Rmd x

Knit on Save

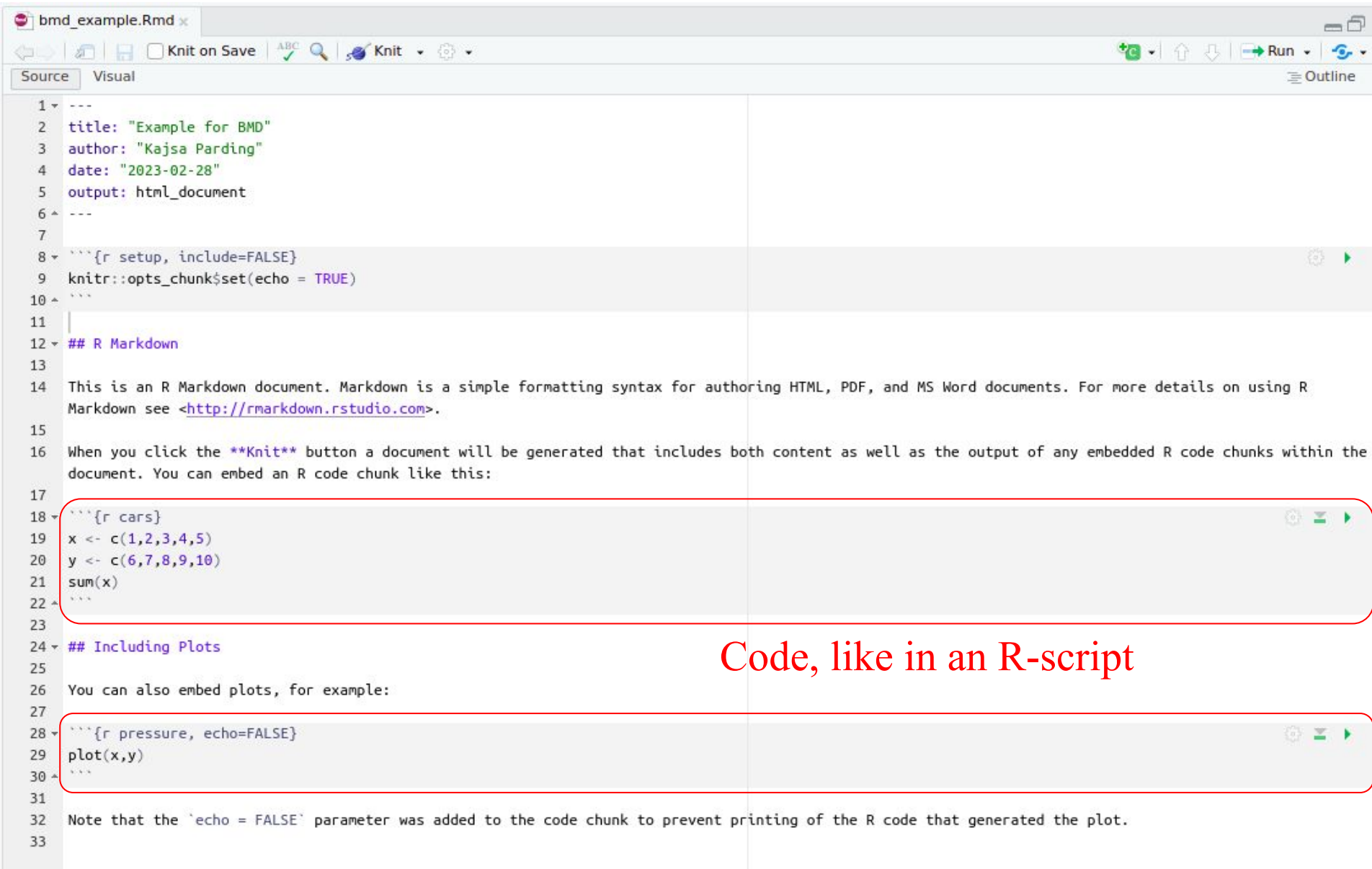
Knit

Run

Outline

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Text, like something you would write in Word



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Code, like in an R-script


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bmd_example.Rmd x
Knit on Save
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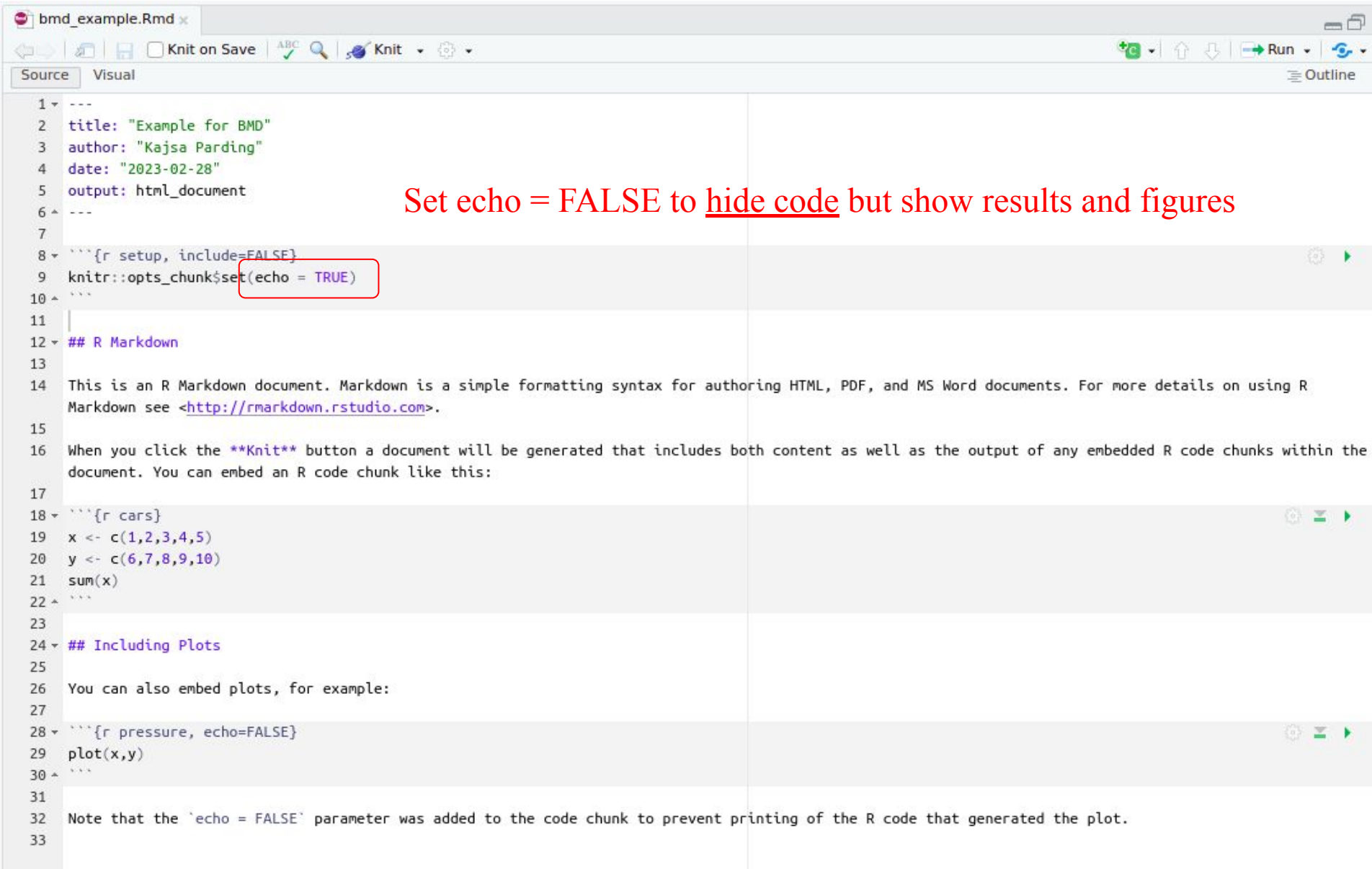
Header, marking a new section of the document

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Title, author, date and type of output

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Setup for the document.
You can use this chunk to include libraries.



The screenshot shows the RStudio interface with a file named `bmd_example.Rmd`. The editor displays an R Markdown document. A red rectangle highlights the line `knitr::opts_chunk$set(echo = TRUE)` in the first code chunk. A red text annotation is overlaid on the right side of the editor.

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Set echo = FALSE to hide code but show results and figures

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Name of chunk. The name must be different for each part!

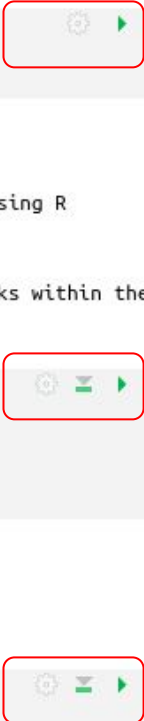
bmd_example.Rmd x

Knit on Save ABC 🔍 🌐 Knit ⚙️

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You can press the green little arrows to run the individual chunks (parts)



Download example file from

`https://github.com/metno/BMD/tree/master/RMarkdown`

Resources

<https://rmarkdown.rstudio.com/>

<https://www.rstudio.com/wp-content/uploads/2015/03/rmarkdown-reference.pdf>



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