

R Markdown



The Data Scientist's Toolbox

The magic of Markdown

- bullets
- **bold**
- *italics*
- [links](https://google.com) (https://google.com)
- or run inline `r code`



- bullets
- **bold**
- *italics*
- [links](#)
- or run inline `r code`

Introduction

Here is some background you need to know:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam iaculis enim ut enim viverra molestie. In lacinia aliquet urna, nec vulputate quam congue et. Maecenas porta mauris sem, nec laoreet sapien tincidunt non. Integer sit amet consequat neque, non iaculis ligula.

Hypothesis

Pellentesque molestie erat nec elit efficitur, sit amet sodales erat viverra. Mauris sed commodo eros, ac volutpat sem. Morbi convallis leo et dui cursus, eu suscipit turpis efficitur.

Section 1 code and results

First I will run this.

```
'''{r}
print("Hello world")
print("Yup, this is important")
'''
```

The output of which is consistent with my hypothesis.

Conclusion

I can move on to the next part of my project]

Introduction

Here is some background you need to know:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam iaculis enim ut enim viverra molestie. In lacinia aliquet urna, nec vulputate quam congue et. Maecenas porta mauris sem, nec laoreet sapien tincidunt non. Integer sit amet consequat neque, non iaculis ligula.

Hypothesis

Pellentesque molestie erat nec elit efficitur, sit amet sodales erat viverra. Mauris sed commodo eros, ac volutpat sem. Morbi convallis leo et dui cursus, eu suscipit turpis efficitur.

Section 1 code and results

First I will run this.

```
print("Hello world")
```

```
## [1] "Hello world"
```

```
print("Yup, this is important")
```

```
## [1] "Yup, this is important"
```

The output of which is consistent with my hypothesis.

Conclusion

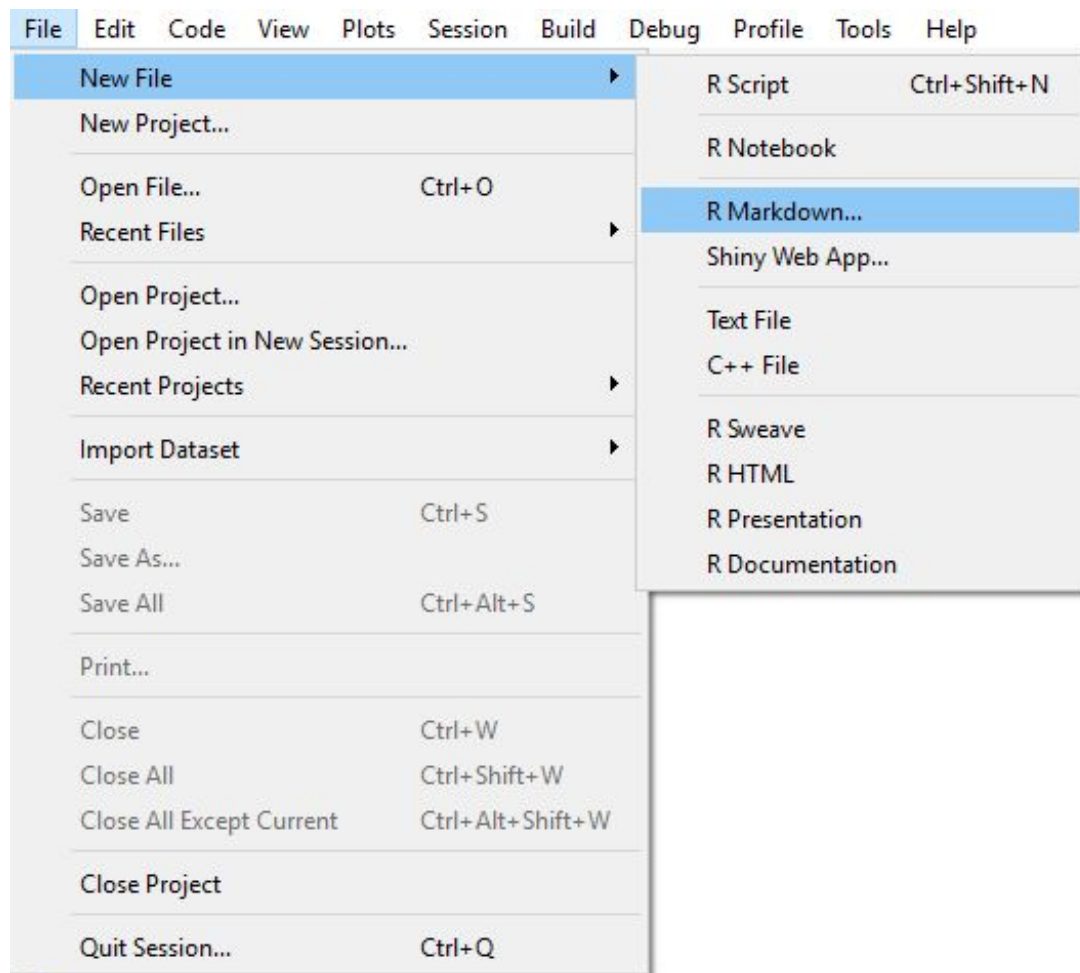
I can move on to the next part of my project




Another major benefit to R Markdown is that since it is plain text, it works very well with version control systems. It is easy to track what character changes occur between commits; unlike other formats that aren't plain text. For example, in one version of this lesson, I may have forgotten to bold this word. When I catch my mistake, I can make the plain text changes to signal I would like that word bolded, and in the commit, you can see the exact character changes that occurred to now make the word bold.


Another major benefit to R Markdown is that since it is plain text, it works very well with version control systems. It is easy to track what character changes occur between commits; unlike other formats that aren't plain text. For example, in one version of this lesson, I may have forgotten to bold **this** word. When I catch my mistake, I can make the plain text changes to signal I would like that word bolded, and in the commit, you can see the exact character changes that occurred to now make the word bold.


```
install.packages("rmarkdown")
```



New R Markdown

 Document

 Presentation

 Shiny

 From Template

Title:

Author:

Default Output Format:

☐ HTML

Recommended format for authoring (you can switch to PDF or Word output anytime).

☒ PDF

PDF output requires TeX (MiKTeX on Windows, MacTeX 2013+ on OS X, TeX Live 2013+ on Linux).

☐ Word

Previewing Word documents requires an installation of MS Word (or Libre/Open Office on Linux).

OK

Cancel

HEADER

```
1 ---
2 title: "My first R Markdown"
3 author: "YOU!"
4 date: "Today"
5 output: pdf_document
6 ---
7
8 ```{r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10 ```
```

TEXT

```
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS
15 Word documents. For more details on using R 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
18 the output of any embedded R code chunks within the document. You can embed an R code chunk like this:
```

CODE CHUNK

```
18 ```{r cars}
19 summary(cars)
20 ```
```

```
21
22 ## Including Plots
23
24 You can also embed plots, for example:
```

```
25
26 ```{r pressure, echo=FALSE}
27 plot(pressure)
28 ```
```

```
29
30 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code
31 that generated the plot.
```

```
1 ---
2 title: "My first R Markdown"
3 author: "YOU!"
4 date: "Today"
5 output: pdf_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
15 Word documents. For more details on using R 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
18 the output of any embedded R code chunks within the document. You can embed an R code chunk like this:
19
20 ```{r cars}
21 summary(cars)
22 ```
23
24 ## Including Plots
25
26 You can also embed plots, for example:
27
28 ```{r pressure, echo=FALSE}
29 plot(pressure)
30 ```
31
32 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code
33 that generated the plot.
```


My first R Markdown

YOU!

Today

Header rendered as
the title

R Markdown Text section rendered as formatted text

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
```

Code rendered as the input code AND
the output of running the code chunk

Including Plots

You can also embed plots, for example:



`**bold**` and `*italics*` → **bold** and *italics*

`# Header level 1`

`## Header level 2`

`### Header level 3...`

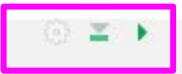
Header level 1

→ Header level 2

Header level 3...

```
1 ---
2 title: "My first R Markdown"
3 author: "YOU!"
4 date: "Today"
5 output: pdf_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
15 Word documents. For more details on using R 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
18 the output of any embedded R code chunks within the document. You can embed an R code chunk like this:
19
20 ```{r cars}
21 summary(cars)
22 ```
23
24 ## Including Plots
25
26 You can also embed plots, for example:
27
28 ```{r pressure, echo=FALSE}
29 plot(pressure)
30 ```
31
32 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code
33 that generated the plot.
```

```
1 ---
2 title: "My first R Markdown"
3 author: "YOU!"
4 date: "Today"
5 output: pdf_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
15 Word documents. For more details on using R 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
18 the output of any embedded R code chunks within the document. You can embed an R code chunk like this:
19
20 ```{r cars}
21 summary(cars)
22 ```
23
24 ## Including Plots
25
26 You can also embed plots, for example:
27
28 ```{r pressure, echo=FALSE}
29 plot(pressure)
30 ```
31
32 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code
33 that generated the plot.
```



TWO SPACES



- bullets
- **bold**
- *italics*
- [\[links\]\(https://google.com\)](https://google.com)
- or run inline ``r` code``



- bullets
- **bold**
- *italics*
- [links](#)
- or run inline `r`code``

Summarizing: R Markdown



The Data Scientist's Toolbox