R Markdown

Organizing Data Science Projects

The magic of Markdown

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

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- *italics*
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```
# 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
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Section 1 code and results

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## [1] "Hello world"
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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.

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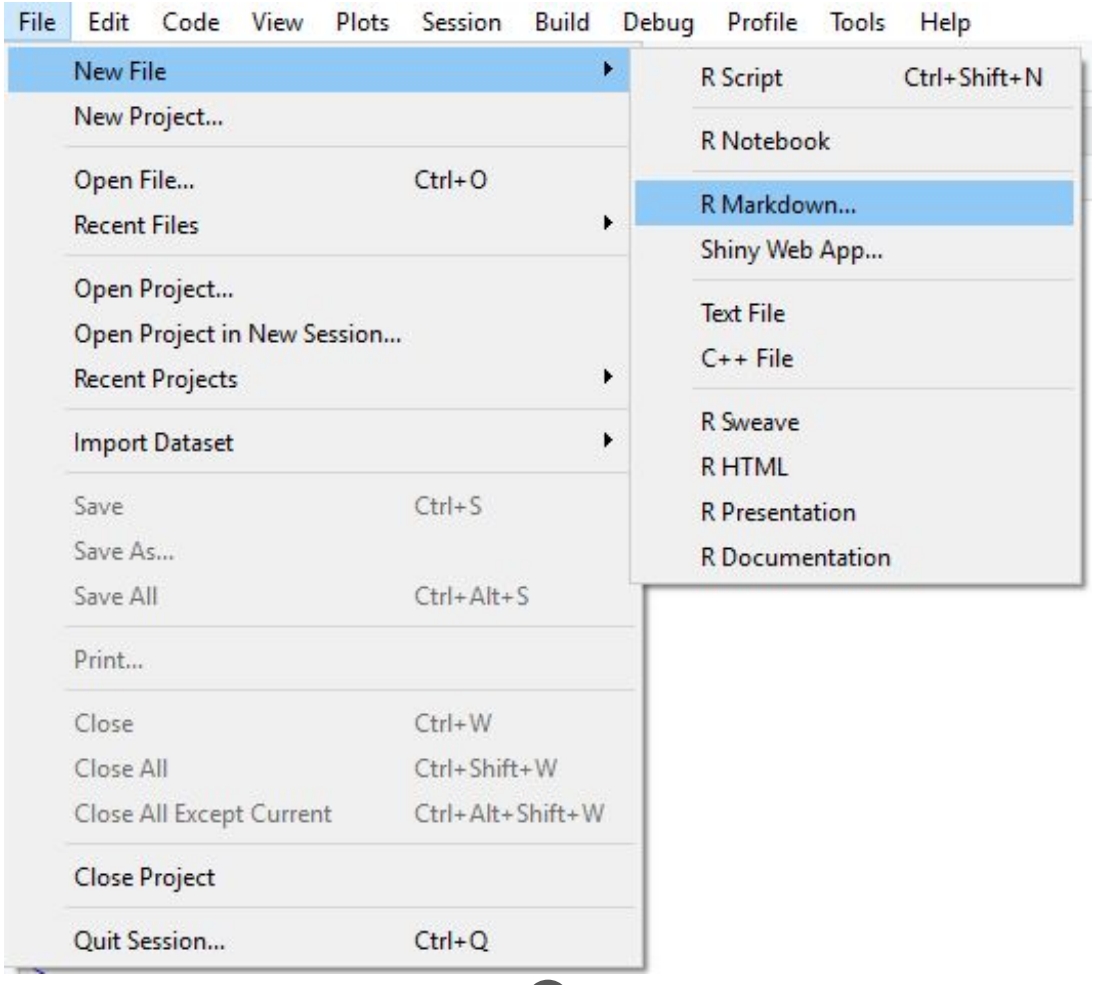
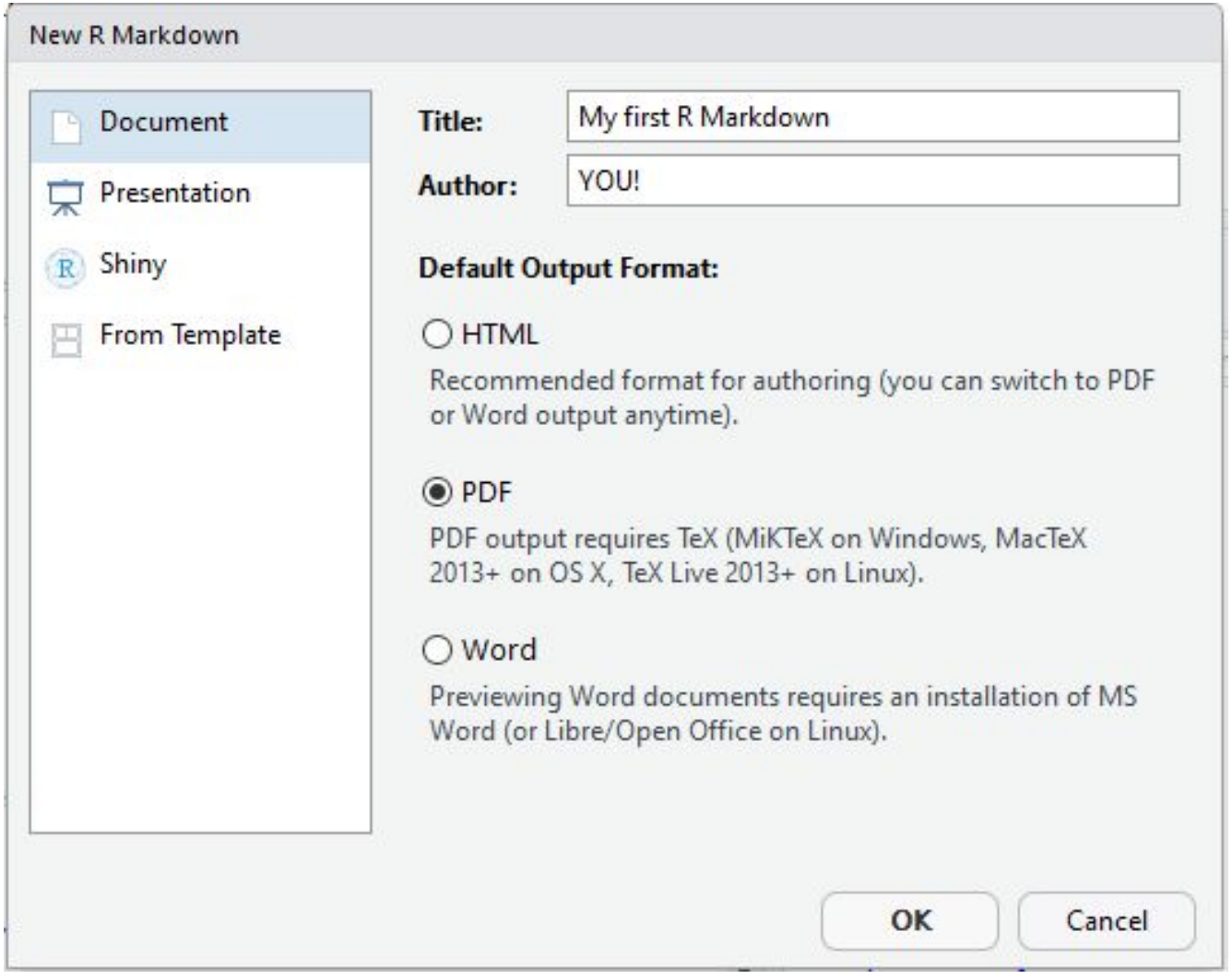
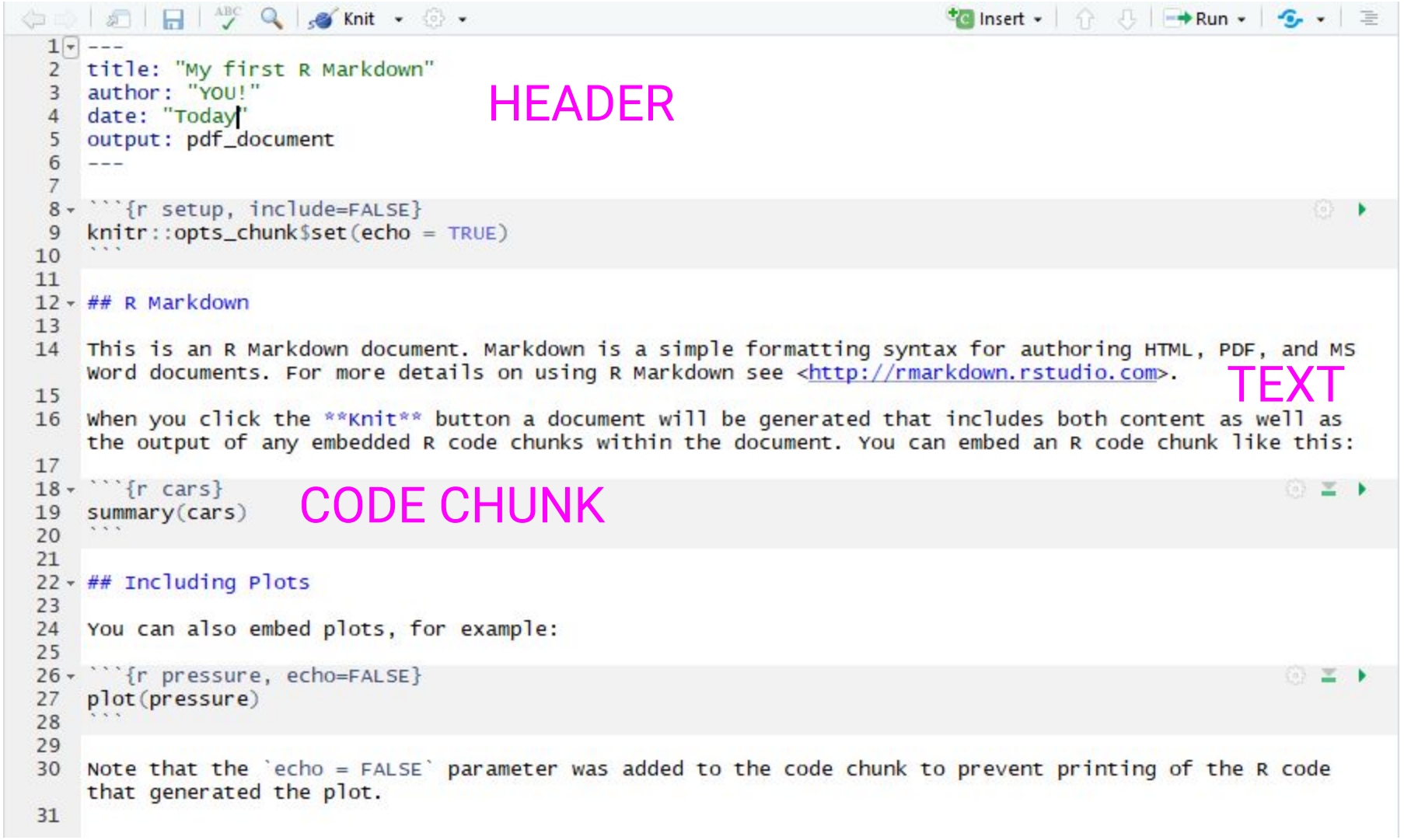
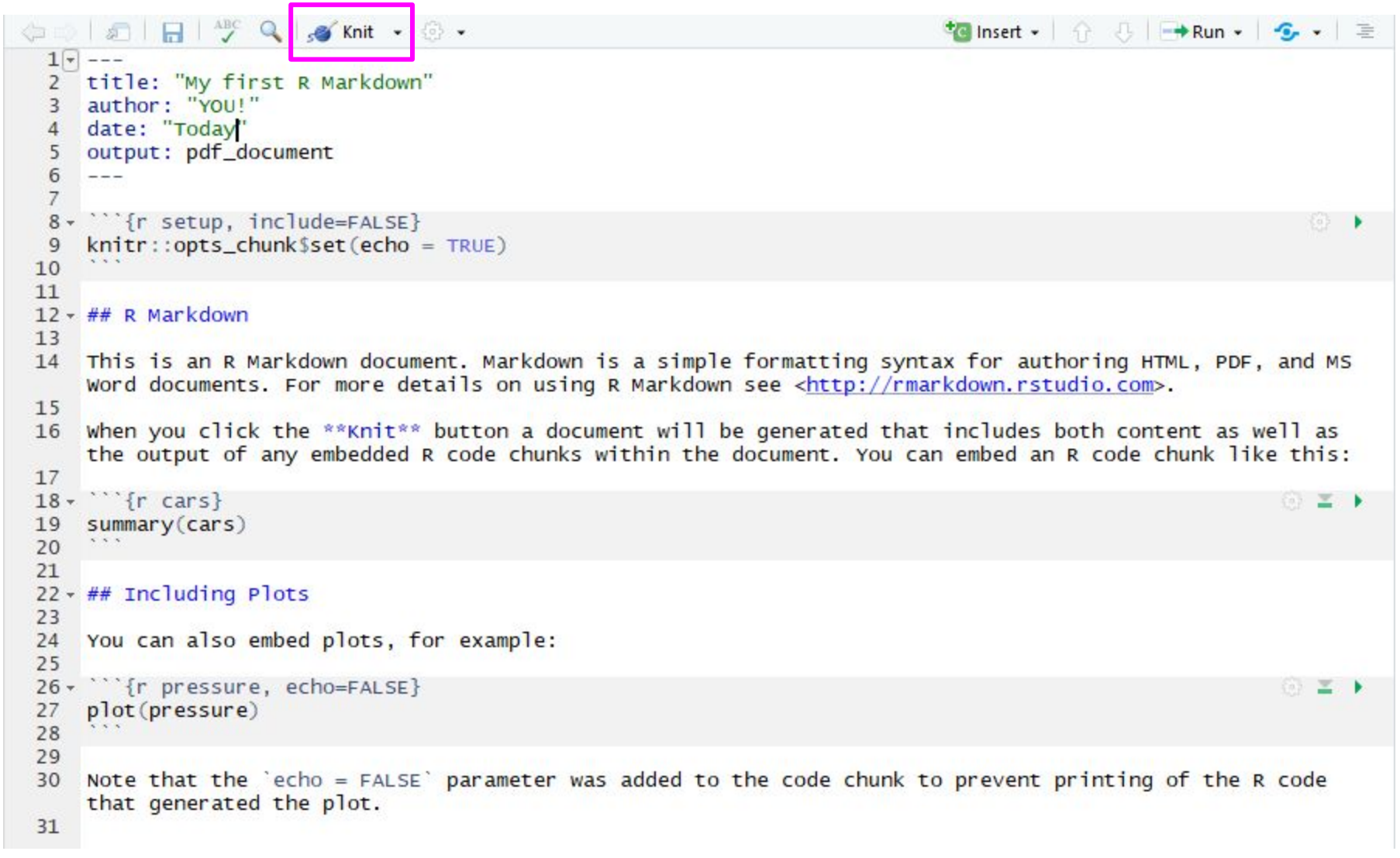
```
install.packages("rmarkdown")
```




New R Markdown
Document
Presentation
Shiny
From Template
Title:
My first R Markdown
Author:
YOU!
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


Knit
Insert
Run
---
title: "My first R Markdown"
author: "YOU!"
date: "Today"
output: pdf_document

HEADER
```{r setup, include=FALSE}
knitr::opts_chunk$set(echo = TRUE)
```
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>.
TEXT
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:
```{r cars}
summary(cars)
```
CODE CHUNK
Including Plots
You can also embed plots, for example:
```{r pressure, echo=FALSE}
plot(pressure)
```
Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.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My first R Markdown

YOU!

Today

Header rendered as the title

R Markdown

Text section rendered as formatted text

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```
##      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

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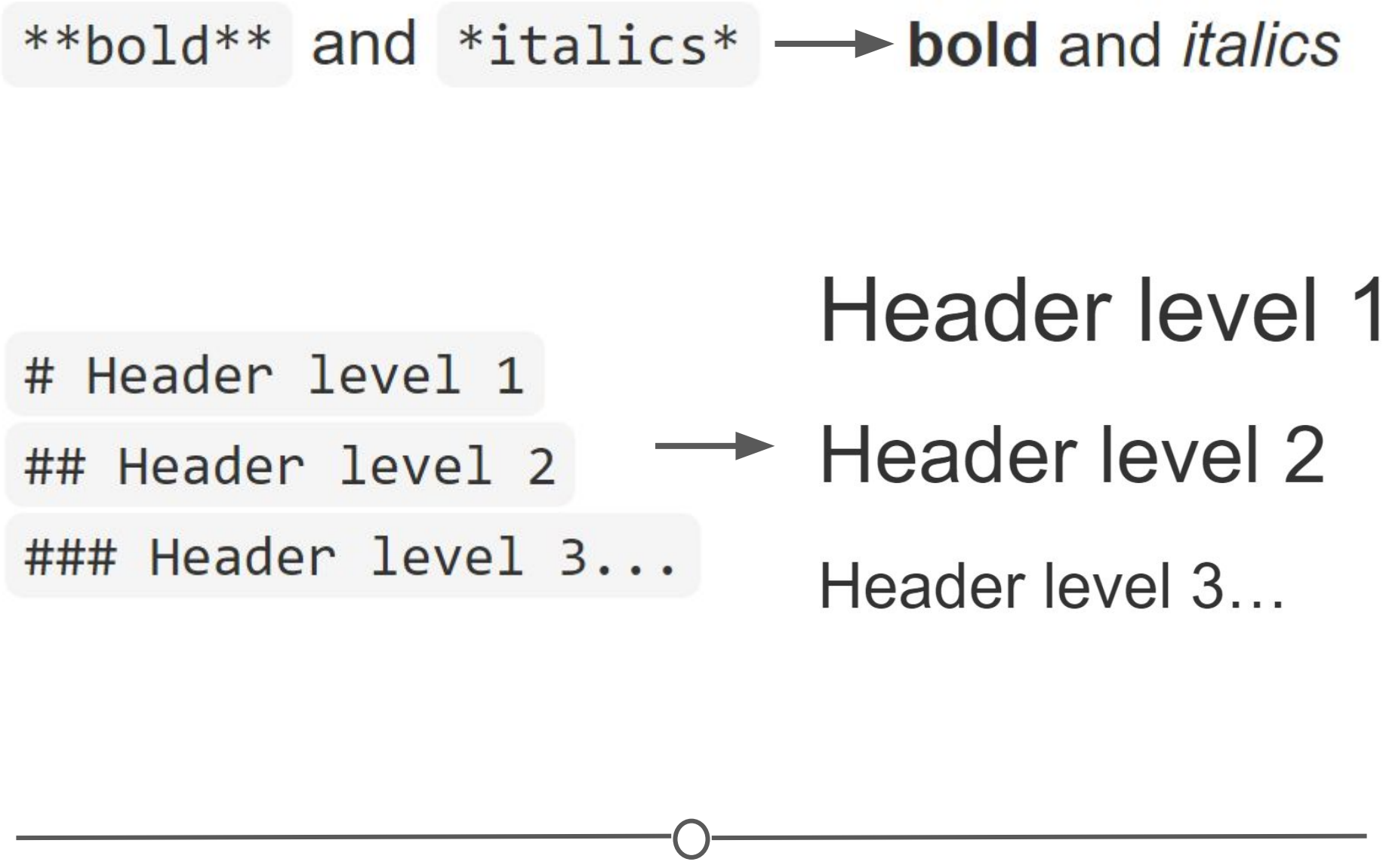
bold and *italics*
bold and italics
Header level 1
Header level 2
Header level 3...
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Header level 2
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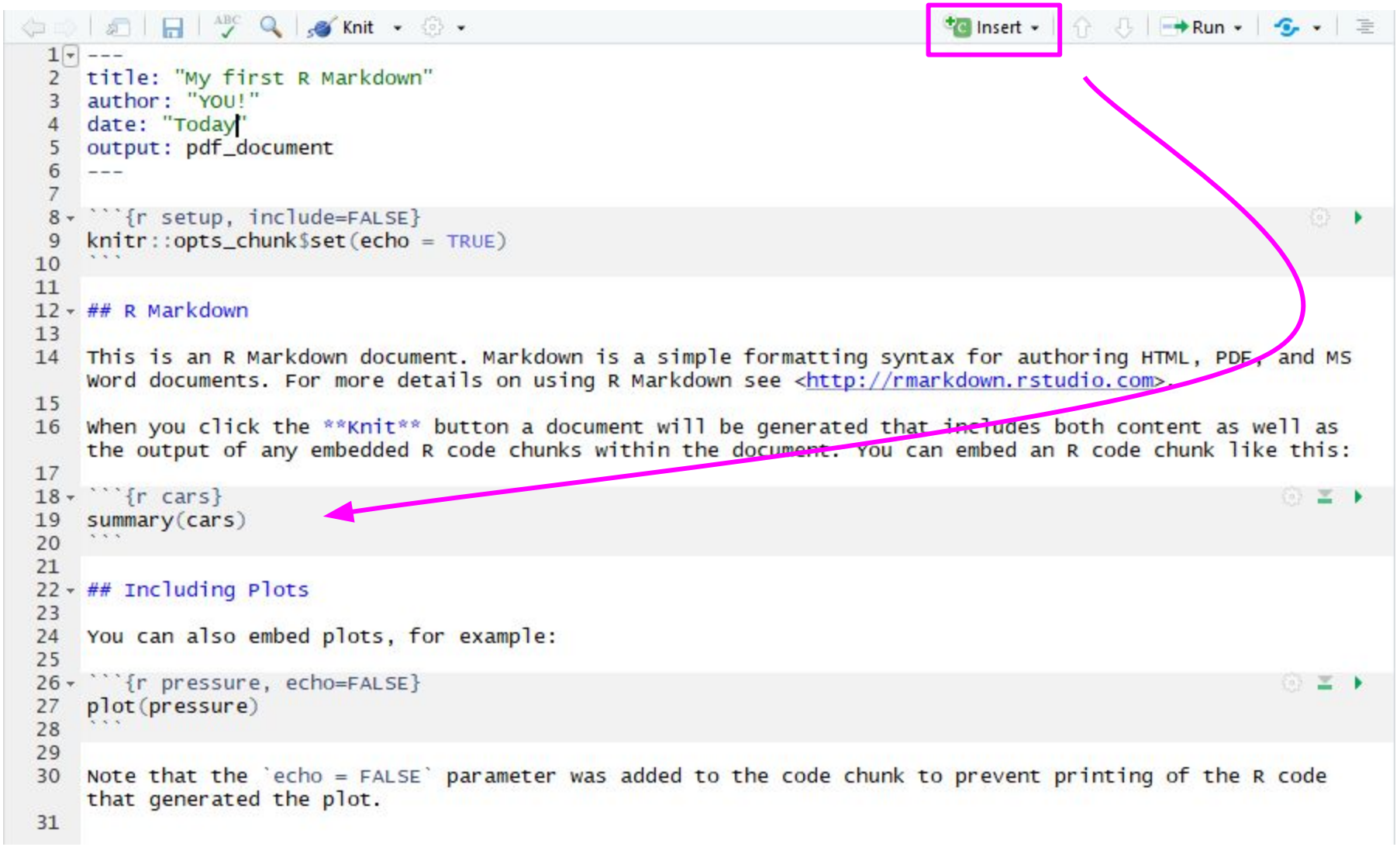
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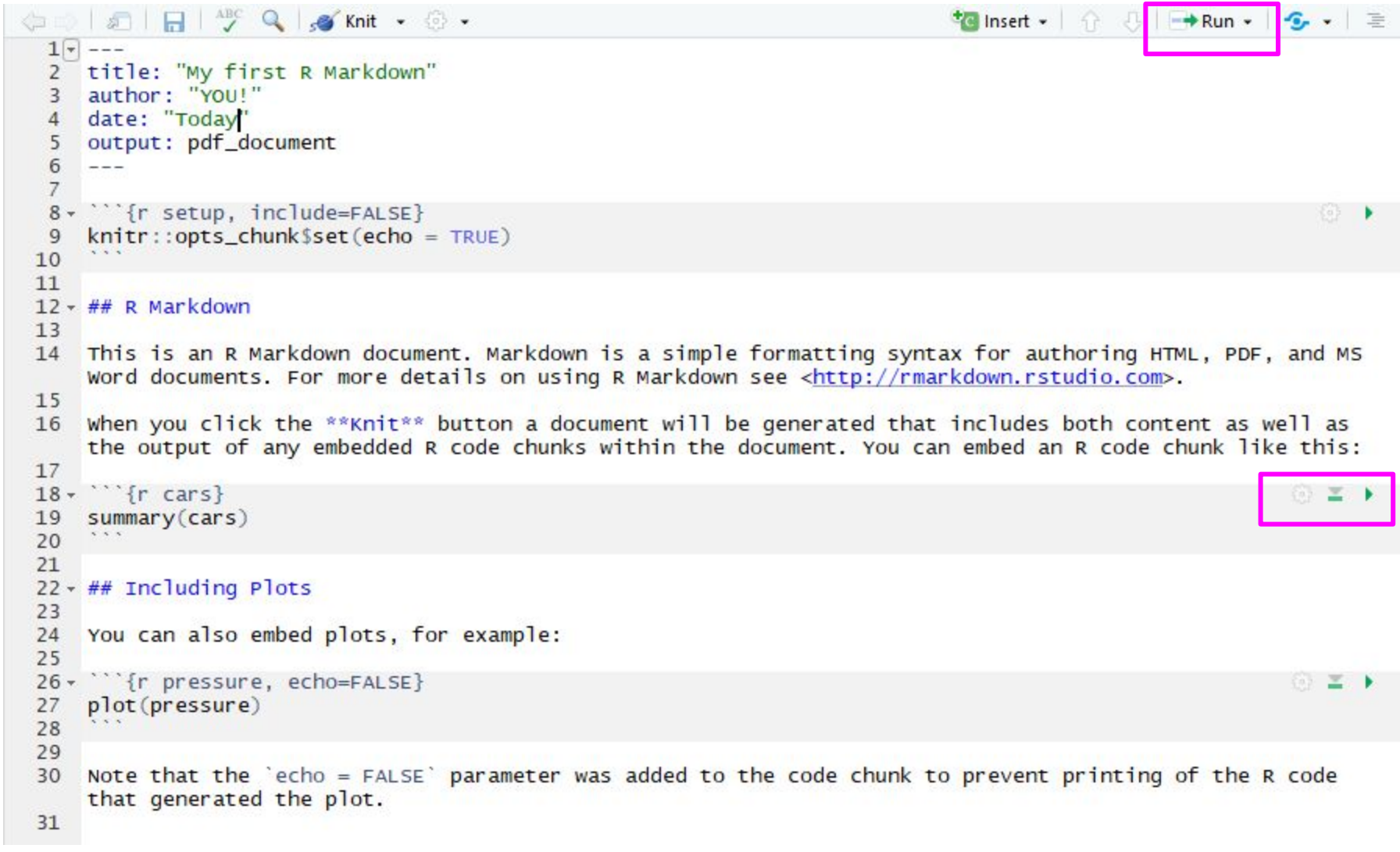
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TWO SPACES

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