

# R Markdown

R for Data Science workshop

2019-05-01 (updated: 2019-05-15)

# R Markdown

## Outline

- Overview
- R Markdown basics
- Code chunks
- YAML header

# Data science workflow



Image source: [R for Data Science](#) by Hadley Wickham & Garrett Golemund.

# Data science workflow

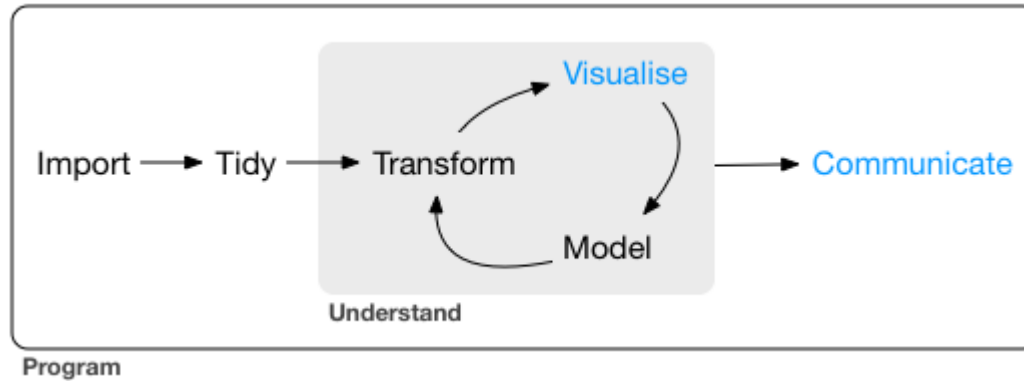


Image source: [R for Data Science](#) by Hadley Wickham & Garrett Golemund.

# R Markdown Overview

Use cases:

- Communicating with decision makers
- Collaborating with other data scientists
- Environment for *doing* data science

# Reproducible research

```
Karl -- this is very interesting,  
however you used an old version of  
the data (n=143 rather than n=226).
```

```
I'm really sorry you did all that  
work on the incomplete dataset.
```

```
Bruce
```

# R Markdown basics

Plain text file with extension *.Rmd*

## Three types of content

1. Optional **YAML** header
2. **Chunks** of R code
3. Text with **Markdown** formatting

## "Knitting" with **knitr**



# R Markdown basics

Markdown Quick Reference in RStudio Help

Demo



# Code chunks

```
` ``r  
x <- 5  
` ``
```

creates an R code chunk named "mychunk".

**knitr** provides almost 60 options for code chunks.

Easiest way to learn them is to use RStudio.

# Your turn

## R Markdown

**[exercises/05-r-markdown.Rmd](#)**