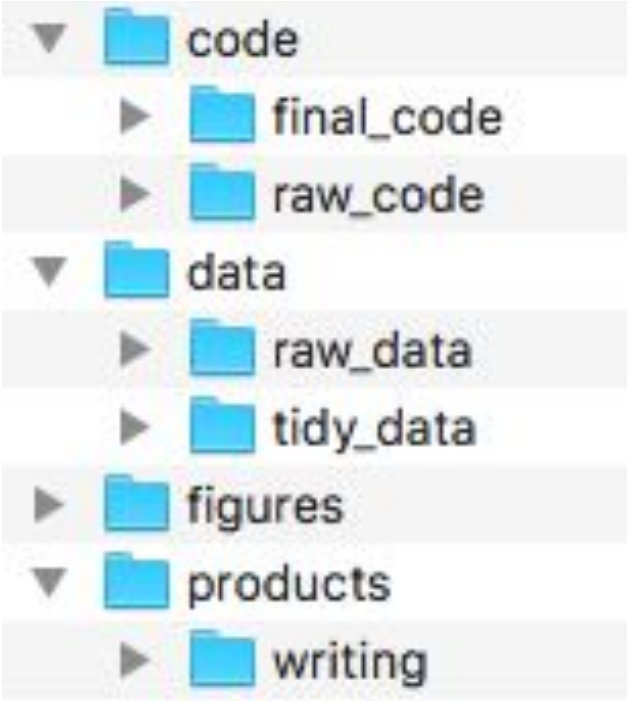
How to Work

Organizing Data Science Projects

Why organize?

- It makes collaboration easier.
- It reduces the likelihood of making mistakes.
- It makes is a lot easier to go back to your analysis
- It shows transparency


code
final_code
raw_code
data
raw_data
tidy_data
figures
products
writing

README.md

This is the README file for my_first_project

Last updated: 02-Mar-2018

The folders in this project are:

- *data* - is the folder where you can find all the collected data.
- *figures* - is where you can find all the plots, data pictures, and other images.
- *code* - is where you can find code files for collecting, cleaning up, or analyzing data.
- *products* - is where you can find reports, presentations, or products

Data on crime is obtained from International Crime Data collected between 2015-2018 and is publicly available. Data on happiness is collected from the Survey of International Happiness.

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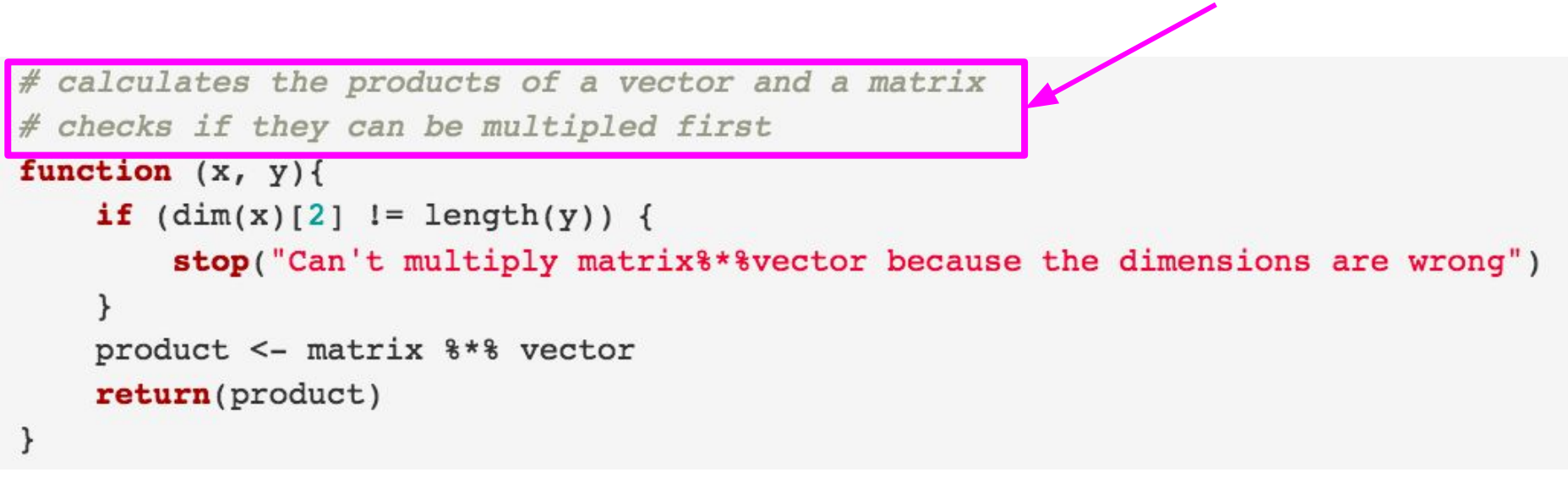
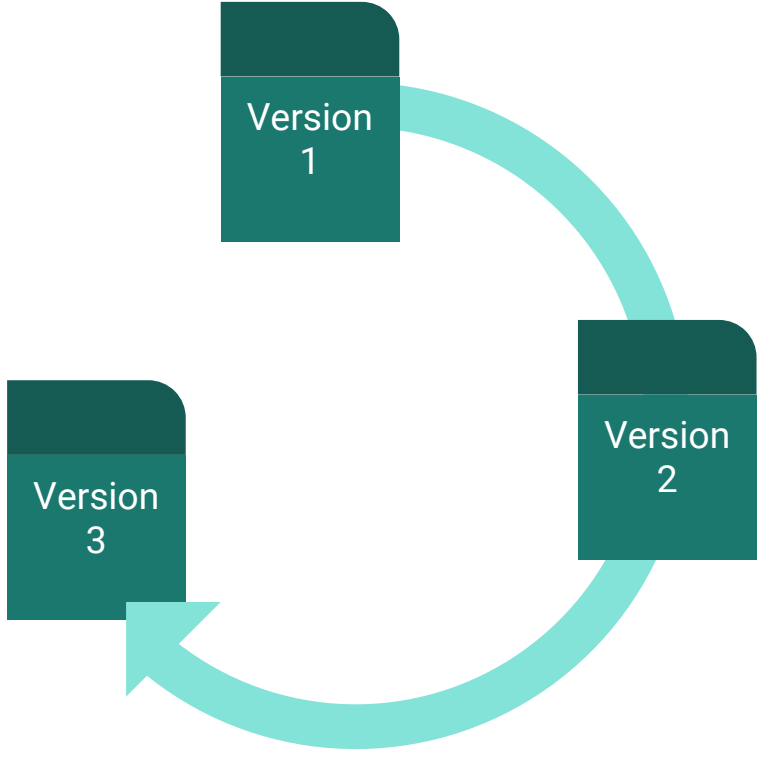
Use Comments

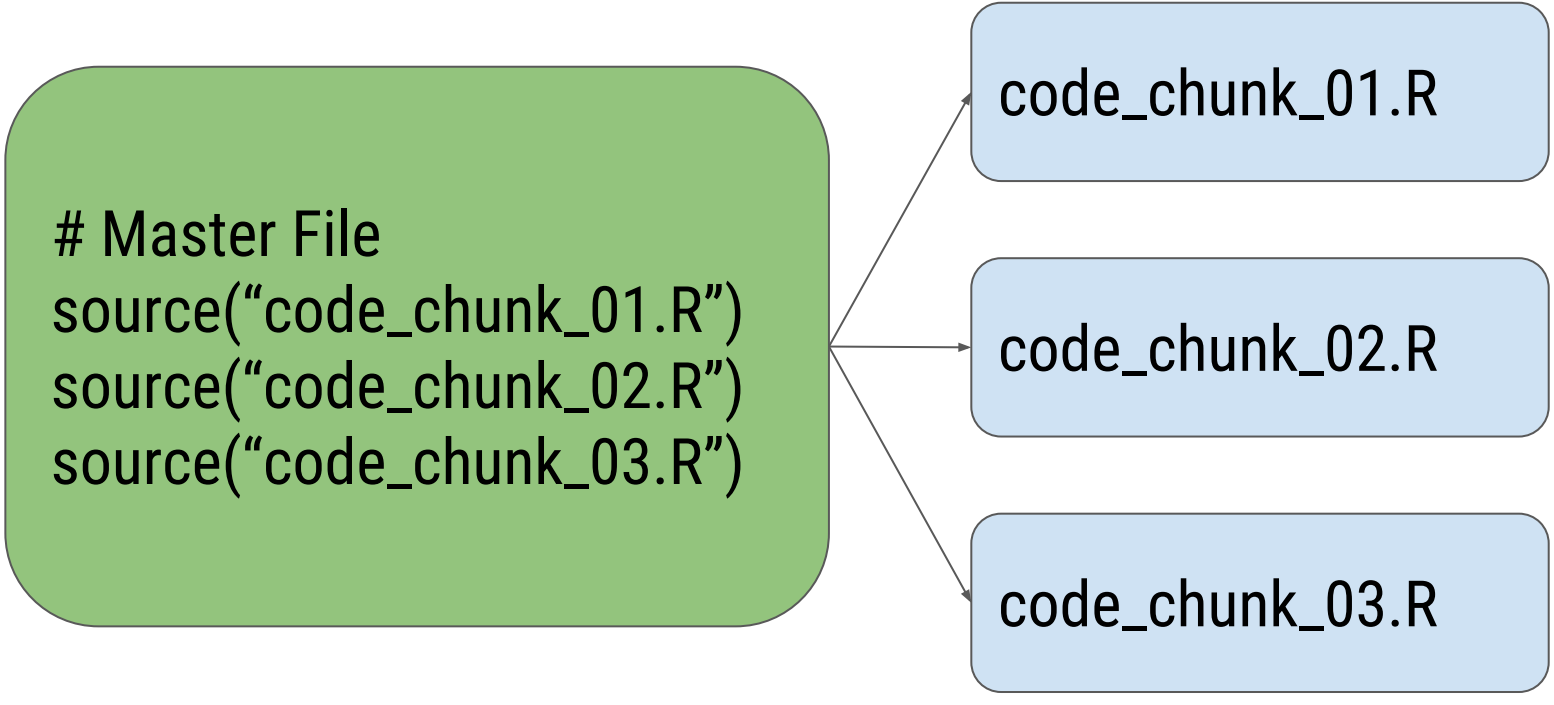


```
# calculates the products of a vector and a matrix
# checks if they can be multipled first
function (x, y){
    if (dim(x)[2] != length(y)) {
        stop("Can't multiply matrix%*%vector because the dimensions are wrong")
    }
    product <- matrix %*% vector
    return(product)
}
```

Version Control



Write in a Modular Way



Final Steps

- Use proper file numbering
- Keep updating the README file
- Write a final report in RMarkdown
- Keep track of what you need to do in a bulleted list
- Keep track of what you do across your projects in a journal