R Markdown Demo

Jarrett Lovelett 12/5/2018

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.

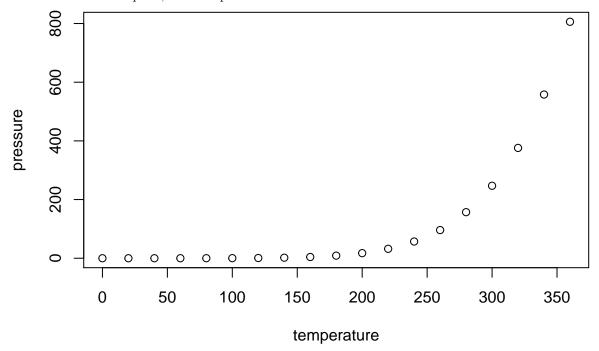
When you click the \mathbf{Knit} button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

summary(cars)

```
##
        speed
                          dist
                               2.00
##
    Min.
            : 4.0
                    Min.
                    1st Qu.: 26.00
##
    1st Qu.:12.0
    Median:15.0
                    Median: 36.00
##
    Mean
                            : 42.98
##
            :15.4
                    Mean
    3rd Qu.:19.0
                    3rd Qu.: 56.00
            :25.0
                            :120.00
##
    Max.
                    Max.
```

Including Plots

You can also embed plots, for example:



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

Begin Lab

Let's start by installing a couple packages (styler and prettycode) and (optionally) github desktop, which can be used for collaboration and version control.

```
\#install.packages('styler')
#install.packages('prettycode')
library(styler)
## Warning: package 'styler' was built under R version 3.4.4
library(prettycode)
## Warning: package 'prettycode' was built under R version 3.4.4
## The following object is masked from package:base:
##
##
       print.function
```

Style

Code style is important for readability. One good way to learn is by playing around with the styler package.

```
read_file('crappyCode.R')
## [1] "library(tidyverse)\nx <- c(\"i\", \"am\", \"vector\")\nprint(x)\nprintNums <- function(x
Let's fix it up!
read_file('crappyCode.R') %>%
  style_text()
## library(tidyverse)
## x <- c("i", "am", "a", "vector")
## print(x)
## printNums <- function(x) {</pre>
     for (i in 1:x) {
##
       print(i)
##
##
     }
## }
## nums <- c(1, 2, 3)
## expand.grid(nums, x) %>% mutate(new = 1:nrow(.))
style_file('crappyCode.R')
## Styling 1 files:
## crappyCode.R v
## Status
          Count Legend
      1 File unchanged.
## v
       0 File changed.
## i
       O Styling threw an error.
```