# day 2 data visualization

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#### 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.

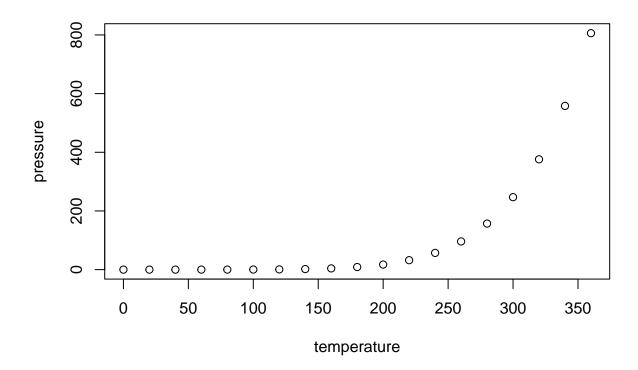
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

#### summary(cars)

```
##
        speed
                          dist
##
           : 4.0
                    Min.
                            : 2.00
    Min.
    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
```

## **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.

#### head(acacia)

```
##
                   SITE BLOCK TREATMENT
                                             PLOT
                                                     ID HEIGHT AXIS1 AXIS2 CIRC
     SURVEY YEAR
## 1
          1 2012 SOUTH
                             1
                                    TOTAL S1TOTAL
                                                    581
                                                          2.25
                                                                 2.75
                                                                       2.15
                                                                               20
## 2
          1 2012 SOUTH
                             1
                                    TOTAL S1TOTAL
                                                   582
                                                          2.65
                                                                 4.10
                                                                       3.90
                                                                               28
## 3
          1 2012 SOUTH
                                   TOTAL S1TOTAL 3111
                                                          1.50
                                                                 1.70
                                                                       0.85
                                                                               17
                             1
## 4
          1 2012 SOUTH
                                   TOTAL S1TOTAL 3112
                                                          2.01
                                                                 1.80
                                                                       1.60
                                                                               12
                             1
## 5
          1 2012 SOUTH
                                    TOTAL S1TOTAL 3113
                             1
                                                          1.75
                                                                 1.84
                                                                       1.42
                                                                               13
## 6
          1 2012 SOUTH
                             1
                                   TOTAL S1TOTAL 3114
                                                          1.65
                                                                 1.62
                                                                      0.85
                                                                               15
##
     FLOWERS BUDS FRUITS ANT
## 1
           0
                 0
                            CS
                        10
## 2
           0
                 0
                      150
                            TP
## 3
           2
                       50
                            TP
                 1
           0
                 0
                        75
                            CS
## 5
           0
                 0
                        20
                            CS
## 6
                        0
                             Ε
```

```
library(ggplot2)
ggplot(data = acacia, mapping = aes(x = HEIGHT, y = FRUITS, color = ANT)) +
  geom_point(size = 3, alpha = 0.5) +
  facet_wrap(~ANT)
```

## Warning: Removed 4 rows containing missing values ('geom\_point()').

