BIT07-1stRmd

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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(iris)
```

```
Sepal.Length
                       Sepal.Width
                                        Petal.Length
                                                         Petal.Width
##
##
    Min.
            :4.300
                     Min.
                             :2.000
                                       Min.
                                               :1.000
                                                        Min.
                                                                :0.100
                                                        1st Qu.:0.300
    1st Qu.:5.100
                      1st Qu.:2.800
                                       1st Qu.:1.600
##
##
    Median :5.800
                     Median :3.000
                                       Median :4.350
                                                        Median :1.300
##
    Mean
            :5.843
                     Mean
                             :3.057
                                       Mean
                                               :3.758
                                                        Mean
                                                                :1.199
##
    3rd Qu.:6.400
                     3rd Qu.:3.300
                                       3rd Qu.:5.100
                                                        3rd Qu.:1.800
##
    Max.
            :7.900
                     Max.
                             :4.400
                                       Max.
                                               :6.900
                                                        Max.
                                                                :2.500
##
          Species
##
    setosa
               :50
##
    versicolor:50
##
    virginica:50
##
##
##
```

Structure of the iris dataset

With the str() function you get a nice overview of the structure of the data in the data frame.

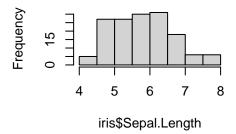
```
str(iris)
```

```
## 'data.frame': 150 obs. of 5 variables:
## $ Sepal.Length: num 5.1 4.9 4.7 4.6 5 5.4 4.6 5 4.4 4.9 ...
## $ Sepal.Width : num 3.5 3 3.2 3.1 3.6 3.9 3.4 3.4 2.9 3.1 ...
## $ Petal.Length: num 1.4 1.4 1.3 1.5 1.4 1.7 1.4 1.5 1.4 1.5 ...
## $ Petal.Width : num 0.2 0.2 0.2 0.2 0.2 0.4 0.3 0.2 0.2 0.1 ...
## $ Species : Factor w/ 3 levels "setosa", "versicolor", ..: 1 1 1 1 1 1 1 1 1 1 ...
```

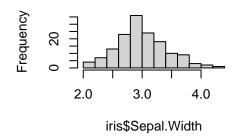
Including Plots

You can also embed plots, for example:

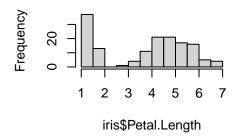
Histogram of sepal length



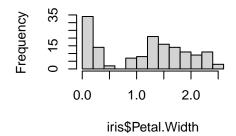
Histogram of sepal width



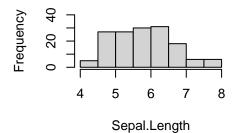
Histogram of petal length



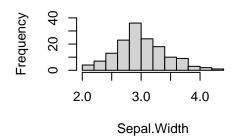
Histogram of petal width



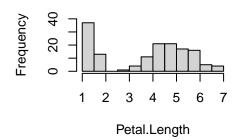
Histogram of Sepal.Length



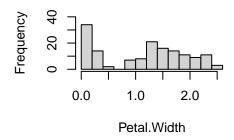
Histogram of Sepal.Width



Histogram of Petal.Length



Histogram of Petal.Width



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