Homework 1

The purpose of this document is to get you some basic practice using *R Markdown.* As mentioned in the syllabus, I will also be asking for all homeworks to be completed with *R Markdown* so it's worth getting used to now.

To receive full credit, please create and render an *R Markdown* document in html or pdf format that has the following elements. - Title, author and date + Use a YAML header in your document to do this - An R code chunk displaying how to load data into R and store it into an object, along with text explaing in the code. - A generic ordered or unordered list with at least one level of nesting (could even be a shopping list) - Some R output of some sort - Calculate the mean of a variable and display it in text. Make some manipulation to the data (e.g., remove a few random cases) and report the mean in text again, using code. For example:

```r
data(ChickWeight)
head(ChickWeight)
```

```
##   weight Time Chick Diet
## 1     42    0     1    1
## 2     51    2     1    1
## 3     59    4     1    1
## 4     64    6     1    1
## 5     76    8     1    1
## 6     93   10     1    1
```

The average chick weight was 121.82 grams. At time time point 0 the average weight was 41.06 grams.

To see the datasets available in R, type in `data()` at the command prompt. You should see a summary of many different datasets. To get information on any one of these datasets, type `?` and the name of the dataset. For example `?ChickWeight` will tell you some information about the dataset above.

Plot

For the final portion of this homework, please pick a dataset (please pick one other than the ChickWeight dataset) and produce a `pairs()` plot. I encourage you do play around with this and check out the documentation. Basically, you just need to feed it a dataframe with the variables you want to visualize through the scatterplot matrix. For example

```r
pairs(ChickWeight)
```
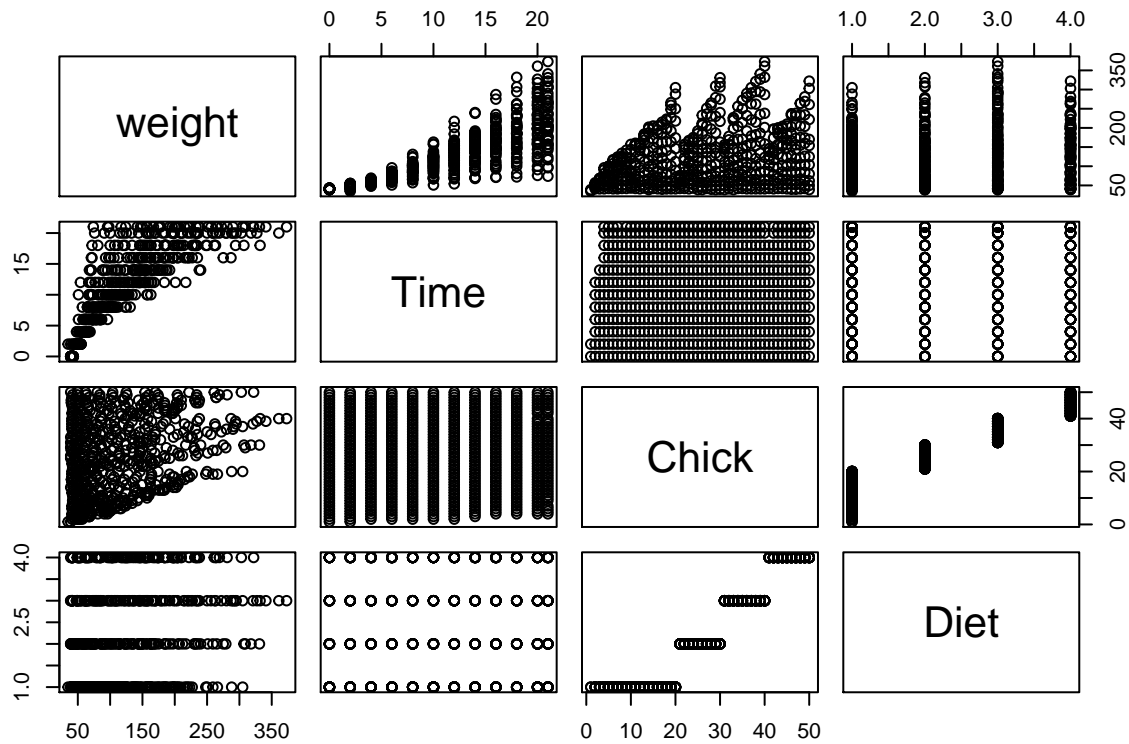
Now you just need to render the document using either the `knit` function in RStudio, or using `knit::knit2html("yourFile.Rmd")`.