Assignments to Lecture 4 – Descriptive statistics
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Descriptive statistics

During this lecture we'll be using the iris dataset, which you can load into R by typing:

```
data(iris)
```

The iris dataset contains 150 measurements of 4 phenotypes on 3 different species of iris flowers.

1a) For each phenotype calculate the mean / median and mode per species
1b) For each phenotype calculate the overal variation
1c) For each phenotype calculate the variation per species
1d) Create a function to calculate the geometric mean
1e) Create a function to calculate the harmonic mean

First plots in R

2a) Use the histogram function (look up the help file) and for each of the 2 iris species create a histogram for the "Petal.Length" column.
2b) Using the par() function to change the size of the main title to lettersize 2
2c) Use the par() and the parameter mfrow to create 3 plots in a single plot window each holding the petal.length of a single species. (make sure each sub-plot has a header with the name of the species)
2d) Save the plot from 2b to a png file

3a) Create a single plot showing 3 boxplots next to each other comparing the Sepal.Length between the different species. Use the axis() function to add human readable axis to the plot
3b) Using the notch parameter, what can you say about the differences in the observed Sepal.Length

That's it, if you have time left, please work on the previous assignments or start reading the free "A Beginner's Guide to R" book or do some additional assignments from the ExtraPractice.pdf