

# Chap1

First, set working directory. 'data' is a table with two columns and same number of rows, and should be numeric. Columns have headers indicating the names of the variables. User will also input desired variable names in double quotes

View the data.

```
##      Len Wid
## 1      3   8
## 2      6   4
## 3      2  10
## 4      6   1
## 5      2  11
## 6      9   1
## 7      6   4
## 8      5   3
## 9      9   1
## 10     4   6
## 11     7   2
## 12    11   1
## 13     5   9
## 14     4   3
## 15     3   4
## 16     9   1
## 17    10   3
## 18     5   3
## 19     4   3
## 20    10   2
```

Calculate the mean for all columns

```
##      Len Wid
## 1      6   4
```

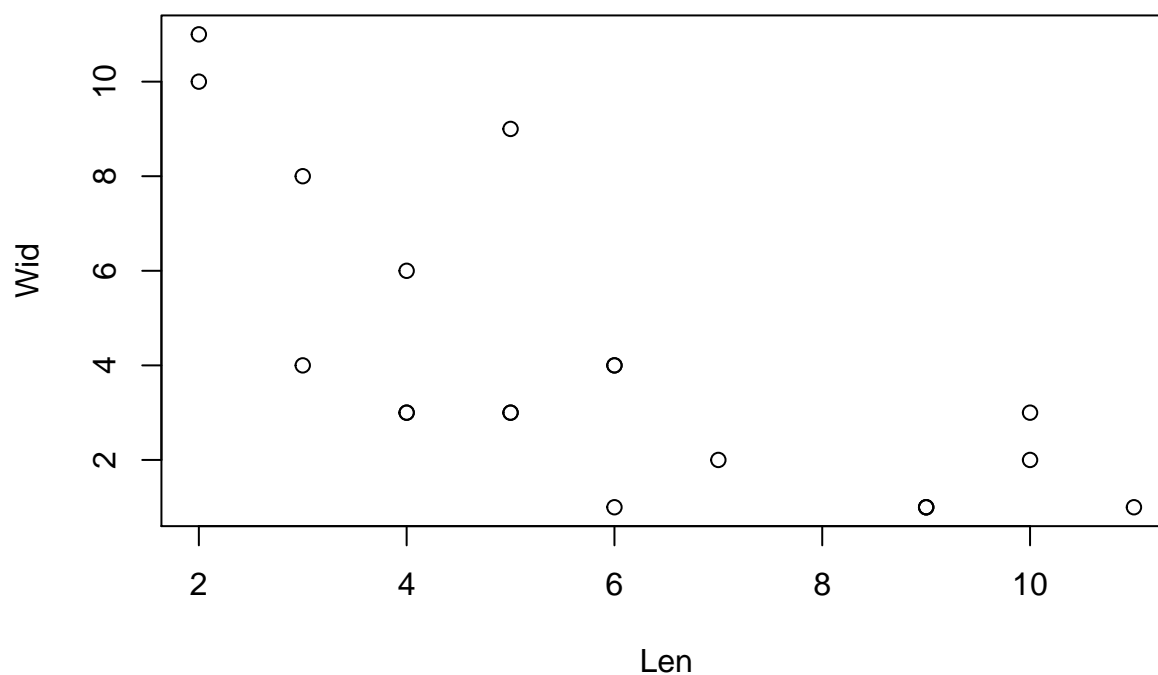
Calculate the standard deviation for all columns

```
##          Len      Wid
## 1 2.809757 3.14559
```

We now perform a correlation and a test on the data which gives confidence intervals, regression analysis on the data, an ANOVA on the data

We now print the data and all the results

## Length vs Meanings



df	t_value	p_value	r	LowC.I.	UpperC.I
18	-4.564434	0.0002403	-0.7324543	-0.8873588	-0.4289759

### Regression Analysis

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	8.6170213	0.7223990	11.928340	0.0000000
var2	-0.6542553	0.1433377	-4.564434	0.0002403

### ANOVA table

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
var2	1	80.4734	80.473404	20.83406	0.0002403
Residuals	18	69.5266	3.862589	NA	NA