

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.

View the data

```
data
```

```
##      Length Meanings
## 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

```
##      Length Meanings
## 1         6         4
```

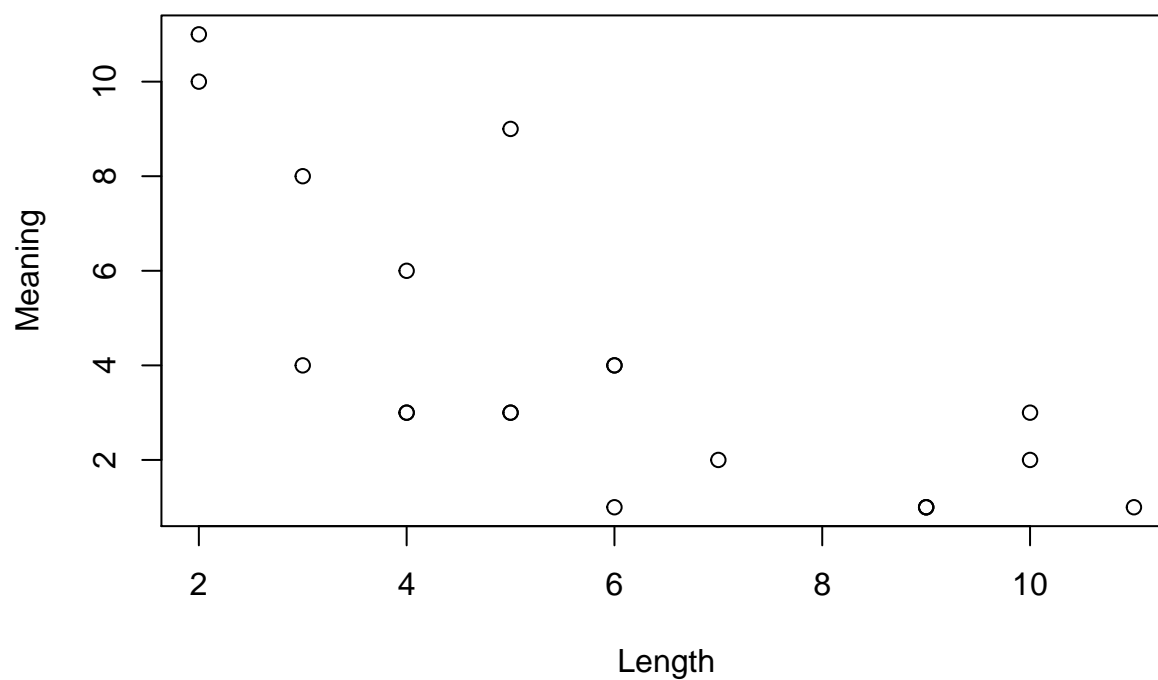
Calculate the standard deviation for all columns

```
##      Length Meanings
## 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



	cor1.parameter	cor1.statistic	cor1.p.value	cor1.estimate	cor1.conf.int.1.	cor1.conf.int.2.
df	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
Meaning	-0.6542553	0.1433377	-4.564434	0.0002403

ANOVA table

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