

## Chap2

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.

```
##      MemorySet ReactionTime
## 1           1           433
## 2           1           435
## 3           1           434
## 4           1           441
## 5           1           457
## 6           3           519
## 7           3           511
## 8           3           513
## 9           3           520
## 10          3           537
## 11          5           598
## 12          5           584
## 13          5           606
## 14          5           605
## 15          5           607
## 16          7           666
## 17          7           674
## 18          7           683
## 19          7           685
## 20          7           692
```

Calculate the mean for all columns

```
##      MemorySet ReactionTime
## 1           4           560
```

Calculate the standard deviation for all columns

```
##      MemorySet ReactionTime
## 1  2.294157    92.22398
```

Correlation between Memory Set and Reaction Time

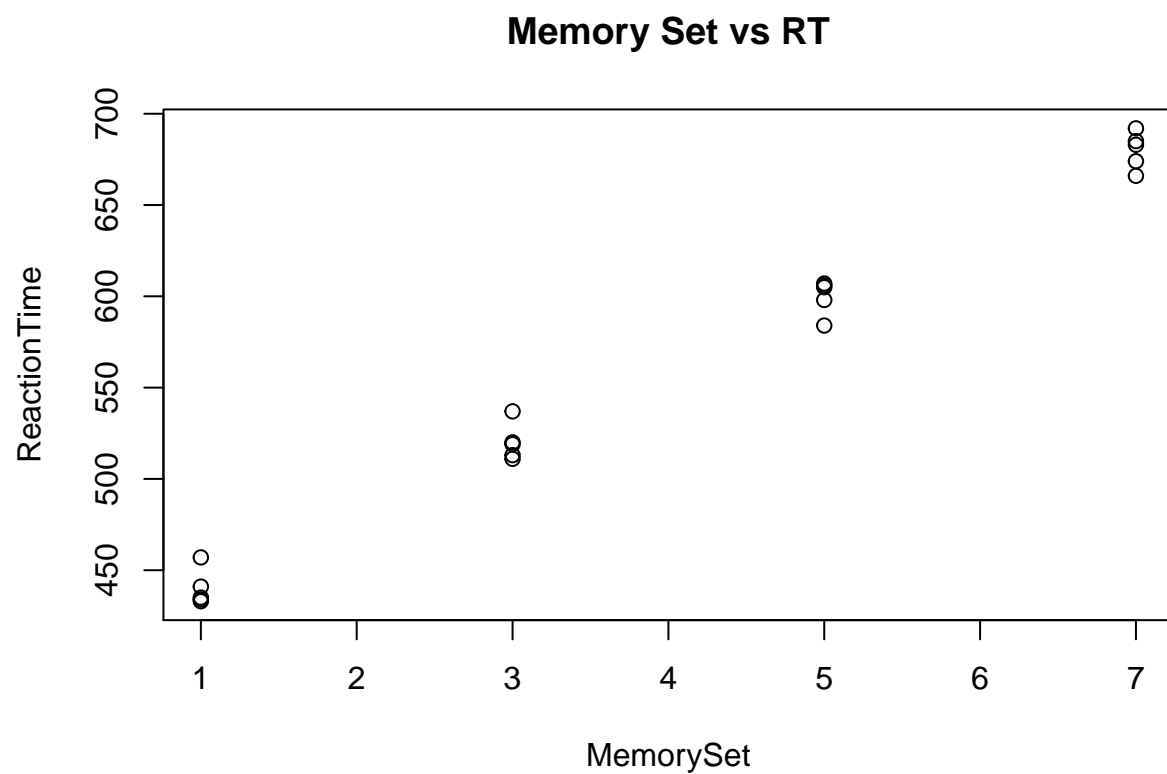
```
cor(var1,var2)
```

```
## [1] 0.9950372
```

We now perform a regression analysis and an ANOVA on the data

```
reg1=lm(var1~var2)
aov1=aov(var1~var2)
```

We now print the data and all the results



Regression Analysis

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	-9.8613861	0.3308982	-29.80187	0
var2	0.0247525	0.0005834	42.42641	0

ANOVA table

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
var2	1	99.009901	99.0099010	1800	0
Residuals	18	0.990099	0.0550055	NA	NA