

# Computation of Tables and Graphs

## Introduction

The purpose of this experiment is to learn the different alignment of data set and various graphical representations in R

## Procedure

Step by step procedure to conduct the required experiment –

1. Arrangement of data using various R functions
2. Visualize the data set using various R functions

## Code and Results:

```
# Input the data
RegNo=c(1101,1102,1103,1104,1105)
RegNo

## [1] 1101 1102 1103 1104 1105

# Input the lables
Grade=c("A","B","A","C","S")
# Create the data frame
data.frame(RegNo, Grade)

##   RegNo Grade
## 1  1101    A
## 2  1102    B
## 3  1103    A
## 4  1104    C
## 5  1105    S

## R has a predefined dataset with the name "discoveries"
# To know more about the dataset type "?discoveries" in the console
Data=discoveries
Data

## Time Series:
## Start = 1860
## End = 1959
## Frequency = 1
## [1] 5 3 0 2 0 3 2 3 6 1 2 1 2 1 3 3 3 5 2 4 4 0 2
## [26] 12 3 10 9 2 3 7 7 2 3 3 6 2 4 3 5 2 2 4 0 4 2 5
## [51] 3 6 5 8 3 6 6 0 5 2 2 2 6 3 4 4 2 2 4 7 5 3 3
## [76] 0 2
```

```
## [76] 2 2 1 3 4 2 2 1 1 1 2 1 4 4 3 2 1 4 1 1 1 0 0
2 0
```

```
# summary of the data set
```

```
summary(Data)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      0.0     2.0     3.0     3.1     4.0    12.0
```

```
#simple frequency table
```

```
table(Data)
```

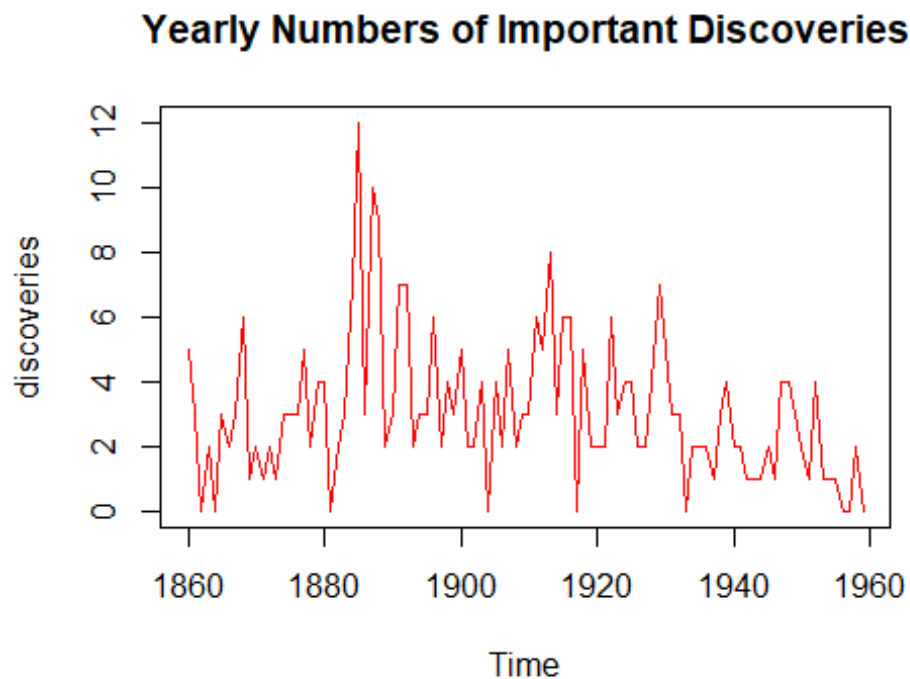
```
## Data
```

```
##  0  1  2  3  4  5  6  7  8  9 10 12
```

```
##  9 12 26 20 12  7  6  4  1  1  1  1
```

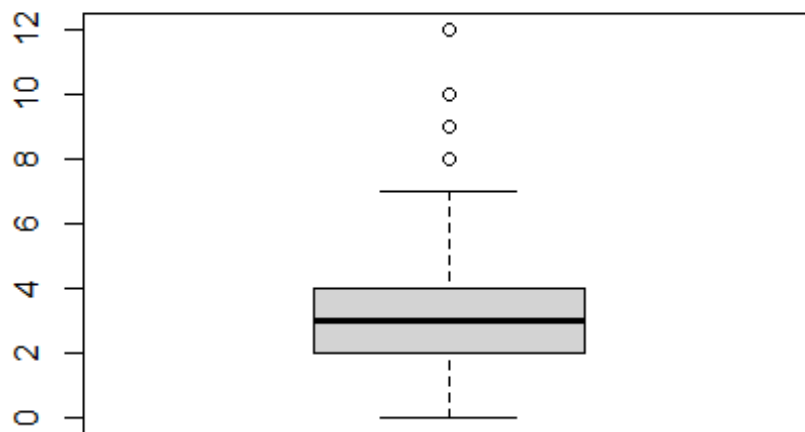
```
# data visualization using plot
```

```
plot(discoveries,type='l',col='red',main="Yearly Numbers of Important
Discoveries")
```



```
# data visualization using boxplot
```

```
boxplot(discoveries)
```



```
# data visualization using Pie chart
pie(table(discoveries))
```

