

Stats 1510 - Assignment Zero

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In this lab,

- This document will serve as a sample template.
- It is pre-formatted and already contains examples and chunks that demonstrate you how to complete your assignment or project with *R Markdown*.

Here, I show you how to some additional notes:

For example, If I want to create an ordered list (see above for unordered list), we articulate them as follows:

- 1- We can insert a URL in R Markdown. Here is the **D2L Shell URL**.
- 2- We can **highlight words** in R Markdown.
- 3- *Did you notice that this item was written in italic font?*
- 4- I can easily **bold word(s) in my R Markdown!**

Exercise 1.11

The population is pregnant and breast-feeding women. The sample consists of the 21 women who returned the surveys.

Only $21/60 \times 100\% = 35\%$ of the women who were contacted responded.

Exercise 3.1

The margin of error for 95% confidence will be about

You can type directly your mathematical calculations in R Markdown as follows:

$$\frac{1}{\sqrt{1033}} = \frac{1}{32.14} = 0.031 \quad (\text{that is, } 3.1\%).$$

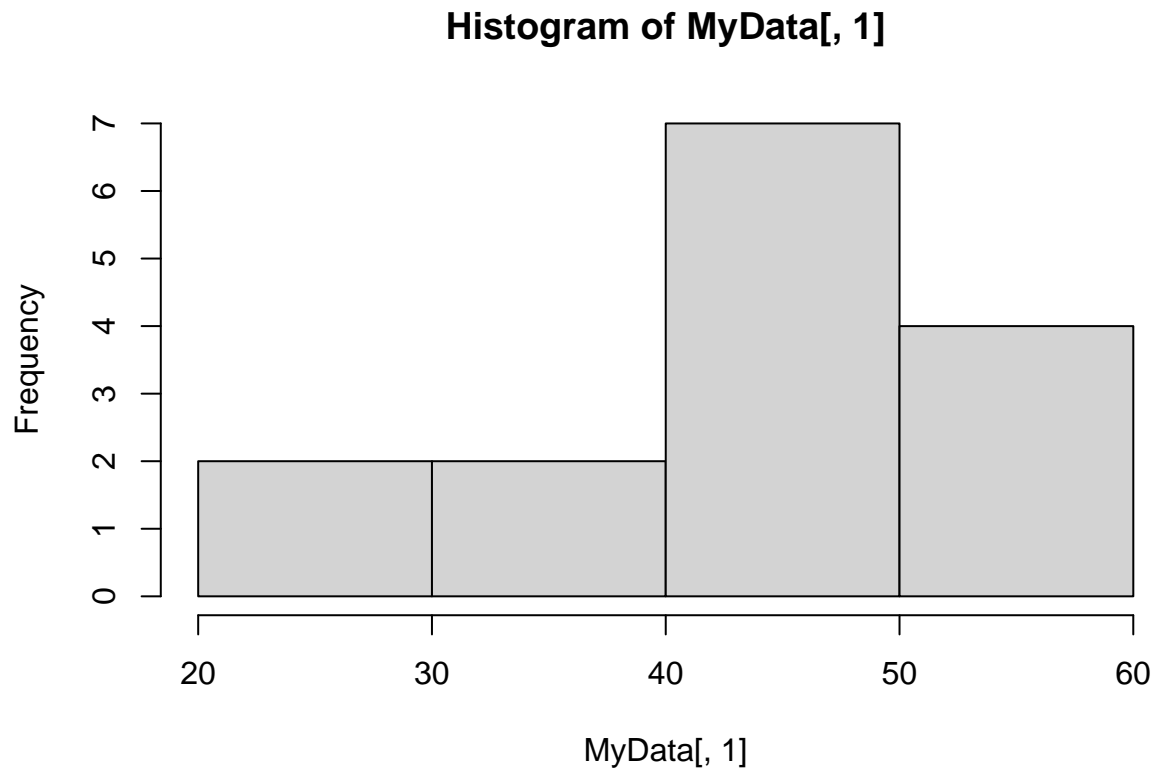
Or you can add your hand-written calculations as an image in R Markdown as follows:

A handwritten mathematical calculation showing the margin of error. It consists of the fraction 1 over the square root of 1033, followed by an equals sign, then 1 over 32.14, followed by another equals sign, then 0.031, and finally a parenthetical note '(that is, 3.1%)'.

Exercise 11.21

Stemplot and Histogram. The distribution is roughly symmetric (it appears slightly left skewed if the stems are split), and centered at 46 (a *typical* year). Ruth's best year was not at all unusual for him; 60 is *not* an outlier.

```
MyData <- read.csv(file= "ex11-21.csv", header = TRUE)
hist(MyData[,1], breaks=5, freq=TRUE)
```



```
xBar = mean(MyData[,1])
xBar
```

```
## [1] 43.93333
```

```
M <- median(MyData[,1])
M
```

```
## [1] 46
```

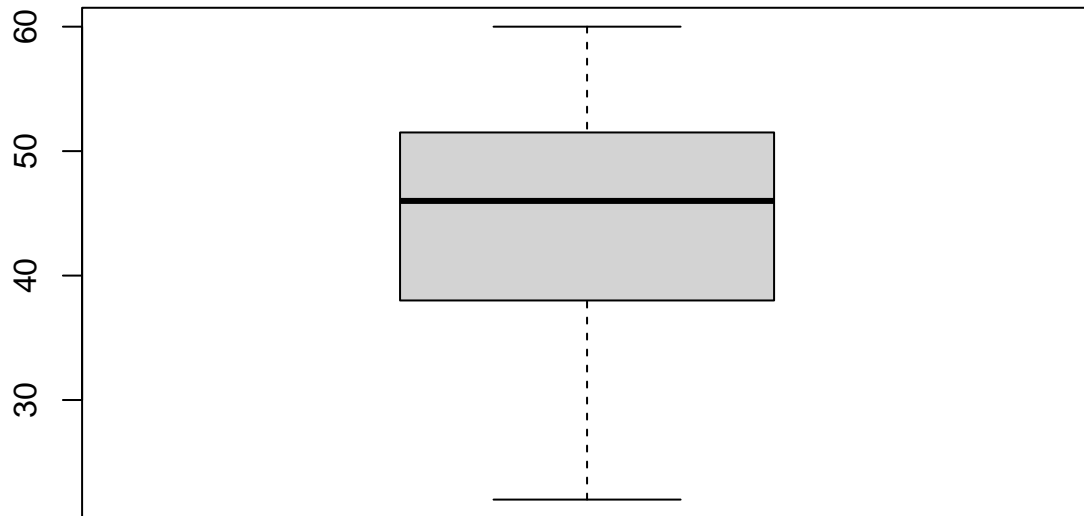
```
xSD <- sd(MyData[,1])
xSD
```

```
## [1] 11.24701
```

```
summary(MyData[,1])
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      22.00   38.00   46.00   43.93   51.50   60.00
```

```
boxplot(MyData[,1])
```



Clearly we see that the median 46 is greater than the mean 43.933333.

Additional Resources

- I also recommend to take a look at this R Markdown “Cheatsheet”

(<https://www.rstudio.com/wp-content/uploads/2015/02/rmarkdown-cheatsheet.pdf>).
