STA 445 Assignment #2

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Exercise 1

Download from GitHub the data file by clicking on this link: Example_5.xls. Open it in Excel and figure out which sheet of data we should import into R. At the same time figure out how many initial rows need to be skipped. Import the data set into a data frame and show the structure of the imported data using the str() command. Make sure that your data has n=31 observations and the three columns are appropriately named. If you make any modifications to the data file, comment on those modifications.

```
Example5 <- read_excel('../data-raw/Example_5.xls', 'RawData', 'A5:C36')
str(Example5)

## tibble [31 x 3] (S3: tbl_df/tbl/data.frame)
## $ Girth : num [1:31] 8.3 8.6 8.8 10.5 10.7 10.8 11 11 11.1 11.2 ...
## $ Height: num [1:31] 70 65 63 72 81 83 66 75 80 75 ...
## $ Volume: num [1:31] 10.3 10.3 10.2 16.4 18.8 19.7 15.6 18.2 22.6 19.9 ...</pre>
```

Exercise 2

Download from GitHub the data file by clicking on this link: Example_3.xls. Import the data set into a data frame and show the structure of the imported data using the tail() command which shows the last few rows of a data table. Make sure the Tesla values are NA where appropriate and that both -9999 and NA are imported as NA values. If you make any modifications to the data file, comment on those modifications.

```
Example3 <- read_excel('../data-raw/Example_3.xls', 'data', 'A1:L34', na = c('NA', '-9999'))
tail(Example3)</pre>
```

```
## # A tibble: 6 x 12
##
     model
                             cyl
                                  disp
                                                drat
                                                                                  gear
                                                                                          carb
                      mpg
                                            hp
                                                          wt
                                                              qsec
                                                                       ٧S
                                                                              am
##
     <chr>
                    <dbl>
                           <dbl>
                                 <dbl>
                                        <dbl>
                                               <dbl>
                                                      <dbl>
                                                             <dbl>
                                                                    <dbl>
                                                                           <dbl>
                                                                                  <dbl>
## 1 Lotus Europa
                     30.4
                                   95.1
                                                3.77
                                                       1.51
                                                              16.9
                                                                                      5
                                                                                             2
                                           113
                                                                        1
                                                                               1
## 2 Ford Panter~
                     15.8
                               8 351
                                           264
                                                4.22
                                                       3.17
                                                              14.5
                                                                        0
                                                                               1
                                                                                      5
                                                                                             4
                     19.7
                               6 145
                                                3.62
                                                                        0
                                                                                      5
                                                                                             6
## 3 Ferrari Dino
                                           175
                                                       2.77
                                                              15.5
                                                                               1
## 4 Maserati Bo~
                     15
                               8 301
                                                3.54
                                                       3.57
                                                                        0
                                                                                      5
                                                                                             8
## 5 Volvo 142E
                     21.4
                               4 121
                                           109
                                                4.11
                                                       2.78
                                                              18.6
                                                                        1
                                                                               1
                                                                                      4
                                                                                             2
## 6 Tesla Model~
                                           778 NA
                                                       4.94
                                                              10.4
                                                                               0
                                                                                            NA
                              NA
                                   NA
```