### FML Assisgnment

#### 2023-09-11

```
demotest <-read.csv("CARS_1.csv")
print(head(demotest))

## car_name reviews_count fuel_type engine_displacement no_cylinder
## 1 Maruti Alto K10 51 Petrol 998 3</pre>
```

```
## 2
          Maruti Brezza
                                                                                      4
                                      86
                                             Petrol
                                                                     1462
## 3
           Mahindra Thar
                                     242
                                             Diesel
                                                                     2184
                                                                                      4
## 4
        Mahindra XUV700
                                     313
                                             Diesel
                                                                     2198
                                                                                      4
## 5 Mahindra Scorpio-N
                                     107
                                             Diesel
                                                                     2198
                                                                                      4
##
        Toyota Fortuner
                                      99
                                             Diesel
                                                                     2755
##
     seating_capacity transmission_type fuel_tank_capacity body_type rating
##
                                                             27 Hatchback
                      5
                                 Automatic
## 2
                     5
                                                                       SUV
                                                                               4.5
                                 Automatic
                                                             48
## 3
                     4
                                 Automatic
                                                             57
                                                                       SUV
                                                                               4.5
## 4
                     7
                                                                       SUV
                                                                               4.5
                                 Automatic
                                                             60
## 5
                     7
                                                             57
                                                                       SUV
                                                                               4.5
                                 Automatic
                     7
                                                                       SUV
                                                                               4.5
## 6
                                 Automatic
                                                             80
##
     starting_price ending_price max_torque_nm max_torque_rpm max_power_bhp
## 1
              399000
                            583000
                                              89.0
                                                              3500
                                                                             65.71
## 2
              799000
                           1396000
                                             136.8
                                                              4400
                                                                            101.65
## 3
             1353000
                                             300.0
                                                              2800
                           1603000
                                                                            130.00
## 4
             1318000
                           2458000
                                             450.0
                                                              2800
                                                                            182.38
## 5
                                             400.0
             1199000
                           2390000
                                                              2750
                                                                            172.45
## 6
             3240000
                           4957000
                                             500.0
                                                              2800
                                                                            201.15
##
     max_power_rp
## 1
              5500
## 2
              6000
## 3
              3750
## 4
              3500
## 5
              3500
```

#### demotest\$fuel\_tank\_capacity

3400

## 6

```
##
     [1]
           27.0
                  48.0
                        57.0
                               60.0
                                      57.0
                                             80.0
                                                   50.0
                                                          37.0
                                                                 60.0
                                                                        37.0
                                                                               44.0
                                                                                      45.0
##
    [13]
           50.0
                  54.0
                        50.0
                               37.0
                                      55.0
                                             45.0
                                                    45.0
                                                          37.0
                                                                 40.0
                                                                        90.0
                                                                               60.0
                                                                                      37.0
##
    [25]
           42.0
                  60.0
                        37.0
                               60.0
                                      45.0
                                             30.0
                                                    40.0
                                                          32.0
                                                                 40.0
                                                                        28.0
                                                                               89.0
                                                                                      60.0
##
    [37]
            0.0
                  60.0
                        40.0
                               27.0
                                      45.0
                                             75.0
                                                    35.0
                                                          40.0
                                                                 50.0
                                                                        37.0
                                                                               60.0
##
    [49]
           32.0
                   0.0
                        68.0
                               50.0
                                              0.0
                                                   65.0
                                                          63.0
                                                                 48.0
                                                                        43.0
                                      45.0
                                                                                      50.0
##
    [61]
           80.0
                   0.0
                        58.0
                               80.0
                                      75.0
                                             90.0
                                                   51.0
                                                            0.0
                                                                  0.0
                                                                        60.0
                                                                                0.0
                                                                                      50.0
           66.0
                        54.0
                                      60.0
                                             40.0
                                                   82.0
                                                                        58.0
                                                                                       0.0
##
    [73]
                 73.0
                                0.0
                                                          40.0
                                                                 70.0
                                                                               54.0
##
    [85]
           52.0
                  59.0
                        50.0
                               45.0
                                       0.0
                                             83.0
                                                    70.0
                                                          35.0
                                                                 55.0
                                                                         0.0
                                                                               80.0
                                                           0.0
##
    [97]
           46.0
                   0.0
                         0.0
                                0.0
                                     70.0
                                             28.0
                                                   51.0
                                                                  0.0
                                                                        55.0
                                                                               90.0
```

```
## [109] 52.5 35.0
                    0.0 65.0 61.7
                                      0.0 82.0 35.0
                                                      35.0
                                                             0.0
## [121]
        0.0 75.0 65.0
                           0.0 82.0
                                      0.0 55.0
                                                  0.0
                                                      90.0
                                                             0.0
                                                                  80.0
                                                                        0.0
## [133] 66.0 81.0
                     0.0 80.0
                               45.0
                                     85.0
                                           90.0
                                                            73.0
                                                                       72.0
                                                  0.0
                                                      92.0
## [145] 100.0 74.0 52.0
                           0.0
                                83.0 57.0
                                           64.0
                                                      44.0
                                                            80.0
                                                                  55.0
                                                  0.0
## [157]
        85.0 68.0
                     0.0 82.0
                                86.0
                                     78.0
                                           93.0
                                                  0.0
                                                      68.0
                                                            51.0
                                                                  66.0
## [169]
        85.0 73.0
                     0.0
                           0.0
                                65.0
                                     65.0
                                            0.0
                                                  0.0
                                                      83.0
                                                            80.0
                                                                  44.0 66.0
## [181]
         60.0 93.0
                     0.0 57.0
                                 0.0
                                     50.0
                                           50.0
                                                  0.0
                                                      55.0
                                                            51.0
                                                                  66.0 37.0
## [193] 37.0
               0.0
                     0.0 40.0 60.0 60.0
                                            0.0 59.0 60.0
                                                            85.0
                                                                  35.0
```

```
table(demotest$transmission_type)
```

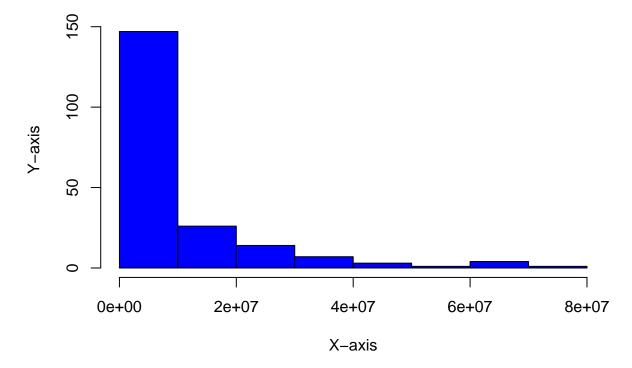
```
##
## Automatic Electric Manual
## 160 14 29
```

```
x<-log(demotest$fuel_tank_capacity)
head(x)</pre>
```

## [1] 3.295837 3.871201 4.043051 4.094345 4.043051 4.382027

hist(demotest\starting\_price,xlab="X-axis",ylab="Y-axis",main="Histogram of Quantitative Variable",col=

# **Histogram of Quantitative Variable**



# **SCATTER PLOT**

