

vivek fml 1

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```
data <- read.csv("C:\\Users\\Vivek\\OneDrive\\Desktop\\cars dataset.csv")
```

```
summary(data)
```

```
##      car_name      reviews_count      fuel_type      engine_displacement
## Length:203      Min.   :   1.0      Length:203      Min.   :   0
## Class :character 1st Qu.:   5.0      Class :character 1st Qu.:1340
## Mode  :character Median :  14.0      Mode  :character Median :1991
##                      Mean  : 118.7      Mean  :2306
##                      3rd Qu.:  83.0      3rd Qu.:2996
##                      Max.   :2392.0      Max.   :6750
##
##      no_cylinder      seating_capacity      transmission_type      fuel_tank_capacity
## Min.   : 0.000      Min.   :2.000      Length:203      Min.   : 0.00
## 1st Qu.: 4.000      1st Qu.:5.000      Class :character 1st Qu.: 33.50
## Median : 4.000      Median :5.000      Mode  :character Median : 50.00
## Mean   : 4.709      Mean   :5.015      Mean   : 46.14
## 3rd Qu.: 6.000      3rd Qu.:5.000      3rd Qu.: 66.00
## Max.   :12.000      Max.   :8.000      Max.   :100.00
##                      NA's   :1
##      body_type      rating      starting_price      ending_price
## Length:203      Min.   :3.000      Min.   : 339000      Min.   : 361000
## Class :character 1st Qu.:4.500      1st Qu.: 945500      1st Qu.:1407500
## Mode  :character Median :4.500      Median : 4312000      Median : 4600000
##                      Mean   :4.433      Mean   : 9443640      Mean   :11120054
##                      3rd Qu.:4.500      3rd Qu.:11600000      3rd Qu.:15750000
##                      Max.   :5.000      Max.   :70600000      Max.   :90000000
##
##      max_torque_nm      max_torque_rpm      max_power_bhp      max_power_rp
## Min.   : 16.1      Min.   : 0      Min.   : 10.8      Min.   : 0
## 1st Qu.: 201.0      1st Qu.:2500      1st Qu.:108.6      1st Qu.:3800
## Median : 360.0      Median :3500      Median :187.7      Median :5500
## Mean   : 402.8      Mean   :3347      Mean   :266.6      Mean   :4790
## 3rd Qu.: 590.0      3rd Qu.:4500      3rd Qu.:384.9      3rd Qu.:6000
## Max.   :1020.0      Max.   :7000      Max.   :788.5      Max.   :8500
##
```

```
head(data)
```

```
##      car_name reviews_count fuel_type engine_displacement no_cylinder
```

```
## 1    Maruti Alto K10          51    Petrol          998          3
## 2      Maruti Brezza          86    Petrol         1462          4
## 3      Mahindra Thar         242    Diesel         2184          4
## 4      Mahindra XUV700        313    Diesel         2198          4
## 5 Mahindra Scorpio-N         107    Diesel         2198          4
## 6      Toyota Fortuner         99    Diesel         2755          4
##   seating_capacity transmission_type fuel_tank_capacity body_type rating
## 1              5      Automatic          27 Hatchback    4.5
## 2              5      Automatic          48      SUV    4.5
## 3              4      Automatic          57      SUV    4.5
## 4              7      Automatic          60      SUV    4.5
## 5              7      Automatic          57      SUV    4.5
## 6              7      Automatic          80      SUV    4.5
##   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     1603000        300.0         2800        130.00
## 4        1318000     2458000        450.0         2800        182.38
## 5        1199000     2390000        400.0         2750        172.45
## 6        3240000     4957000        500.0         2800        201.15
##   max_power_rp
## 1          5500
## 2          6000
## 3          3750
## 4          3500
## 5          3500
## 6          3400
```

```
mean(data$rating)
```

```
## [1] 4.433498
```

```
median(data$reviews_count)
```

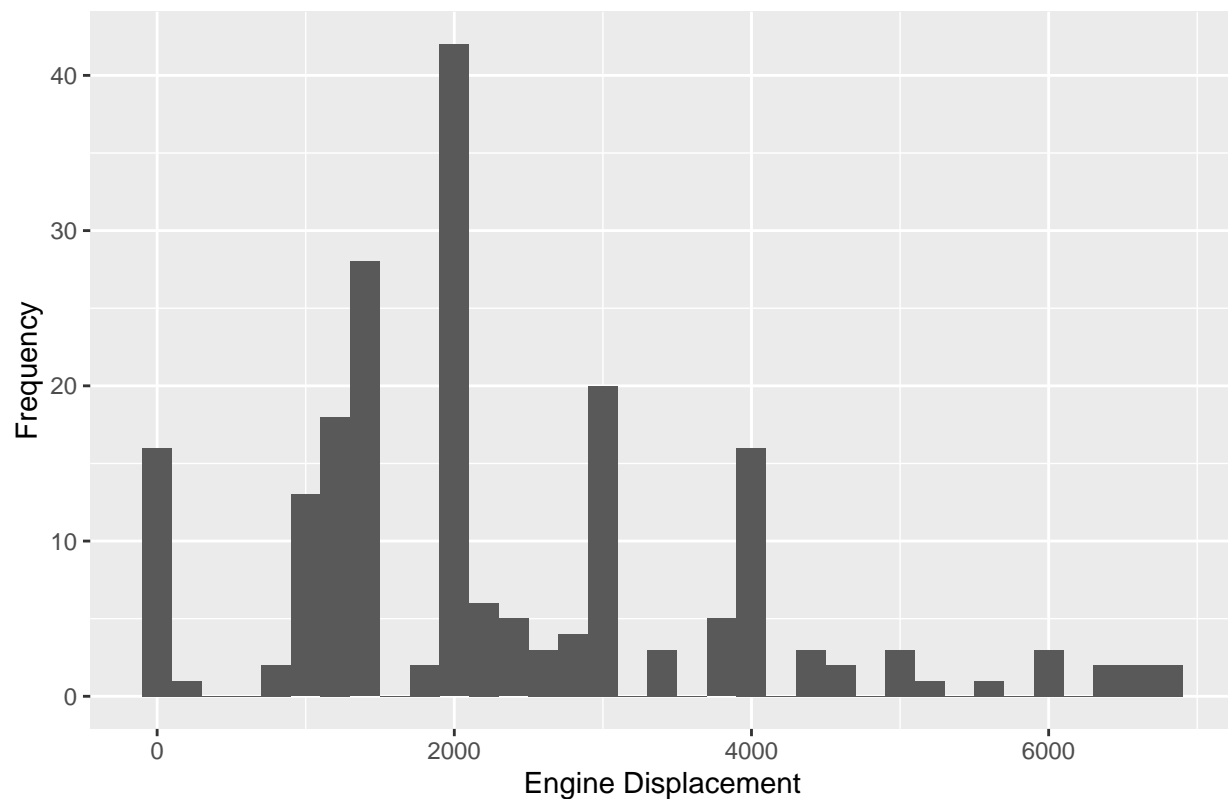
```
## [1] 14
```

```
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 4.3.2
```

```
# Histogram plot for engine_displacement
ggplot(data, aes(x = engine_displacement)) +
  geom_histogram(binwidth = 200) +
  labs(title = "Histogram of Engine Displacement",
       x = "Engine Displacement",
       y = "Frequency")
```

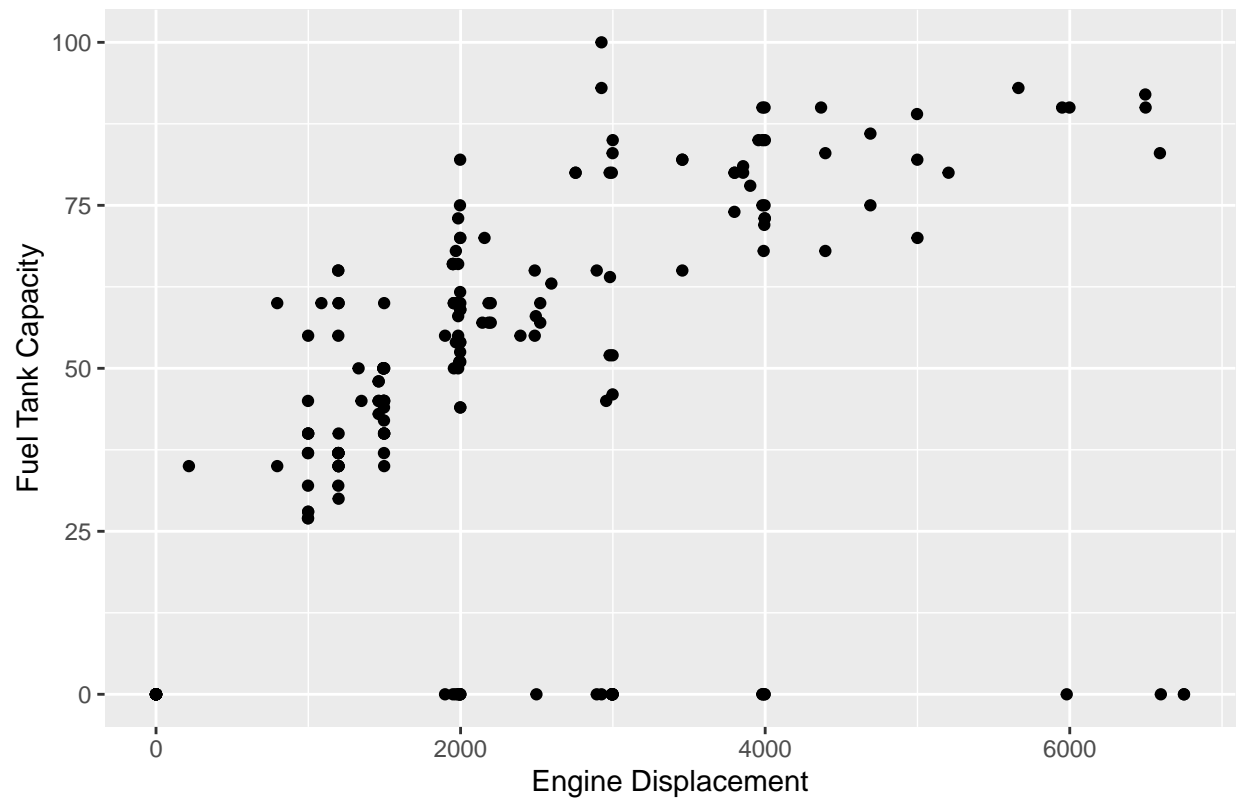
Histogram of Engine Displacement



```
# Load ggplot2 library
library(ggplot2)

# Scatter plot for engine_displacement and fuel_tank_capacity
ggplot(data, aes(x = engine_displacement, y = fuel_tank_capacity)) +
  geom_point() +
  labs(title = "Scatter Plot of Engine Displacement vs. Fuel Tank Capacity",
       x = "Engine Displacement",
       y = "Fuel Tank Capacity")
```

Scatter Plot of Engine Displacement vs. Fuel Tank Capacity



```
min_cars <- min(data$fuel_type)
cat("Minimum cars:", min_cars, "\n" )
```

```
## Minimum cars: CNG
```

```
max_cars <- max(data$body_type)
cat("Maximum cars:", max_cars, "\n")
```

```
## Maximum cars: Wagon
```