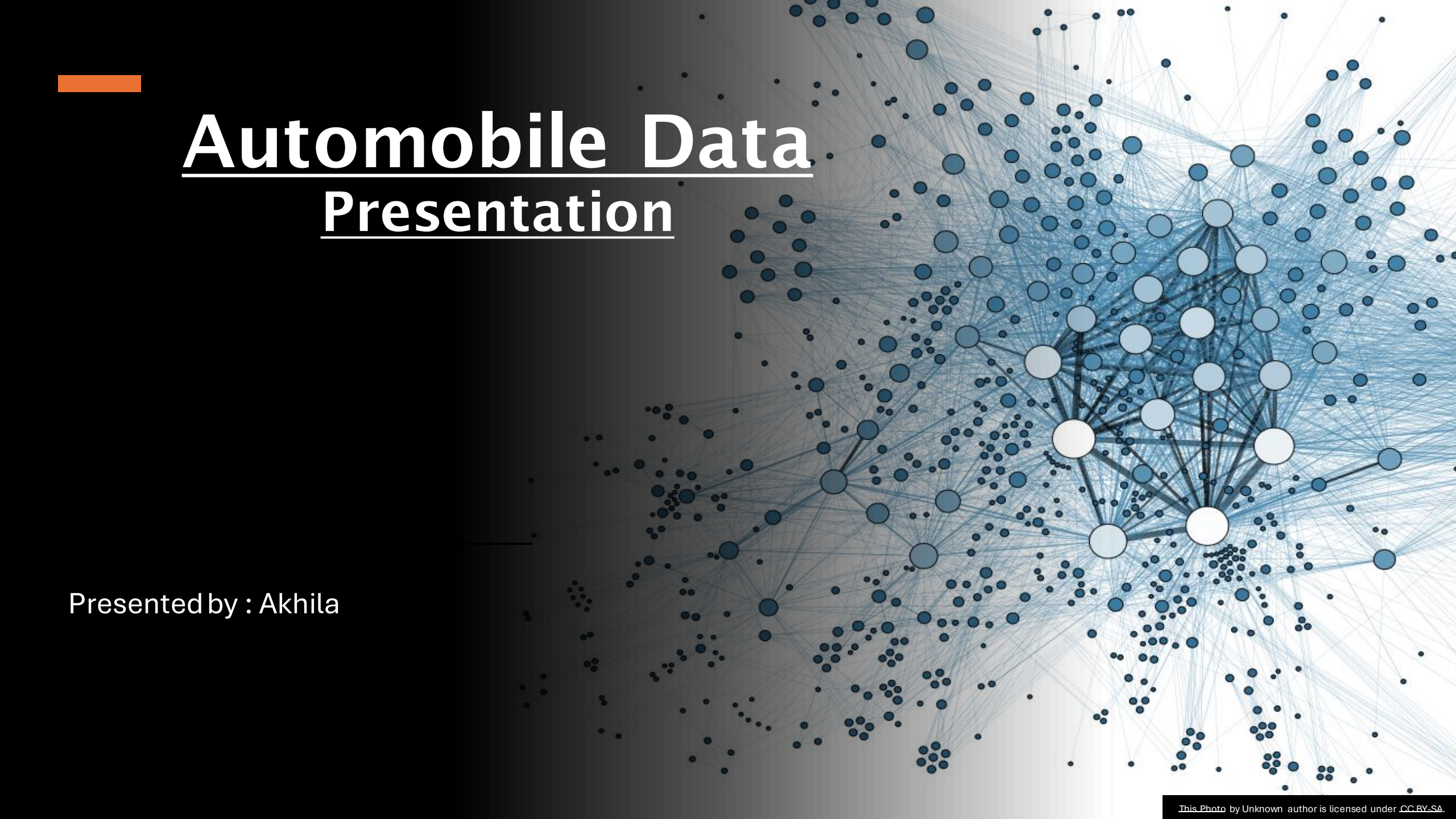
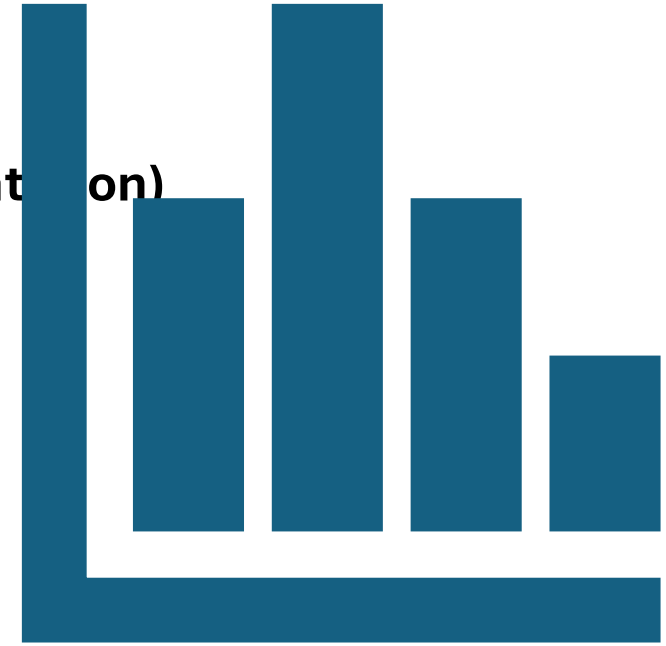
Automobile Data Presentation



Presented by : Akhila

Content

- Data Analysis
- Visualizations(Graphical representation)
  - Histogram
  - Boxplot
  - Scatterplot
  - Piechart
  - Barchart

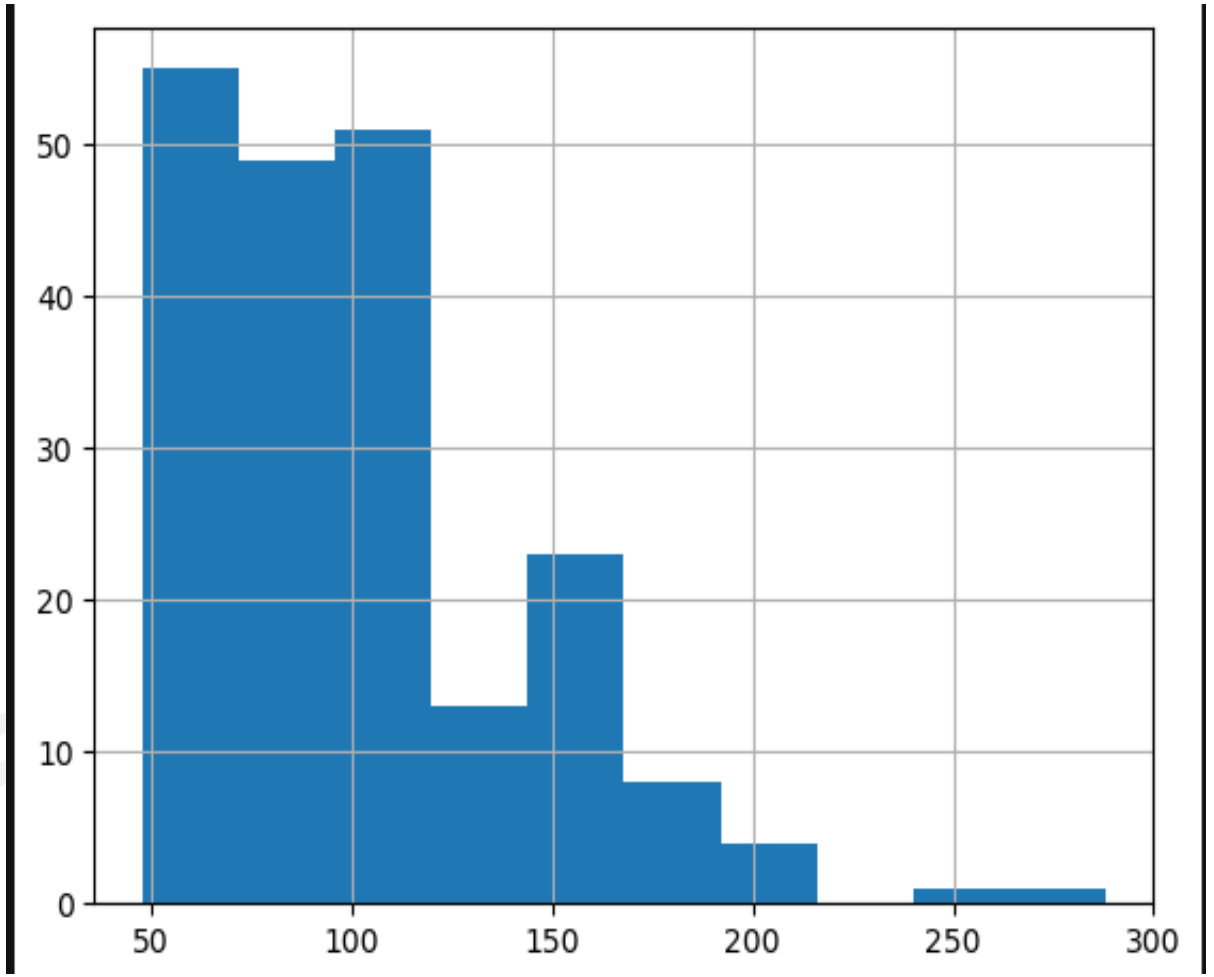


Data Analysis

- In the data(automobile data),price is the main crateria
- Which one is effect to the price, we will see in the graphical representation
- Next slide

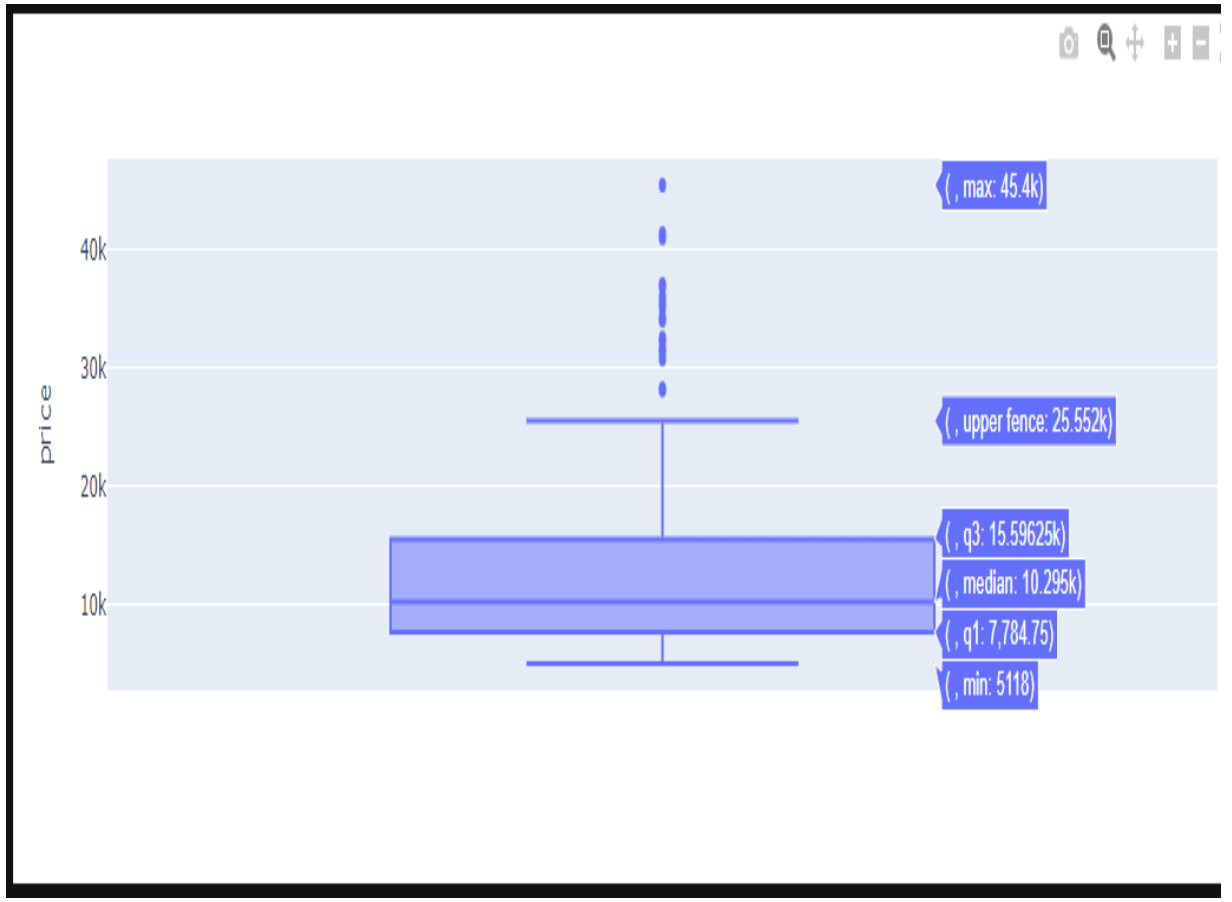
Histogram

- In the fig x-axis = horsepower, y-axis = value counts(In histogram y-axis takes value-counts automatically)
- In this fig the horsepower range is (48,120) graph is high
- In the fig Above 120 range the horsepower graph is low
- My prediction is, if the range of horsepower is high,
- The price is increased but sales will be low

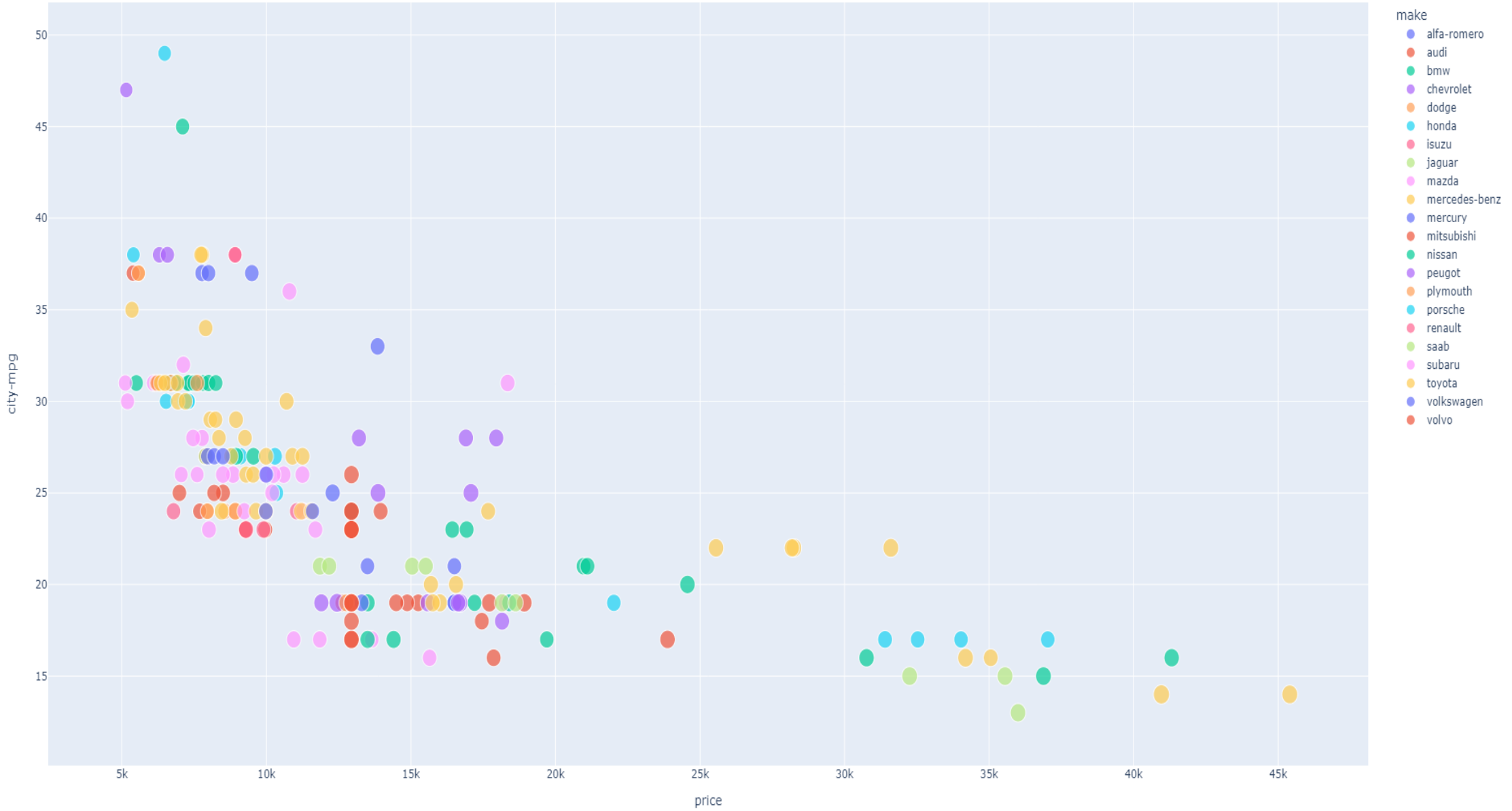


Boxplot

- In this fig y-axis='price', (Boxplot takes only y –axis)
- In this fig we have three quartiles (q1,q2,q3)
- First horizontal line represents min value (price)- 5118k
- The box first horizontal line represents q1(25th percentile)-7,784.75k
- The box middle line or second horizontal line represents q2 or median (50th percentile)
-10295k
- The box third horizontal line represents q3(75th percentile)- 15.59625k
- The second horizontal line represents upper fence value – 25.552k
- The dots we can call outliers of the data
- Dots represents 0.05% of the price data
- My prediction is automobile price 7k to 16k range of cars are high amount of sales
- Below 7k and above 16k cars are less amount of sales.



Scatterplot

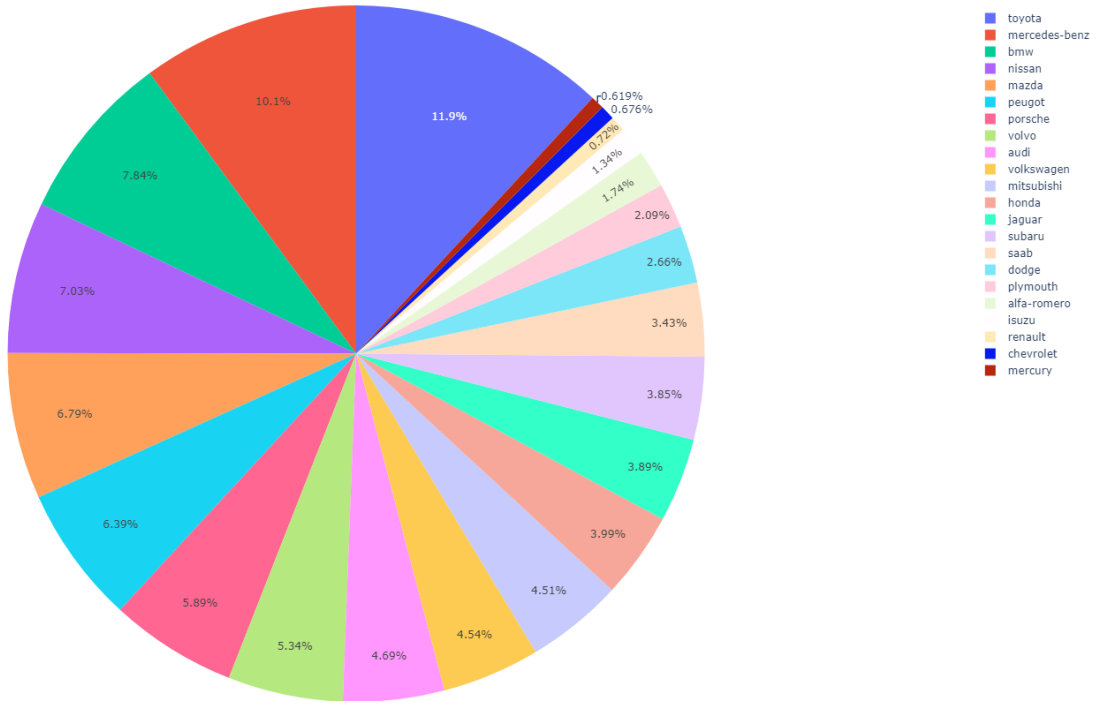


Scatter plot

- *In the fig represents x-axis='price' , y-axis='city-mpg' , color ='make' , size= 'length', hover_data='width'*
- *The price range - 5k to 10k :,35 to 50 range of city-mpg are high level,less amount of cars sales*
- *: 23 to 34 range of city-mpg are medium level , high amlount of cars sales*
- *The price range – 10kto 15k : 17 to 36 range of city-mpg are medium level of the car sales*
- *The price range – 15kto 20k : 16 to 31 range city-mpg are medium level of the car sales*
- *The price range – 20kto 35k : 15to 22 range of city-mpg are medium Level of the car sales*
- *The price range – 35kto 45.4k : 13 to 17range of city- mpg are low level of the car sales*
- *My prediction is lowest price of cars city-mpg is high, highest price of cars city-mpg is low.*

Piechart

- In this fig represents values = " price", names ="make"
- In the fig 1st place 11.9% toyota car sales are high
- 2ndplace 10.9% mercedes-benz
- 3rd places are 7.9% bmw
- Last place 2 places are 1. mercury,(0.619%)2.chevrolet(0.676%)
- My Prediction is , in this data ,toyota,mercedes-benz,,bmw, nissan,mazda having more sales



Barplot

In the fig x-axis= "highway" , y-axis="make".

In the figi highway-mpg range 0 to 20 -: very less amount of cars

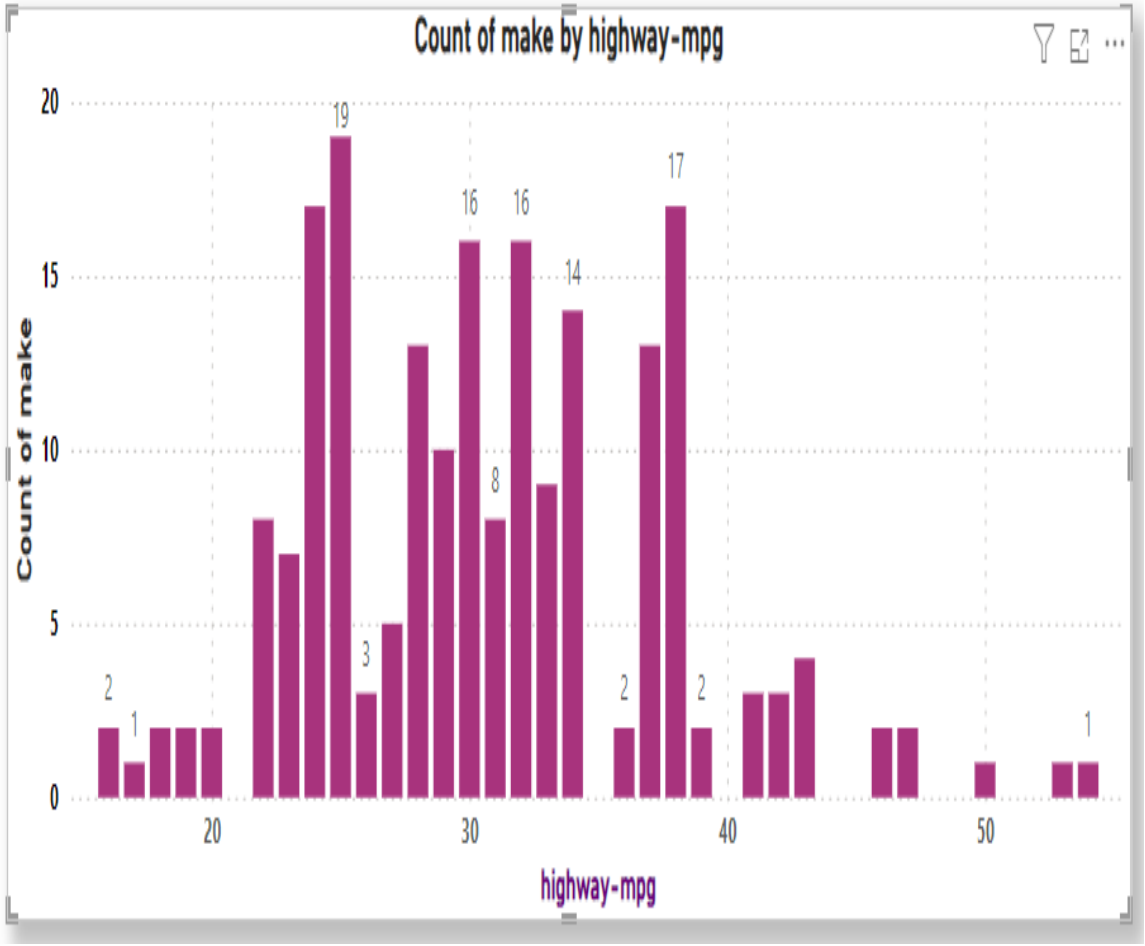
In the fig highway -mpg range 20 to 40 -: some of them are medium and some of them are high amount of cars

High amount of cars in range 20 to 40 is toyota,nissan,mazda,honda, mitsubishi

In the fig highway-mpg range 40 to 54 -: range of cars are very low

Least amount of car is renult

My prediction is toyota and nissan cars having high highway-mpg.



Make	count
alfa-romero	3
audi	7
bmw	8
chevrolet	3
dodge	9
honda	13
isuzu	4
jaguar	3
mazda	17
mercedes-benz	8
mercury	1
mitsubishi	13
nissan	18
peugot	11
plymouth	7
porsche	5
renault	2
saab	6
subaru	12
toyota	32
volkswagen	12
volvo	11

Conclusion

- In the automobile data I observed that
- The highest, lowest price of cars sales are very low
- The medium range of car sales are more high when compared to highest and lowest
- The highway-mpg 20 to 40 range of cars are having high sales
- The city-mpg 23 to 34 range of cars are having high sales
- If the range of horsepower is high ,price is also increased but if the price increased amount of sales will be low
- Almost customers wants medium price of cars because in our country most of MCP(middle class people) Population
- Manufacturer companys to think of MC People And manufactures reasonable price of cars.

Thank you

Presented by

Akhila

(Laerning data analytics @bepec)