R programming :-

Aim :- Analyze csv dataset using R.

① ⇒ Working directory :-
Set wd ("C:/users/Rajat")

② ⇒ Read of .csv file :-
RJ <— read.csv ("Cars.csv")

③ ⇒ Structure of dataset ⇒
Str (dataX)

④ ⇒ Head of data set ⇒
Head (dataX)

⑤ ⇒ tail of dataset ⇒
tail (dataX)

⑥ ⇒ minimum of dataset ⇒ Horsepower
min (dataX $ Horsepower)

⑦ ⇒ maximum of dataset ⇒ Horsepower
max (dataX $ Horsepower)

⑧ ⇒ Mean of dataSet ⇒ Horsepower
mean (dataX $ Horsepower)

⑨ ⇒ Median of data set ⇒ Horsepower
median (dataX $ Horsepower)

⑩ ⇒ Summary of data set ⇒
Summary (dataX)

Assignment

Descriptive Statistics :-

Here we take the data of Movies and runtime in our data :-

1) Bar graph ⇒

```
ggplot ( dataX , aes ( x = identification , y = Horsepower ))
        + geom_bar
        ( stat = " identity " )
```

2) BobPlot Chart ⇒

```
ggplot ( dataX , aes ( x = identification , y = Horse
-power )) + geom_boxplot ()
```

3) Linegraph ⇒

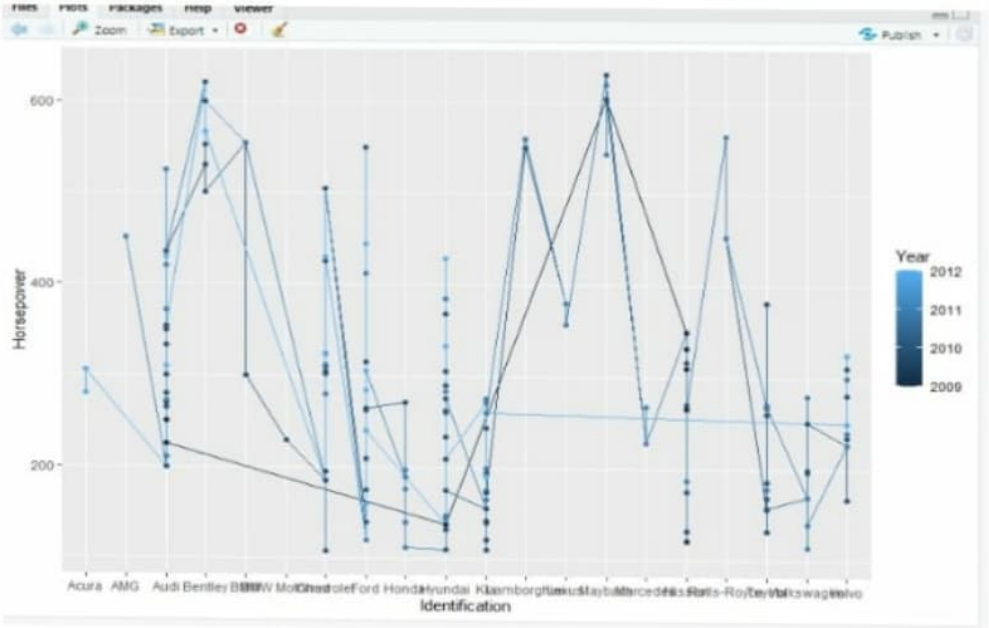
```
ggplot ( dataX , ass ( x = Identification , y = Horsepower
, group year , colour = year ))
+ geom_line ( + geom_point ()
```

4) Piechart ⇒

```
ggplot ( dataX , aes ( y = " " , fill = identification
, x = Horsepower ))
+ geom_bar ( width = 1 , stat = " identity " )
+ coord_polar ( " x " , start = 1 )
```

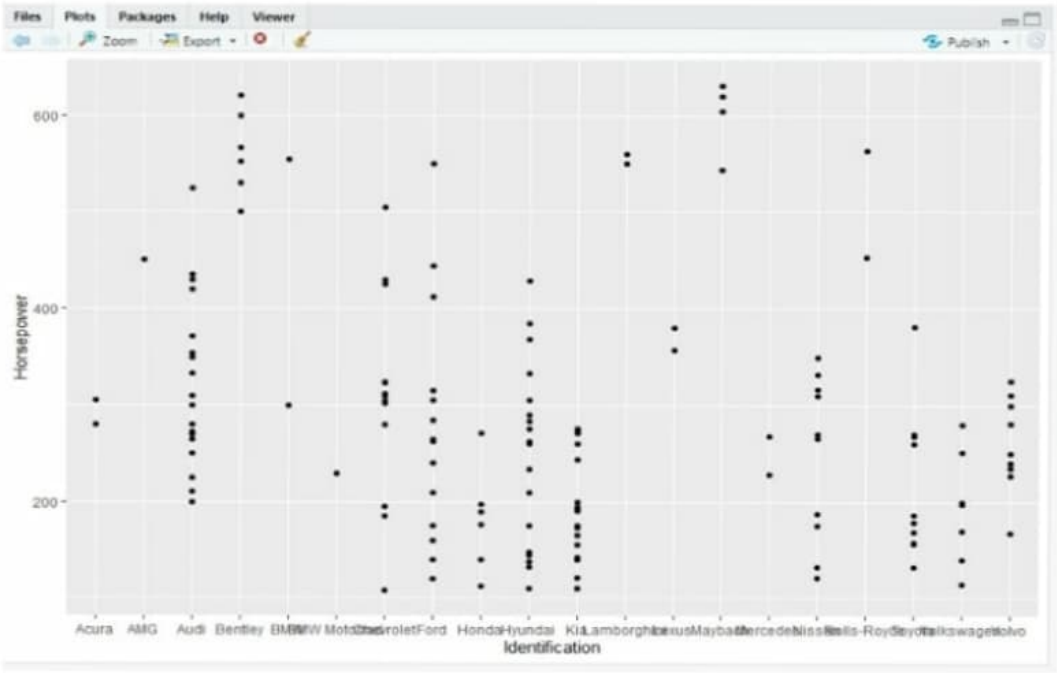
- **Line Graph—**

- **Syntax:** ggplot(datax , aes(x = Identification, y = Horsepower , group= Year, colour=Year)) +geom_line() +geom_point()



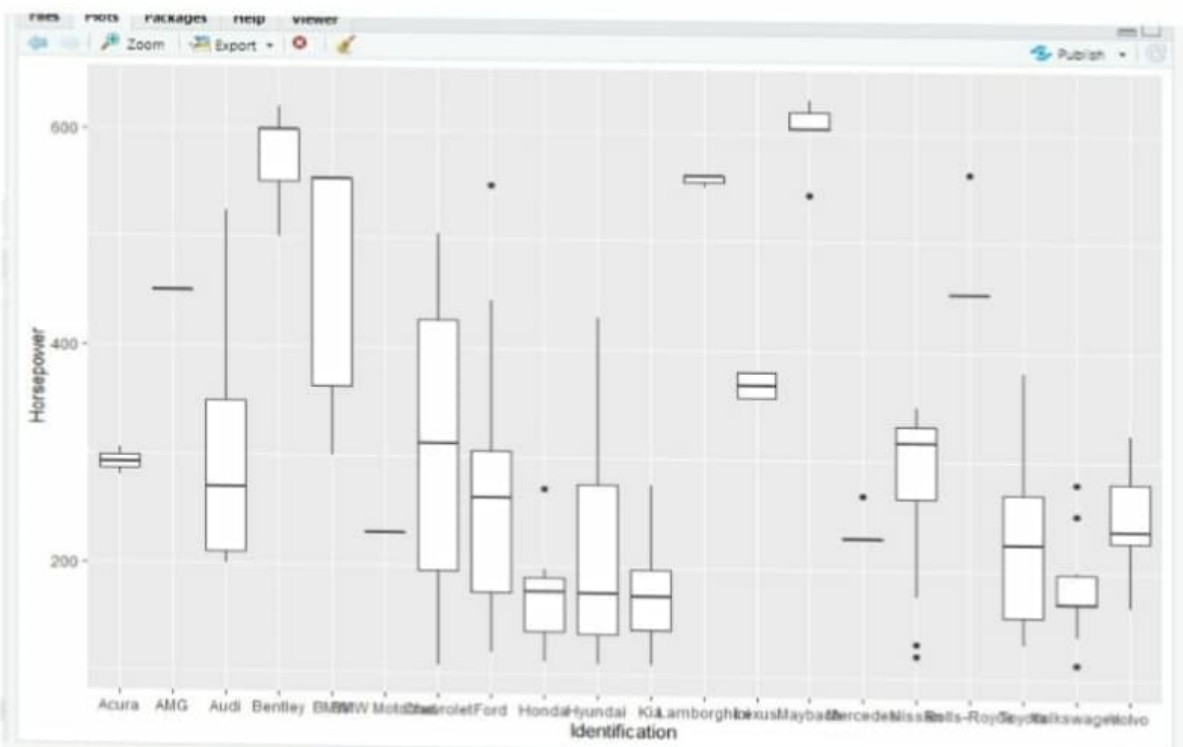
- **Scatter-Plotting Chart—**

Syntax: ggplot(datax , aes(x = Identification, y = Horsepower)) + geom_point()



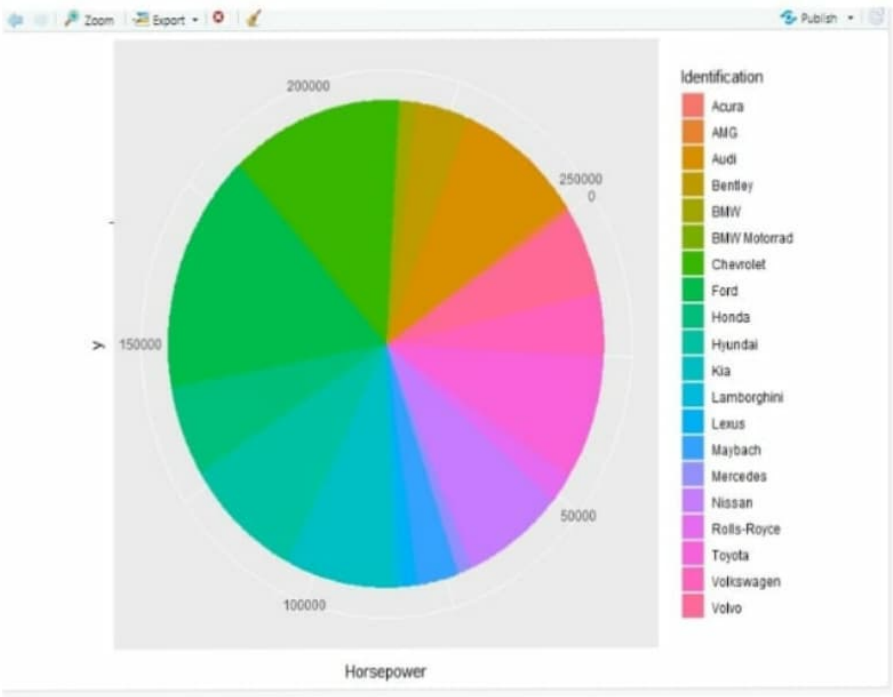
- **BoxPlot Chart—**

Syntax: ggplot(datax , aes(x = Identification, y = Horsepower)) + geom_boxplot()



- **Pie Chart—**

Syntax: ggplot(datax , aes(y="" , fill =Identification, x = Horsepower))+geom_bar(width = 1 , stat = "identity")+coord_polar(" x" , start=1)



- **Bar Graphs —**

Syntax—

```
ggplot(datax ,
aes(x=Identification , y=
Horsepower )) +
geom_bar(stat =
"identity")
```