

In [6]:

```
pip install mtp
```

Requirement already satisfied: mtp in c:\users\manas\anaconda3\lib\site-packages (1.0.0)
Requirement already satisfied: urwid==2.0.1 in c:\users\manas\anaconda3\lib\site-packages (from mtp) (2.0.1)
Note: you may need to restart the kernel to use updated packages.

In [7]:

```
import numpy as np
import matplotlib.pyplot as mtp
import pandas as pd
df=pd.read_csv('car price dataset.csv')
df
```

Out[7]:

	Unnamed: 0		Name	Location	Year	Kilometers_Driven	Fuel_Type	Transmission	Owner_Type	Mileage	Engine	Power	Seats	Price
	0	0	Maruti Wagon R LXI CNG	Mumbai	2010	72000	CNG	Manual	First	26.6 km/kg	998 CC	58.16 bhp	5.0	1.75
	1	1	Hyundai Creta 1.6 CRDi SX Option	Pune	2015	41000	Diesel	Manual	First	19.67 kmpl	1582 CC	126.2 bhp	5.0	12.50
	2	2	Honda Jazz V	Chennai	2011	46000	Petrol	Manual	First	18.2 kmpl	1199 CC	88.7 bhp	5.0	4.50
	3	3	Maruti Ertiga VDI	Chennai	2012	87000	Diesel	Manual	First	20.77 kmpl	1248 CC	88.76 bhp	7.0	6.00
	4	4	Audi A4 New 2.0 TDI Multitronic	Coimbatore	2013	40670	Diesel	Automatic	Second	15.2 kmpl	1968 CC	140.8 bhp	5.0	17.74

	6014	6014	Maruti Swift VDI	Delhi	2014	27365	Diesel	Manual	First	28.4 kmpl	1248 CC	74 bhp	5.0	4.75
	6015	6015	Hyundai Xcent 1.1 CRDi S	Jaipur	2015	100000	Diesel	Manual	First	24.4 kmpl	1120 CC	71 bhp	5.0	4.00
	6016	6016	Mahindra Xylo D4 BSIV	Jaipur	2012	55000	Diesel	Manual	Second	14.0 kmpl	2498 CC	112 bhp	8.0	2.90
	6017	6017	Maruti Wagon R VXi	Kolkata	2013	46000	Petrol	Manual	First	18.9 kmpl	998 CC	67.1 bhp	5.0	2.65
	6018	6018	Chevrolet Beat Diesel	Hyderabad	2011	47000	Diesel	Manual	First	25.44 kmpl	936 CC	57.6 bhp	5.0	2.50

6019 rows × 13 columns

In [17]:

```
x=df.iloc[:,[0]].values
print(x)
y=df.iloc[:,1].values
print(y)
```

```
[[ 0]
 [ 1]
 [ 2]
 ...
 [6016]
 [6017]
 [6018]]
[[0 'Maruti Wagon R LXI CNG' 'Mumbai' 2010 72000 'CNG' 'Manual' 'First'
 '26.6 km/kg' '998 CC' '58.16 bhp' 5.0 1.75]]
```

In [111]:

```
print('Split the dataset into training and testing dataset.')
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test= train_test_split(x, y, test_size= 0.25, random_state=0)
print(x_train,x_test)
```

Split the dataset into training and testing dataset.
[[1329]
[3924]
[636]
...
[1653]
[2607]
[2732]] [[5150]
[2164]
[1136]
...
[1875]
[2861]
[2315]]

In [90]:

```
pip install sklearn
```

Collecting sklearnNote: you may need to restart the kernel to use updated packages.

Downloading sklearn-0.0.tar.gz (1.1 kB)
Requirement already satisfied: scikit-learn in c:\users\manas\anaconda3\lib\site-packages (from sklearn) (0.24.2)
Requirement already satisfied: numpy>=1.13.3 in c:\users\manas\anaconda3\lib\site-packages (from scikit-learn->sklearn) (1.20.3)
Requirement already satisfied: scipy>=0.19.1 in c:\users\manas\anaconda3\lib\site-packages (from scikit-learn->sklearn) (1.7.1)
Requirement already satisfied: threadpoolctl>=2.0.0 in c:\users\manas\anaconda3\lib\site-packages (from scikit-learn->sklearn) (2.2.0)
Requirement already satisfied: joblib>=0.11 in c:\users\manas\anaconda3\lib\site-packages (from scikit-learn->sklearn) (1.1.0)
Building wheels for collected packages: sklearn
Building wheel for sklearn (setup.py): started
Building wheel for sklearn (setup.py): finished with status 'done'
Created wheel for sklearn: filename=sklearn-0.0-py2.py3-none-any.whl size=1309 sha256=dbb106cafa5ccbedbb66711e624d1b9a64f75be5a921b6eed513fcfd4db4569
Stored in directory: c:\users\manas\appdata\local\pip\cache\wheels\e4\7b\98\b6466d71b8d738a0c547008b9eb39bf8676d1ff6ca4b22af1c
Successfully built sklearn
Installing collected packages: sklearn
Successfully installed sklearn-0.0

In [112]:

```
print('Split the dataset into training and testing dataset.')
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test=train_test_split(x, y, test_size=1/3, random_state=0)
```

Split the dataset into training and testing dataset.

In [113]:

```
print('Develop and train the linear regression model using the training dataset.')
from sklearn.linear_model import LinearRegression
regressor=LinearRegression()
regressor.fit(x_train, y_train)
```

Develop and train the linear regression model using the training dataset.
LinearRegression()

Out[113]:

In [114]:

```
print('Predict the price of a car.')
p= regressor.predict([[12]])
print(p)
```

Predict the price of a car.
[9.91426737]

In []: