EDS Assignment 01

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To Find the statistical Analysis on CAR Sale data (Data set 2)

1.**Find the most expensive car**

In [61]:
```
#To find the most expensive car
import pandas as pd
df=pd.read_csv("dataset2.csv")
mostexp=df.groupby("Model")["Price_in_thousands"].sum().idxmax()

print("The most expensive car name is:",mostexp)
```

```
The most expensive car name is: A8
```

2.**Calculate average sale of all cars**

In [78]:
```
#To find average sales
a=df["Sales_in_thousands"].mean()
print("The average sales of all cars is :",a)
```

```
The average sales of all cars is : 103.6896551724138
```

3.Find the total no of passenger cars

In [79]:
```
#To find total no of passenger car
count=0
for i in df["Vehicle_type"]:
    if(i=="Passenger"):
        count+=1
print("The total no of passenger car is :",count)
```

```
The total no of passenger car is : 20
```

4. Find the car who has maximum engine size

In [76]:
```
#To find car with maximum engine size

b=df.groupby("Model")["Engine_size"].sum().idxmax()
print("The car who has maximum engine size is :",b)
```

```
The car who has maximum engine size is : Durango
```

5. Find the car who has minimum horsepower

In [7]:
```
#To fine car with minimum horsepower
c=df.groupby("Model")["Horsepower"].sum().idxmin()
print("The car with minimum Horsepower is:",c)
```

```
The car with minimum Horsepower is: Metro
```

6. Find the all passenger cars details which is manufacturing by 'Ford'

In [80]:
```
#Details of car manufactured by Ford
print("Details of car manufactured by Ford\n",df.loc[(df.Manufacturer == 'Ford')])
```

```
Details of car manufactured by Ford
    Manufacturer     Model  Sales_in_thousands Vehicle_type  \
18         Ford    Escort                  70    Passenger
19         Ford   Mustang                 113    Passenger
20         Ford   Contour                  35    Passenger
21         Ford    Taurus                 246    Passenger
22         Ford    Ranger                 221          Car
23         Ford  F-Series                 541          Car

    Price_in_thousands  Engine_size  Horsepower  Wheelbase  Width  Length  \
18              12.070          2.0         110       98.4     67   174.7
19              21.560          3.8         190      101.3     73   183.2
20              17.035          2.5         170      106.5     69   184.6
21              17.885          3.0         155      108.5     73   197.6
22              12.050          2.5         119      117.5     69   200.7
23              26.935          4.6         220      138.5     79   224.5

    Curb_weight  Fuel_capacity  Fuel_efficiency Latest_Launch
18        2.468           12.7               30     3/31/2012
19        3.203           15.7               24     1/31/2012
20        2.769           15.0               25     8/20/2012
21        3.368           16.0               24    12/20/2011
22        3.086           20.0               23     1/14/2012
23        4.241           25.1               18     8/16/2012
```

7.Convert “Width” column values into integer values

In [77]:

```
#To convert datatype of colum 'width' from float to int
print("Before conversion:\n",df["Width"])
df['Width'] = df['Width'].astype('int')
print("\nAfter conversion:\n",df["Width"])
```

```
Before conversion:
 0     67
1     70
2     74
3     68
4     73
5     74
6     67
7     69
8     62
9     73
10    69
11    74
12    74
13    74
14    78
15    71
16    71
17    76
18    67
19    73
20    69
21    73
22    69
23    79
24    67
25    70
26    68
```

```
26    68
27    70
28    75
Name: Width, dtype: int32

After conversion:
 0     67
1     70
2     74
3     68
4     73
5     74
6     67
7     69
8     62
9     73
10    69
11    74
12    74
13    74
14    78
15    71
16    71
17    76
18    67
19    73
20    69
21    73
22    69
23    79
24    67
25    70
26    68
27    70
28    75
Name: Width, dtype: int32
```