Project : Car data set (analysis in uk)

```
--a.  Create an analysis to find income class of UK citizens based on price
--Cars(You can use per-capita income in UK from internet sources)

Select Price,Transmission,
Case When Price Between 0 and 20000 then 'Lower_Class'
      when Price Between 20000 and 50000 Then 'Middle_class'
      When Price Between 50000 And 900000 Then 'Upper_clss'
      End as Income_class From cclass ,Transmission  Union
     Select Price,Transmission,
Case When Price Between 0 and 20000 then 'Lower_Class'
      when Price Between 20000 and 50000 Then 'Middle_class'
      When Price Between 50000 And 900000 Then 'Upper_clss'
      End as Income_class From Audi ,Transmission Union
      Select Price,Transmission,
Case When Price Between 0 and 20000 then 'Lower_Class'
      when Price Between 20000 and 50000 Then 'Middle_class'
      When Price Between 50000 And 900000 Then 'Upper_clss'
      End as Income_class From Bmw ,Transmission Union
      Select Price,Transmission,
Case When Price Between 0 and 20000 then 'Lower_Class'
      when Price Between 20000 and 50000 Then 'Middle_class'
      When Price Between 50000 And 900000 Then 'Upper_clss'
      End as Income_class From merc ,Transmission  Union
      Select Price,Transmission,
Case When Price Between 0 and 20000 then 'Lower_Class'
      when Price Between 20000 and 50000 Then 'Middle_class'
      When Price Between 50000 And 900000 Then 'Upper_clss'
      End as Income_class From hyndai,Transmission;
```

Results | Messages

	Price	Transmission	Income_class
1	27974	Other	Middle_class

```
--b. Categorize the cars on the basis of their price
--(Create as many buckets as you want as per your understanding of data) and analyze the:
 select *,ntile(4) over( Partition By Price Order By Price) as Buckets
from (Select Distinct A.Year,E.model_name,(A.Price) From merc As A
Left join hyndai As B On A.price=B.price
Left join bmw AS C On B.price=C.price
Left Join Audi As D On C.price = D.price
Left Join Models As E On D.model_ID=E.model_ID )Da;
```

Results | Messages

Year	model_name	Price	Buckets
2003	NULL	650	1
2010	NULL	1350	1
2000	NULL	1490	1
2004	NULL	1495	1

Project : Car data set (analysis in uk)

```
--a. price changes across the years and identify the categories which has seen significant jump
Select  A.Year,Sum(A.Price)As Sum_price,E.Model_Name From merc As A
Left join hyndai As B On A.price=B.price
Left join bmw AS C On B.price=C.price
Left Join Audi As D On C.price=D.price
Left Join models As E On D.model_ID= E.Model_ID
Left Join cclass As F On E.model_ID=F.model_ID
Left Join Transmission As G On F.ID=G.ID
Group By A.year,E.Model_NAme
Order By A.year ,Sum(A.price) Asc;
--b. changes in no of cars sold across the years and identify the categories
--which has seen significant jump in its sales
Select  A.Year,Count(A.Price)As Count_price,D.Model_Name From merc As A
Left join hyndai As B On A.price=B.price
Left join bmw AS C On B.price=C.price
```

Results | Messages

Year	Sum_price	Model_Name
1970	399984	A4
1970	399984	A5
1970	399984	Q2
1997	5067465	TT

```
--b. changes in no of cars sold across the years and identify the categories
--which has seen significant jump in its sales
Select  A.Year,Count(A.Price)As Count_price,D.Model_Name From merc As A
Left join hyndai As B On A.price=B.price
Left join bmw AS C On B.price=C.price
Left Join models As D On D.model_ID= A.Model_ID Group By A.year,D.model_name
Order By A.year ,Count(A.price) Asc;

--c. Find relationship between fuel efficiency & price of car/sales of car/fuel type/,
Select  A.Year,Sum(A.Price)As Sum_price,D.fueltype From merc As A
```

Results | Messages

Year	Count_price	Model_Name
1970	16	M Class
1997	507	SL CLASS
1998	3	SL CLASS

Project : Car data set (analysis in uk)

```
--c. Find relationship between fuel efficiency & price of car/sales of car/fuel t
Select  A.Year,Sum(A.Price)As Sum_price,D.fueltype From merc As A
Left join hyndai As B On A.price=B.price
Left join bmw AS C On B.price=C.price
Left Join fueltype As D On D.fuel_ID= A.fuel_ID
Left Join models As E On E.model_ID= A.Model_ID
Group By A.year,D.fueltype
Order By A.year ,Sum(A.price) Asc;


----New Query Showing The Change In SUm Price According To Transmission And Time
```

Results | Messages

Year	Sum_price	fueltype
1970	399984	Diesel
1997	5067465	Petrol
1998	3157750	Petrol
1999	647460	Petrol

```
Select  A.Year,Sum(A.Price)As Sum_price,D.Transmission From merc As A
Left join hyndai As B On A.price=B.price
Left join bmw AS C On B.price=C.price
Left Join transmission As D On D.ID= C.transmission_ID
Left Join models As E On E.model_ID= D.ID
Group By A.year,D.transmission
Order By A.year ,Sum(A.price) Asc;
```

Results | Messages

Year	Sum_price	Transmission
1970	149994	Semi-Auto
1970	249990	Automatic
1997	389805	Semi-Auto