Data Analytics SQL Mini Project - L1

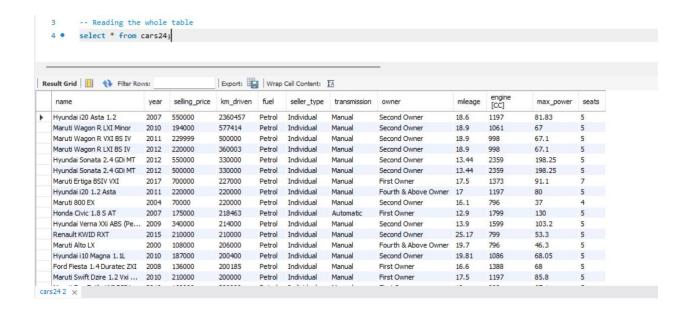
I created a new database called "kp" and I'm using it for this project.

create database kp – use kp;

Insight number 1 --

Reading the whole table

select * from cars24



Insight number 2 -

-- counting the total number cars present in the data set

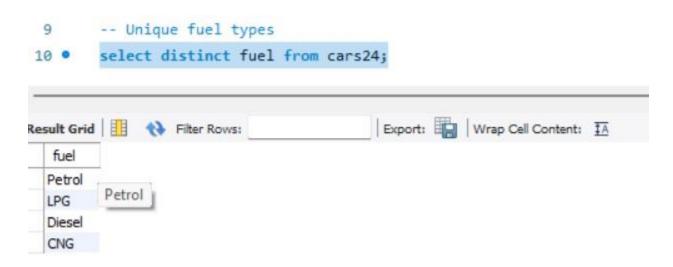
select count(*) from cars24



Insight number 3 -- unique fuel

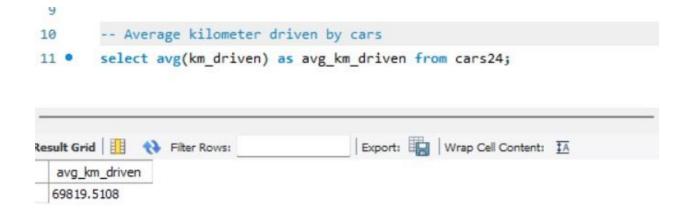
types in this table select

distinct fuel from cars24;



Insight number 4 -- Average kilometer driven by cars

select avg(km_driven) as avg_km_driven from cars24;



Insight number 5 -

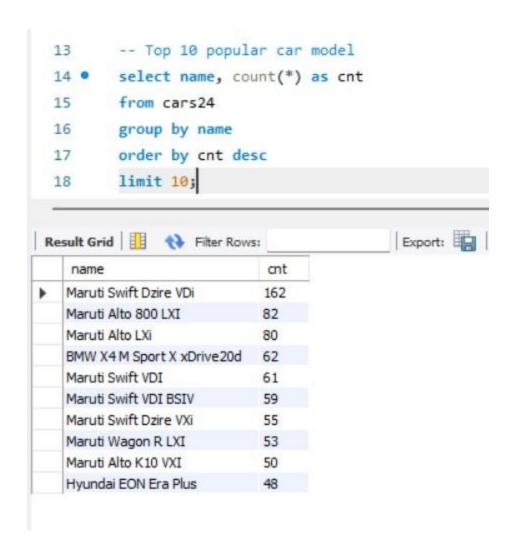
-- 10 car model driven the most on average select name, avg(km_driven) as avg_km_driven from cars24 group by name order by avg_km_driven desc limit 10;

```
14
 13
          -- 10 car model driven the most on average
 14 •
          select name, avg(km driven) as avg km driven
          from cars24
 15
 16
          group by name
          order by avg km_driven desc
 17
 18
          limit 10;
 19
 20
                                                 Export: Wrap Cell Content: IA
Result Grid
                Filter Rows:
                                             avg_km_driven
   name
  Toyota Innova 2.5 EV Diesel PS 7 Seater BSIII
                                             500000.0000
   Toyota Innova 2.5 VX (Diesel) 7 Seater BS IV
                                             426000.0000
  Mahindra Bolero DI Non AC BSIII
                                             300000.0000
  Toyota Qualis FS B3
                                             290000.0000
   Tata Sumo Gold GX BSIII
                                             270000.0000
   Chevrolet Tavera Neo LT-L - 9 seats BSII
                                             265000.0000
  Hyundai i20 Asta 1.2
                                             260325.6667
  Tata New Safari DICOR 2,2 EX 4x4 BS IV
                                             250000.0000
   Chevrolet Tavera B2 8 Seats BSIII
                                             250000.0000
  Toyota Qualis FS F7
                                             250000.0000
```

Insight number 6 -- Top 10

popular car model

select name, count(*) as cnt from cars24 group by name order by cnt desc, limit 10;



Insight number 7 -

-- Average selling price of different car models

select name, avg(selling_price) as avg_selling_price from cars24 group by name order by avg_selling_price desc;

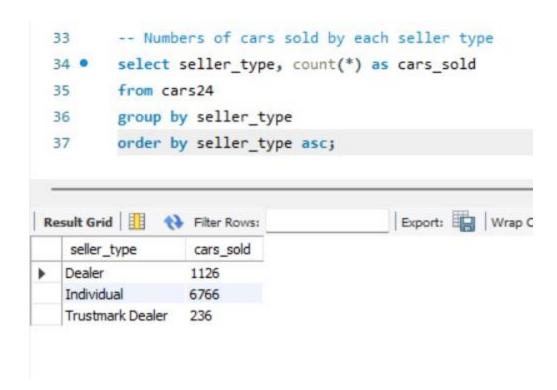
```
18
19 -- Average selling price of different car models
20 • select name, avg(selling_price) as avg_selling_price
21 from cars24
22 group by name
23 order by avg_selling_price desc;
```

name	avg_selling_price	
Volvo XC90 T8 Excellence BSIV	10000000.0000	
BMW X7 xDrive 30d DPE	7200000.0000	
Audi A6 35 TFSI Matrix	6223000.0000	
Mercedes-Benz S-Class S 350 CDI	5962500.0000	
BMW 6 Series GT 630d Luxury Line	5860000.0000	
Volvo XC60 Inscription D5 BSIV	5500000.0000	
Volvo S90 D4 Inscription BSIV	5500000.0000	
BMW X4 M Sport X xDrive20d	5461290.3226	
Mercedes-Benz E-Class Exclusive E 200 BSIV	5200000.0000	
Lexus ES 300h	5150000.0000	
Mercedes-Benz GL-Class 220d 4MATIC Sport	4600000.0000	
Land Rover Discovery Sport TD4 SE	4500000.0000	
BMW 5 Series 520d Luxury Line	4125000.0000	
Jeep Wrangler 2016-2019 3.6 4X4	4100000.0000	
Mercedes-Benz GL-Class 350 CDI Luxury	4090000.0000	
Audi Q5 35TDI Premium Plus	3975000.0000	
Volvo XC40 D4 Inscription BSIV	3800000.0000	
BMW X6 xDrive30d	3750000.0000	

Insight number 8 -

-- Numbers of cars sold by each seller type

select seller_type, count(*) as cars_sold from cars24 group by seller_type order by seller_type asc;



Insight number 9 -

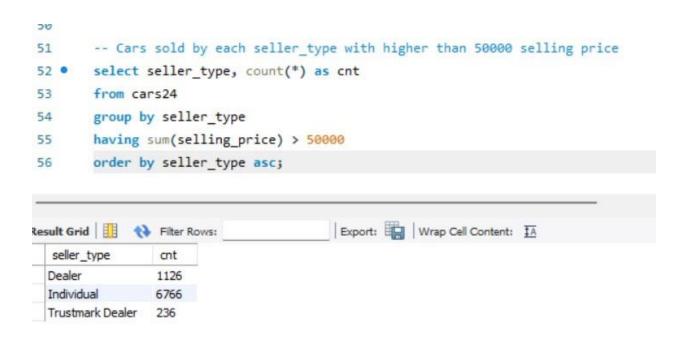
-- Total number of milage covered by cars with name 'Audi'

```
select sum(mileage) as audi_milage
from cars24 where name like
'%Audi%':
 38
         -- Total number of milage covered by cars with name 'Audi'
         select sum(mileage) as audi_milage
 40 •
 41
         from cars24
         where name like '%Audi%';
 42
                                           Export: Wrap Cell Content: TA
              Filter Rows:
Result Grid
   audi_milage
  630.98
```

Insight number 10 -

-- Cars sold by each seller_type with higher than 50000 selling price

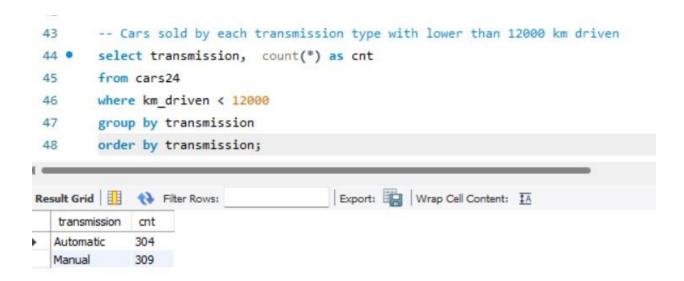
```
select seller_type, count(*) as cnt
from cars24 group by seller_type
having sum(selling_price) > 50000
order by seller_type asc;
```



Insight number 11 -

-- Cars sold by each transmission type with lower than 12000 km driven

```
select transmission, count(*) as cnt from cars24 where km_driven < 12000 group by transmission order by transmission;
```



Insight number 12 -

- Cars sold by 'dealear' seller type having 'maruti' in their name

```
select seller_type, name, count(*) as cnt from cars24 where seller_type = 'dealer' and name like '%maruti%' group by seller_type, name order by seller_type asc;
```

```
7
        -- Cars sold by 'dealear' seller type having 'maruti' in their name
        select seller type, name, count(*) as cnt
8 .
        from cars24
9
0
        where seller type = 'dealer' and name like '%maruti%'
1
        group by seller type, name
        order by seller_type asc;
12
                                               Export: Wrap Cell Content: IA
sult Grid
              Filter Rows:
 seller_type
                                           cnt
Dealer
             Maruti Swift VXI BSIV
                                           4
Dealer
             Maruti Swift Dzire ZXI Plus BS IV
                                           1
Dealer
             Maruti Ritz VXi
                                           1
Dealer
             Maruti Wagon R VXI
                                           6
Dealer
             Maruti Wagon R VXI 1.2
                                           2
Dealer
             Maruti Zen Estilo LXI BSIII
                                           2
Dealer
             Maruti Swift AMT ZXI
                                           30
Dealer
             Maruti Wagon R LXI BS IV
                                           3
Dealer
             Maruti Wagon R LXI
                                           3
                                           2
Dealer
             Maruti Alto LX BSIII
Dealer
             Maruti Swift VXI
                                           5
                                           1
Dealer
             Maruti Ciaz Zeta
             Maruti Swift ZXI
Dealer
                                           1
             Maruti Omni E 8 Str STD
Dealer
```

Insight number 13 -- Car with

the highest mileage

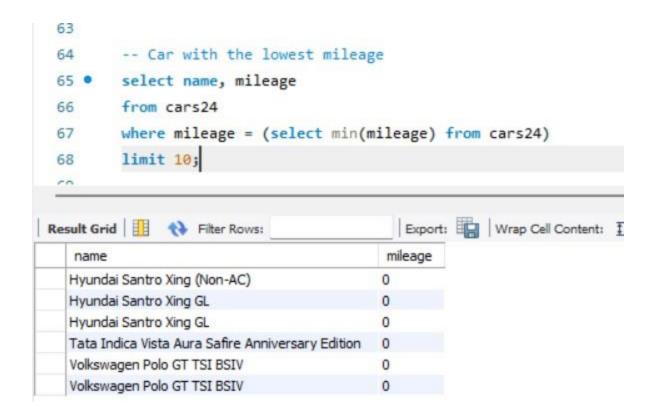
select name, mileage from cars24 where mileage = (select max(mileage) from cars24);



Insight number 14 -- Car with

the lowest mileage

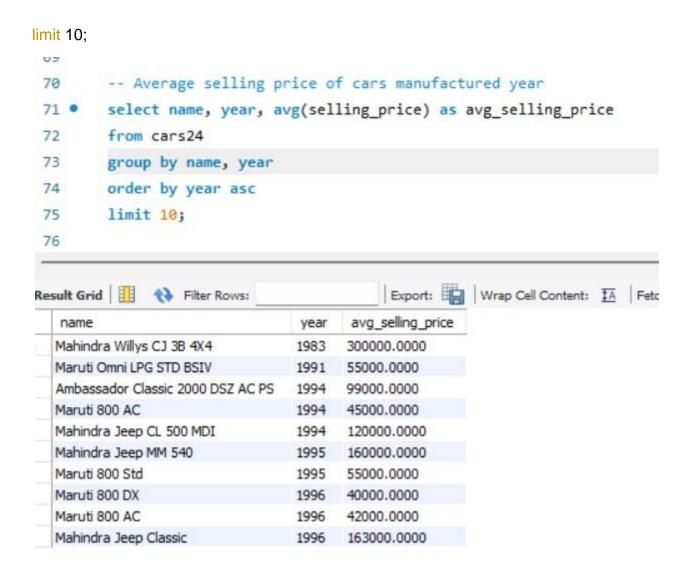
select name, mileage from cars24 where mileage = (select min(mileage) from cars24) limit 10;



Insight number 15 -

-- Average selling price of cars manufactured year

select name, year, avg(selling_price) as avg_selling_price from cars24 group by name, year order by year asc



Insight number 16 -

-- Highest selling-price of car models across year

select name, year, avg(selling_price) as avg_price from cars24 group by name, year order by avg_price desc limit 10;

```
81
         -- Highest selling-price of car models across year
 82
         select name, year, avg(selling price) as avg price
         from cars24
 84
         group by name, year
 85
         order by avg price desc
 86
         limit 10;
 87
 88
 20
                                               Export: Wrap Cell Content:
Result Grid
               Filter Rows:
   name
                                          year
                                                 avg_price
   Volvo XC90 T8 Excellence BSIV
                                          2017
                                                 10000000.0000
   BMW X7 xDrive 30d DPE
                                          2020
                                                 7200000.0000
   Audi A6 35 TFSI Matrix
                                                 6223000.0000
                                          2019
   Mercedes-Benz S-Class S 350 CDI
                                          2017
                                                 5962500.0000
   BMW 6 Series GT 630d Luxury Line
                                          2018
                                                 5860000.0000
   Volvo S90 D4 Inscription BSIV
                                          2019
                                                 5500000.0000
   Volvo XC60 Inscription D5 BSIV
                                          2018
                                                 5500000.0000
   BMW X4 M Sport X xDrive20d
                                          2019
                                                 5461290.3226
   BMW 5 Series 520d Luxury Line
                                          2019
                                                 5200000.0000
   Mercedes-Benz E-Class Exclusive E 200 BSIV
                                          2019
                                                 5200000,0000
```

Insight number 17 -

-- Cars with more seats having average mileage

select seats, name, avg(mileage) as avg_mileage from cars24 group by seats, name order by seats desc

limit 5;

```
-- Cars with more seats having average mileage
 89
 90 •
          select seats, name, AVG(mileage) AS avg mileage
          from cars24
 91
          group by seats, name
 92
          order by seats desc
 93
 94
          limit 5;
Result Grid
                                                 Export:
                                                              Wrap Cell Conte
                    Filter Rows:
   seats
          name
                                                avg_mileage
          Tata Winger Deluxe - Flat Roof (Non-AC)
                                                10.71
   14
          Chevrolet Tavera B1-10 seats BSII
   10
                                                14.8
          Chevrolet Tavera B3 LT L1 10 Seats BSIII
   10
                                                14.8
          Chevrolet Tavera LS B3 10 Seats BSII
   10
                                                14.8
          Chevrolet Tavera Neo 3 10 Seats BSIII
   10
                                                13.58
```

Insight number 18 -

-- Average selling price of cars with seats more than 8

select name, seats, avg(selling_price) as avg_sellling_price from cars24 where seats >= 8 group by name, seats order by seats desc

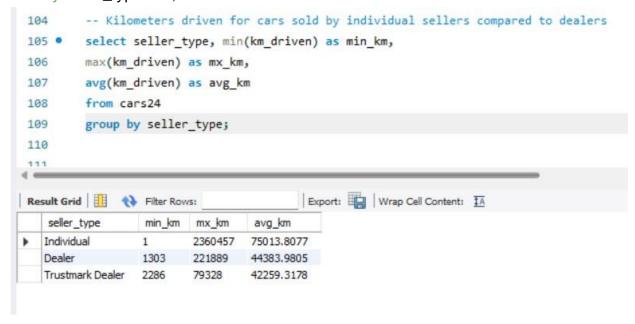
```
limit 15;
10
         -- Average selling price of cars with seats more than 8
96
         select name, seats, avg(selling price) AS avg sellling price
         from cars24
86
        where seats >= 8
99
         group by name, seats
90
         order by seats desc
16
         limit 15;
32
                                                  Export: Wrap Cell Content: TA Fetch r
sult Grid
                Filter Rows:
  name
                                                   avg_selling_price
                                            seats
 Tata Winger Deluxe - Flat Roof (Non-AC)
                                           14
                                                   235000.0000
 Toyota Oualis FS B3
                                           10
                                                   229999.0000
 Chevrolet Tavera Neo LS B3 - 10 seats BSIII
                                           10
                                                   350000.0000
 Tata Spacio Gold-10/6 Str BSII
                                           10
                                                   100000.0000
 Tata Sumo SE Plus BSII
                                                   95000.0000
                                           10
 Chevrolet Tavera Neo 3 10 Seats BSIII
                                           10
                                                   514666.3333
 Chevrolet Tavera LS B3 10 Seats BSII
                                           10
                                                   225000.0000
 Tata Sumo EX 10/7 Str BSIII
                                           10
                                                   200000,0000
 Chevrolet Tavera B1-10 seats BSII
                                                   287500.0000
                                           10
 Chevrolet Tavera Neo 3 LS 10 Str
                                           10
                                                   409999.0000
 Chevrolet Tavera Neo 3 LS 10 Seats BSIII
                                                   568500,0000
                                           10
 Chevrolet Tavera B3 LT L1 10 Seats BSIII
                                                   160000.0000
                                           10
 Tata Sumo CX 10 Str BSIV
                                                   175000.0000
                                           10
 Mahindra Bolero 2011-2019 Plus - AC BSIII
                                           9
                                                   436666.6667
 Mahindra Bolero 2011-2019 DI - AC BS III
                                           9
                                                   565900.0000
```

Insight number 19 -

-- Kilometers driven for cars sold by individual sellers compared to dealers

```
select seller_type, min(km_driven) as min_km, max(km_driven) as mx_km, avg(km_driven)
```

as avg_km from cars24 group by seller_type
order by seller_type asc;



Insight number 20 -

-- car models with consistently low mileage across different years

```
select name, year, mileage from cars24 where mileage < (select avg(mileage)from cars24) order by name, year limit 10;
```

```
-- car models with consistently low mileage across different years
111
112 •
         select name, year, mileage
         from cars24
113
         where mileage < (select avg(mileage)from cars24)
114
115
         order by name, year
116
         limit 10;
117
118
110
                                             Export: Wrap Cell Content: A Fetch rows:
Result Grid
               Filter Rows:
   name
                                         mileage
                                    year
  Ambassador CLASSIC 1500 DSL AC
                                   2000
                                          12.8
  Ambassador Classic 2000 DSZ AC PS
                                   1994
                                          12.8
  Ambassador Grand 1500 DSZ BSIII
                                   2008
                                          12.8
  Ambassador Grand 2000 DSZ PW CL
                                   2008
                                          13.5
  Audi A3 40 TFSI Premium
                                   2017
                                          16.6
  Audi A4 1.8 TFSI
                                   2010
                                         12.3
  Audi A4 2.0 TDI
                                   2014
                                          16.55
  Audi A4 2.0 TDI
                                   2014 16.55
  Audi A4 2.0 TDI 177 Bhp Premium Plus
                                   2013
                                          17.11
  Audi A4 35 TDI Premium Plus
                                   2015 18.25
```