Data Analytics SQL Mini Project -L1

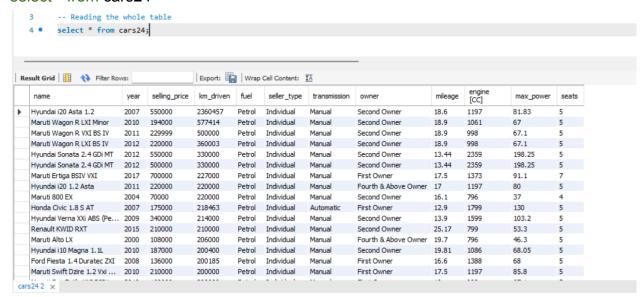
I created a new database called "moonmoon" and I'm using it for this project.

- create database moonmoon;
- use moonmoon;

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

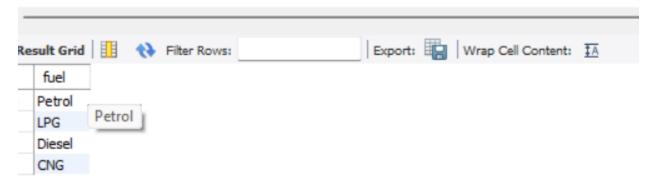


Insight number 3 -

-- unique fuel types in this table

select distinct fuel from cars24;

9 -- Unique fuel types10 • select distinct fuel from cars24;

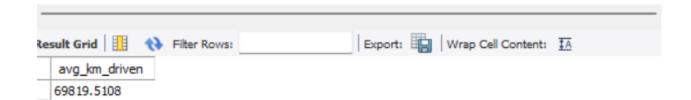


Insight number 4 -

-- Average kilometer driven by cars

select avg(km_driven) as avg_km_driven from cars24;

-- 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

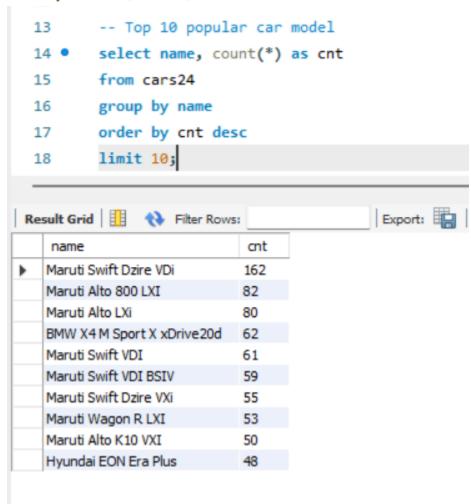
```
select name, avg(km driven) as avg km driven
from cars24
group by name
order by avg km driven desc
limit 10;
  14
           -- 10 car model driven the most on average
  13
  14 •
           select name, avg(km_driven) as avg_km_driven
           from cars24
  15
           group by name
  16
  17
           order by avg_km_driven desc
  18
           limit 10;
  19
  20
                                                  Export: Wrap Cell Content: TA
 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;
```

K	esult Grid 1	Export: Wrap Cell Content:
	name	avg_selling_price
•	Volvo XC90 T8 Excellence BSIV	1000000.0000
	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;
```

```
-- Numbers of cars sold by each seller type
 33
         select seller type, count(*) as cars sold
 34 •
        from cars24
 35
         group by seller_type
 36
         order by seller type asc;
 37
Result Grid
                                           Export: Wrap C
              Filter Rows:
   seller type
                  cars sold
  Dealer
                  1126
  Individual
                  6766
  Trustmark Dealer
                  236
```

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'
 39
         select sum(mileage) as audi_milage
         from cars24
 41
         where name like '%Audi%';
 42
                                           Export: Wrap Cell Content: IA
Result Grid
             Filter Rows:
   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;
```

```
שכ
        -- Cars sold by each seller_type with higher than 50000 selling price
51
        select seller_type, count(*) as cnt
        from cars24
53
        group by seller_type
55
        having sum(selling_price) > 50000
        order by seller type asc;
56
Result Grid
             Filter Rows:
                                          Export: Wrap Cell Content: IA
  seller_type
                  cnt
  Dealer
                 1126
  Individual
                 6766
  Trustmark Dealer
```

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;
```

```
-- Cars sold by each transmission type with lower than 12000 km driven
 43
        select transmission, count(*) as cnt
 44 •
        from cars24
 45
        where km_driven < 12000
46
47
        group by transmission
        order by transmission;
 48
                                          Export: Wrap Cell Content: IA
Result Grid
              Filter Rows:
   transmission
              cnt
  Automatic
              304
  Manual
              309
```

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
8 •
        select seller type, name, count(*) as cnt
        from cars24
9
        where seller_type = 'dealer' and name like '%maruti%'
0
        group by seller_type, name
1
        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
                                           3
 Dealer
             Maruti Wagon R LXI BS IV
 Dealer
             Maruti Wagon R LXI
                                           3
                                           2
 Dealer
             Maruti Alto LX BSIII
 Dealer
             Maruti Swift VXI
                                           5
 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);
```

```
63
         -- Car with the highest mileage
 64
         select name, mileage
         from cars24
 66
 67
         where mileage = (select max(mileage) from cars24);
 68
                                           Export: Wrap Cell Content: IA
Result Grid
              Filter Rows:
   name
                            mileage
  Volvo XC90 T8 Excellence BSIV
                            42
```

Insight number 14 -

-- Car with the lowest mileage

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

```
63
         -- Car with the lowest mileage
 64
          select name, mileage
          from cars24
 66
          where mileage = (select min(mileage) from cars24)
          limit 10;
 68
Result Grid
                                                Export: Wrap Cell Content: I
               Filter Rows:
                                             mileage
   Hyundai Santro Xing (Non-AC)
                                             0
   Hyundai Santro Xing GL
   Hyundai Santro Xing GL
                                             0
   Tata Indica Vista Aura Safire Anniversary Edition
   Volkswagen Polo GT TSI BSIV
                                             0
   Volkswagen Polo GT TSI BSIV
```

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 limit 10;
```

```
05
70
         -- Average selling price of cars manufactured year
71 •
         select name, year, avg(selling_price) as avg_selling_price
72
         from cars24
73
         group by name, year
         order by year asc
74
75
         limit 10;
76
                                               Export: Wrap Cell Content: A Fetc
Result Grid
               Filter Rows:
                                          avg_selling_price
   name
                                   year
  Mahindra Willys CJ 3B 4X4
                                          300000.0000
                                   1983
  Maruti Omni LPG STD BSIV
                                   1991
                                          55000.0000
  Ambassador Classic 2000 DSZ AC PS
                                   1994
                                          99000.0000
  Maruti 800 AC
                                   1994
                                          45000.0000
  Mahindra Jeep CL 500 MDI
                                   1994
                                          120000,0000
  Mahindra Jeep MM 540
                                   1995
                                          160000.0000
  Maruti 800 Std
                                          55000.0000
                                   1995
  Maruti 800 DX
                                   1996
                                          40000.0000
  Maruti 800 AC
                                   1996
                                          42000.0000
  Mahindra Jeep Classic
                                   1996
                                          163000.0000
```

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
 29
                                               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
          select seats, name, AVG(mileage) AS avg mileage
 90 •
          from cars24
 91
          group by seats, name
 92
          order by seats desc
 93
          limit 5;
 94
                                                 Export:
Result Grid
                    Filter Rows:
                                                             Wrap Cell Conter
                                                avg_mileage
   seats
          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
   10
          Chevrolet Tavera LS B3 10 Seats BSII
                                                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

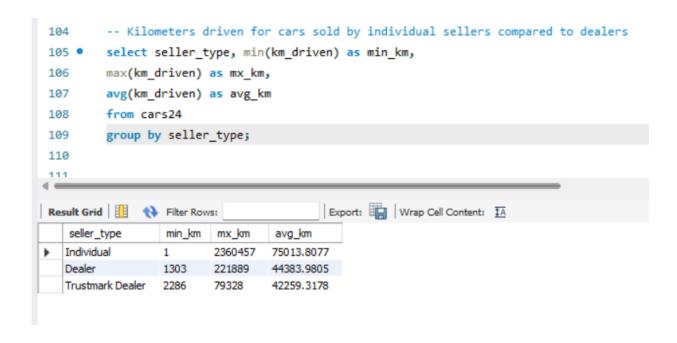
```
select name, seats, avg(selling_price) as avg_sellling_price from cars24 where seats >= 8 group by name, seats order by seats desc limit 15;
```

```
10
96
        -- Average selling price of cars with seats more than 8
        select name, seats, avg(selling_price) AS avg_sellling_price
97 •
        from cars24
98
        where seats >= 8
99
        group by name, seats
90
16
        order by seats desc
        limit 15;
32
                                                 Export: Wrap Cell Content: TA Fetch r
sult Grid
               Filter Rows:
 name
                                           seats
                                                   avg_sellling_price
 Tata Winger Deluxe - Flat Roof (Non-AC)
                                           14
                                                  235000.0000
 Toyota Qualis FS B3
                                           10
                                                  229999.0000
 Chevrolet Tavera Neo LS B3 - 10 seats BSIII
                                           10
                                                  350000.0000
 Tata Spacio Gold-10/6 Str BSII
                                                  100000.0000
                                           10
 Tata Sumo SE Plus BSII
                                                  95000.0000
                                           10
 Chevrolet Tavera Neo 3 10 Seats BSIII
                                                  514666.3333
                                           10
 Chevrolet Tavera LS B3 10 Seats BSII
                                                  225000.0000
                                           10
 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
                                           10
                                                  568500.0000
 Chevrolet Tavera B3 LT L1 10 Seats BSIII
                                                   160000.0000
                                           10
 Tata Sumo CX 10 Str BSIV
                                           10
                                                   175000,0000
 Mahindra Bolero 2011-2019 Plus - AC BSIII
                                          9
                                                  436666.6667
 Mahindra Bolero 2011-2019 DI - AC BS III
                                                  565900.0000
                                          9
```

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)</pre>
114
         order by name, year
115
         limit 10;
116
117
118
110
                                            Export: Wrap Cell Content: 🔼 Fetch rows:
mileage
                                   year
  Ambassador CLASSIC 1500 DSL AC
                                  2000
                                         12.8
  Ambassador Classic 2000 DSZ AC PS
                                         12.8
                                  1994
  Ambassador Grand 1500 DSZ BSIII
                                  2008
                                         12.8
  Ambassador Grand 2000 DSZ PW CL
                                        13.5
                                  2008
  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
```