

Data Analytics SQL Mini-Project

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Insight number 1

- -- Reading the whole table

```
select * from cars24
```

The screenshot shows a SQL query editor with the following code:

```
2
3 • use Cars24 ;
4
5 • select * from cars24 ;
6
```

Below the editor is a toolbar with icons for file operations, a 'Don't Limit' dropdown, and other tools. The 'Result Grid' tab is active, displaying a table with 9 columns: name, year, selling_price, km_driven, fuel, seller_type, transmission, and owner. The table contains 16 rows of car data. On the right side of the interface, there are buttons for 'Result Grid', 'Form Editor', 'Field Types', and 'Query Stats'. At the bottom, a tab labeled 'cars24 6' is visible, and a 'Read Only' status is shown.

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner
▶	Hyundai i20 Asta 1.2	2007	550000	2360457	Petrol	Individual	Manual	Second O...
	Maruti Wagon R LXI Minor	2010	194000	577414	Petrol	Individual	Manual	Second O...
	Maruti Wagon R VXI BS IV	2011	229999	500000	Petrol	Individual	Manual	Second O...
	Maruti Wagon R LXI BS IV	2012	220000	360003	Petrol	Individual	Manual	Second O...
	Hyundai Sonata 2.4 GDi MT	2012	550000	330000	Petrol	Individual	Manual	Second O...
	Hyundai Sonata 2.4 GDi MT	2012	500000	330000	Petrol	Individual	Manual	Second O...
	Maruti Ertiga BSIV VXI	2017	700000	227000	Petrol	Individual	Manual	First Owner
	Hyundai i20 1.2 Asta	2011	220000	220000	Petrol	Individual	Manual	Fourth & ...
	Maruti 800 EX	2004	70000	220000	Petrol	Individual	Manual	Second O...
	Honda Civic 1.8 S AT	2007	175000	218463	Petrol	Individual	Automatic	First Owner
	Hyundai Verna XXI ABS (Petrol)	2009	340000	214000	Petrol	Individual	Manual	Second O...
	Renault KWID RXT	2015	210000	210000	Petrol	Individual	Manual	Second O...
	Maruti Alto LX	2000	108000	206000	Petrol	Individual	Manual	Fourth & ...
	Hyundai i10 Magna 1.1L	2010	187000	200400	Petrol	Individual	Manual	Second O...
	Ford Fiesta 1.4 Duratec ZXI	2008	136000	200185	Petrol	Individual	Manual	First Owner

Insight number 2

--- Get the details of car whose selling price is greater than 5lakh , owner is first and automatic.

*select * from cars24*

where selling_price > 500000 and owner = 'First owner' and transmission = 'Automatic'

order by YEAR desc ;

The screenshot shows a database query editor interface. The query is as follows:

```
6
7 • select * from cars24
8 where selling_price > 500000 and owner = 'First owner' and transmission = 'Automatic'
9 order by YEAR desc ;
10
```

Below the query editor, the results are displayed in a table. The table has 9 columns: name, year, selling_price, km_driven, fuel, seller_type, transmission, and owner. The results are sorted by year in descending order.

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner
▶	Toyota Innova Crysta 2.7 GX AT 8...	2020	1500000	40000	Petrol	Individual	Automatic	First Owr
	Toyota Innova Crysta 2.7 GX AT 8...	2020	1500000	40000	Petrol	Individual	Automatic	First Owr
	Maruti Vitara Brezza ZXI Plus AT D...	2020	737000	10000	Petrol	Individual	Automatic	First Owr
	Tata Nexon 1.2 Revotron XZA Plus	2020	950000	5000	Petrol	Individual	Automatic	First Owr
	Hyundai Grand i10 Nios AMT Sportz	2020	675000	5000	Petrol	Individual	Automatic	First Owr
	Maruti Ignis Zeta AMT	2020	600000	5000	Petrol	Individual	Automatic	First Owr
	Maruti Ignis Zeta AMT	2020	600000	5000	Petrol	Individual	Automatic	First Owr
	MG Hector Sharp DCT Dualtone	2020	1900000	1600	Petrol	Dealer	Automatic	First Owr
	Maruti Swift AMT VXi	2020	654000	1000	Petrol	Individual	Automatic	First Owr
	Maruti Vitara Brezza ZDi AMT	2020	925000	7400	Diesel	Individual	Automatic	First Owr
	BMW X7 xDrive 30d DPE	2020	7200000	5000	Diesel	Individual	Automatic	First Owr
	Kia Seltos HTX Plus AT D	2020	1900000	5000	Diesel	Dealer	Automatic	First Owr
	Kia Seltos HTX Plus AT D	2020	1900000	5000	Diesel	Dealer	Automatic	First Owr
	Toyota Fortuner 2.8 4WD AT BSIV	2020	3200000	3000	Diesel	Individual	Automatic	First Owr
	Hyundai Creta 1.6 CRDi AT SX Plus	2020	1950000	2700	Diesel	Dealer	Automatic	First Owr

The interface includes a toolbar at the top with icons for file operations, a "Don't Limit" dropdown, and a "Result Grid" button on the right. The bottom status bar shows "cars24 8" and "Read Only".

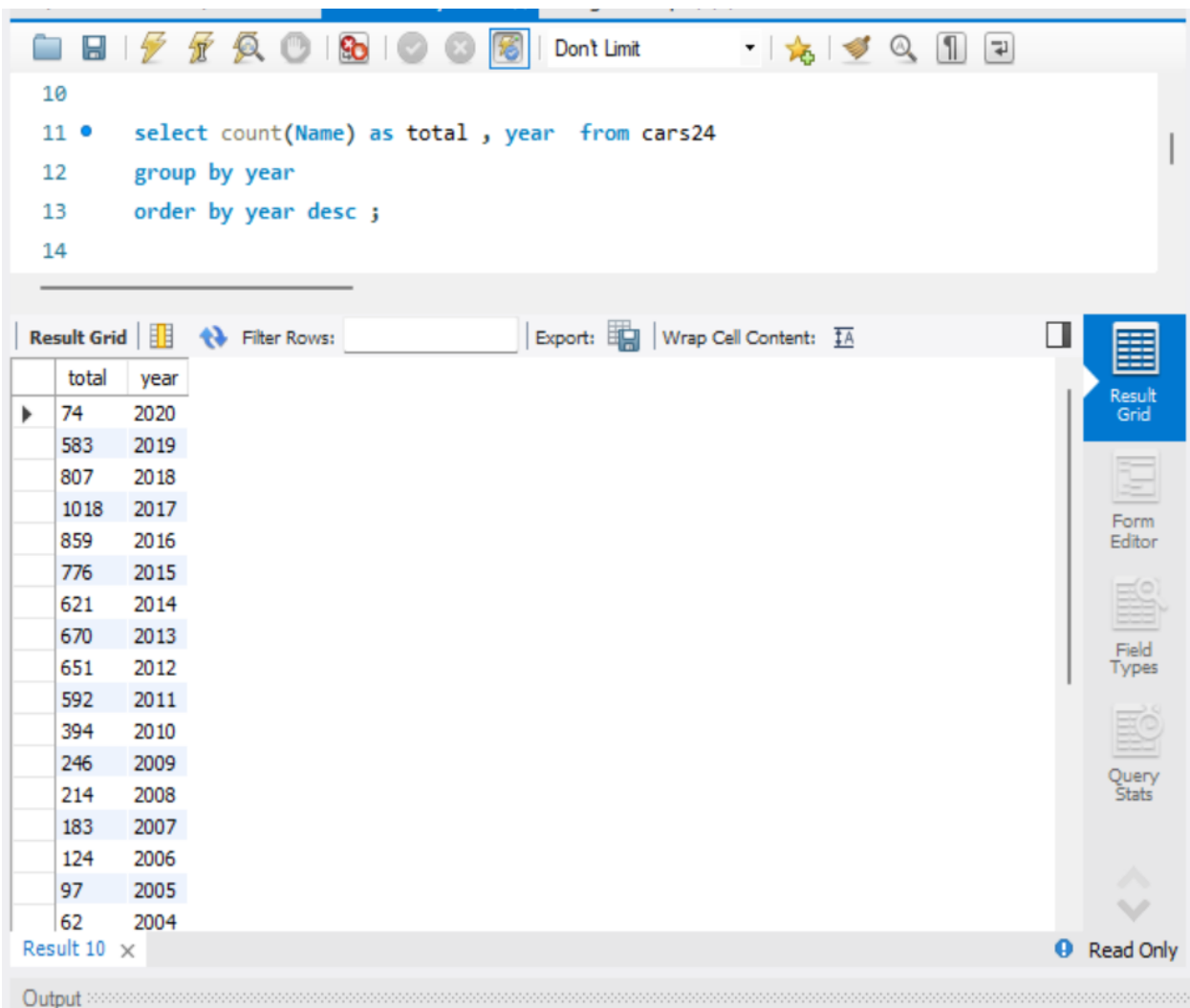
Insight number 3

--- Count the number of cars in stocks by their year

```
select count(Name) as total , year  from cars24
```

```
group by year
```

```
order by year desc ;
```



The screenshot shows a database query tool interface. At the top, there is a toolbar with various icons and a dropdown menu set to "Don't Limit". Below the toolbar is a text area containing the following SQL query:

```
10
11 • select count(Name) as total , year  from cars24
12   group by year
13   order by year desc ;
14
```

Below the query editor is a "Result Grid" section. It includes a "Filter Rows:" input field, an "Export:" button, and a "Wrap Cell Content:" checkbox. The grid itself displays the results of the query, with columns labeled "total" and "year". The data is sorted by year in descending order. To the right of the grid is a vertical sidebar with icons for "Result Grid", "Form Editor", "Field Types", and "Query Stats". At the bottom of the grid, there is a tab labeled "Result 10" and a "Read Only" status indicator.

	total	year
▶	74	2020
	583	2019
	807	2018
	1018	2017
	859	2016
	776	2015
	621	2014
	670	2013
	651	2012
	592	2011
	394	2010
	246	2009
	214	2008
	183	2007
	124	2006
	97	2005
	62	2004

insight number 4

--- count the number of cars whose fuel type is Petrol .

*Select * from cars24*

where fuel = 'Petrol' ;

```
18 • Select * from cars24
19   where fuel = 'Petrol' ;
20
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows: |

name	year	selling_price	km_driven	fuel	seller_type	transmission	owner
Hyundai i20 Asta 1.2	2007	550000	2360457	Petrol	Individual	Manual	Second O...
Maruti Wagon R LXI Minor	2010	194000	577414	Petrol	Individual	Manual	Second O...
Maruti Wagon R VXI BS IV	2011	229999	500000	Petrol	Individual	Manual	Second O...
Maruti Wagon R LXI BS IV	2012	220000	360003	Petrol	Individual	Manual	Second O...
Hyundai Sonata 2.4 GDi MT	2012	550000	330000	Petrol	Individual	Manual	Second O...
Hyundai Sonata 2.4 GDi MT	2012	500000	330000	Petrol	Individual	Manual	Second O...
Maruti Ertiga BSIV VXI	2017	700000	227000	Petrol	Individual	Manual	First Owner
Hyundai i20 1.2 Asta	2011	220000	220000	Petrol	Individual	Manual	Fourth & ...
Maruti 800 EX	2004	70000	220000	Petrol	Individual	Manual	Second O...
Honda Civic 1.8 S AT	2007	175000	218463	Petrol	Individual	Automatic	First Owner
Hyundai Verna Xxi ABS (Petrol)	2009	340000	214000	Petrol	Individual	Manual	Second O...
Renault KWID RXT	2015	210000	210000	Petrol	Individual	Manual	Second O...
Maruti Alto LX	2000	108000	206000	Petrol	Individual	Manual	Fourth & ...
Hyundai i10 Magna 1.1L	2010	187000	200400	Petrol	Individual	Manual	Second O...
Ford Fiesta 1.4 Duratec ZXI	2008	136000	200185	Petrol	Individual	Manual	First Owner

ars24 11 x Read On

insight number 5

Select 10 most expensive cars from table ;

```
select * from cars24
```

```
order by selling_price desc
```

```
limit 10 ;
```

The screenshot shows a database application window with multiple tabs. The active tab is 'Cars 24 Project-1*'. The SQL editor contains the following query:

```
50 • select * from cars24
51 order by selling_price desc
52 limit 10 ;
53
54
```

Below the editor, the 'Result Grid' is displayed, showing 10 rows of data. The columns are: name, year, selling_price, km_driven, fuel, seller_type, transmission, and owner. The results are sorted by selling_price in descending order.

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner
▶	Volvo XC90 T8 Excellence BSIV	2017	10000000	30000	Petrol	Individual	Automatic	First Owner
	BMW X7 xDrive 30d DPE	2020	7200000	5000	Diesel	Individual	Automatic	First Owner
	Audi A6 35 TFSI Matrix	2019	6523000	23600	Petrol	Dealer	Automatic	Test Driv...
	Audi A6 35 TFSI Matrix	2019	6223000	7800	Petrol	Dealer	Automatic	Test Driv...
	BMW 6 Series GT 630d Luxury Line	2018	6000000	28156	Diesel	Dealer	Automatic	First Owner
	BMW 6 Series GT 630d Luxury Line	2018	6000000	27000	Diesel	Dealer	Automatic	First Owner
	Mercedes-Benz S-Class S 350 CDI	2017	6000000	37000	Diesel	Dealer	Automatic	First Owner
	Mercedes-Benz S-Class S 350 CDI	2017	6000000	37000	Diesel	Dealer	Automatic	First Owner
	Mercedes-Benz S-Class S 350 CDI	2017	6000000	37000	Diesel	Dealer	Automatic	First Owner
	BMW 6 Series GT 630d Luxury Line	2018	6000000	28156	Diesel	Dealer	Automatic	First Owner

At the bottom, there is a tab labeled 'cars24 3' and a 'Read Only' indicator. The 'Output' section is visible at the very bottom.

insight number 6

Select the number of cars by their Model name and order them in max to min.

Select name , count(NAME) as cnt

from cars24

group by name

order by cnt desc ;

The screenshot shows a database query editor interface. The top toolbar includes icons for file operations, execution, and settings. The SQL query is entered in a text area:

```
23  
24 • Select name , count(NAME) as cnt  
25 from cars24  
26 group by name  
27 order by cnt desc ;
```

Below the query editor is the 'Result Grid' section. It includes a 'Filter Rows' input, an 'Export' button, a 'Wrap Cell Content' toggle, and a 'Fetch rows' button. The results are displayed in a table with two columns: 'name' and 'cnt'.

name	cnt
Maruti Swift Dzire VDi	162
Maruti Alto 800 LXI	82
Maruti Alto LXi	80
BMW X4 M Sport X xDrive20d	62
Maruti Swift VDI	61
Maruti Swift VDI BSIV	59
Maruti Swift Dzire VXi	55
Maruti Wagon R LXI	53
Maruti Alto K10 VXI	50
Hyundai EON Era Plus	48
Maruti Wagon R VXI BS IV	45
Maruti Ertiga VDI	45
Maruti Alto LX	44
Toyota Innova 2.5 VX (Diesel) 7 S...	44
Maruti Ritz VDi	42
Maruti 800 AC	38
Tata Safari Storme EX	38

On the right side of the interface, there is a vertical toolbar with icons for 'Result Grid', 'Form Editor', 'Field Types', and 'Query Stats'. At the bottom right, there is a 'Read Only' status indicator.

insight number 7

--- Get the number of total cars whose owner is first ;

select count(owner) from cars24

where owner = 'First owner' ;

```
14  
15 • select count(owner) from cars24  
16   where owner = 'First owner' ;
```

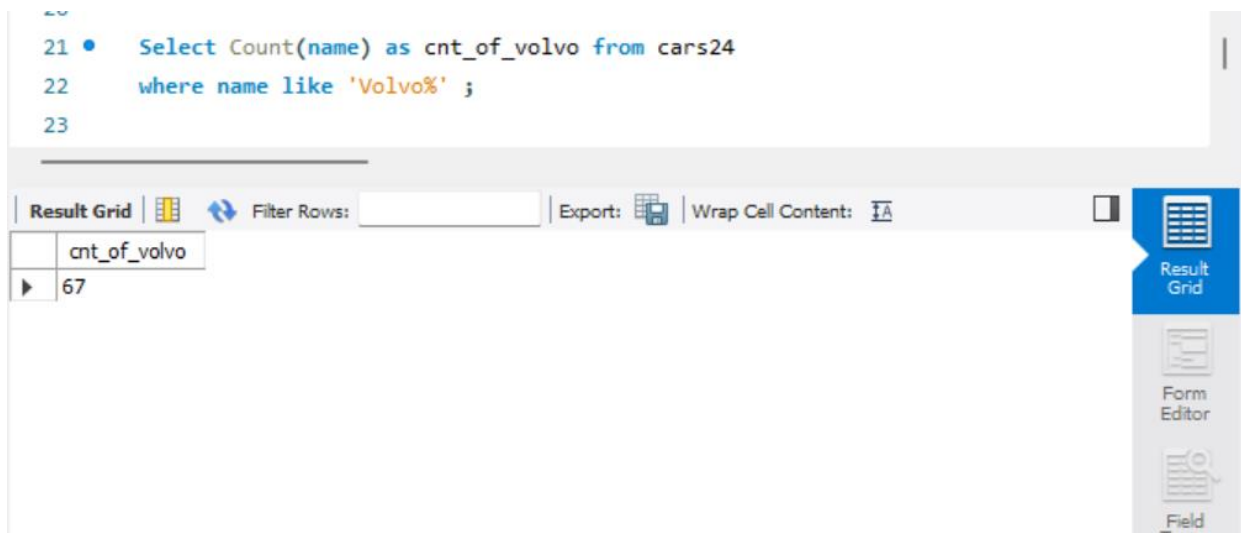
Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	count(owner)			
▶	5289			

insight number 8

--- Get the number of total cars of Volvo ;

Select Count(name) as cnt_of_volvo from cars24

where name like 'Volvo%' ;



The screenshot shows a database query interface. The query editor at the top contains the following SQL code:

```
21 • Select Count(name) as cnt_of_volvo from cars24
22   where name like 'Volvo%' ;
23
```

Below the query editor is a toolbar with the following options: "Result Grid" (selected), "Filter Rows:", "Export:", and "Wrap Cell Content:". The "Result Grid" is displayed below the toolbar, showing a single row with the column name "cnt_of_volvo" and the value "67".

cnt_of_volvo
67

On the right side of the interface, there is a vertical toolbar with the following options: "Result Grid" (selected), "Form Editor", and "Field Tunes".

insight number 9

--- Select the number of cars which is driven less than 50000 and year is more than 2018

*select **

from cars24

where (km_driven < 50000) and (year > 2018);

```
28
29 • select *
30 from cars24
31 where (km_driven < 50000) and (year > 2018 );
32
```

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner
▶	Maruti Swift Dzire AMT VXI BS IV	2019	700000	45000	Petrol	Individual	Automatic	First Owr
	Toyota Innova Crysta 2.7 GX AT 8...	2020	1500000	40000	Petrol	Individual	Automatic	First Owr
	Toyota Innova Crysta 2.7 GX AT 8...	2020	1500000	40000	Petrol	Individual	Automatic	First Owr
	Maruti Swift VXI	2019	550000	40000	Petrol	Individual	Manual	First Owr
	Hyundai Xcent 1.2 VTVT S	2019	509999	40000	Petrol	Individual	Manual	First Owr
	Tata Zest Revotron 1.2 XT	2020	500000	40000	Petrol	Individual	Manual	First Owr
	Tata Zest Revotron 1.2 XT	2020	500000	40000	Petrol	Individual	Manual	First Owr
	Tata Zest Revotron 1.2 XT	2020	500000	40000	Petrol	Individual	Manual	First Owr
	Tata Zest Revotron 1.2 XT	2020	500000	40000	Petrol	Individual	Manual	First Owr
	Datsun GO D Petrol	2019	300000	40000	Petrol	Individual	Manual	First Owr
	Hyundai Elite i20 Asta Option BSIV	2019	800000	35000	Petrol	Individual	Manual	First Owr
	Honda WR-V i-VTEC VX	2019	580000	35000	Petrol	Individual	Manual	First Owr
	Honda WR-V i-VTEC VX	2019	580000	35000	Petrol	Individual	Manual	First Owr
	Datsun GO T Petrol	2019	459999	35000	Petrol	Individual	Manual	First Owr
	Renault KWID Climber 1.0 MT BSIV	2019	300000	35000	Petrol	Individual	Manual	First Owr

cars24 24 x

Read Only

Output

insight number 10

--- Select the name of car which is less driven

select name , min(km_driven) as total_km

from cars24

group by name

order by total_km asc

limit 1 ;

```
36
37 • select name , min(km_driven) as total_km
38     from cars24
39     group by name
40     order by total_km asc
41     limit 1 ;
42
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

name	total_km
▶ Maruti Eeco 5 STR With AC Plus H...	1

Result Grid
Form Editor

insight number 11

--- Select the name of car which is maximum driven

```
select name,owner, max(km_driven)as km_run
from cars24
group by name , owner
order by km_run desc
limit 1 ;
```

The screenshot shows a SQL query editor with a query that has been executed. The query is as follows:

```
44 • select name,owner, max(km_driven)as km_run
45 from cars24
46 group by name , owner
47 order by km_run desc
48 limit 1 ;
49
50
```

Below the query editor, the results are displayed in a table. The table has three columns: name, owner, and km_run. The results show a single row for a Hyundai i20 Asta 1.2, owned by Second O..., with a km_run of 2360457.

name	owner	km_run
Hyundai i20 Asta 1.2	Second O...	2360457

The interface includes a toolbar with options like 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. A 'Result Grid' button is also visible on the right side. At the bottom, there is a tab labeled 'Result 4' and a 'Read Only' status indicator.