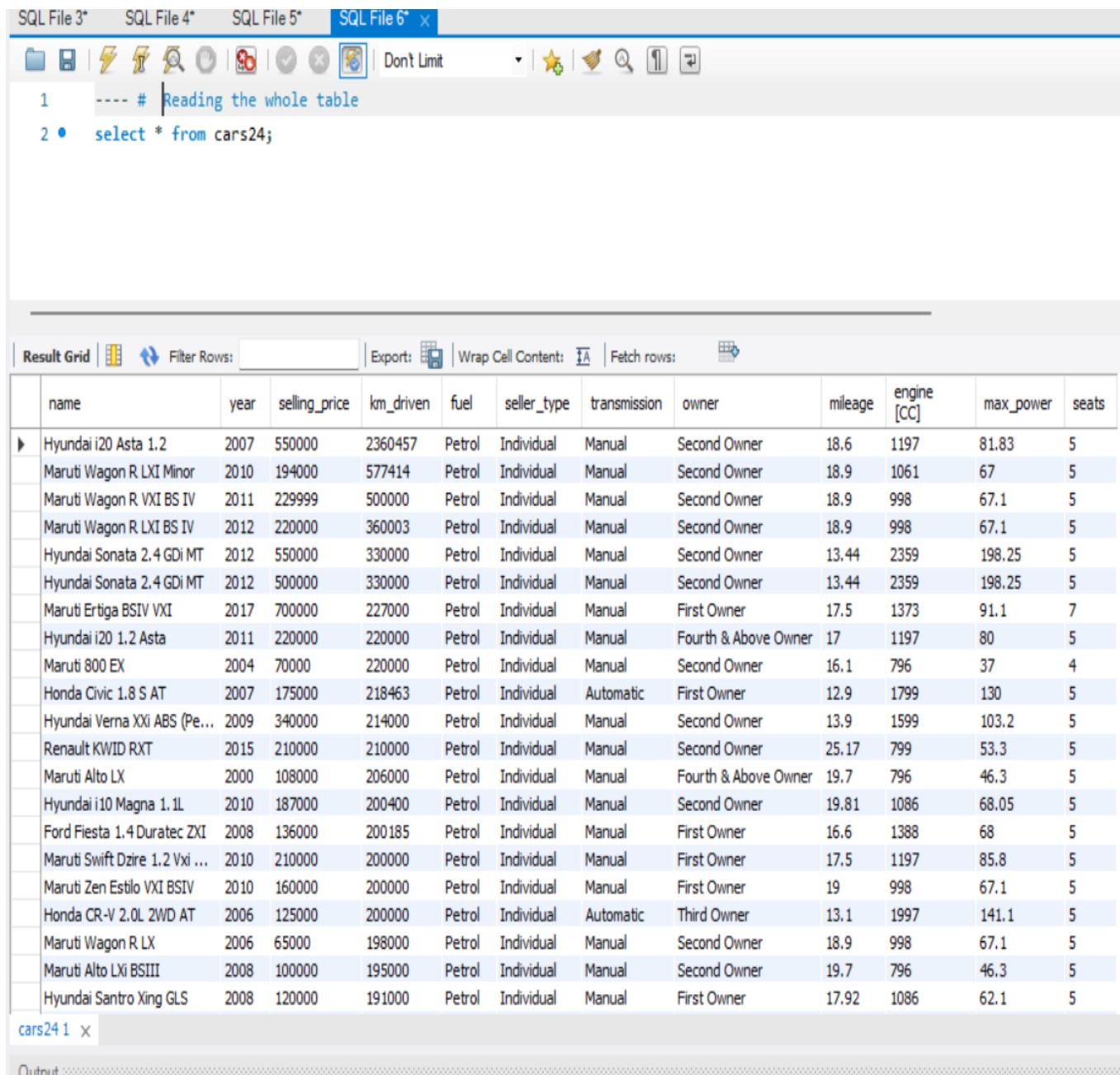


# Data Analytics SQL Mini – Project 1

## Insight Number 1 –

- Reading the whole table

Select \* from cars24;



The screenshot shows a SQL IDE interface with a query editor and a result grid. The query editor contains the following SQL code:

```
1  --- # Reading the whole table
2  • select * from cars24;
```

The result grid displays the following data:

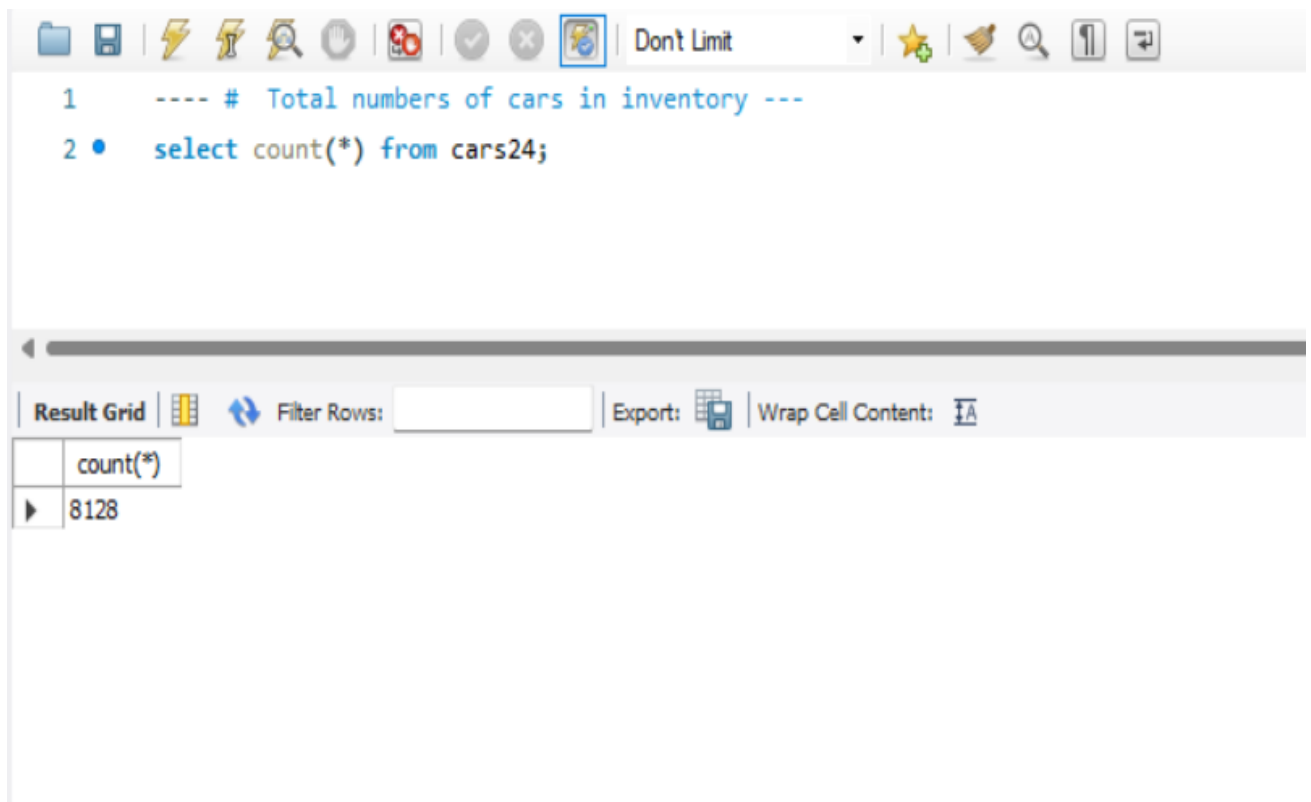
	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine [cc]	max_power	seats
▶	Hyundai i20 Asta 1.2	2007	550000	2360457	Petrol	Individual	Manual	Second Owner	18.6	1197	81.83	5
	Maruti Wagon R LXI Minor	2010	194000	577414	Petrol	Individual	Manual	Second Owner	18.9	1061	67	5
	Maruti Wagon R VXI BS IV	2011	229999	500000	Petrol	Individual	Manual	Second Owner	18.9	998	67.1	5
	Maruti Wagon R LXI BS IV	2012	220000	360003	Petrol	Individual	Manual	Second Owner	18.9	998	67.1	5
	Hyundai Sonata 2.4 GDI MT	2012	550000	330000	Petrol	Individual	Manual	Second Owner	13.44	2359	198.25	5
	Hyundai Sonata 2.4 GDI MT	2012	500000	330000	Petrol	Individual	Manual	Second Owner	13.44	2359	198.25	5
	Maruti Ertiga BSIV VXI	2017	700000	227000	Petrol	Individual	Manual	First Owner	17.5	1373	91.1	7
	Hyundai i20 1.2 Asta	2011	220000	220000	Petrol	Individual	Manual	Fourth & Above Owner	17	1197	80	5
	Maruti 800 EX	2004	70000	220000	Petrol	Individual	Manual	Second Owner	16.1	796	37	4
	Honda Civic 1.8 S AT	2007	175000	218463	Petrol	Individual	Automatic	First Owner	12.9	1799	130	5
	Hyundai Verna XXI ABS (Pe...	2009	340000	214000	Petrol	Individual	Manual	Second Owner	13.9	1599	103.2	5
	Renault KWID RXT	2015	210000	210000	Petrol	Individual	Manual	Second Owner	25.17	799	53.3	5
	Maruti Alto LX	2000	108000	206000	Petrol	Individual	Manual	Fourth & Above Owner	19.7	796	46.3	5
	Hyundai i10 Magna 1.1L	2010	187000	200400	Petrol	Individual	Manual	Second Owner	19.81	1086	68.05	5
	Ford Fiesta 1.4 Duratec ZXI	2008	136000	200185	Petrol	Individual	Manual	First Owner	16.6	1388	68	5
	Maruti Swift Dzire 1.2 Vxi ...	2010	210000	200000	Petrol	Individual	Manual	First Owner	17.5	1197	85.8	5
	Maruti Zen Estilo VXI BSIV	2010	160000	200000	Petrol	Individual	Manual	First Owner	19	998	67.1	5
	Honda CR-V 2.0L 2WD AT	2006	125000	200000	Petrol	Individual	Automatic	Third Owner	13.1	1997	141.1	5
	Maruti Wagon R LX	2006	65000	198000	Petrol	Individual	Manual	Second Owner	18.9	998	67.1	5
	Maruti Alto LXI BSIII	2008	100000	195000	Petrol	Individual	Manual	Second Owner	19.7	796	46.3	5
	Hyundai Santro Xing GLS	2008	120000	191000	Petrol	Individual	Manual	First Owner	17.92	1086	62.1	5

The interface also shows a tab labeled 'cars24 1' and an 'Output' section at the bottom.

## Insight Number 2 –

- Total numbers of cars in inventory

Select count(\*) from cars24;



The screenshot shows a SQL query editor interface. The top toolbar includes icons for file operations, execution, and settings. The query text area contains two lines: a comment and a SQL statement. Below the query, the 'Result Grid' tab is active, displaying a single row with the value 8128. The 'Filter Rows' field is empty, and the 'Export' button is visible.

```
1 ---- # Total numbers of cars in inventory ----
2 • select count(*) from cars24;
```

count(*)
8128

## Insight Number 3 –

- Type of cars with name, year, selling price and Max power.

Select name, year, selling\_price, max\_power,

Case

when max\_power > '290' then 'LUXURY'

when max\_power between 260 and 289 then 'OFFROADED'

when max\_power between 180 and 259 then 'SPORTS'

when max\_power between 100 and 179 then 'SUV'

else 'HATCHBACK CAR'

END as 'Type'

from cars24;

The screenshot shows a SQL IDE with a query editor and a result grid. The query is as follows:

```
1  ---- # Types of cars with name, year, selling price, max_power  ---
2  •  select name, year, selling_price, max_power,
3     case
4         when max_power > '290' then 'LUXURY'
5         when max_power between 260 and 289 then 'OFFROADED'
6         when max_power between 180 and 259 then 'SPORTS'
7         when max_power between 100 and 179 then 'SUV'
8         else 'HATCHBACK CAR'
9     END as 'Type'
10  from cars24;
```

The result grid displays the following data:

	name	year	selling_price	max_power	Type
▶	Hyundai i20 Asta 1.2	2007	550000	81.83	HATCHBACK CAR
	Maruti Wagon R LXI Minor	2010	194000	67	HATCHBACK CAR
	Maruti Wagon R VXI BS IV	2011	229999	67.1	HATCHBACK CAR
	Maruti Wagon R LXI BS IV	2012	220000	67.1	HATCHBACK CAR
	Hyundai Sonata 2.4 GDi MT	2012	550000	198.25	SPORTS
	Hyundai Sonata 2.4 GDi MT	2012	500000	198.25	SPORTS
	Maruti Ertiga BSIV VXI	2017	700000	91.1	HATCHBACK CAR
	Hyundai i20 1.2 Asta	2011	220000	80	HATCHBACK CAR
	Maruti 800 EX	2004	70000	37	HATCHBACK CAR
	Honda Civic 1.8 S AT	2007	175000	130	SUV
	Hyundai Verna Xxi ABS (Pe...	2009	340000	103.2	SUV
	Renault KWID RXT	2015	210000	53.3	HATCHBACK CAR
	Maruti Alto LX	2000	108000	46.3	HATCHBACK CAR
	Hyundai i10 Magna 1.1L	2010	187000	68.05	HATCHBACK CAR
	Ford Fiesta 1.4 Duratec ZXI	2008	136000	68	HATCHBACK CAR
	Maruti Swift Dzire 1.2 Vxi ...	2010	210000	85.8	HATCHBACK CAR
	Maruti Zen Estilo VXI BSIV	2010	160000	67.1	HATCHBACK CAR
	Honda CR-V 2.0L 2WD AT	2006	125000	141.1	SUV

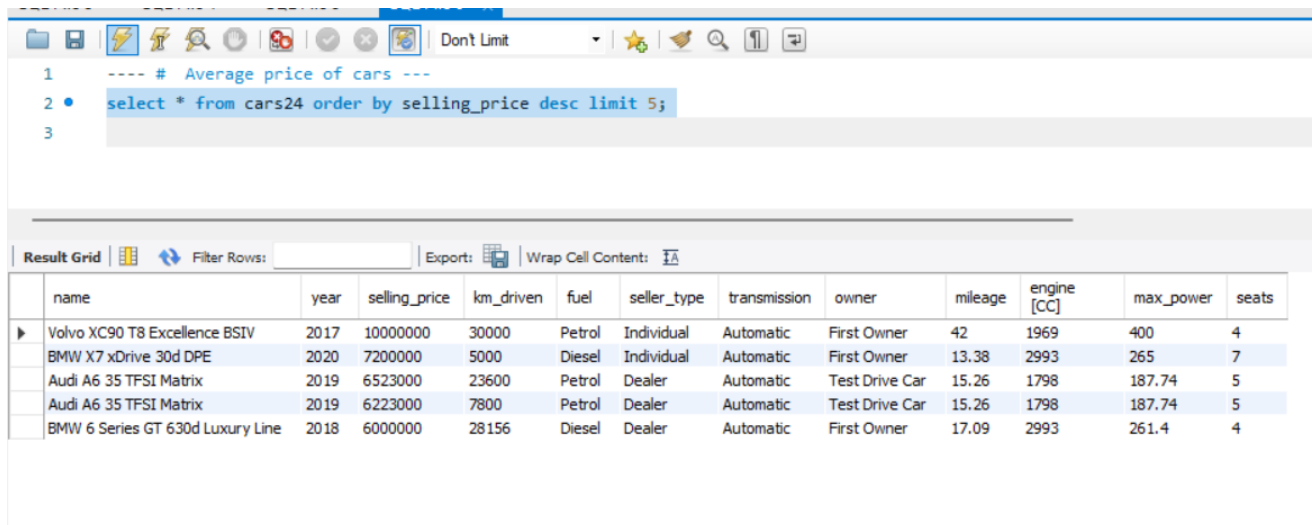
Result 1 x

Output :

## Insight Number 4 –

- Top 5 most expensive cars

Select \* from cars24 order by selling\_price desc limit 5;



```
1 ---- # Average price of cars ---
2 • select * from cars24 order by selling_price desc limit 5;
3
```

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine [CC]	max_power	seats
▶	Volvo XC90 T8 Excellence BSIV	2017	10000000	30000	Petrol	Individual	Automatic	First Owner	42	1969	400	4
	BMW X7 xDrive 30d DPE	2020	7200000	5000	Diesel	Individual	Automatic	First Owner	13.38	2993	265	7
	Audi A6 35 TFSI Matrix	2019	6523000	23600	Petrol	Dealer	Automatic	Test Drive Car	15.26	1798	187.74	5
	Audi A6 35 TFSI Matrix	2019	6223000	7800	Petrol	Dealer	Automatic	Test Drive Car	15.26	1798	187.74	5
	BMW 6 Series GT 630d Luxury Line	2018	6000000	28156	Diesel	Dealer	Automatic	First Owner	17.09	2993	261.4	4

## Insight Number 5 –

- Number of cars sold in last year

Select \* from cars24 where year = 2020;



SQL File 3\* SQL File 4\* SQL File 5\* SQL File 6\* x

1 ---- # Number of cars with name, selling\_price and fuel ---  
 2 • select name, selling\_price, fuel, count(name) as number from cars24 group by 1, 2, 3 order by 2 desc;  
 3

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

name	selling_price	fuel	number
Volvo XC90 T8 Excellence BSIV	10000000	Petrol	1
BMW X7 xDrive 30d DPE	7200000	Diesel	1
Audi A6 35 TFSI Matrix	6523000	Petrol	1
Audi A6 35 TFSI Matrix	6223000	Petrol	1
Mercedes-Benz S-Class S 350 CDI	6000000	Diesel	3
BMW 6 Series GT 630d Luxury Line	6000000	Diesel	3
Audi A6 35 TFSI Matrix	5923000	Petrol	1
Mercedes-Benz S-Class S 350 CDI	5850000	Diesel	1
BMW 6 Series GT 630d Luxury Line	5830000	Diesel	2
BMW X4 M Sport X xDrive20d	5800000	Diesel	2
Volvo XC60 Inscription D5 BSIV	5500000	Diesel	1
BMW 6 Series GT 630d Luxury Line	5500000	Diesel	1
Volvo S90 D4 Inscription BSIV	5500000	Diesel	1
BMW X4 M Sport X xDrive20d	5500000	Diesel	30
BMW X4 M Sport X xDrive20d	5400000	Diesel	30
BMW 5 Series 520d Luxury Line	5200000	Diesel	2
Mercedes-Benz E-Class Exclusive ...	5200000	Petrol	2
Lexus ES 300h	5150000	Petrol	34
Mercedes-Benz GL-Class 220d 4M...	4600000	Diesel	2
Land Rover Discovery Sport TD4 SE	4500000	Diesel	4
Jeep Wrangler 2016-2019 3.6 4X4	4100000	Petrol	6
Mercedes-Benz GL-Class 350 CDI ...	4090000	Diesel	1
BMW 5 Series 520d Sport Line	4000000	Diesel	2
Audi Q5 35TDI Premium Plus	3975000	Diesel	6

Result 21 x

## Insight Number 7 –

- Number of cars with manual Transmission

Select count(Transmission) from cars24 where transmission = 'manual';

SQL File 3\* SQL File 4\* SQL File 5\* SQL File 6\* x

1 ---- # Number of cars with manual transmission ---  
 2 • select count(transmission) from cars24 where transmission = 'manual';  
 3

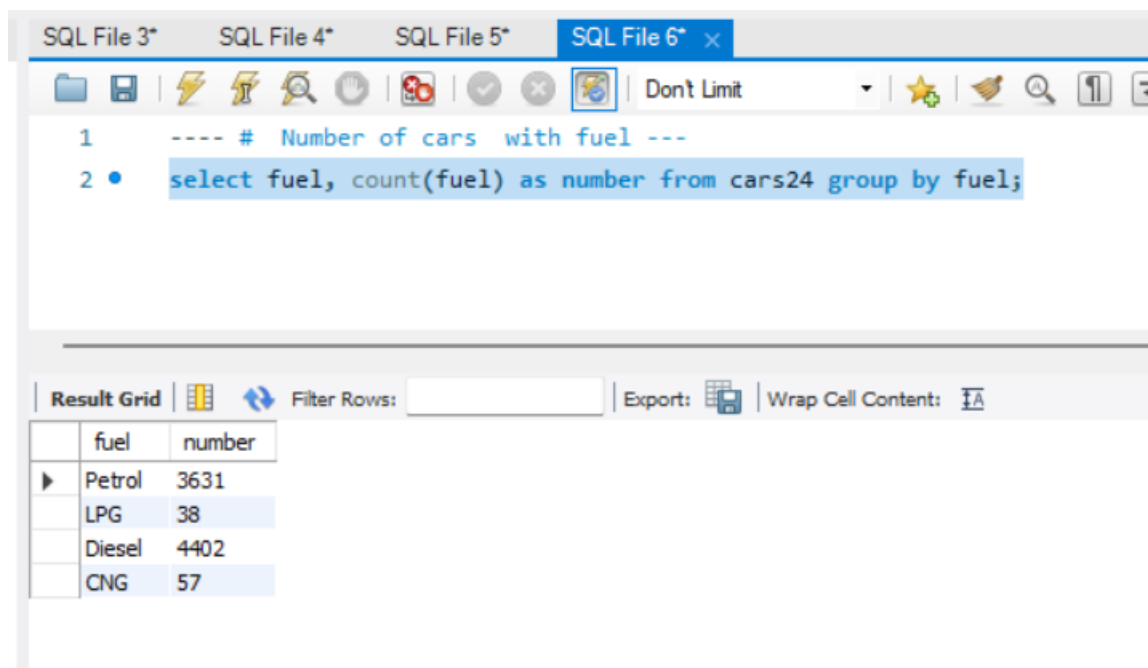
Result Grid Filter Rows: Export: Wrap Cell Content:

count(transmission)
7078

### Insight Number 8 –

- Number of cars with fuel.

Select fuel, count(fuel) as number from cars24 group by fuel;



The screenshot shows an SQL IDE with a tab labeled 'SQL File 6\*'. The query editor contains the following SQL code:

```
1 ---- # Number of cars with fuel ---  
2 • select fuel, count(fuel) as number from cars24 group by fuel;
```

Below the query editor, the 'Result Grid' is displayed, showing the results of the query. The grid has two columns: 'fuel' and 'number'. The results are as follows:

fuel	number
Petrol	3631
LPG	38
Diesel	4402
CNG	57

### Insight Number 9 –

- List of cars with name Hyundai and Maruti.

Select \* from cars24 where name like 'H%' or name like 'M%';



SQL File 3\* SQL File 4\* SQL File 5\* SQL File 6\* x

1 ---- # list of cars with name Hyundai and Maruti ---  
 2 • select \* from cars24 where name like 'H%' or name like 'M%';

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

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine [CC]	max_power	seats
	Maruti Alto LXi	2006	85000	150000	Petrol	Individual	Manual	Second Owner	19.7	796	46.3	5
	Maruti Alto LX	2005	85000	150000	Petrol	Individual	Manual	Second Owner	19.7	796	46.3	5
	Maruti Wagon R LXI	2006	80000	150000	Petrol	Individual	Manual	Fourth & Above Owner	18.9	998	67.1	5
	Maruti Zen LXI	2004	70000	150000	Petrol	Individual	Manual	First Owner	17.3	993	60	5
	Hyundai i20 Sportz Option ...	2014	400000	147000	Petrol	Individual	Manual	Second Owner	18.6	1197	81.83	5
	Maruti Wagon R LXI	2003	50000	147000	Petrol	Individual	Manual	Fourth & Above Owner	18.9	998	67.1	5
	Honda Accord 2.4 M/T	2012	600000	144030	Petrol	Individual	Manual	First Owner	12.8	2354	177.6	5
	Maruti Swift Dzire VXi	2010	240000	143000	Petrol	Individual	Manual	First Owner	17.5	1298	85.8	5
	Maruti Alto LXi	2009	125000	141000	Petrol	Individual	Manual	Second Owner	19.7	796	46.3	5
	Maruti Zen LXI	2006	120000	141000	Petrol	Individual	Manual	Second Owner	17.3	993	60	5
	Honda BRV i-VTEC V MT	2016	725000	140000	Petrol	Individual	Manual	First Owner	15.4	1497	117.3	7
	Maruti Ertiga VXi	2013	450000	140000	Petrol	Individual	Manual	First Owner	16.02	1373	93.7	7
	Maruti Wagon R LXI Optional	2016	350000	140000	Petrol	Individual	Manual	First Owner	20.51	998	67.04	5
	Honda City 2017-2020 Gxi	2007	210000	140000	Petrol	Individual	Manual	First Owner	17.7	1497	78	5
	Honda City 2017-2020 EXi	2006	158000	140000	Petrol	Individual	Manual	Third Owner	17.7	1497	78	5
	Honda City 2017-2020 EXi	2006	150000	140000	Petrol	Individual	Manual	Third Owner	17.7	1497	78	5
	Maruti Wagon R LXI	2005	130000	140000	Petrol	Individual	Manual	Second Owner	18.9	998	67.1	5
	Maruti Wagon R LXI	2005	130000	140000	Petrol	Individual	Manual	Second Owner	18.9	998	67.1	5
	Maruti A-Star Vxi	2009	120000	140000	Petrol	Individual	Manual	Third Owner	19	998	66.1	5
	Maruti Omni E 8 Str STD	2009	120000	140000	Petrol	Individual	Manual	First Owner	19.41	1458	91.5	5
	Hyundai Accent GLS 1.6 ABS	2006	110000	140000	Petrol	Individual	Manual	Second Owner	14.4	1599	94	5
	Hyundai Santro GLS I - Eur...	1999	60000	140000	Petrol	Individual	Manual	Third Owner	19.41	1458	91.5	5
	Maruti Wagon R VXi BS IV	2011	246000	139000	Petrol	Individual	Manual	First Owner	18.9	998	67.1	5
	Hyundai i20 1.2 Asta	2011	300000	138000	Petrol	Individual	Manual	Third Owner	17	1197	80	5
	Maruti Swift L vi BSIII	2007	220000	136000	Petrol	Individual	Manual	Second Owner	16.1	1298	88.2	5

cars24 31 x

## Insight Number 10 –

- List of cars with number of seller\_type

Select \*, count(seller\_type) as type from cars24 group by seller\_type;

SQL File 3\* SQL File 4\* SQL File 5\* SQL File 6\* x

1 ---- # list of cars with number of seller\_type ---  
 2 • select \*, count(seller\_type) as type from cars24 group by seller\_type;

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

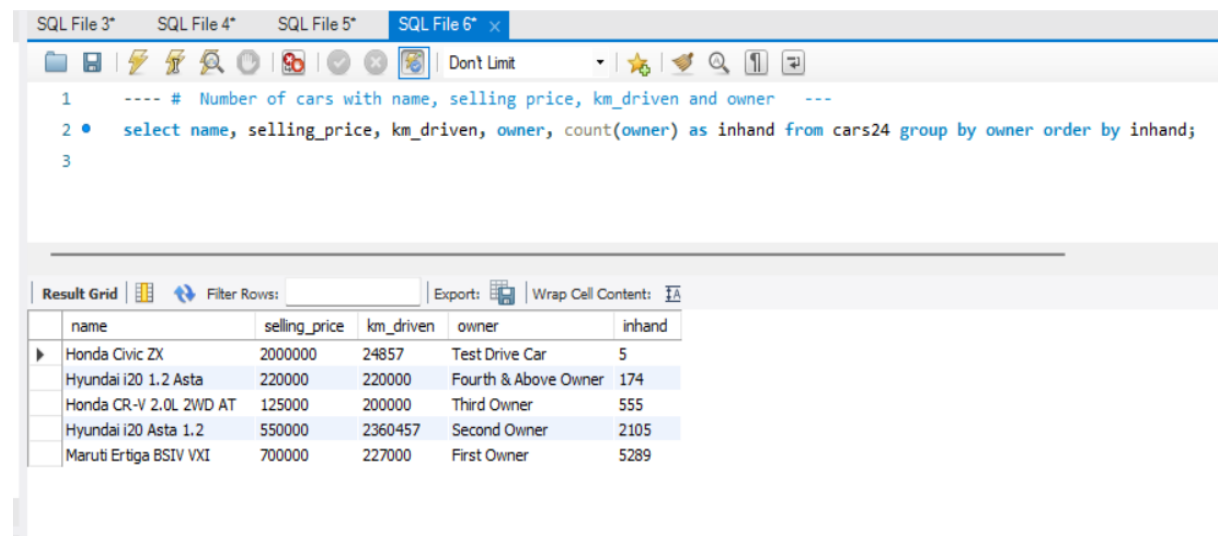
	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine [CC]	max_power	seats	type
▶	Hyundai i20 Asta 1.2	2007	550000	2360457	Petrol	Individual	Manual	Second Owner	18.6	1197	81.83	5	6766
	Maruti Swift VXi BSIV	2015	500000	150546	Petrol	Dealer	Manual	First Owner	22	1197	81.8	5	1126
	Honda City i VTEC CVT VX	2014	635000	79011	Petrol	Trustmark Dealer	Automatic	First Owner	18	1497	117.3	5	236



## Insight Number 11 –

- Number of cars with name, selling price, km driven and owner.

Select name, selling\_price, km\_driven, owner, count(owner) as inhand from cars24 group by owner order by inhand;



The screenshot shows a SQL IDE with a query editor and a results grid. The query editor contains the following SQL code:

```
1  ---- # Number of cars with name, selling price, km_driven and owner  ---
2  •  select name, selling_price, km_driven, owner, count(owner) as inhand from cars24 group by owner order by inhand;
3
```

The results grid displays the following data:

	name	selling_price	km_driven	owner	inhand
▶	Honda Civic ZX	2000000	24857	Test Drive Car	5
	Hyundai i20 1.2 Asta	220000	220000	Fourth & Above Owner	174
	Honda CR-V 2.0L 2WD AT	125000	200000	Third Owner	555
	Hyundai i20 Asta 1.2	550000	2360457	Second Owner	2105
	Maruti Ertiga BSIV VXI	700000	227000	First Owner	5289