

SQL DATA

ANALYST

PROJECT



“2nd Hand Cars Sales Analysis”
(CarDekho.com)

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GitHub link - https://github.com/Sandeshpatidar99/SQL-car_dekho-sales-analysis

Creating Database and loading full table :

- `create database cars;`
- `select * from car_dekho;`

	Name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mile
▶	Maruti Alto 800 LXI Opt	2023	410000	10000	Petrol	Individual	Manual	First Owner	19.0
	Skoda Slavia 1.0 TSI Ambition	2023	1350000	10000	Petrol	Individual	Manual	First Owner	14.0
	BMW 3 Series Gran Limousine 320Ld Luxury Line	2023	5800000	1000	Diesel	Dealer	Automatic	First Owner	18.1
	MG ZS EV Exclusive	2023	2650000	10000	Electric	Dealer	Automatic	First Owner	32.5
	Tata Punch Adventure	2023	715000	10000	Petrol	Individual	Manual	First Owner	12.1
	Maruti S-Presso VXi Plus	2023	450000	30171	Petrol	Individual	Manual	First Owner	19.0
	Maruti S-Presso LXi	2022	425000	1994	Petrol	Dealer	Manual	First Owner	19.4
	Hyundai Creta SX Turbo	2022	1895000	22000	Petrol	Individual	Automatic	First Owner	12.1
	Renault Kiger RXT AMT Opt DT	2022	842000	6424	Petrol	Individual	Automatic	First Owner	14.0
	Renault KWID CLIMBER	2022	567000	5148	Petrol	Dealer	Manual	First Owner	18.1
	Mahindra XUV300 W8 Diesel Sunroof	2022	1197000	5030	Diesel	Individual	Manual	Second O...	32.5
	Mahindra XUV700 AX5 Diesel AT	2022	2275000	28000	Diesel	Individual	Automatic	First Owner	12.1
	Renault Triber RXT	2022	800000	10000	Petrol	Individual	Manual	Second O...	21.0

Q.1 What is total count of all cars available ?

Query

- `select count(*) from car_dekho;`

Output

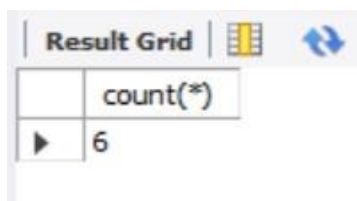
Result Grid	
	count(*)
▶	7927

Q.2 How many cars of year 2023 are available ?

Query

- ```
select count(*) from car_dekho
where year = 2023;
```

Output



|   | count(*) |
|---|----------|
| ▶ | 6        |

Q.3 How many cars of year 2020, 2021 and 2022 are available?

Query

- ```
select year, count(*) from car_dekho
where year in (2020,2021,2022)
group by year;
```

Output



	year	count(*)
▶	2022	7
	2021	7
	2020	74

Q.4 Total no of cars year wise ?

Query

- ```
select year, count(*) from car_dekho
group by year;
```

Output

| Result Grid |      |          |
|-------------|------|----------|
|             | year | count(*) |
| ▶           | 2023 | 6        |
|             | 2022 | 7        |
|             | 2021 | 7        |
|             | 2020 | 74       |
|             | 2019 | 583      |
|             | 2018 | 806      |
|             | 2017 | 1010     |
|             | 2016 | 856      |
|             | 2015 | 775      |
|             | 2014 | 620      |
|             | 2013 | 668      |
|             | 2012 | 621      |
|             | 2011 | 570      |
|             | 2010 | 375      |
|             | 2009 | 231      |
|             | 2008 | 201      |
|             | 2007 | 173      |

## Q.5 How many diesel cars of year 2020 are there ?

Query

- ```
select count(*) as diesel_car_in_2020 from car_dekho  
where year = 2020 and fuel = 'Diesel';
```

Output

Result Grid	
	diesel_car_in_2020
▶	20

Q.6 How many petrol cars of year 2020 and 2021 are there ?

Query

- ```
select count(*) as Petrol_cars_in_2020and2021 from car_dekho
where year in (2020,2021) and fuel = 'Petrol';
```

Output

| Result Grid |                            | Filter Rows: |
|-------------|----------------------------|--------------|
|             | Petrol_cars_in_2020and2021 |              |
| ▶           | 56                         |              |

Q.7 How many no. of CNG cars in each year ?

Query

- ```
select year, count(*) as no_of_CNG_cars from car_dekho
where fuel = 'CNG'
group by year;
```

Output

Result Grid			Filter Rows:
	year	no_of_CNG_cars	
▶	2020	3	
	2019	7	
	2018	5	
	2017	9	
	2016	6	
	2015	2	
	2014	4	
	2013	3	
	2012	5	
	2011	4	
	2010	3	
	2008	1	
	2000	1	

Q.8 In which years the number of cars are more than 100 ?

Query

```
• select year as years_with_more_than_100_cars, count(*) as no_of_cars from car_dekho  
  group by year  
  having count(*)>100;
```

Output

	years_with_more_than_100_cars	no_of_cars
▶	2019	583
	2018	806
	2017	1010
	2016	856
	2015	775
	2014	620
	2013	668
	2012	621
	2011	570
	2010	375
	2009	231
	2008	201
	2007	173
	2006	102

Q.9 Show names of all the automatic petrol cars between year 2020 to 2023 which have been driven less than 10,000 Km ?

Query

- ```
select name from car_dekho
where year between 2020 and 2023
and fuel = 'Petrol'
and transmission = 'Automatic'
and km_driven < 10000 ;
```

Output



|   | name                              |
|---|-----------------------------------|
| ▶ | Hyundai Grand i10 Nios AMT Sportz |
|   | Maruti Ignis Zeta AMT             |
|   | Maruti Ignis Zeta AMT             |
|   | Maruti Swift AMT VXI              |
|   | MG Hector Sharp DCT Dualtone      |
|   | Tata Nexon 1.2 Revotron XZA Plus  |

Q.10 Show all total number of cars of each fuel type, with the maximum number showing first ?

Query

- ```
select fuel, count(*) as No_of_cars from car_dekho  
group by fuel  
order by No_of_cars desc;
```

Output

Result Grid				 Filter Rows
	fuel	No_of_cars		
▶	Diesel	4304		
	Petrol	3534		
	CNG	53		
	LPG	35		
	Electric	1		

Q.11 How many fuel efficient cars are there of year 2020 to 2023 whose selling price is less than 5 lakhs ? (cars with mileage greater than 18 is considered fuel efficient)

Query

```
• select name from car_dekho  
  where year in (2020,2021,2022,2023)  
  and selling_price < 500000  
  and mileage > 18;
```

Output

	name
▶	Maruti Alto 800 LXI Opt
	Maruti S-Presso VXi Plus
	Maruti S-Presso LXI
	Maruti Alto 800 LXI Opt
	Datsun GO T Option
	Datsun RediGO 1.0 S
	Ford Freestyle Titanium Petrol BSIV
	Hyundai Grand i10 Sportz
	Hyundai Xcent 1.2 VTVT E
	Mahindra KUV 100 D75 K6 Plus
	Maruti Alto 800 LXI
	Maruti Alto 800 LXI
	Maruti Alto 800 LXI CNG
	Maruti Alto 800 VXi
	Maruti Alto 800 VXi
	Maruti Alto 800 VXi Plus
	Maruti Alto K10 VXi

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Q.12 How many Maruti cars of different transmissions are available whose model should not be of before 2018 ?

Query

- ```
select transmission, count(*) from car_dekho
where year between 2018 and 2023
and name like '%Maruti%'
group by transmission
order by count(*) desc;
```

Output

| Result Grid |              |          | Filter Rows: |
|-------------|--------------|----------|--------------|
|             | transmission | count(*) |              |
| ▶           | Manual       | 322      |              |
|             | Automatic    | 127      |              |
|             | Manual       | 4        |              |

## Q.13 Show all the details of all luxury cars ?

### Query

```
• select * from car_dekho
 where name like '%Audi%'
 or name like '%BMW%'
 or name like '%Volvo%'
 or name like '%Lexus%'
 or name like '%Rover%'
 or name like '%Mercedes%';
```

### Output

|   | Name                                          | year | selling_price | km_driven | fuel   | seller_type | transmission | owner          | mil |
|---|-----------------------------------------------|------|---------------|-----------|--------|-------------|--------------|----------------|-----|
| ▶ | BMW 3 Series Gran Limousine 320Ld Luxury Line | 2023 | 5800000       | 1000      | Diesel | Dealer      | Automatic    | First Owner    | 18. |
|   | BMW X7 xDrive 30d DPE                         | 2020 | 7200000       | 5000      | Diesel | Individual  | Automatic    | First Owner    | 13. |
|   | Audi A6 35 TFSI Matrix                        | 2019 | 6223000       | 7800      | Petrol | Dealer      | Automatic    | Test Drive Car | 15. |
|   | Audi A6 35 TFSI Matrix                        | 2019 | 5923000       | 11500     | Petrol | Dealer      | Automatic    | Test Drive Car | 15. |
|   | Audi A6 35 TFSI Matrix                        | 2019 | 6523000       | 23600     | Petrol | Dealer      | Automatic    | Test Drive Car | 15. |
|   | BMW 5 Series 520d Luxury Line                 | 2019 | 5200000       | 10000     | Diesel | Dealer      | Automatic    | First Owner    | 18. |
|   | BMW 5 Series 520d Luxury Line                 | 2019 | 5200000       | 10000     | Diesel | Dealer      | Automatic    | First Owner    | 18. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5800000       | 7500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5400000       | 7500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5500000       | 8500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5400000       | 7500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5500000       | 8500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5400000       | 7500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5500000       | 8500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5400000       | 7500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |
|   | BMW X4 M Sport X xDrive20d                    | 2019 | 5500000       | 8500      | Diesel | Dealer      | Automatic    | First Owner    | 16. |

Q.14 Show all the manual transmission cars of year between 2018 to 2023 whose owner is first owner and which has engine of < 1000 CC ?

Query

- ```
select name, year from car_dekho
where year between 2018 and 2023
and transmission = 'Manual'
and owner = 'First Owner'
and engine like '____CC%';
```

Output

	name	year
►	Datsun RediGO 1.0 S	2020
	Maruti Alto 800 LXI	2020
	Maruti Alto 800 LXI	2020
	Maruti Alto 800 LXI CNG	2020
	Maruti Alto 800 VXI	2020
	Maruti Alto 800 VXI	2020
	Maruti Alto 800 VXI Plus	2020
	Maruti Alto K10 VXI	2020
	Maruti Celerio VXI	2020
	Maruti Celerio ZXI	2020
	Volkswagen Polo 1.0 T...	2020
	Datsun RediGO 1.0 T O...	2019
	Datsun RediGO A	2019
	Datsun RediGO SV 1.0	2019
	Maruti Alto K10 LXI CNG	2019
	Maruti Alto K10 VXI	2019
	Maruti Alto K10 VXI	2019

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Q.15 Show the average price of petrol cars of different transmissions of year 2018 to 2023 ?

Query

- ```
select transmission, avg(selling_price) from car_dekho
where year between 2018 and 2023
and fuel = 'Petrol'
group by transmission
order by avg(selling_price) desc;
```

Output

| Result Grid |              |                    | Filter Rows: |
|-------------|--------------|--------------------|--------------|
|             | transmission | avg(selling_price) |              |
| ▶           | Automatic    | 1904000.0000       |              |
|             | Automatic    | 1427843.4885       |              |
|             | Manual       | 661545.4545        |              |
|             | Manual       | 576067.2467        |              |

**End**