

-----CARS-----



Project



BY - HARSHIT CHAUBEY



Introduction


Welcome to the "MySQL Queries for Pre-Owned Cars Analysis" project, created by Harshit Chaubey. This project utilizes MySQL queries to analyze pre-owned car data stored in the **car_details** table. In today's automotive market, understanding the dynamics of pre-owned car sales is crucial. Through MySQL queries, we aim to extract valuable insights that illuminate key aspects of the pre-owned car market.



A magnifying glass with a black handle and frame is positioned over a grayscale world map. The map shows continents and oceans, with labels like 'NORTH ATLANTIC OCEAN', 'SOUTH ATLANTIC OCEAN', 'INDIAN OCEAN', and 'AUSTRALIA'. Two pink curved arrows originate from the top left and point towards the title 'Project overview'.

Project overview

The objective of this project is to harness the power of MySQL queries to extract, manipulate, and analyze data from the `car_details` table. From basic SELECT queries to advanced JOIN operations and aggregation functions, our exploration covers a wide spectrum of MySQL query techniques to address various facets of pre-owned car sales analysis.

A yellow wavy line runs horizontally across the bottom of the text area. In the bottom right corner, there is a blue swirl graphic.



KEY AREA OF FOCUS



1

Data Retrieval: Using SELECT queries to retrieve and display relevant information from the **car_details** table, including car models, prices, mileage, and more.

2

Data Filtering and Sorting: Applying WHERE and ORDER BY clauses to filter and sort pre-owned car data based on specific criteria such as price range, mileage, and manufacturing year.

3

Data Aggregation: Utilizing SQL aggregate functions such as COUNT(), SUM(), and AVG() to aggregate and summarize data, enabling insights into market trends and patterns.



____QUERIES____

1. Total Cars: To get a count of total records.

2. How many cars is available in 2020,2021,2022 and 2023?

3. Total of all cars by year with highest number of cars.

4. How many diesel and petrol cars will be there in 2020?

5. Display all the fuel cars (petrol,diesel and CNG) come by all year.

6. Which year had more than 100 cars?

7. Count all the car details between 2015 and 2023.

1. Total Cars: To get a count of total records.

```
SELECT  
    COUNT(*)  
FROM  
    car_details;
```

Result Grid	
	COUNT(*)
▶	7927

2. How many cars is available in 2020,2021,2022 and 2023?

```
• SELECT
    year, COUNT(*) AS no_of_cars
FROM
    car_details
WHERE
    YEAR IN (2020 , 2021, 2022, 2023)
GROUP BY year
ORDER BY no_of_cars DESC;
```

Result Grid			Filter
	year	no_of_cars	
▶	2020	74	
	2022	7	
	2021	7	
	2023	6	

3. Total of all cars by year with highest number of cars.

```
• SELECT
    year, COUNT(name) AS total_cars
FROM
    car_details
GROUP BY year
ORDER BY total_cars DESC;
```

Result Grid		
	year	total_cars
▶	2017	1010
	2016	856
	2018	806
	2015	775
	2013	668
	2012	621
	2014	620
	2019	583
	2011	570
	2010	375
	2009	231
	2008	201
	2007	173

4. How many diesel and petrol cars will be there in 2020?

```
• SELECT
    fuel, COUNT(name)
FROM
    car_details
WHERE
    fuel IN ('diesel' , 'petrol')
    AND year = '2020'
GROUP BY fuel
ORDER BY fuel DESC;
```

Result Grid			Filter Row
	fuel	COUNT(name)	
▶	Petrol	51	
	Diesel	20	

5. Display all the fuel cars (petrol,diesel and CNG) come by all year.

```
SELECT
    fuel, COUNT(*) AS no_of_cars
FROM
    car_details
GROUP BY fuel
ORDER BY no_of_cars DESC;
```

Result Grid			Filter R
	fuel	no_of_cars	
▶	Diesel	4304	
	Petrol	3534	
	CNG	53	
	LPG	35	
	Electric	1	

6. Which year had more than 100 cars?

```
• SELECT
    year, max_cars
FROM
    (SELECT
        year, COUNT(*) AS max_cars
    FROM
        car_details
    GROUP BY year
    ORDER BY max_cars DESC) AS a
WHERE
    max_cars >= 100;
```

Result Grid		
	year	max_cars
▶	2017	1010
	2016	856
	2018	806
	2015	775
	2013	668

7. Count all the car details between 2015 and 2023.



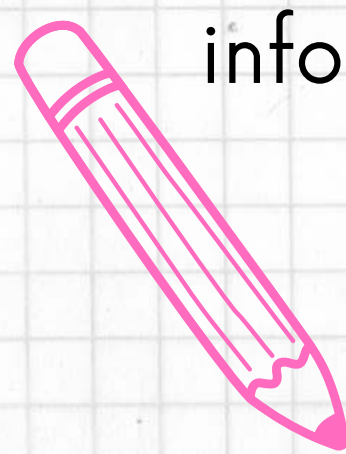
```
• SELECT
    COUNT(*) AS total_cars
FROM
    car_details
WHERE
    year BETWEEN 2015 AND 2023;
```

Result Grid	
	total_cars
▶	4124



Conclusion

This project serves as an in-depth exploration of MySQL queries applied to pre-owned car sales analysis. Through the expertise of Harshit Chaubey in MySQL querying and analysis, we aim to provide actionable insights that contribute to informed decision-making in the competitive landscape of the pre-owned car market.



THANK
YOU

