

SQL PROJECT FOR



SALE OF

AUTOCAR

• - MUKESH BHATT

WELCOME TO THIS PROJECT

The dataset represents a car sales record, containing key attributes such as mileage, make, model, fuel type, gearbox, offer type, price, horsepower, and year of manufacture. This information is crucial for analyzing car performance, pricing trends, and offer types across different makes and models.

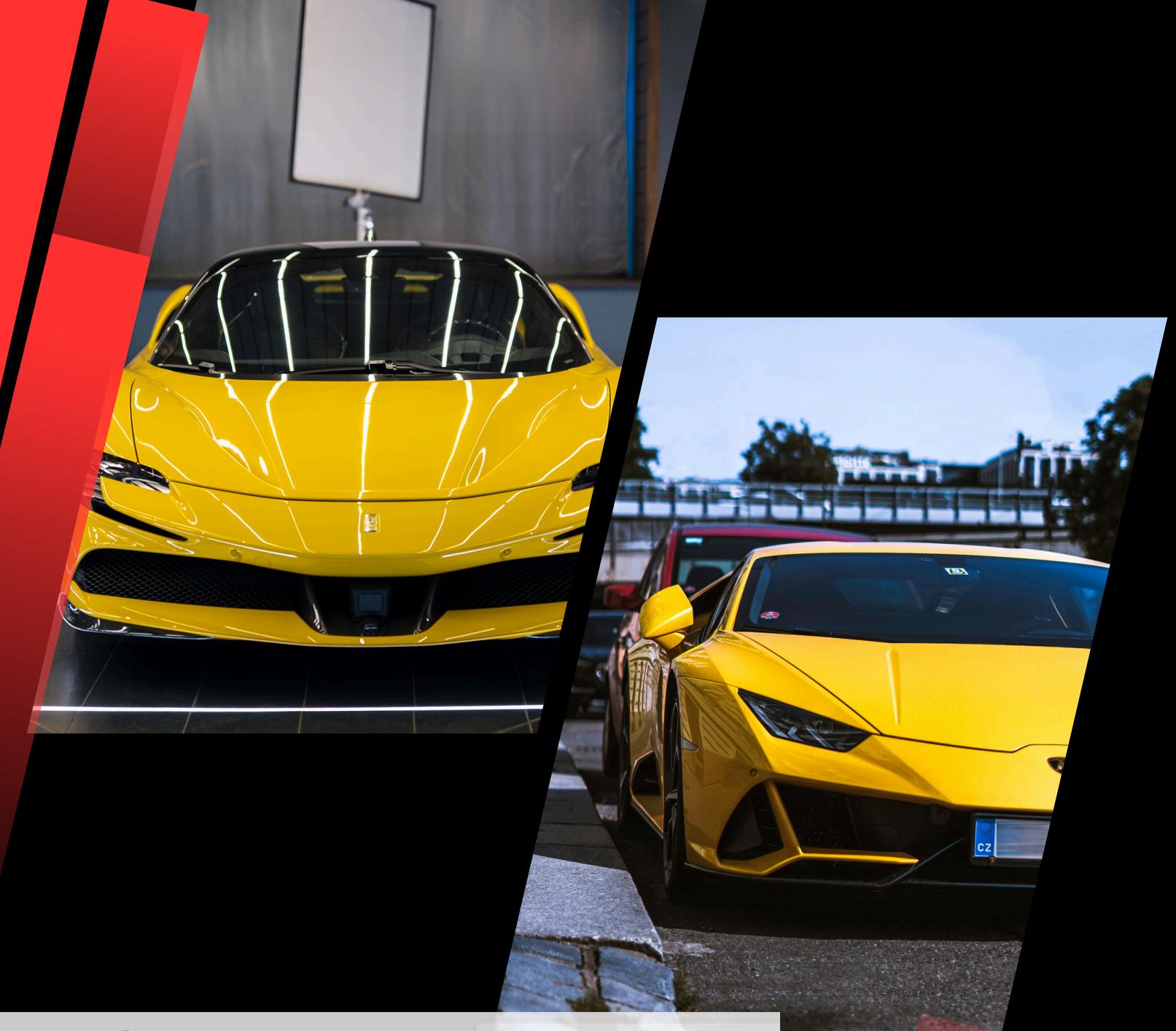


WRITE A QUERY TO FIND THE TOP 5 MOST EXPENSIVE CAR MODELS FOR EACH MAKE.

```
WITH RankedCars AS (
    SELECT
        make,
        model,
        price,
        ROW_NUMBER() OVER (PARTITION BY make ORDER BY price DESC) AS `rank`
    FROM
        car
)

SELECT
    make,
    model,
    price
FROM
    RankedCars
WHERE
    `rank` <= 5
ORDER BY
    price DESC
LIMIT 5;
```

	make	model	price
▶	Ferrari	F12	1199900
	Maybach	Pullman	717078
	Mercedes-Benz	S 650	717078
	Maybach	Pullman	499800
	Mercedes-Benz	SLS	465000



CALCULATE THE TOTAL MILEAGE OF CARS MANUFACTURED EACH YEAR, AND DISPLAY THE YEAR WITH THE CORRESPONDING TOTAL MILEAGE.

```
select  
year,  
sum(mileage) as total_mileage, make  
from car  
group by year,make ;
```



Result Grid | Filter Rows:

	year	total_mileage	make
▶	2011	36628111	BMW
	2011	97682532	Volkswagen
	2011	18147430	SEAT
	2011	31816831	Renault
	2011	22496292	Peugeot
	2011	10668987	Toyota
	2011	53057769	Opel
	2011	8521150	Mazda
	2011	38294428	Ford
	2011	42597614	Mercedes-Benz
	2011	8097971	Chevrolet
	2011	31222008	Audi
	2011	17390741	Fiat

**WRITE A QUERY TO FIND THE
SECOND MOST EXPENSIVE CAR IN
THE DATASET.**

Result Grid | Filter Rows:

	make	model	price
▶	Maybach	Pullman	717078



```
WITH RankedCars AS (
    SELECT
        make,
        model,
        price,
        ROW_NUMBER() OVER (ORDER BY price DESC) AS Ranked
    FROM
        car
)
SELECT
    make,
    model,
    price
FROM
    RankedCars
WHERE
    Ranked = 2;
```

-- FIND THE AVERAGE HORSEPOWER OF CARS GROUPED BY FUEL TYPE, AND RETURN ONLY THOSE FUEL TYPES WITH AN AVERAGE HORSEPOWER ABOVE 150.

```
select avg(hp) as Avg_HP, fuel  
from car  
group by fuel  
having Avg_HP > 150  
order by Avg_HP desc;
```

result Grid | Filter Rows:

Avg_HP	fuel
214.2830	Electric/Diesel
170.2185	Electric/Gasoline
154.0000	Hydrogen
152.9430	Diesel

IDENTIFY ALL CARS THAT HAVE A PRICE LOWER THAN THE AVERAGE PRICE OF THEIR RESPECTIVE MAKE.

```
select avg(hp) as Avg_HP, fuel  
from car  
group by fuel  
having Avg_HP > 150  
order by Avg_HP desc;
```

mileage	make	model	fuel	gear	offerType	price	hp	year
235000	BMW	BMW	Diesel	Manual	Used	6800	116	2011
92800	Volkswagen	Golf	Gasoline	Manual	Used	6877	122	2011
149300	SEAT	Exeo	Gasoline	Manual	Used	6900	160	2011
96200	Renault	Megane	Gasoline	Manual	Used	6950	110	2011
156000	Peugeot	308	Gasoline	Manual	Used	6950	156	2011
147000	Toyota	Auris	Electric/Gasoline	Automatic	Used	6950	99	2011
91894	Renault	Scenic	Diesel	Manual	Used	6970	131	2011
127500	Opel	Zafira	Gasoline	Manual	Used	6972	116	2011
115000	Mazda	3	Gasoline	Automatic	Used	6980	150	2011
104	Ford	Transit	Diesel	Manual	Used	6990	86	2011
59580	Opel	Meriva	Diesel	Automatic	Used	6990	101	2011
84000	Volkswagen	Golf	Gasoline	Manual	Used	6990	105	2011
427000	Mercedes...	E 250	Diesel	Automatic	Used	6990	204	2011

IDENTIFY THE MAKE AND MODEL OF THE CAR WITH THE HIGHEST MILEAGE IN THE DATASET.

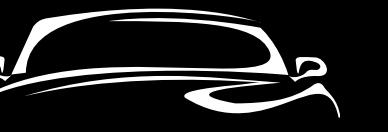
```
WITH ranked_cars AS (
    SELECT
        make,
        model,
        year,
        ROW_NUMBER() OVER (PARTITION BY make ORDER BY year DESC) AS row_num
    FROM
        car
)
SELECT
    make,
    model,
    year
FROM
    ranked_cars
WHERE
    row_num = 1;
```

	make	model	year
	9ff		2018
▶	Abarth	595C	2021
	Aixam	City	2021
	Alfa	Romeo Stelvio	2021
	Alpina	B3	2021
	Alpine		2021
	Aston	Martin V8	2021
	Audi	Q2	2021
	Baic		2018
	Bentley	Flying Spur	2021
	BMW	218	2021
	Brilliance	BS4	2011
	Cadillac	XT4	2021

THANK YOU

IN CONCLUSION, THE DATASET PROVIDES A COMPREHENSIVE VIEW OF CAR SALES, ALLOWING FOR DETAILED ANALYSIS OF KEY FACTORS LIKE PRICING, MILEAGE, HORSEPOWER, AND MORE. THIS DATA CAN HELP INFORM BETTER DECISION-MAKING, OPTIMIZE SALES STRATEGIES, AND ENHANCE UNDERSTANDING OF MARKET TRENDS IN THE AUTOMOTIVE INDUSTRY.





**SEE YOU IN
NEXT PROJECT**

-MUKESH BHATT