



```
-- Car category (SUV > 4 doors, Sedan = Doors, or Coupe < 4 doors)
-- This query categorises used car by type based on doors.
```

```
SELECT Id, Fuel_Type, Doors,
       CASE
         WHEN Doors > 4 THEN 'SUV'
         WHEN Doors = 4 THEN 'Sedans'
         WHEN Doors < 4 THEN 'Coupe'
         ELSE 'UNKNOWN' END AS CarType
```

```
FROM
[dbo].[ToyotaCorolla$]
ORDER BY Doors;
```

```
--What's the average Quarterly tax of sold used cars
```

```
SELECT Model, AVG(Quarterly_Tax) Average_car_tax
FROM
[dbo].[ToyotaCorolla$]
GROUP BY Model
ORDER BY Average_car_tax Desc;
```

```
-- What's the Age of the most expensive used car that's automatic in the dealership?
```

```
SELECT [Age_since_Aug 2004] AS Car_Age, MAX(Price) as Car_price
FROM
[dbo].[ToyotaCorolla$]
WHERE Automatic = 1
GROUP BY Model, [Age_since_Aug 2004]
ORDER BY Car_price DESC;
```

```
-- What's the oldest used car sold at the dealership?
```

```
SELECT Model, MAX([Age_since_Aug 2004]) AS Car_age
FROM
[dbo].[ToyotaCorolla$]
GROUP BY Model
ORDER BY Car_age Desc
;
```

USED CAR REPORT

About the Dataset

The total number of records in the dataset is 1436 cars. Description of each of variables is as below:

Column Description

Id: Unique identifier for each car entry.

Model: The model name of the Toyota Corolla.

Price: The selling price of the used car.

Age_since_Aug_2004: The age of the car in months as of August 2004.

Mfg_Month: The manufacturing month of the car.

Mfg_Year: The manufacturing year of the car.

KiloMeter: The number of kilometers the car has been driven.

Fuel_type: The type of fuel the car uses (e.g., Petrol, Diesel).

HorsePower: Horsepower, a measure of the engine's power.

Metallic_paint: Binary indicator for metallic paint (0 = No, 1 = Yes).

Color: The exterior color of the car.

Automatic: Binary indicator for automatic transmission (0 = No, 1 = Yes).

CC: Engine size in cubic centimeters.

Doors: Number of doors on the car.

Cylinders: Number of cylinders in the engine.

Gears: Number of gears in the transmission.

Quarterly: Quarterly tax for the car.

Weight: Weight of the car.

Mfr_Guarantee: Binary indicator for manufacturer's guarantee (0 = No, 1 = Yes).

BOVAG_Guarantee: Binary indicator for BOVAG guarantee (0 = No, 1 = Yes).

Guarantee_Period: Duration of the guarantee in months.

ABS: Binary indicator for Anti-lock Braking System (0 = No, 1 = Yes).

Airbag_1: Binary indicator for the presence of Airbag 1 (0 = No, 1 = Yes).

Airbag_2: Binary indicator for the presence of Airbag 2 (0 = No, 1 = Yes).

AirCond: Binary indicator for air conditioning (0 = No, 1 = Yes).

Automatic_airco: Binary indicator for automatic air conditioning (0 = No, 1 = Yes).

Boardcomputer: Binary indicator for a board computer (0 = No, 1 = Yes).

CD_Player: Binary indicator for the presence of a CD player (0 = No, 1 = Yes).

Central_Lock: Binary indicator for central locking system (0 = No, 1 = Yes).

Powered_Windows: Binary indicator for powered windows (0 = No, 1 = Yes).

Power_Steering: Binary indicator for power steering (0 = No, 1 = Yes).

Radio: Binary indicator for a radio (0 = No, 1 = Yes).

Mistlamps: Binary indicator for mist lamps (0 = No, 1 = Yes).

Sport_Model: Binary indicator for a sport model (0 = No, 1 = Yes).

Backseat_Divider: Binary indicator for a backseat divider (0 = No, 1 = Yes).

Metallic_Rim: Binary indicator for metallic rims (0 = No, 1 = Yes).

Radio_cassette: Binary indicator for a radio cassette player (0 = No, 1 = Yes).

Parking_Assistant: Binary indicator for a parking assistant (0 = No, 1 = Yes).

Tow_Bar: Binary indicator for the presence of a tow bar (0 = No, 1 = Yes).

Problem questions

1. What are the key factors influencing the pricing of used cars?
 - This question explores the various elements that contribute to the **pricing** of used cars, including factors like **age**, **mileage**, condition, and market demand.

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Primary KPIs

s

- Manufacturing Year
- Manufacturing Month
- Car Age
- Car mileage
- Quarterly Tax
- Doors