Dataset:

https://www.kaggle.com/datasets/tawfikelmetwally/automobile-dataset

Here is the breakdown of data set columns

Column name	Description
Name	Name of the car
mpg	Miles per gallon
cylinder	Number of engine cylinders
displacement	Engine size in cubic inches
horsepower	Engine power output
weight	Weight of the car
acceleration	Time Taken to go from 0 to 60 kmph
Model year	Year of the car(last two digits)
origin	Country of origin(usa,europe,japan)

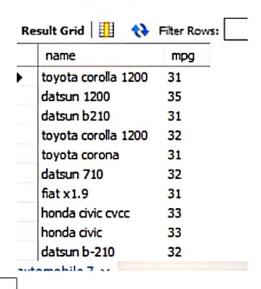
1.Get all cars with mileage above 30 mpg

useful for identifying economical cars

select name,mpg

from automobile

where mpg>30;



2. Find average horse power for each origin

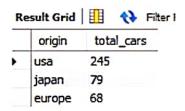
It calculate the average engine horse power by region. Helpful to compare engineering trends I region

select Origin,avg(horsepower) as avg_horsepower from automobile group by Origin;



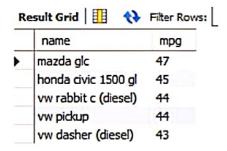
3. Count the number of cars from each origin

select origin, count(*)as total_cars from automobile group by origin;



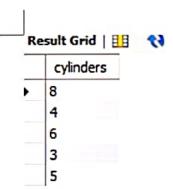
4. Find the top 5most fuel-efficient cars

This query is useful to rank the cars by fuel efficiency. Useful for eco-conscious buyers select name,mpg from automobile order by mpg desc limit 5;



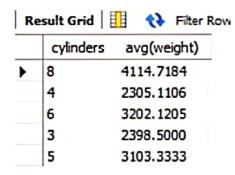
5.List distinct cylinder counts in the dataset

This query is useful to find variety of engine cylinder types used select distinct cylinders from automobile;



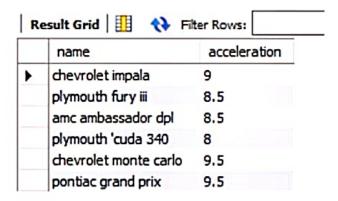
6. Find the average weight by number of cylinders

This query is useful to find Heavier cars, it shows weight distribution per engine cars select cylinders, avg(weight) from automobile group by cylinders;



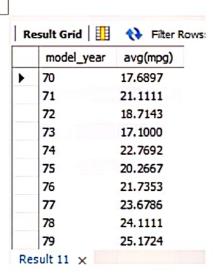
7. Find all cars with acceleration below 10 seconds

select name, acceleration from automobile where acceleration<10;



8.Get model years with the highest average mpg

select model_year,avg(mpg) from automobile group by model_year;



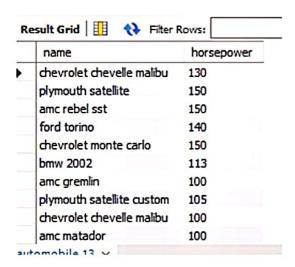
9. Find the heaviest car in the dataset

select name, weight from automobile order by weight desc limit 1;



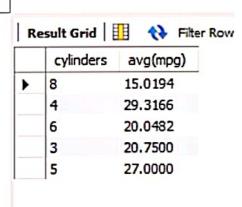
10.List cars with horsepower between 100 and 150

this query is useful to find cars with moderate power neither too weak nor too strong select name, horsepower from automobile where horsepower between 100 and 150;



11. Show the average mpg by numberbof cylinders

select cylinders, avg(mpg) from automobile group by cylinders;



12.Find all cars manufactured in 1975

select name,model_year from automobile where model_year=75;

