## **Predicting Car Prices Based on Different Features**

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#### **Problem Statement:**

In the automotive industry, accurately predicting car prices is crucial for both buyers and sellers. It aids in making informed decisions, understanding market trends, and identifying key features influencing the cost of vehicles. This project aims to build a machine learning model that can predict car prices based on various attributes, such as engine size, horsepower, and brand. By leveraging data-driven insights, we hope to enhance the transparency of car valuation and contribute to more efficient pricing strategies.

#### **Source of Dataset:**

The dataset used for this project was obtained from Kaggle and can be accessed here: <u>Car Price Prediction Dataset</u>.

### **Brief Description of the Dataset:**

This dataset contains information on various attributes of cars, along with their corresponding prices. It includes a variety of features, from technical specifications to design elements, which are commonly used to determine a car's market value. This data is essential for building a predictive model, allowing us to analyze relationships between features and their impact on pricing.

# **Description of Attributes/Variables:**

Attribute	Description
CarName	The model or name of the car.
fueltype	Type of fuel used by the car (e.g., gas, diesel).
aspiration	Engine aspiration type (e.g., turbo, standard).
doornumber	Number of doors in the car (e.g., two, four).
carbody	Style of the car's body (e.g., sedan,
	hatchback).
drivewheel	Type of drivetrain (e.g., front-wheel drive,
	rear-wheel drive).
enginelocation	Position of the engine in the car (e.g., front,
	rear).
enginesize	Engine displacement in cubic centimeters.
horsepower	Engine power output, measured in
	horsepower.
price	Price of the car (target variable).