
🚗 Car Sales Analysis – Executive Summary

📖 Introduction

This project presents a comprehensive analysis of car sales data using SQL. The goal was to uncover key trends, pricing patterns, and popular car models to provide actionable insights for dealerships and automotive businesses.

🎯 Objectives

- Analyze car sales trends across states and time periods
- Identify top-selling car brands and models
- Explore average selling prices across different locations
- Examine seasonal sales patterns and anomalies

📌 Key Insights

- **California** recorded the highest number of car sales, followed by **Texas**.
- The **Infiniti G Sedan** emerged as the most popular model, with **BMW 3 Series** taking second place.
- Average selling prices were highest in **Quebec** and **Tennessee**.
- **December** and **January** were the peak sales months, highlighting seasonal demand.
- Several vehicles sold above their model's average price, indicating strong demand or premium condition.

💡 Recommendations

- **Prioritize inventory** in high-sales states like California and Texas
- **Time marketing campaigns** for December and January to leverage peak demand
- **Feature high-demand models**, such as Infiniti G Sedan, in advertisements and promotions
- **Offer premium packages** in markets with higher average selling prices
- **Analyze characteristics** of vehicles sold above average (e.g. condition, mileage, trim) to replicate success

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🛠️ Tools & Techniques

- **SQL (MySQL):** Data cleaning, aggregation, window functions
- Exploratory data analysis (EDA) and trend identification techniques