**PROJECT OBJECTIVE:**

The primary objective of this project is to **design, develop, and implement a dynamic and interactive Car Sales Dashboard using Microsoft Power BI**. This dashboard aims to serve as a comprehensive analytical tool for visualizing, monitoring, and analyzing key performance indicators (KPIs) related to car sales data.

The goal is to transform raw sales data into meaningful and actionable insights by leveraging the powerful data visualization and business intelligence capabilities of Power BI. The dashboard will provide a centralized platform to track and analyze various aspects of sales performance over time, including but not limited to total sales revenue, sales volume by car model, regional performance, monthly or quarterly trends, customer demographics, and salesperson performance.

By implementing interactive visuals such as bar charts, line graphs, pie charts, slicers, and filters, the dashboard will allow users to drill down into specific segments and dynamically explore the data. This interactivity will enhance the user experience and make it easier for stakeholders to identify trends, uncover hidden patterns, and spot areas that require attention or improvement.

The ultimate aim of this project is to empower the sales team, management, and decision-makers with real-time insights and data-driven evidence to support strategic planning, optimize sales strategies, and improve overall business performance.

**Problem Statement 1: KPI’s Requirement**

The dashboard should provide real-time insights into key performance indicators (KPIs) related to our sales data. This will enable us to make informed decisions, monitor our progress, and identify trends and opportunities for growth.

1. **Sales Overview:**

• Year-to-Date (YTD) Total Sales

• Month-to-Date (MTD) Total Sales

• Year-over-Year (YOY) Growth in Total Sales

• Difference between YTD Sales and Previous Year-to-Date (PTYD) Sales

1. **Average Price Analysis:**

• YTD Average Price

• MTD Average Price

• YOY Growth in Average Price

• Difference between YTD Average Price and PTYD Average Price

1. **Cars Sold Metrics:**

• YTD Cars Sold

• MTD Cars Sold

• YOY Growth in Cars Sold

• Difference between YTD Cars Sold and PTYD Cars Sold

**Problem Statement 2: Charts Requirement**

1. **YTD Sales Weekly Trend:**

Display a line chart illustrating the weekly trend of YTD sales. The X-axis should represent weeks, and the Y-axis should show the total sales amount.

1. **YTD Total Sales by Body Style:**

Visualize the distribution of YTD total sales across different car body styles using a Pie chart.

1. **YTD Total Sales by Color**:

Present the contribution of various car colors to the YTD total sales through a pie chart.

1. **YTD Cars Sold by Dealer Region:**

Showcase the YTD sales data based on different dealer regions using a map chart to visualize the sales distribution geographically.

1. **Company-Wise Sales Trend in Grid Form:**

Provide a tabular grid that displays the sales trend for each company. The grid should showcase the company name along with their YTD sales figures.

1. **Details Grid Showing All Car Sales Information:**

Create a detailed grid that presents all relevant information for each car sale, including car model, body style, color, sales amount, dealer region, date, etc.