SHORT REPORT

Vehicle Sales Data Analysis :

Dataset Description

The dataset used in this project is sourced from Kaggle: Vehicle Sales Data. It contains **vehicle sales records** with 16 columns and thousands of entries.
Key columns include:

- year: Manufacturing year of the vehicle
- make: Brand (e.g., Toyota, Ford)
- model, trim, body: Vehicle details
- transmission: Gear type
- condition: Vehicle condition score (1-5)
- odometer: Distance traveled
- sellingprice: Final selling price
- saledate: Date of sale

Key Findings

- **Average Selling Price**: ₹11,012.92
- **Most Common Brand**: Ford
- **Most Frequent Transmission**: Automatic
- **Top 10 Car Brands** (by count): Ford, Chevrolet, Toyota, Nissan, etc.
- **Years with Highest Sales Volume**: 2015–2017

Insights from Visualizations

1. Distribution of Selling Prices

- Most vehicles are sold for less than ₹20,000.
- There's a small number of high-priced vehicles indicating luxury or newer models.

2. Top 10 Car Brands

- Ford, Chevrolet, and Toyota dominate the dataset.
- These are likely the most in-demand or widely available brands in the dataset region.

3. Average Selling Price Over Years

- Older models have lower average prices.
- Newer models (2016–2020) see a sharp price increase, reflecting depreciation trends.

4. Selling Price vs Condition

- Vehicles with better condition (closer to 5) tend to fetch higher prices.
- There's a visible spread even among high-condition cars, suggesting brand/model influence.

5. Selling Price by Transmission

- Automatic cars generally command higher selling prices.
- Manual transmission cars tend to cluster at lower prices.

Tools Used

- Python 3 (Jupyter Notebook)
- Libraries: Pandas, NumPy, Matplotlib, Seaborn