**Vehicle Attributes and Emissions Dataset**

**About Dataset (**filename: FuelConsumption.csv)

The "Vehicle Attributes and Emissions Dataset" contains comprehensive information on various vehicles manufactured in the year 2000. It includes details such as make, model, vehicle class, engine size, cylinder count, transmission type, and fuel type. Additionally, the dataset provides ranges for fuel consumption and CO2 emissions, offering insights into the environmental impact of each vehicle. The dataset encompasses a wide range of vehicle types, from compact to mid-size, and includes both conventional and high-performance models. With this information, analysts and researchers can study trends in vehicle characteristics, fuel efficiency, and emissions. This dataset serves as a valuable resource for understanding the automotive landscape and informing discussions on environmental sustainability and transportation policies.

**Year** - Indicates the year of manufacture for the vehicles in the dataset.

**MAKE -** Represents the brand or manufacturer of the vehicle, such as Acura, Audi, BMW, etc.

**MODEL -** Specifies the specific model of the vehicle produced by the manufacturer, for example, A4, 323Ci, NSX, etc.

**VEHICLE CLASS -** Categorizes the vehicles into different classes based on their size and intended use, such as compact, mid-size, subcompact, etc.

**ENGINE SIZE -** Denotes the volume of the engine in liters, providing information about the capacity of the vehicle's powerplant.

**CYLINDERS-** Indicates the number of cylinders present in the vehicle's engine, providing insights into its design and performance characteristics.

**TRANSMISSION -** Specifies the type of transmission system used in the vehicle, such as automatic (A4, AS5) or manual (M5, M6).

**FUEL -** Identifies the type of fuel used by the vehicle, which could be represented by codes such as "X" or "Z", or unspecified "Other" categories.

**FUEL CONSUMPTION -** Presents ranges indicating the amount of fuel consumed by the vehicle over a given distance, providing insights into its efficiency.

**COEMISSIONS -** Provides ranges representing the quantity of carbon dioxide emitted by the vehicle, helping to evaluate its environmental impact.

**Target Var: (Please run 2 models as below)**

Use “**COEMISSIONS**” as target variable and run a regression model

Use “**FUEL CONSUMPTION**” as target variable and run another regression model

**Walmart Sales Dataset**

File name: **Walmart\_Sales.csv**

The dataset Walmart Sales contains information about weekly sales in different stores along with various other features. Here's a brief description of the dataset:

* **Store**: The store number.
* **Date**: The date of the sales data.
* **Weekly\_Sales**: The total sales for the week.
* **Holiday\_Flag**: A binary flag indicating whether the week includes a holiday (1) or not (0).
* **Temperature**: The temperature on the date of sales.
* **Fuel\_Price**: The fuel price on the date of sales.
* **CPI**: The Consumer Price Index on the date of sales.
* **Unemployment**: The unemployment rate on the date of sales.

**Target variable**: Weekly\_sales