**1. Barplot Task:**

* **Task**: Create a bar plot showing the **average fuel consumption** in the **city** for each **vehicle class**.
* **Purpose**: To visualize how fuel efficiency in city driving varies by vehicle class.

**2. Count Plot Task:**

* **Task**: Use a count plot to show the **number of vehicles** for each **fuel type**.
* **Purpose**: To get a sense of the distribution of different fuel types in the dataset.
* **Purpose**: To examine how fuel consumption impacts CO2 emissions.

**3. Count Plot Task with Hue:**

* **Task: Modify the above count plot to add the vehicle class as a hue to visualize how fuel type distribution varies by vehicle class.**
* **Purpose: To explore the relationship between fuel type and vehicle class.**

**4. Color Palette Task:**

* **Task: Customize the color palette for any of the previous plots using sns.color\_palette() or palette='color\_name'.**
* **Purpose: To give students experience with customizing plot aesthetics using color palettes.**

**5. Box Plot Task:**

* **Task: Create a box plot showing the distribution of CO2 emissions for each vehicle class.**
* **Purpose: To examine the spread and potential outliers in CO2 emissions across different vehicle types.**

**6. Box Plot with Hue Task:**

* **Task**: Create a box plot showing the **distribution of engine size** for each **fuel type**, with **vehicle class** as the hue.
* **Purpose**: To visualize the spread of engine sizes across fuel types while adding an extra dimension of vehicle class.

**7. Advanced Bar Plot Task (Stacked Bar):**

* **Task**: Plot a bar plot with **vehicle class** on the x-axis and **fuel consumption in city** on the y-axis, using different **fuel types** as the hue.
* **Purpose**: To explore the fuel consumption across vehicle classes and fuel types.

**8. Box Plot for Outlier Detection:**

* Explore the **box plot** for identifying outliers in **CO2 emissions** for different **fuel types**.