Task 4: Data Visualization

Objective

Understand the importance of **data visualization** and create visual stories using **Seaborn** and **Matplotlib**.
Visualization helps identify patterns, correlations, and outliers.

Implementation

- Create **bar, scatter, pie, and line charts**.
- Use **Seaborn** for aesthetic statistical plots.
- Label and customize charts with titles, legends, and annotations.

Sample Python Code

```
import seaborn as sns

import matplotlib.pyplot as plt

import pandas as pd

# Load example dataset

df = sns.load_dataset("tips")

# Scatter plot

sns.scatterplot(x="total_bill", y="tip", data=df)

plt.title("Total Bill vs Tip")

plt.show()

# Bar plot

sns.barplot(x="day", y="total_bill", data=df, palette="cool")

plt.title("Average Bill by Day")

plt.show()
```

Client Project

Visualize real or client-provided data to highlight key insights and patterns using Seaborn charts.