In-Class-Assigment1:

Data Storytelling Exercise: Uncovering Insights and Patterns

Assignment Type: Individual lab work

Weight: 5% , Time: In Class/ ...../

In this assignment, you will leverage your data analysis, visualization, and storytelling skills to uncover insights from a dataset. The goal is to analyze the dataset, identify meaningful patterns or trends, and create a compelling data story to communicate your findings effectively.

Objectives:

1. Conduct Exploratory Data Analysis (EDA) to understand the structure and characteristics of the dataset.

2. Identify key variables and relationships between variables using visualizations.

3. Develop a narrative that explains the insights uncovered from the data and their implications.

4. Create visualizations and data storytelling techniques to present your findings clearly and engagingly.

Tasks:

1. Exploratory Data Analysis (EDA):

- Explore the dataset to understand its features, data types, and missing values. Use attribute summary to identify any missing values or wrong values. Utilize Power BI visualization features to graphicly represent data

2. Variable Analysis:

- Identify key attributes of interest and explore their relationships using correlation analysis. Consider how these variables may impact each other and the overall dataset.

3. Insights Generation:

- Based on your analysis, identify interesting patterns, trends, or anomalies in the data.

4. Data Storytelling:

- Develop a narrative that explains the insights uncovered from the data. Structure your story in a logical sequence, starting with an introduction to the dataset and ending with conclusions and recommendations.
- Use visualizations such as charts, graphs, and maps to support your narrative and illustrate key points. Choose visualization techniques that effectively convey your findings and engage the audience.

Deliverables:

a) Submit a professional report (PDF) including at least:
    a. Data analysis report
    b. Detailed explanations of your solution including snippets of your source code.
    c. Your experience reflection
b) Power BI -Visualization report