Project Title: "Analyzing Student Performance Data"

Project Questions

1. **Data Collection**:
    - What data will you collect? (e.g., exam scores or hours studied)
    - How will you select your sample? Describe your sampling method.
    - How many students will you include in your sample?
2. **Data Organization**:
    - Create a table to display your data clearly, listing each student's score or hours studied.
3. **Calculating Measures**:
    - For your sample data, calculate:
        - **Mean**: What is the average score/hours studied?
        - **Median**: What is the middle value when the data is arranged in order?
        - **Mode**: Which score/hours studied appears most frequently?
    - What do these measures indicate about the data?
4. **Data Interpretation**:
    - What do the calculated measures tell you about your sample?
    - Were there any outliers in your data? If so, how did they affect the mean and median?
    - How might the measures of central tendency differ if you collected data from the entire class instead of a sample?
5. **Conclusion**:
    - Summarize your key findings and insights based on your analysis.
    - Reflect on what you learned about data analysis and the importance of central tendency.

Project Guidelines

1. **Data Collection**:
    - Use the following sample data for the project:
        - **Sample Data for Exam Scores** (out of 100):
            - 85, 90, 78, 88, 92, 70, 65, 95, 80, 75, 82, 84, 91, 89, 76
        - **Sample Data for Hours Studied** (per week):
            - 5, 10, 8, 6, 12, 4, 3, 9, 7, 11, 10, 5, 6, 8, 9
2. **Data Organization**:
    - Organize your data in a simple table format, listing the scores or hours studied for each student.
3. **Calculations**:
    - Show all calculations clearly, step by step, for mean, median, and mode.
    - Discuss how each measure is relevant to understanding the dataset.
4. **Report Writing**:

    - Write a brief report (1-2 pages) summarizing your findings, interpretations, and any patterns observed.
    - Include a section on what you learned about central tendency.
5. **Submission**:
    - Submit your report with calculations and findings by the project deadline.

Timeline

- **Submission**: 13/10/2024