Analysis Task

Task 1: Electricity Bill Generator

Create an Electricity Bill Generator web application to calculate the electricity bill for different types of consumers based on the units consumed.

The form should capture essential details like consumer number, name, consumer type (Household, Industrial, or Commercial), and the current and previous meter readings.

Requirements:

1. The application should calculate the units consumed by subtracting the previous reading from the current reading.
2. Apply a rate per unit that varies based on the consumer type and level of consumption:
   - Household: ₹2 per unit (≤ 100 units), ₹3 per unit (101-200 units), ₹4 per unit (> 200 units)
   - Industrial: ₹5 per unit (≤ 100 units), ₹6 per unit (101-200 units), ₹7 per unit (> 200 units)
   - Commercial: ₹8 per unit (≤ 100 units), ₹9 per unit (101-200 units), ₹10 per unit (> 200 units)
3. Calculate the total bill amount by multiplying the units consumed by the rate per unit according to the consumer type.
4. Add a 12% tax to the total bill amount to get the net bill amount.

Expected Output:

When the "Generate Bill" button is clicked, the bill details should appear on the page in a structured format. This should include:
- Consumer name and number
- Type of consumer
- Units consumed
- Rate per unit
- Current date
- Total bill amount (with tax included)

Task 2: Student Performance Analysis

You are tasked with analyzing student performance data to determine scholarship eligibility. You receive a list of students, where each student is represented as an array containing their name, age, and scores in three subjects (Math, English, and Science).

Eligibility Criteria:

1. Age: The student must be 18 years or older.
2. Subject Scores:
   - Science Score: Must be 50 or above.
   - English Score: Must be at least 60.
3. Overall Average: To be eligible, the student's average score across all three subjects must be at least 70.

Tasks:

1. Filter Eligible Students: Identify students who meet all the eligibility criteria.
2. Calculate Average Scores: Compute the average score for each eligible student across the three subjects. Round the averages to two decimal places.
3. Apply Additional Bonus Points: Add 5 bonus points to the average score of students who scored 90 or above in Math.
4. Rank Students: Rank the eligible students based on their adjusted average scores in descending order.
5. Calculate the Total Sum: Calculate the total sum of the adjusted average scores of all eligible students.
6. Generate Summary Report: Display each student's name, their original average score, adjusted average score, and a scholarship status indicator (✅ if the adjusted average is 80 or more, ❌ otherwise).