Scenario 1: Sales Data Analysis

Questions:

1. **Filter and Sort Data**:

   o   Sort the data by "Region" and "Revenue" in descending order.

   o   Filter to show only the sales data where more than 150 units were sold.

2. **Summarizing Data**:

   o   Using a **Pivot Table**, summarize the total revenue generated per region.

3. **Calculating Averages**:

   o   Calculate the average units sold for each product type using the **AVERAGEIF** function.

4. **Conditional Formatting**:

   o   Apply **conditional formatting** to highlight the rows where "Revenue" is greater than $5000.

5. **Data Validation**:

   o   Create a **dropdown list** for the "Region" column that allows only the values: North, South, East, and West.

Scenario 2: Employee Attendance Tracking

You are maintaining an employee attendance sheet for a month. The columns are Employee Name, Date, and Status (Present/Absent).

Questions:

1. **Count Absent Days**:

   o   Use the **COUNTIF** function to count how many days each employee was absent.

2. **Conditional Formatting**:

   o   Apply a rule to highlight the names of employees who were absent for more than 3 days in the month.

3. **Attendance Summary**:

   o   Create a **Pivot Table** to display the total number of days present for each employee.

4. **Date Functions**:

   o   Use the **NETWORKDAYS** function to calculate the number of working days in the month (excluding weekends).

Scenario 3: Budget vs Actual Expense

You have two columns of data: **Budgeted Expense** and **Actual Expense**. Your goal is to analyze the performance of a project.

Questions:

1. **Conditional Formatting**:
   - Highlight the cells in the column where actual expenses exceed the budgeted amount.

2. **Sum of Actual Expenses**:
   - Use the **SUMIF** function to calculate the total actual expenses for only those items where the variance is negative (i.e., over budget).

3. **Charts**:
   - Create a **bar chart** that compares the budgeted and actual expenses.

Scenario 4: Data Cleaning

You are given a customer dataset with the following columns: **Name**, **Email**, **Phone Number**, and **Address**. Some names have extra spaces, some email IDs are in uppercase, and some phone numbers contain formatting issues.

Questions:

1. **Removing Extra Spaces**:
   - Use the **TRIM** function to clean up any extra spaces in the "Name" column.

2. **Correcting Email Format**:
   - Convert all the email addresses to lowercase using the **LOWER** function.

3. **Phone Number Formatting**:
   - Use **TEXT** functions to ensure that all phone numbers are in a standard format (e.g., (XXX) XXX-XXXX).

4. **Duplicate Removal**:
   - Identify and remove any duplicate entries based on the "Email" column.