**Python (Jupyter Notebook) Tasks:**

1. **Data Cleaning:**
   * Handle missing values using Pandas.
   * Detect and remove duplicates.
2. **Exploratory Data Analysis (EDA):**
   * Use Pandas, NumPy, Matplotlib, and Seaborn to visualize key metrics (sales, profit, category distribution).
   * Perform univariate, bivariate, and multivariate analysis.
3. **Normalization & Feature Engineering:**
   * Normalize numeric columns (e.g., sales, profit) using Scikit-Learn's MinMaxScaler or StandardScaler.
   * Create new features such as Profit Ratio or Sales per State.
4. **Statistical Analysis:**
   * Sales differences across regions
5. **Save CSV Files:**
   * Save intermediate processed data or model predictions to CSV files.

**Power BI Tasks:**

1. **Data Import & Query Editor:**
   * Import the dataset and transform it using Power Query Editor (e.g., data type correction, creating new columns like month/year from date).
   * Utilize Power BI's Python integration to run Python scripts for more advanced processing.
2. **Visualizations:**
   * Create a dashboard displaying KPIs like Total Sales, Average Profit, Regional Performance, etc.
   * Use slicers and filters to drill down into product categories, states, and time periods.
3. **Interactive Dashboard:**
   * Design an interactive dashboard to summarize sales performance with visuals like maps, bar charts, and treemaps.

**Excel Tasks:**

1. **Functions and Formulas:**
   * Use SUMIF(), COUNTIF(), VLOOKUP(), INDEX MATCH() to create summaries.
   * Create pivot tables to analyze sales data by regions and products.
2. **Data Validation:**
   * Set up dropdowns for filtering salespeople or regions.
3. **Conditional Formatting:**
   * Highlight the top/bottom 10% sales and profit performers.

**SQL (PostgreSQL using pgAdmin):**

1. **Basic Queries:**
   * Select, filter, and sort data (e.g., list the top 10 highest-grossing products).
2. **Aggregations and Grouping:**
   * Calculate total sales per category, region.
   * Use window functions like ROW\_NUMBER() to rank customers by sales volume.
3. **Advanced SQL:**
   * Perform subqueries and CTEs (Common Table Expressions).
   * Create views to summarize sales data.
4. **Database Normalization:**
   * Normalize the dataset into multiple tables like Products, Customers, and Sales to reduce redundancy.