Data Analyst Task Sheet

Business Objective

As a top-tier software house, our goal is to help our client (a superstore owner) maximize profit, optimize operations, and improve customer satisfaction using data-driven insights from the provided sales dataset.

Tools & Environment

- Python (Pandas, Seaborn, Matplotlib)

- Jupyter Notebook / Google Colab

- Excel for validation (optional)

- PowerBI for final presentation

Tasks to Perform (End-to-End)

1. Data Understanding & Cleaning:

- Load and explore the dataset

- Handle missing values (Postal Code)

- Convert date columns to datetime format

- Remove duplicates if any

2. Exploratory Data Analysis (EDA):

- Summary stats of Sales, Categories, Regions, etc.

- Correlation between sales and other metrics

- Trend analysis over time

3. Business KPIs to Analyze:

- Top-performing products and categories

- Sales by Region, State, and City

- Monthly/Quarterly sales trend

4. Customer Analysis:
    -Top 5 High-value customers and most frequent customers.

5. Profitability Analysis

    -Suggest areas for cost reduction.

6. Product Insights:

- Most returned products (if return info is added later)

- Least and most popular products.

7. Visualization:

- Bar plots, Heatmaps, Time series plots

- Pie charts or stacked bars for category shares

8. Recommendation Report:

- What should the business keep doing?

- What should the business stop or change?

- New sales strategies based on data insights

Final Deliverables

- Cleaned dataset (CSV/XLSX)

- Google Colab file with full code.

- PowerBI dashboard summarizing insights and recommendations

- Recommendation Report.