# **Business Analyst Task**

Please find data needed for the task attached with Dataset Description pdf to better understand the data.

## 1. Data Analysis Exercise:

You are provided with a dataset containing. Analyze the data and provide insights on:

- Monthly sales trends.
- Identify any seasonality patterns.
- Top-selling products and categories.

#### 2. Dashboard Creation:

Using the provided dataset, create a comprehensive dashboard using Microsoft Power BI Or any other tool you prefer The dashboard should include visualizations for:

- Monthly and weekly sales trends.
- Customer retention metrics.
- Inventory status and restocking needs.

## 3. SQL Proficiency Test:

You are given a database. Write SQL queries to:

- Retrieve the total sales for each product category.
- Identify customers who made purchases in the last month.
- Calculate the average order value.

#### 4. Problem-Solving Case Study:

Review a case study on challenges in managing inventory for products. Develop a written plan outlining how you would address the following issues:

- Identify factors causing fluctuations in inventory levels.
- Propose data-driven strategies to optimize restocking processes.
- Suggest methods to reduce aging and overstocked products.
- Analyze the impact of your proposed solutions on sales and customer satisfaction.

#### **Submission Guidelines:**

- Submit all code and files in a compressed folder
- Include a README file or PDF with instructions on how to run, test your code and any additional notes if needed