# Data Analysis Assignment

## Objective:

To perform various data analysis tasks on the cleaned financial dataset using Excel.

## Analysis Tasks:

### 1. Transaction Type Analysis:

You are a financial analyst for a company that processes various types of transactions. To better understand your business operations, you need to analyze the distribution of transaction types (e.g., Credit, Debit, Transfer, Payment) to determine which type occurs most frequently. This information will help you allocate resources and improve transaction processing efficiency.

### 2. Merchant Performance Analysis:

As part of your role in merchant relationship management, you need to identify which merchants contribute the most to your company's transaction volume. By analyzing the total transaction amounts for each merchant, you can focus on nurturing relationships with top-performing merchants and strategize how to increase transaction volumes with them.

### 3. High-Risk Transaction Identification:

Fraud prevention is critical to your company's financial security. You need to identify high-risk transactions that have a high probability of being fraudulent. By flagging transactions with a FraudScore greater than 80 and counting them, you can monitor and take proactive measures to mitigate potential fraud, protecting both your company and its customers.

### 4. Customer Age Distribution:

In your role as a marketing analyst, understanding the age distribution of your customer base is essential for designing targeted marketing campaigns. By analyzing the age distribution, you can segment your customers into different age groups and tailor marketing efforts to appeal to the specific preferences and needs of each group, ultimately increasing engagement and sales.

### 5. Monthly Transaction Trends:

As part of financial planning and analysis, you need to examine the trends in transaction amounts over time. By identifying monthly transaction trends, you can forecast future sales, manage cash flow more effectively, and make informed decisions about budget allocations. Understanding these trends will also help you identify seasonal patterns and adjust your strategies accordingly.

## Submission:

Submit the Excel file with the analysis tasks completed.  
Include charts and visualizations within the Excel file.  
Document any insights or observations in a new sheet within the Excel file.