The dataset is from Kaggle

Data source: [Ecommerce Customer Churn Analysis and Prediction (kaggle.com)](https://www.kaggle.com/datasets/ankitverma2010/ecommerce-customer-churn-analysis-and-prediction/data)

Download the excel named: raw data

The content of data:

* CustomerID: Unique customer identifier, serving as a means to track and distinguish different customers.
* Churn: A binary flag indicating whether a customer has churned, providing a crucial target variable for predicting and analyzing factors contributing to customer departure.
* Tenure: Records the duration of a customer's service within the organization, crucial for understanding long-term customer loyalty and potential risks of departure.
* PreferredLoginDevice: Indicates the customer's preferred login device, aiding in understanding their usage preferences and behavior.
* SatisfactionScore: Measures customer satisfaction with the service, providing important insights into how customers perceive the brand or product.
* NumberOfDeviceRegistered: Records the total number of devices registered under a customer's name, potentially reflecting their activity across multiple platforms.
* PreferredPayment Mode: Reveals the customer's preference for payment methods, crucial for providing a more convenient shopping experience.
* CouponUsed and OrderCount: Provide information about customer coupon usage and order frequency in the previous month, essential for analyzing shopping behavior and the effectiveness of promotional strategies.
* DaySinceLastOrder: Records the number of days since the customer's last order, offering clues for predicting future shopping behavior.

And I copy the content of data to new excel sheet named 05 case study 1.

Project overview:

In a comprehensive data analytics project, SAS Enterprise Miner and Talend Data Preparation collaborate seamlessly to address distinct aspects of the data workflow. SAS Enterprise Miner takes the lead in advanced analytics and predictive modeling, offering tools for data exploration, preparation, and model building. Its scalability and integration capabilities make it suitable for large datasets, providing a robust environment for data scientists. On the other hand, Talend Data Preparation specializes in data cleansing, transformation, and integration tasks. With a user-friendly interface, Talend enables business users to participate in data preparation, fostering collaboration across technical and non-technical teams. The combined strengths of these tools create an end-to-end data pipeline, where Talend's efficiency in data integration complements SAS Enterprise Miner's advanced analytics capabilities. This collaboration not only streamlines the data analytics workflow but also ensures the seamless scalability and effectiveness of the entire project.

Objective:

By analyzing various factors, the customer churn rate is predicted