SQL Project: Bank Customer Analysis

Project Description:

Banking Intelligence aimed to develop a supervised machine learning model to predict future customer behaviors based on transactional data and product ownership characteristics. The central objective of the project was to create a denormalized table with a series of indicators derived from the available tables in the database, representing customer behaviors and financial activities. The goal was to build a feature table for training machine learning models by enriching customer data with various indicators calculated from their transactions and owned accounts. The final table was linked to the customer ID and contained both quantitative and qualitative information.

Key Responsibilities and Tasks:

1. **Data Collection:** I accessed and gathered data from existing tables in the database, which contained information about transactions, accounts, and products owned by customers.

2. **Data Cleaning and Preprocessing:** I used SQL to clean the data, handling missing values, removing duplicates, and normalizing data where necessary.

3. **Feature Engineering:** I created features derived from the existing tables.

4. **Creation of Denormalized Table:** I used SQL to join and aggregate data into a single, denormalized table that included all calculated features. This table served as input for machine learning models.

Outcome:

- Creation of a rich and informative feature table for training predictive models.

Tools and Technologies:

- MySQL for data manipulation and aggregation.