Introduction to SQL Programming

Data Science Project Deliverable

- Your deliverable will be an SQL script with your solution.

Instructions

Background Information and Problem Statement

Shoprity is a retail company that has operations in several African countries. The company focuses on providing retail services to small businesses as well as individual consumers. Recently the company's management is looking at the prospect of expanding the B2B sales and would like to task you as a Data Scientist to gather insights from data that the company has collected then inform them on how the company can increase B2B sales.

To get you started you look at the following questions then later provide your insights in an effort to answer the research question.

- Which branch had the highest gross income?
- Which branch was the top-rated?
- Which branch was the lowest-rated?
- Should the company spend more costs on advertising to normal clients or clients who are members?
- What type of products should the company focus on increasing sales?
- Should the company invest in their own payments systems if they are outsourcing all payment methods?

Remember: What matters the most is what your insights mean to the business. Make sure to have a section where you elaborate on how your analysis findings tie to your recommendations.

NB: You can use the following guiding script: [Link]

Dataset Information

You have been provided with the following retail dataset script.

Context

The growth of retail supermarkets in most populated cities is increasing and market competitions are also high. The dataset is one of the historical sales of supermarket company which has recorded in 3 different branches for 3 months data. Predictive data analytics methods are easy to apply with this dataset.

Attribute information

- **Invoice id:** Computer generated sales slip invoice identification number
- **Date:** Date of purchase (Record available from January 2019 to March 2019)
- **Time:** Purchase time (10 am to 9 pm)
- **Branch:** Branch of supercenter (3 branches are available identified by a, b and c).
- **City:** Location of supercenters
- **Customer type:** Type of customers, recorded by Members for customers using member card and Normal for without member card.
- **Gender:** Gender type of customer
- **Product line:** General item categorization groups - Electronic accessories, Fashion accessories, Food and beverages, Health and beauty, Home and Lifestyle, Sports and travel
- **Unit price:** Price of each product in $
- **Quantity**: Number of products purchased by the customer
- **Tax:** 5% tax fee for customer buying
- **Total:** Total price including tax
- **Payment:** Payment used by the customer for the purchase (3 methods are available – Cash, Debit Card and Mobile money)
- **COGS:** Cost of goods sold (USD)
- **Gross margin percentage:** Gross margin percentage
- **Gross income:** Gross income (USD)
- **Rating:** Customer stratification rating on their overall shopping experience (On a scale of 1 to 10)

Project Source: [Link]