**SQL CHALLENGE**

**In this challenge we will use a dataset that belongs to a retailer. You will create 3 tables, define the data types and the relationships and finally apply some queries that are like the ones we covered in the 3 Bootcamps. Follow the exact same sequence of the columns while you create the tables. First thing is to open the blank Database (*“SQL\_Challenge”*) that was provided to you and then start creating the tables. If you have any questions, please contact** [**trsmbootcamps@torontomu.ca**](mailto:trsmbootcamps@torontomu.ca)

**Data Source:** [**https://www.kaggle.com/datasets/bravehart101/sample-supermarket-dataset**](https://www.kaggle.com/datasets/bravehart101/sample-supermarket-dataset)

**1. CREATE TABLES**

**CREATE TABLE Customers (Make Customer\_ID as TEXT data Type and Primary Key. The other columns make the data type as TEXT**

**Customer\_ID**

**Name**

**Segment**

**City**

**State**

**Region**

**CREATE TABLE Orders (Make Order\_ID as Primary Key NOT NULL and Integer as data Type. For the columns Order\_Date, Ship\_Date, and Year\_Order use “DATE” as data Type . Ship\_Mode. Customer\_ID as text and references the column Customer\_ID from the table Customers**

**Order\_ID**

**Order\_Date**

**Ship\_Date**

**Ship\_Mode**

**Year\_Order**

**Customer\_ID TEXT REFERENCES Customers (Customer\_ID)**

**CREATE TABLE Sales(Product\_ID as Text. Make all non-numerical columns as Text data type. Sales\_Value, Quantity, Profit, and Order\_Code as Integer, Discount as DECIMAL(3,1)**

**Product\_ID TEXT**

**Category**

**Sub\_Category**

**Product\_Name**

**Sales\_Value**

**Quantity**

**Discount DECIMAL(3,1)**

**Profit**

**Order\_Code INTEGER REFERENCES Orders (Order\_ID)**

**Customer\_ID TEXT REFERENCES Customer (Customer\_ID)**

**2. IMPORT THE DATA**

**Once the Structure of the tables are created using the Data Definition Language (DDL). You will use the Import Data function in DBeaver to populate the tables (Customers, Orders, Sales) with the data from the CSV files provided.**

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**3. QUERIES**

**Please respond the following questions and save the results in a .sql file format**

**1. Calculate the Total Sales**

**2. Calculate total sales for each Category**

**3. Calculate the maximum and minimum Sales Value**

**4. Calculate the Total Profit for each category**

**5. Calculate the Average Discount for each Subcategory**

**5.1 List the top 3 Subcategories that have the highest discount values**

**6. Show all Regions and their Total Sales which region has higher Sales (Inner Join)**

**7. Find out the Category, Subcategory and Product name under the Order\_ID is 117121**

**8. What is the Subcategory that sells the most**

**9. Calculate the total number of orders by year**

**10. List the top 10 Customers, which purchased more furniture (include Customer\_ID, and the state where they reside)**