-- SQL Query to create and import data from csv files:

This file has SQL queries for creating a database having two tables that will hold the data. this database will be connected to the PowerBI like a real world scenario for creating a dashboard.

-- 0. Create a database

```
CREATE DATABASE creditcarddb;
USE creditcarddb;
```

-- 1. Create cc_detail table

```
CREATE TABLE cc_detail (
    Client_Num INT,
    Card_Category VARCHAR(20),
    Annual_Fees INT,
    Activation_30_Days INT,
    Customer_Acq_Cost INT,
    Week_Start_Date DATE,
    Week_Num VARCHAR(20),
    Qtr VARCHAR(10),
    current_year INT,
    Credit_Limit DECIMAL(10,2),
    Total_Revolving_Bal INT,
    Total_Trans_Amt INT,
    Total_Trans_Ct INT,
    Avg_Utilization_Ratio DECIMAL(10,3),
    Use_Chip VARCHAR(10),
```

```sql
    Exp_Type VARCHAR(50),

    Interest_Earned DECIMAL(10,3),

    Delinquent_Acc VARCHAR(5)
);
```

-- 2. Create cc_detail table

```sql
CREATE TABLE cust_detail (

    Client_Num INT,

    Customer_Age INT,

    Gender VARCHAR(5),

    Dependent_Count INT,

    Education_Level VARCHAR(50),

    Marital_Status VARCHAR(20),

    State_cd VARCHAR(50),

    Zipcode VARCHAR(20),

    Car_Owner VARCHAR(5),

    House_Owner VARCHAR(5),

    Personal_Loan VARCHAR(5),

    Contact VARCHAR(50),

    Customer_Job VARCHAR(50),

    Income INT,

    Cust_Satisfaction_Score INT
);
```

-- 3. Copy csv data into SQL (remember to update the file name and file location in below query)

-- 3.1 Copy cc_detail table:

```sql
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/credit_card.csv'

INTO TABLE cc_detail

FIELDS TERMINATED BY ','

ENCLOSED BY '"'

LINES TERMINATED BY '\n'

IGNORE 1 ROWS

(

Client_Num,

Card_Category,

Annual_Fees,

Activation_30_Days,

Customer_Acq_Cost,

@Week_Start_Date,

Week_Num,

Qtr,

current_year,

Credit_Limit,

Total_Revolving_Bal,

Total_Trans_Amt,

Total_Trans_Ct,

Avg_Utilization_Ratio,

Use_Chip,

Exp_Type,
```

Interest_Earned,

Delinquent_Acc

)

SET Week_Start_Date = STR_TO_DATE(@Week_Start_Date, '%d-%m-%Y');

This is the correct querry for the task. As direct copy will throw an error for date formatting.

👉 Your CSV date format = DD-MM-YYYY

👉 MySQL DATE format = YYYY-MM-DD

MySQL expects: 2023-01-01

but your file has: 01-01-2023

-- 3.2 Copy cust_detail table:


```
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/customer.csv'

INTO TABLE cust_detail

FIELDS TERMINATED BY ','

ENCLOSED BY '"'

LINES TERMINATED BY '\n'

IGNORE 1 ROWS;
```


-- 4. Insert additional data into SQL, using same COPY function

Since we have 2 separate file for both the tables cc_detail and cust_detail we will also insert that data to the respective tables.

-- 4.1 Copy cc_add table:

```
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/cc_add.csv'

INTO TABLE cc_detail

FIELDS TERMINATED BY ','

ENCLOSED BY '"'

LINES TERMINATED BY '\n'

IGNORE 1 ROWS

(

Client_Num,

Card_Category,

Annual_Fees,

Activation_30_Days,

Customer_Acq_Cost,

@Week_Start_Date,

Week_Num,

Qtr,

current_year,

Credit_Limit,

Total_Revolving_Bal,

Total_Trans_Amt,

Total_Trans_Ct,

Avg_Utilization_Ratio,

Use_Chip,

Exp_Type,

Interest_Earned,

Delinquent_Acc

)
```

SET Week_Start_Date = STR_TO_DATE(@Week_Start_Date, '%d-%m-%Y');

-- 4.2 Copy cust_add table:

LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/cust_add.csv'

INTO TABLE cust_detail

FIELDS TERMINATED BY ','

ENCLOSED BY '"'

LINES TERMINATED BY '\n'

IGNORE 1 ROWS;