SQL Queries:

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

-- 0. Create a database
CREATE DATABASE ccdb;

-- 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),
    Exp_Type VARCHAR(50),
    Interest_Earned DECIMAL(10,3),
    Delinquent_Acc VARCHAR(5)
);
```

-- 2. Create cc_detail table

```
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)

-- copy cc_detail table

```
COPY cc_detail
FROM 'D:\credit_card.csv'
DELIMITER ','
CSV HEADER;
```

-- copy cust_detail table

```
COPY cust_detail
FROM 'D:\customer.csv'
DELIMITER ','
CSV HEADER;
```

-- If you are getting below error, then use the below point:
  -- ERROR: date/time field value out of range: "0"
  -- HINT: Perhaps you need a different "datestyle" setting.

-- Check the Data in Your CSV File: Ensure date column values are formatted correctly and are in a valid format that PostgreSQL can recognize (e.g., YYYY-MM-DD). And correct any incorrect or missing date values in the CSV file.
  -- or
-- Update the Datestyle Setting: Set the datestyle explicitly for your session using the following command:
```
SET datestyle TO 'ISO, DMY';
```

-- Now, try to COPY the csv files!

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

-- copy additional data (week-53) in cc_detail table

```
COPY cc_detail
FROM 'D:\cc_add.csv'
DELIMITER ','
```

CSV HEADER;

-- copy additional data (week-53) in cust_detail table (remember to update the file name and file location in below query)

COPY cust_detail
FROM 'D:\cust_add.csv'
DELIMITER ','
CSV HEADER;

DAX Queries:

AgeGroup = SWITCH(
TRUE(),
'public cust_detail'[customer_age] < 30, "20-30",
'public cust_detail'[customer_age] >= 30 && 'public cust_detail'[customer_age] < 40, "30-40",
'public cust_detail'[customer_age] >= 40 && 'public cust_detail'[customer_age] < 50, "40-50",
'public cust_detail'[customer_age] >= 50 && 'public cust_detail'[customer_age] < 60, "50-60",
'public cust_detail'[customer_age] >= 60, "60+",
"unknown"
)
IncomeGroup = SWITCH(
TRUE(),
'public cust_detail'[income] < 35000, "Low",
'public cust_detail'[income] >= 35000 && 'public cust_detail'[income] <70000, "Med",
'public cust_detail'[income] >= 70000, "High",
"unknown"
eek_num2 = WEEKNUM('public cc_detail'[week_start_date])
Revenue = 'public cc_detail'[annual_fees] + 'public cc_detail'[total_trans_amt] + 'public cc_detail'[interest_earned]
Current_week_Reveneue = CALCULATE(
SUM('public cc_detail'[Revenue]),
FILTER(
ALL('public cc_detail'),
'public cc_detail'[week_num2] = MAX('public cc_detail'[week_num2])))
Previous_week_Reveneue = CALCULATE(
SUM('public cc_detail'[Revenue]),
FILTER(
ALL('public cc_detail'),
'public cc_detail'[week_num2] = MAX('public cc_detail'[week_num2])-1))