

Credit Card Analysis



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Project Objective

To develop a comprehensive credit card weekly dashboard that provides real-time insights into key performance metrics and trends, enabling stakeholders to monitor and analyze credit card operations effectively



Import data to SQL database

- A Prepare csv file
- B Create tables in SOL
- C Import csv file into SOL

SQL Queries

SQL Query to create and import data from csv files:

Create a database

CREATE DATABASE ccdb;

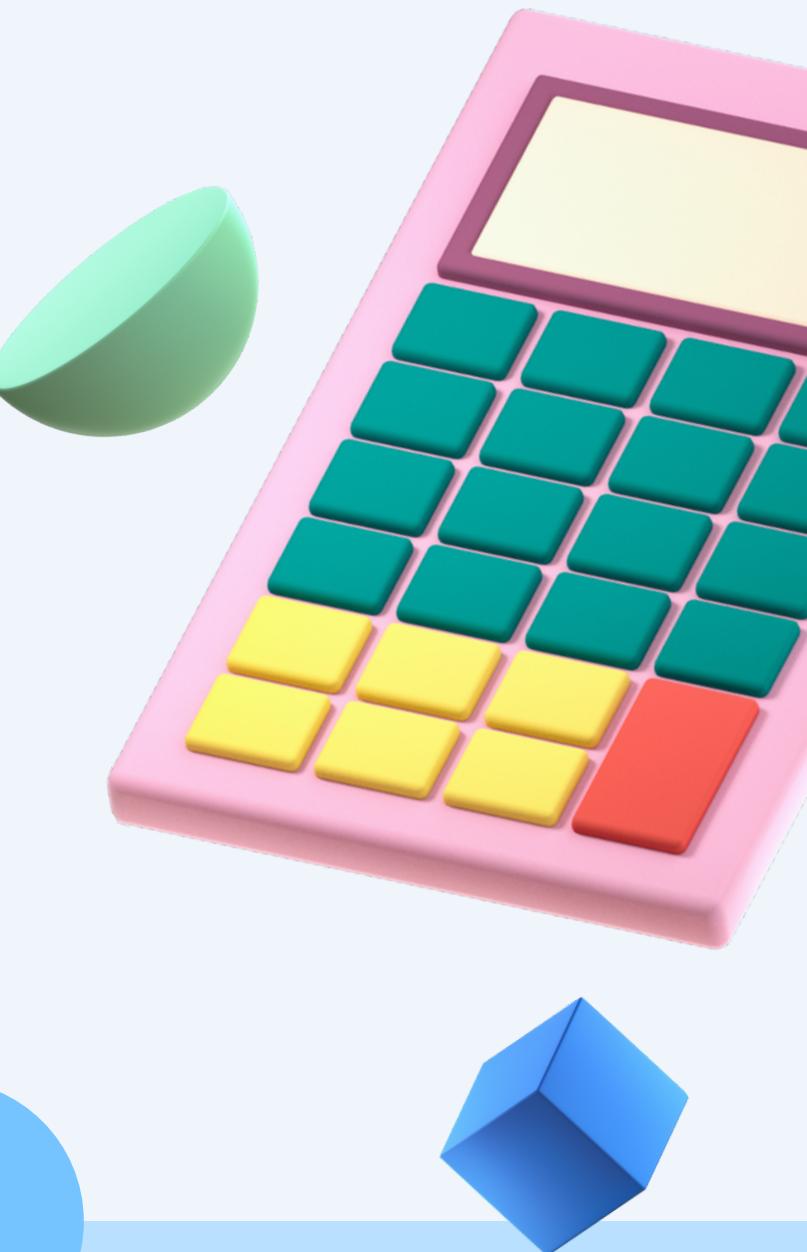


SQL Queries

```
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)
);
```

SQL Queries

```
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
);
```



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"  
)
```

DAX Queries

```
week_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_Revenue = CALCULATE(
SUM('public cc_detail'[Revenue]),
FILTER
ALL('public cc_detail'),
'public cc_detail [week_num2] = MAX('public cc_detail'[week_num2])
Previous_week_Revenue = CALCULATE(
SUM('public cc_detail'[Revenue]),
FILTER(
ALL('public cc_detail'),
"public cc_detail'[week_num2] = MAX('public cc_detail'[week_num2])-1))
```



Credit Card Transaction Reports

Revenue
55M

Interest
8M

Total transaction
45M

Count
656K

Q4

Q3

Q2

Q1

Low

Medium

High

Silver

Blue

Gold

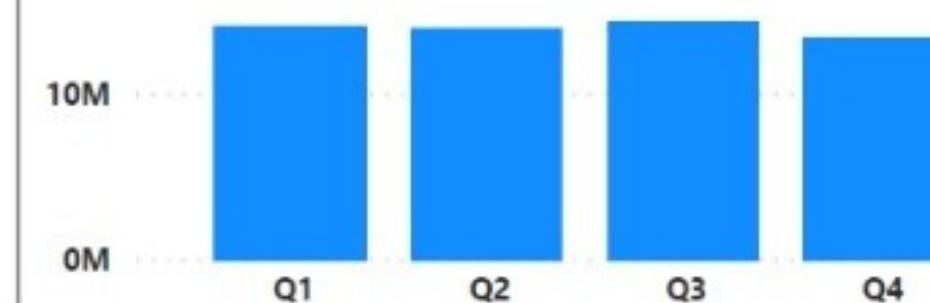
Platinum

Week Start Day
All

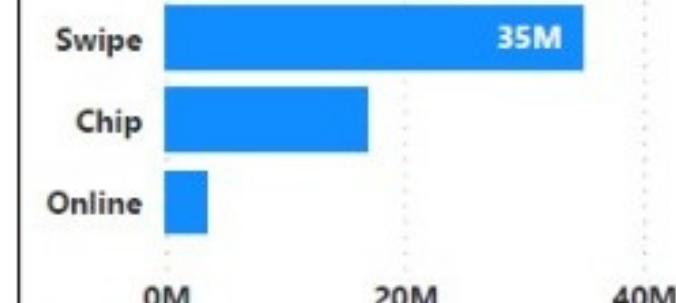
F M

| Card_Catagory | Sum of Interest_Earned | Sum of Revenue | Sum of Total_Trans_Amt |
|---------------|------------------------|-----------------------|------------------------|
| Blue | 64,95,887.74 | 4,61,39,397.74 | 36957875 |
| Gold | 3,73,784.16 | 24,54,072.16 | 2024078 |
| Platinum | 1,61,629.05 | 11,35,608.05 | 953314 |
| Silver | 8,12,081.28 | 55,86,332.28 | 4586746 |
| Total | 78,43,382.23 | 5,53,15,410.23 | 44522013 |

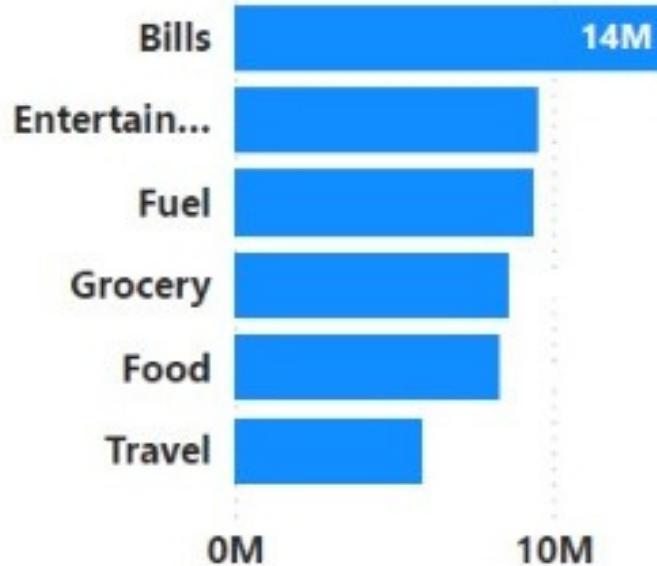
Sum of Revenue by Qtr



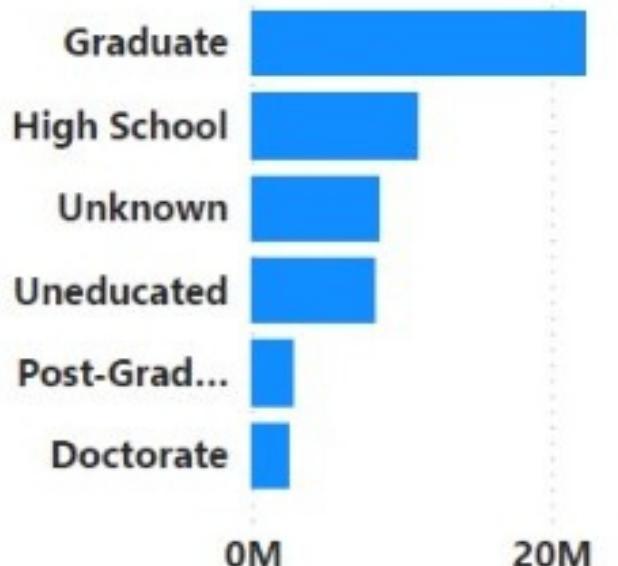
Revenue by Chip



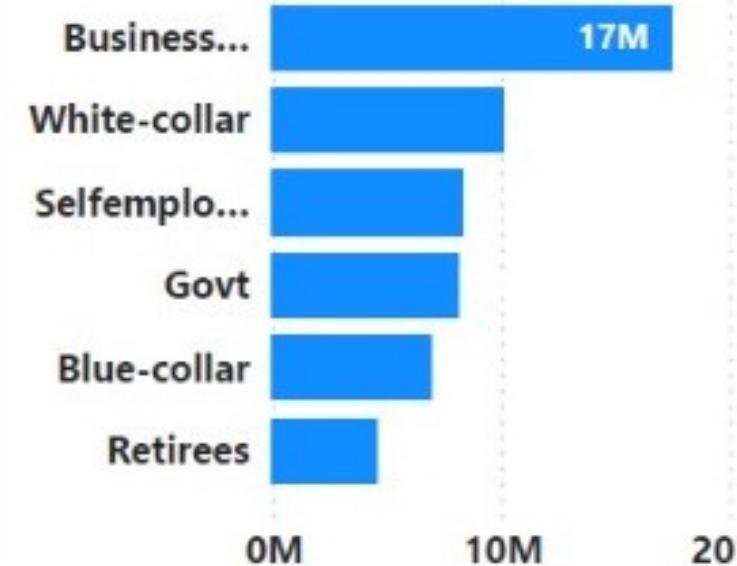
Revenue by Exp Type



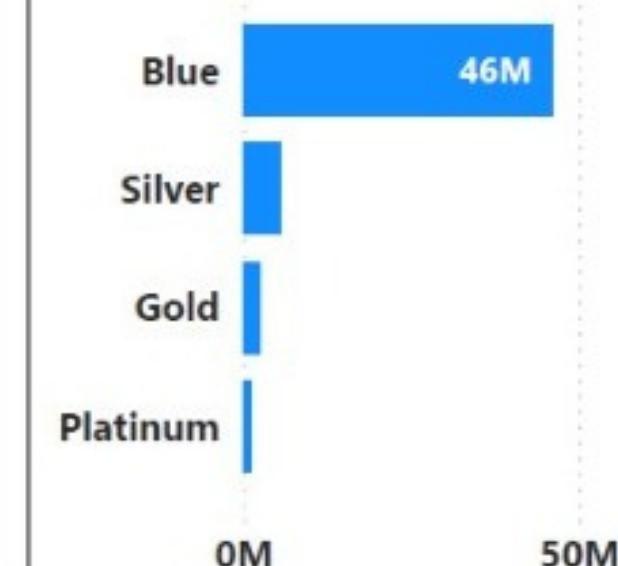
Revenue on Education



Revenue by Customer Job



Revenue by Card



Credit Card Customer Reports

Q4

Q3

Q2

Q1

Week Start Day

All

Revenue

55M

Interest

8M

Income

576M

CSS

3.19

M

30.22M

F

25.09M

Swipe

Online

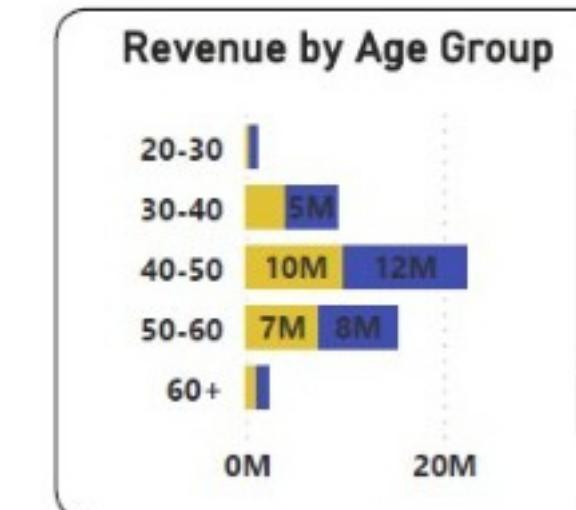
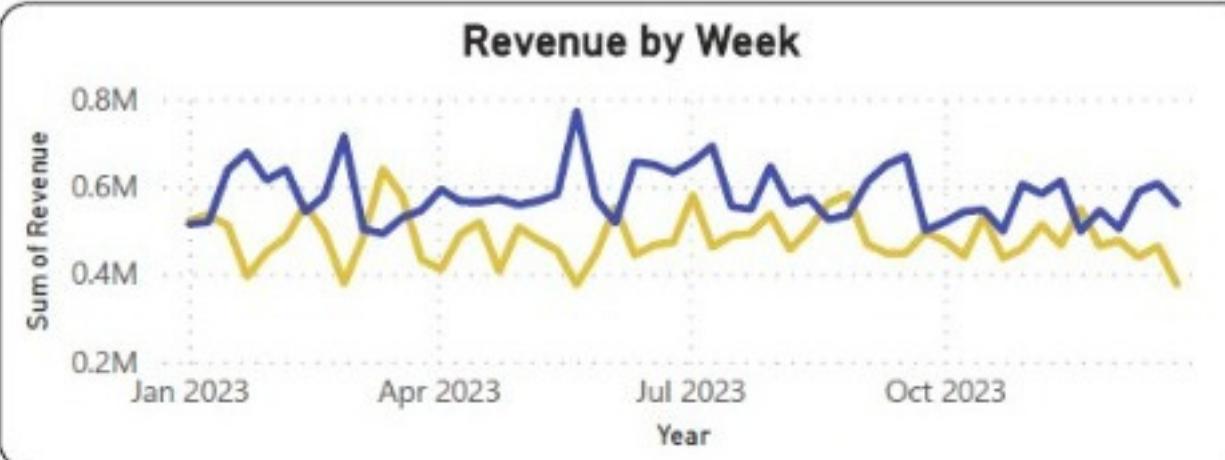
Chip

Silver

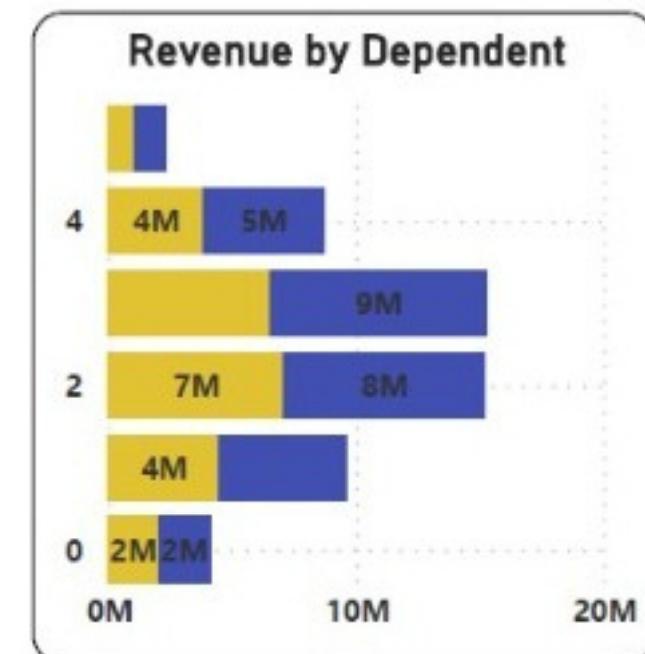
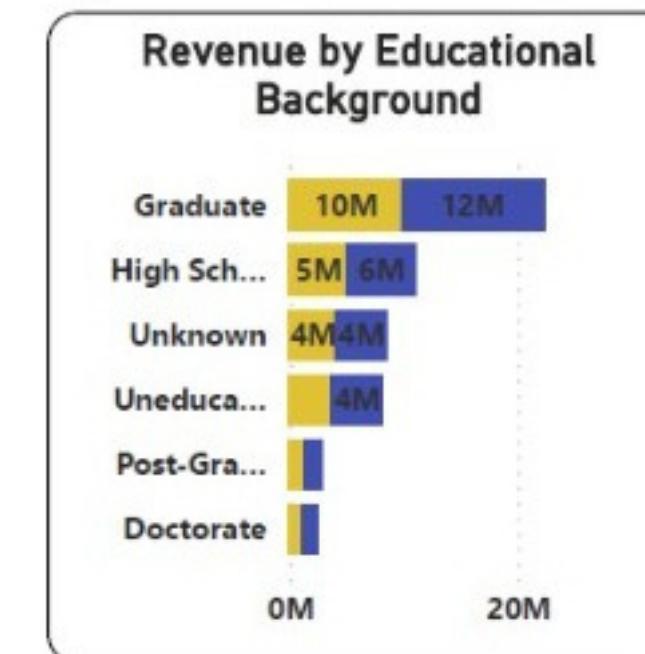
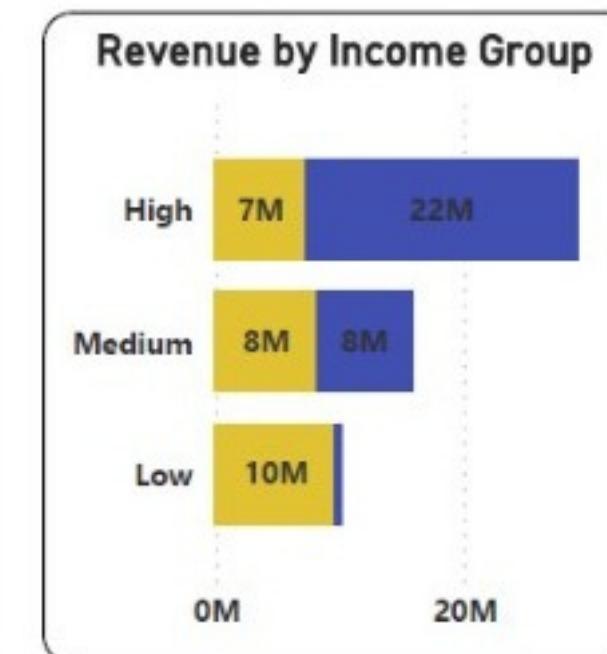
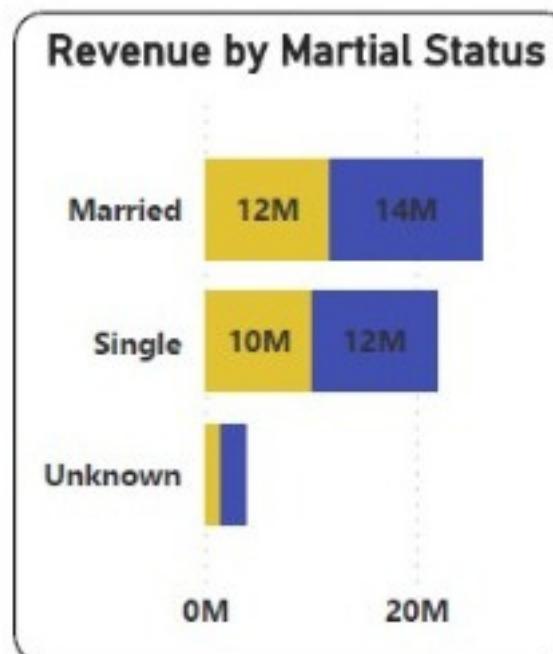
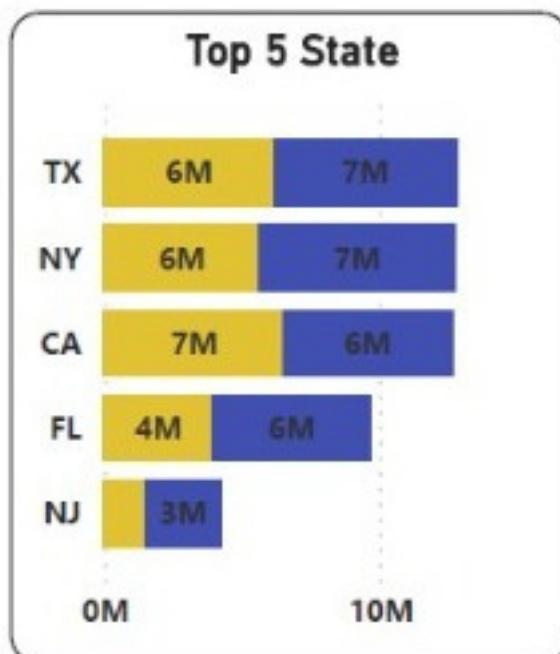
Blue

Gold

Platinum



| Customer_Job | Sum of Revenue | Sum of Income | Sum of Interest_Earned |
|--------------|----------------|---------------|------------------------|
| Blue-collar | 69,04,278.57 | 72262158 | 9,52,800.57 |
| Businessman | 1,73,87,832.31 | 186959919 | 25,39,390.31 |
| Govt | 81,11,701.37 | 88773989 | 11,60,016.37 |
| Retirees | 45,35,184.24 | 48675030 | 6,30,359.24 |
| Selfemployed | 82,61,757.81 | 75313288 | 11,19,741.81 |
| Total | 5,53,15,410.23 | 575914439 | 78,43,382.23 |



Thank you!

