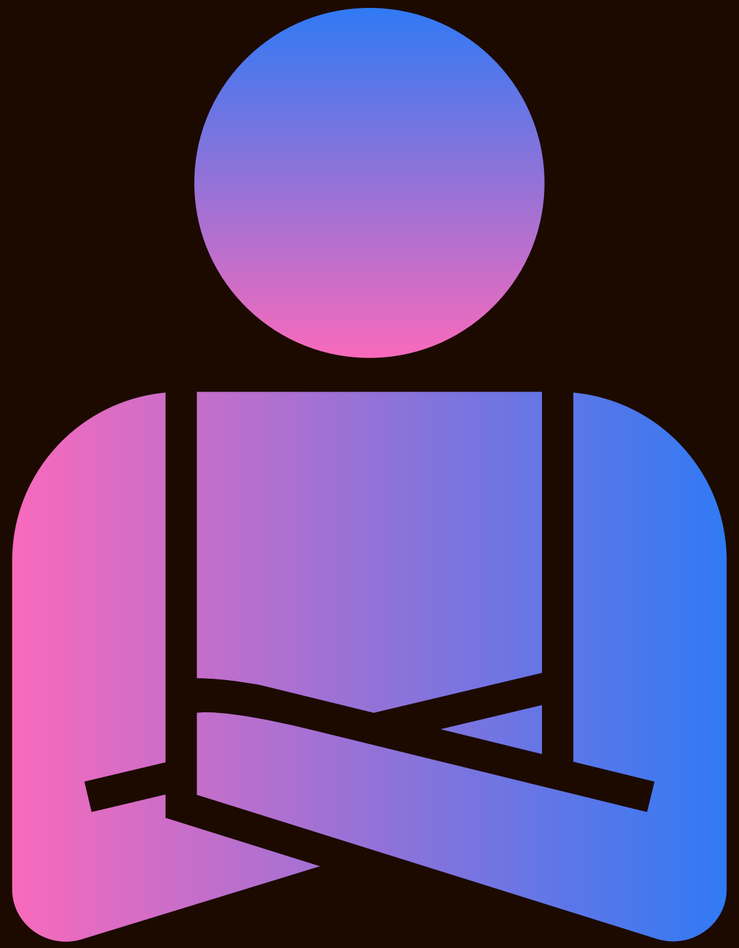
CREDIT CARD FINANCIAL DASHBOARD

P O W E R B I & M Y S Q L

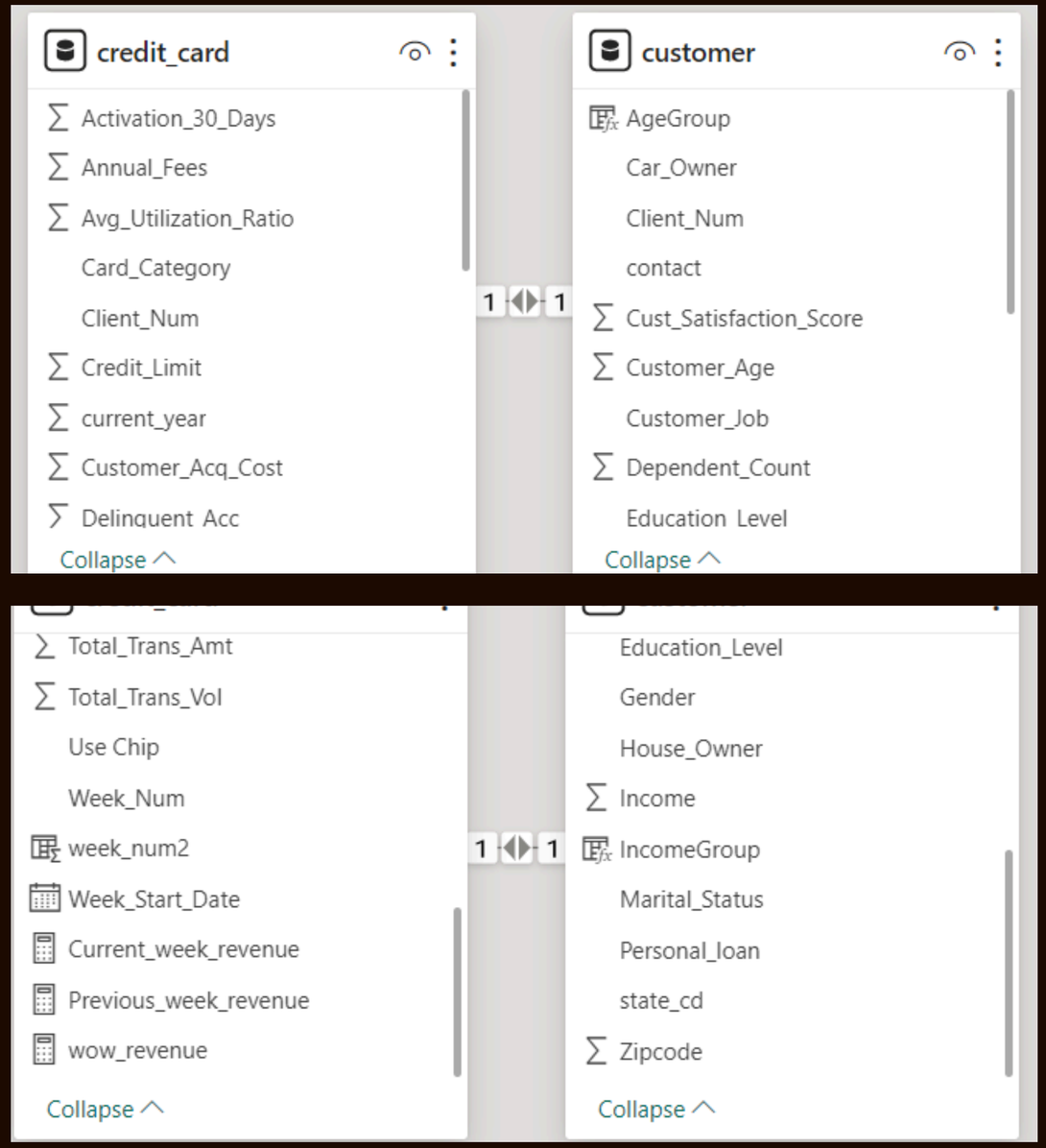
By Shubham paswan



PROJECT OBJECTIVE

- **To create a comprehensive weekly dashboard in Power BI that delivers real-time insights into key performance metrics and trends, empowering stakeholders to effectively monitor and analyze credit card operations.**

DATABASE TABLES



SAMPLE DATA IN CSV FORMAT

Credit_card

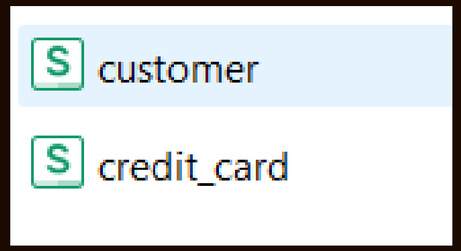
ient_Num	Card_Categ	Annual_Fee	Activation_	Customer_A	Week_Start	Week_Num	Qtr	current_yea	Credit_Limit	Total_Revol	Total_Trans	Total_Trans	Avg_Utilizat	Use Chip	Exp Type	Interest_Ea	Delinquent_Acc
08082083	Blue	200	0	87	01-01-2023	Week-1	Q1	2023	3544	1661	15149	111	0.469	Chip	Travel	4393.21	0
08083283	Blue	445	1	108	01-01-2023	Week-1	Q1	2023	3421	2517	992	21	0.736	Swipe	Entertainme	69.44	0
08084558	Blue	140	0	106	01-01-2023	Week-1	Q1	2023	8258	1771	1447	23	0.214	Chip	Bills	202.58	0
08085458	Blue	250	1	150	01-01-2023	Week-1	Q1	2023	1438.3	0	3940	82	0	Online	Grocery	236.4	0
08086958	Blue	320	1	106	01-01-2023	Week-1	Q1	2023	3128	749	4369	59	0.239	Swipe	Fuel	1004.87	1
08095133	Blue	100	0	94	01-01-2023	Week-1	Q1	2023	33304	1833	1448	29	0.055	Swipe	Bills	275.12	0
08098133	Blue	225	1	75	01-01-2023	Week-1	Q1	2023	2834	1418	1598	39	0.5	Swipe	Bills	159.8	1
08099183	Blue	400	1	75	01-01-2023	Week-1	Q1	2023	5723	1873	2732	63	0.327	Swipe	Grocery	409.8	0
08100533	Blue	200	1	64	01-01-2023	Week-1	Q1	2023	2679	2277	4943	85	0.85	Chip	Food	988.6	0
08103608	Platinum	95	1	80	01-01-2023	Week-1	Q1	2023	11898	2517	15798	128	0.212	Chip	Grocery	3791.52	0
08104658	Blue	455	1	118	01-01-2023	Week-1	Q1	2023	1438.3	890	2928	48	0.619	Swipe	Fuel	732	0
08108333	Blue	485	0	86	01-01-2023	Week-1	Q1	2023	5590	0	1507	32	0	Swipe	Entertainme	150.7	0
08112008	Blue	440	1	86	01-01-2023	Week-1	Q1	2023	23510	1049	1661	35	0.045	Swipe	Grocery	465.08	0
08113208	Blue	300	1	149	01-01-2023	Week-1	Q1	2023	1688	0	4375	69	0	Chip	Fuel	525	0
08117933	Blue	360	0	70	01-01-2023	Week-1	Q1	2023	1880	0	2469	34	0	Chip	Bills	419.73	1

Customer

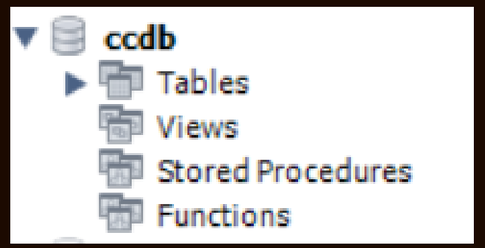
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Client_Num	Customer_A	Gender	Dependent_	Education_l	Marital_Sta	state_cd	Zipcode	Car_Owner	House_Owr	Personal_lo	contact	Customer_J	Income	Cust_Satisfaction_Score	
708082083	24	F	1	Uneducatec	Single	FL	91750	no	yes	no	unknown	Businessma	202326	3	
708083283	62	F	0	Unknown	Married	NJ	91750	no	no	no	cellular	Selfemploye	5225	2	
708084558	32	F	1	Unknown	Married	NJ	91750	yes	no	no	unknown	Selfemploye	14235	2	
708085458	38	M	2	Uneducatec	Single	NY	91750	no	no	no	cellular	Blue-collar	45683	1	
708086958	48	M	4	Graduate	Single	TX	91750	yes	yes	no	cellular	Businessma	59279	1	
708095133	33	F	1	High School	Single	NY	91750	no	yes	no	cellular	Selfemploye	14254	3	
708098133	34	F	3	Graduate	Single	CA	91750	yes	no	no	telephone	Selfemploye	14975	2	
708099183	34	F	2	Uneducatec	Single	CA	91750	no	no	no	cellular	Retirees	31982	2	
708100533	48	M	2	High School	Married	NJ	91750	yes	no	no	telephone	Businessma	86668	2	
708103608	53	F	1	Graduate	Married	NJ	91750	yes	yes	no	cellular	Businessma	223196	1	
708104658	31	F	0	Post-Gradua	Single	CA	91750	no	yes	no	telephone	Businessma	33625	2	
708108333	34	F	4	Graduate	Single	NY	91750	no	no	no	cellular	Selfemploye	14975	3	
708112008	51	F	2	Graduate	Single	NJ	91750	yes	yes	no	cellular	Selfemploye	14975	2	
708113208	36	M	1	High School	Single	NJ	91750	yes	no	no	telephone	White-colla	59416	3	

IMPORT DATA TO MYSQL DATABASE

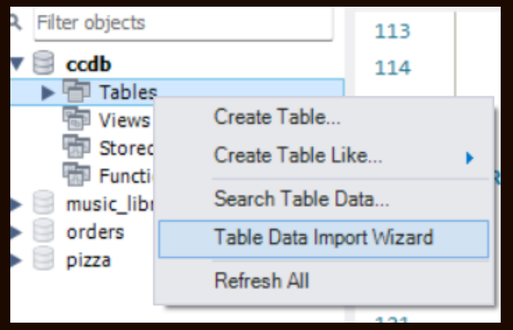
1.Prepare csv file

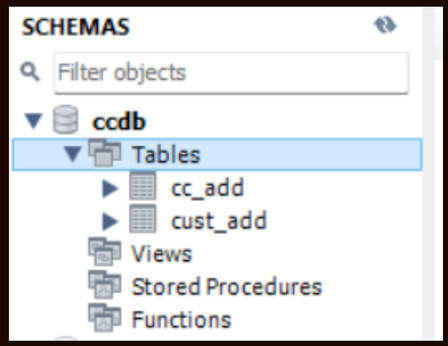


2.Create database in MySql



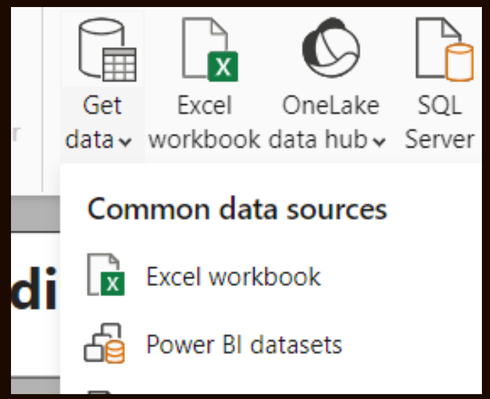
3.Import csv file in MySql



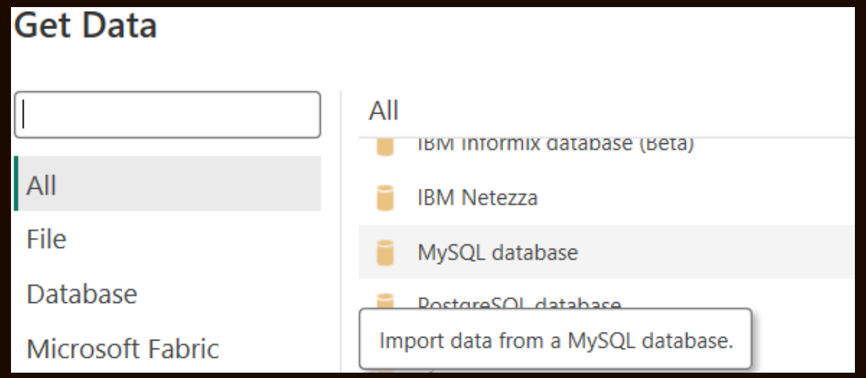


CONNECT MYSQL DATABASE TO POWER BI

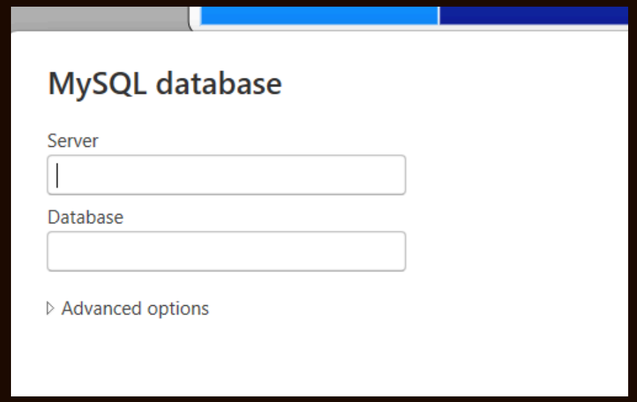
Step 1. Click on the Home tab, then select Get Data in Power BI.



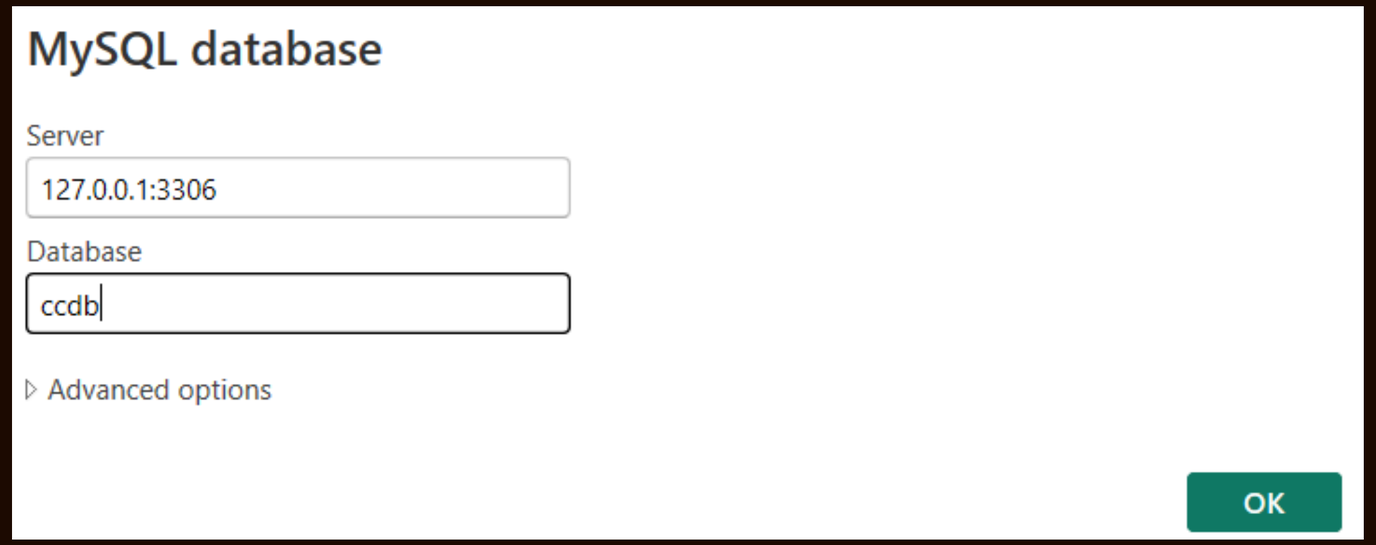
Step2. In the Get Data window, search for MySQL database and select it



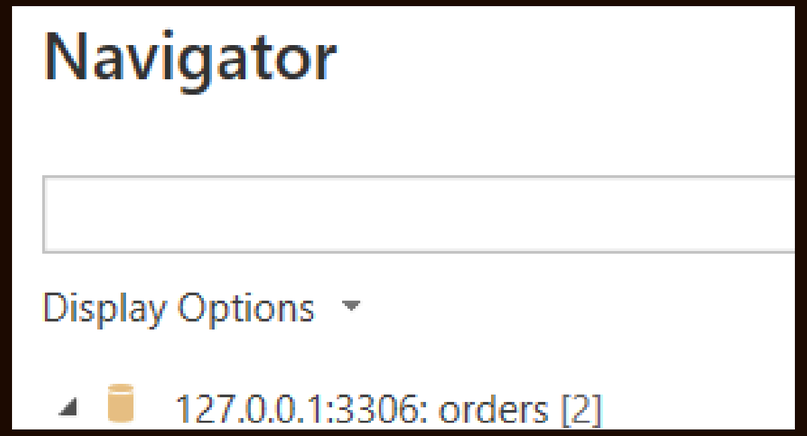
Step3. In the MySQL database dialog box, enter the server name, port number, and database name.



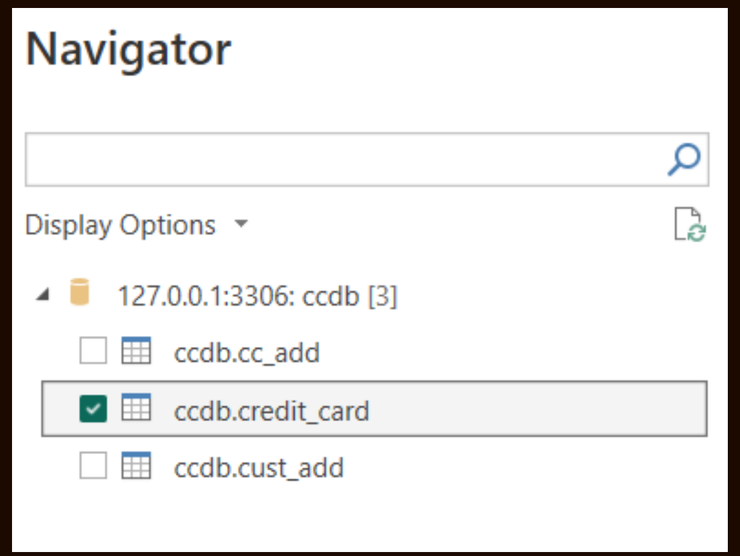
Step4. Choose the authentication method (usually Database) and enter your username and password



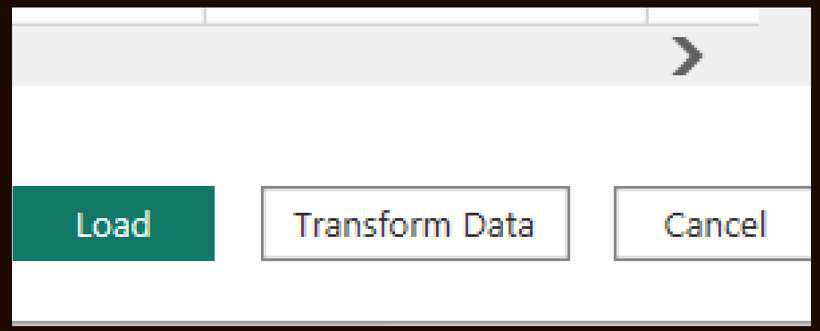
Step5. Click OK to connect to the database. If the connection is successful, the Navigator window will appear



Step6. In the Navigator window, select the tables or views you want to import.



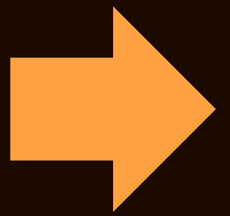
Step7.Click Load to import the data directly or Transform Data to open the Power Query Editor for data transformation.



DAX QUERIES

```
AgeGroup = SWITCH(
    TRUE(),
    customer[Customer_Age] < 30,"20-30",
    customer[Customer_Age]>= 30 && customer[Customer_Age] < 40,"30-40",
     customer[Customer_Age]>= 40 && customer[Customer_Age] < 50,"40-50",
      customer[Customer_Age]>= 50 && customer[Customer_Age] < 60,"50-60",
       customer[Customer_Age]>= 60,"60+",
       "unknown"
    )
```

```
IncomeGroup = SWITCH(
    TRUE(),
    customer[Income] < 35000, "Low",
    customer[Income] >= 35000 && customer[Income] < 70000, "Med",
    customer[Income] < 70000, "High",
    "unknown")
```



```
Revenue = 'credit_card'[Annual_Fees] + credit_card[Total_Trans_Amt] + credit_card[Interest_Earned]
```

```
wow_revenue = DIVIDE(([Current_week_revenue] - [Previous_week_revenue]),[Previous_week_revenue])
```

```
week_num2 = WEEKNUM(credit_card[Week_Start_Date])
```

```
Previous_week_revenue = CALCULATE(
    SUM(credit_card[Revenue]),
    FILTER(ALL(credit_card),credit_card[week_num2] = MAX(credit_card[week_num2])-1))
```

```
Current_week_revenue = CALCULATE(
    SUM(credit_card[Revenue]),
    FILTER(ALL(credit_card),credit_card[week_num2] = MAX(credit_card[week_num2])))
```

CREDIT CARD TRANSACTION DASHBOARD

Credit Card Transaction Report

Revenue	Total Interest	Amount	Count
55.3M	7.8M	44.5M	656K

Card_Category	Sum of Revenue	Sum of Total_Trans_Amt	Sum of Interest_Earned
Blue	46139398	36957875	64,95,887.74
Gold	2454072	2024078	3,73,784.16
Platinum	1135608	953314	1,61,629.05
Silver	5586332	4586746	8,12,081.28
Total	**55315410**	**44522013**	**78,43,382.23**

Q4 | Q3 | Q2 | Q1

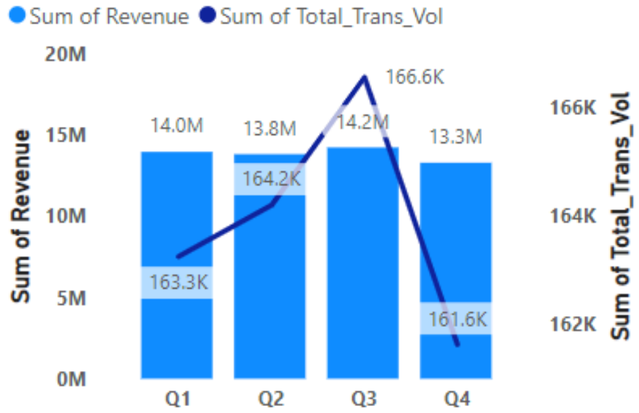
F | M

Week_Start_Date: All

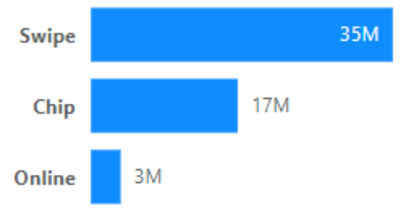
Med | Low | unknown

Silver | Blue | Gold | Platinum

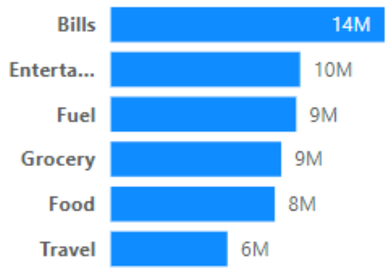
Sum of Revenue and Sum of Total_Trans_Vol by Qtr



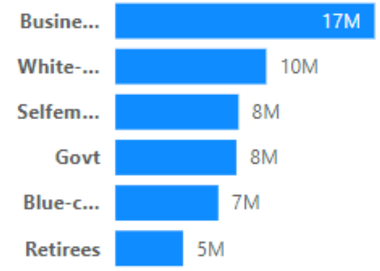
Revenue by Card Category



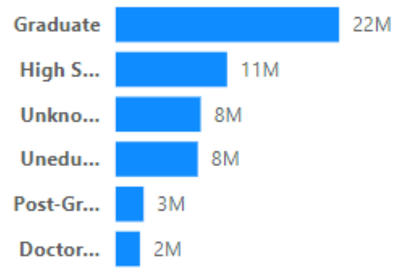
Revenue by Expenditure Type



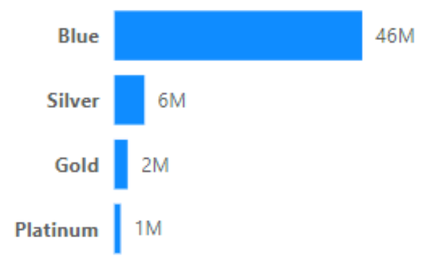
Revenue by Customer Job Type



Revenue by Education Level Type



Revenue by Card Category



CREDIT CARD CUSTOMER DASHBOARD

Credit Card Customer Report

Q4 | Q3 | Q2 | Q1

Week_Start_Date: All

Revenue	Total Interest	Income	CSS
55M	7.8M	576M	3.19

Revenue by Gender

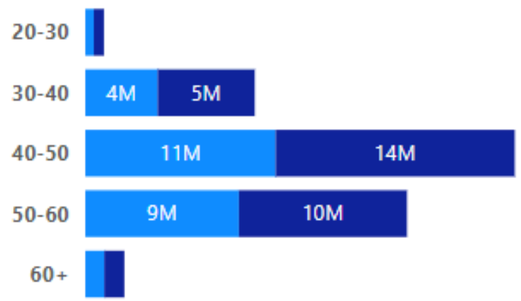
M 30M | F 25M

Swipe | Online | Chip

Silver | Blue | Gold | Platinum

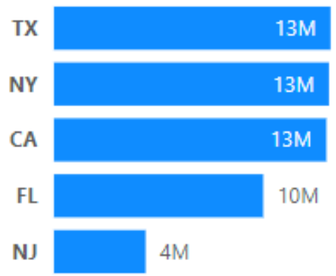
Sum of Revenue by Year and Gender

Revenue by Age Group

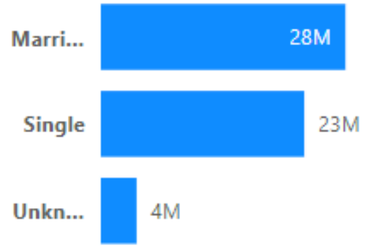


Customer_Job	Sum of Revenue	Sum of Interest_Earned	Sum of Income
Blue-collar	6904279	9,52,800.57	72262158
Businessman	17387832	25,39,390.31	186959919
Govt	8111701	11,60,016.37	88773989
Retirees	4535184	6,30,359.24	48675030
Selfemployeed	8261758	11,19,741.81	75313288
White-collar	10114656	14,41,073.93	103930055
Total	**55315410**	**78,43,382.23**	**575914439**

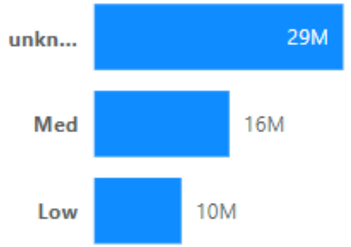
Top 5 States



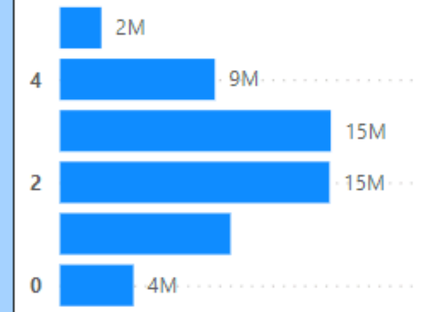
Revenue by Martial status



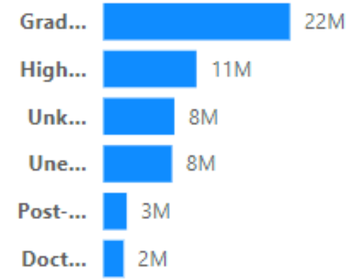
Revenue by Income Group



Revenue by Dependent



Revenue by Education



Credit card financial dashboard using Power BI:

- Developed an interactive dashboard using transaction and customer data from a SQL database, to provide real-time insights.
- Streamlined data processing & analysis to monitor key performance metrics and trends.
- Shared actionable insights with stakeholders based on dashboard findings to support decision-making processes.

THANK YOU