BANK ACCOUNT FINANCIAL INSIGHT

View in Power BI



1. PROJECT OVERVIEW



This is a financial analysis project. The objective of the project is to gain valuable insights from a personal 6 months bank statement, starting from June the 15th, 2023 to January the 15th, 2024. The project involves transaction categorization, expense tracking, and visualization of financial trends.



Tools:



- Microsoft Excel: Microsoft Excel was used to import the raw bank statement data(pdf), perform preliminary data cleaning and preparation using Power Query in the process.

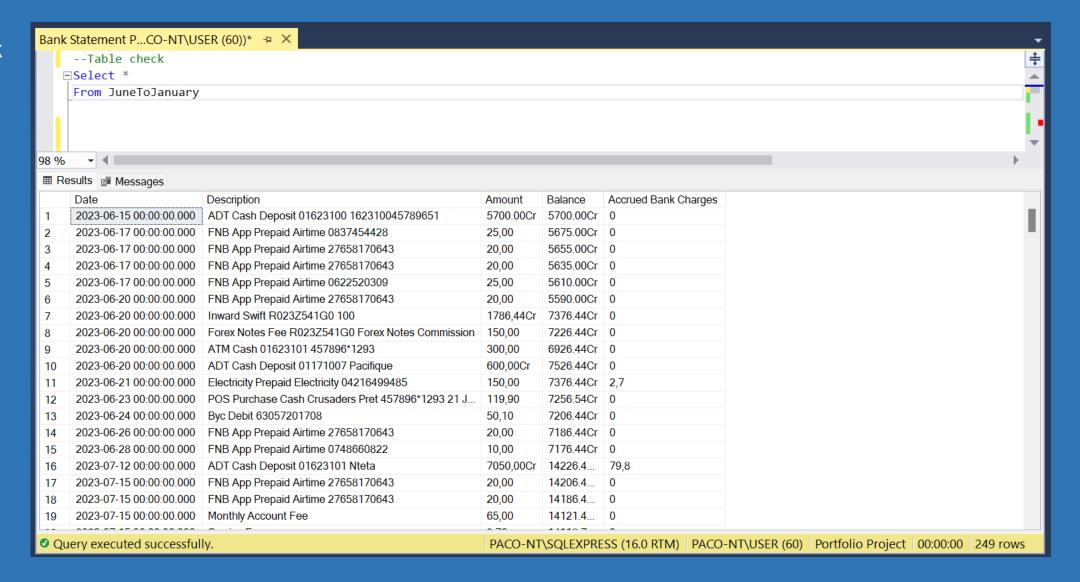


- **SQL Server**: SQL Server is used for data exploration, further data preparation, transaction categorization and expense tracking.

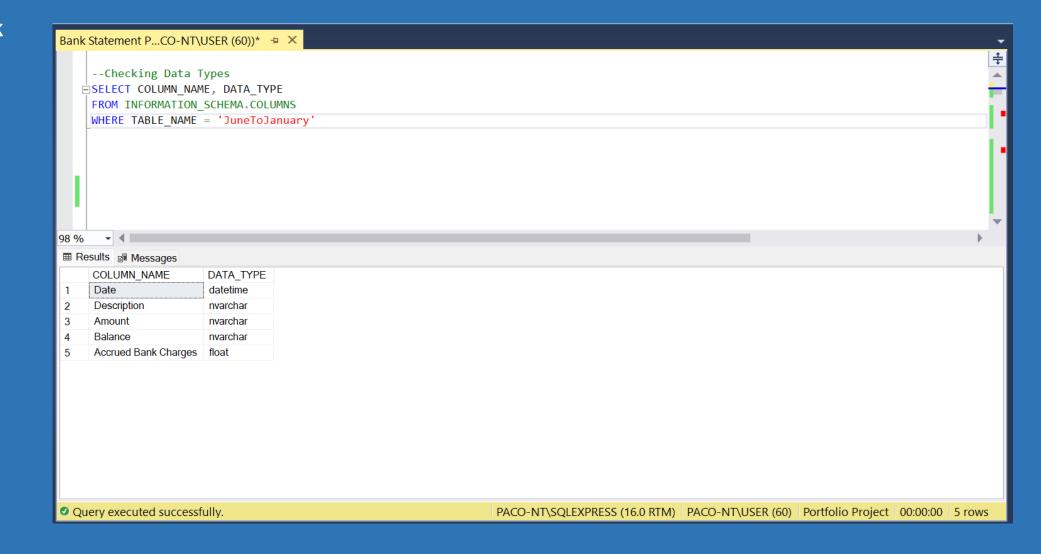


- **PowerBI**: PowerBi will be used to visualize financial trends.

1. Table check



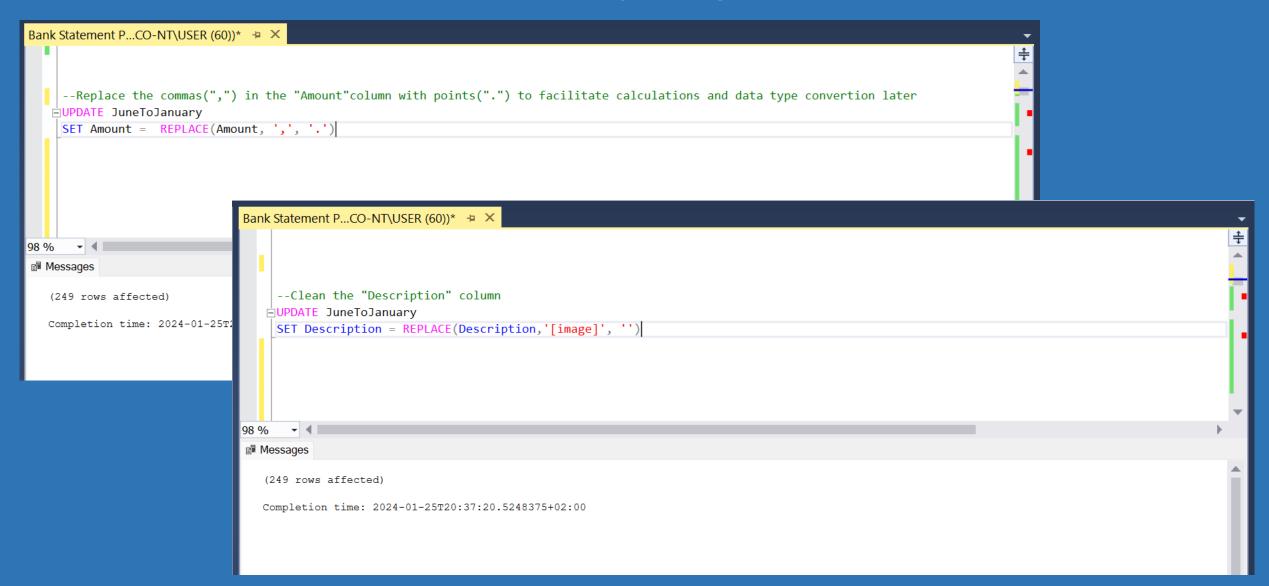
2. Data Type Check



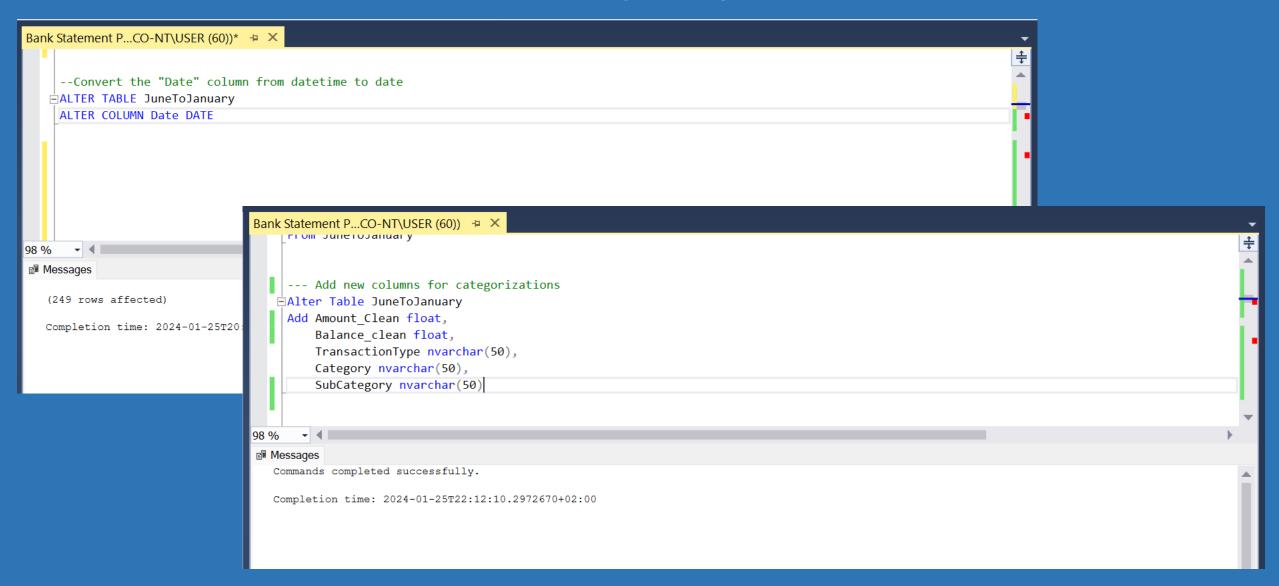
OBSERVATIONS

- The table shows that there is the presence of letters('Cr') in the columns 'Amount' and 'Balance'. These two columns are supposed to contain numbers only, the presence of 'Cr' will not make calculations on these columns possible.
- We can also notice the presence of commas(',') in instead of points('.') to delimit decimals in the 'Amount' column. This will also make calculations in this column. These two issues will be addressed later.
- Columns 'Amount' and 'Balance' are NVARCHAR which is a string data type, but it should be a number data type. And the 'Date' column appears as 'datetime' but since the time part doesn't reflect any info, we can keep it just as 'date'. These will be fixed later.

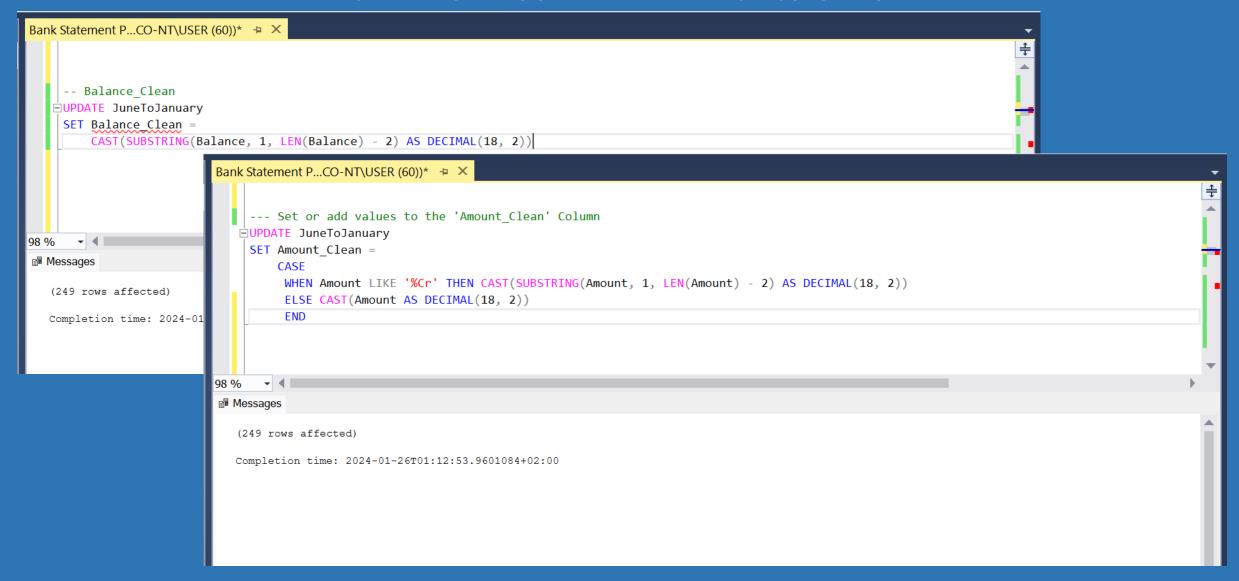
DATA CLEANING



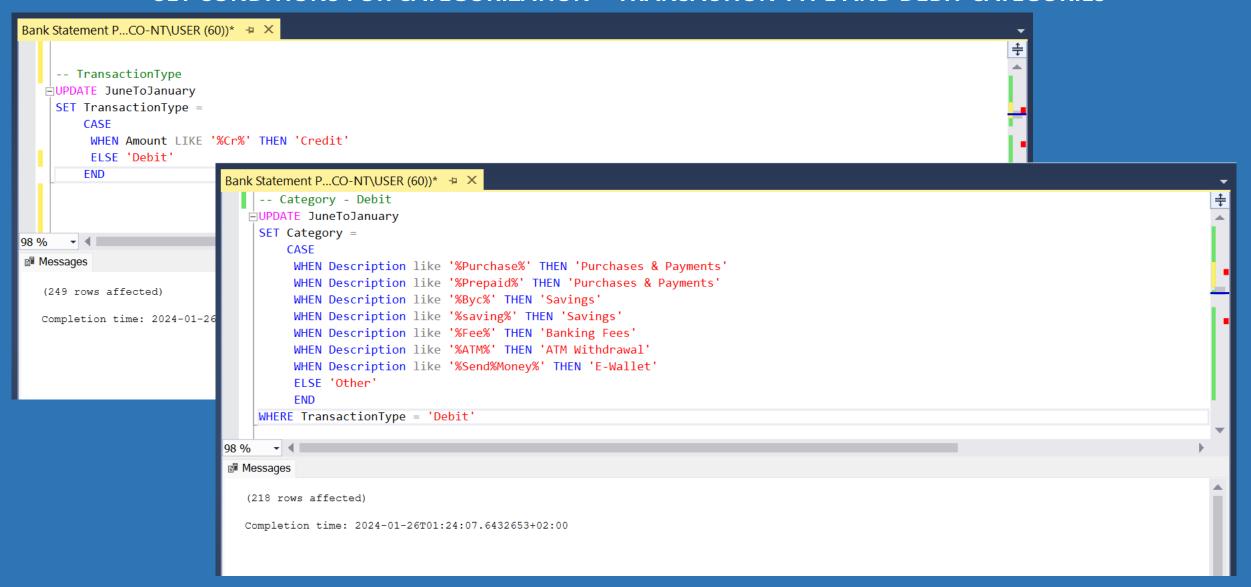
DATA CLEANING



CLEANING 'AMOUNT' AND 'BALANCE' COLUMNS



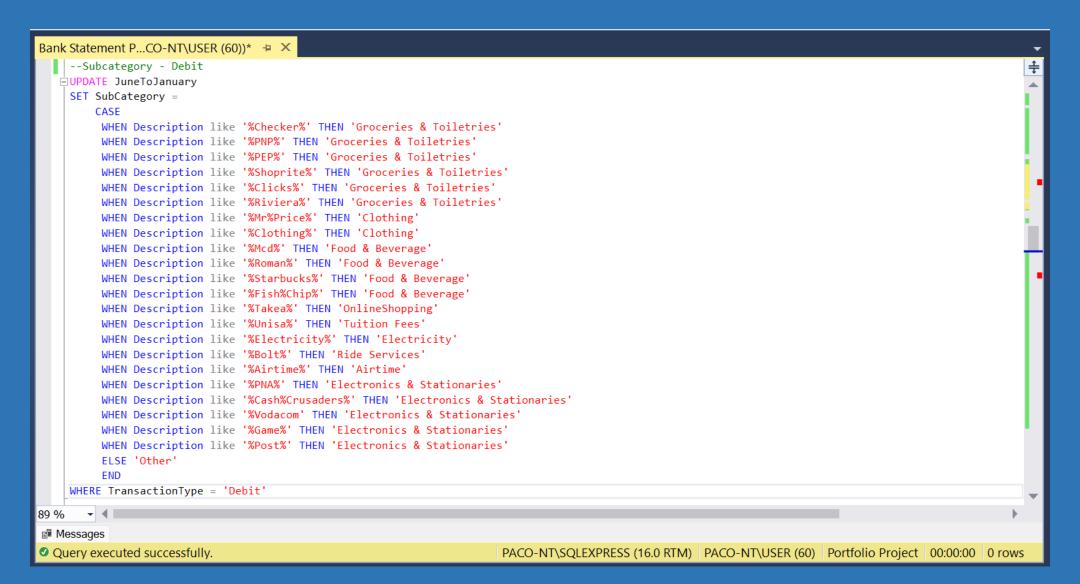
SET CONDITIONS FOR CATEGORIZATION – TRANSACTION TYPE AND DEBIT CATEGORIES



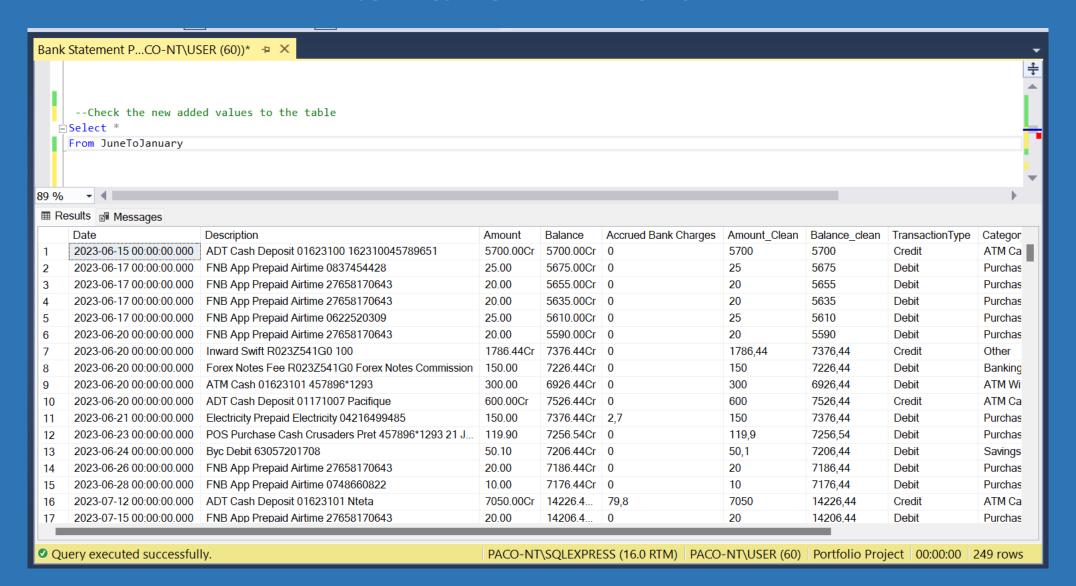
SET CONDITIONS FOR CATEGORIZATION – DEBIT CATEGORIES

```
Bank Statement P...CO-NT\USER (60))* ≠ X
     -- Category - Credit
   UPDATE JuneToJanuary
    SET Category =
        CASE
         WHEN Description like '%ADT%' THEN 'ATM Cash Deposit'
         WHEN Description like '%Transfer%' THEN 'TransferFromSavings'
         ELSE 'Other'
         END
    WHERE TransactionType = 'Credit'
98 % - 4
(31 rows affected)
  Completion time: 2024-01-26T01:22:51.6103300+02:00
```

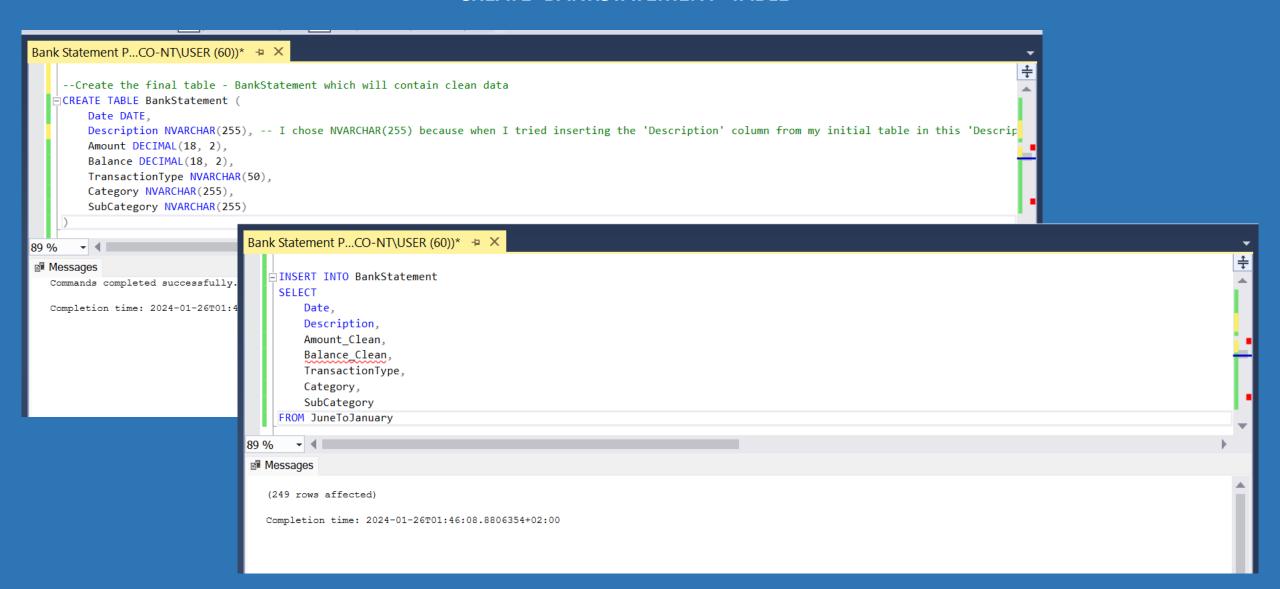
SET CONDITIONS FOR CATEGORIZATION – DEBIT SUBCATEGORIES



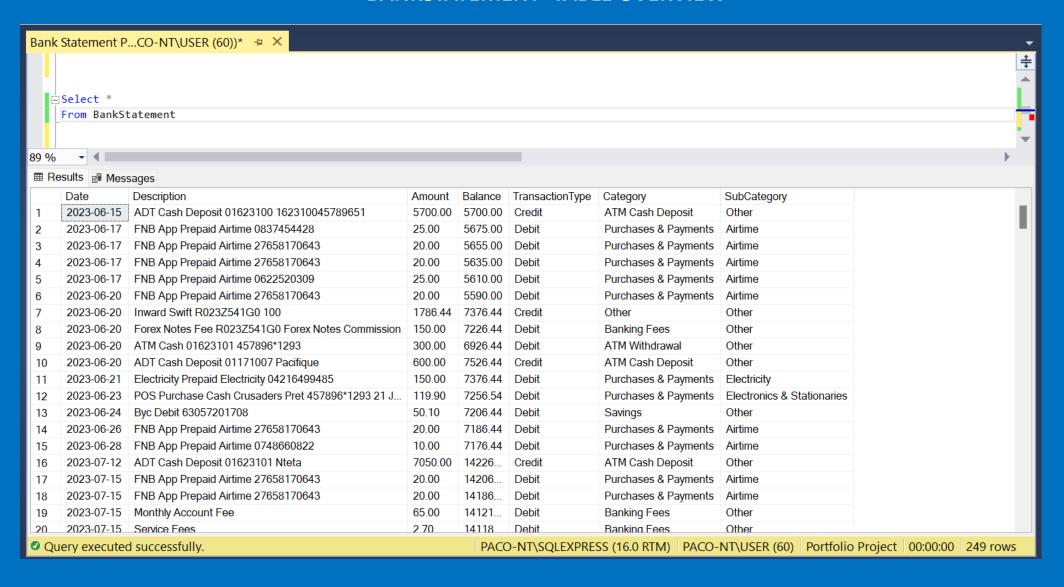
'JUNETOJANUARY' TABLE CHECK



CREATE 'BANKSTATEMENT' TABLE

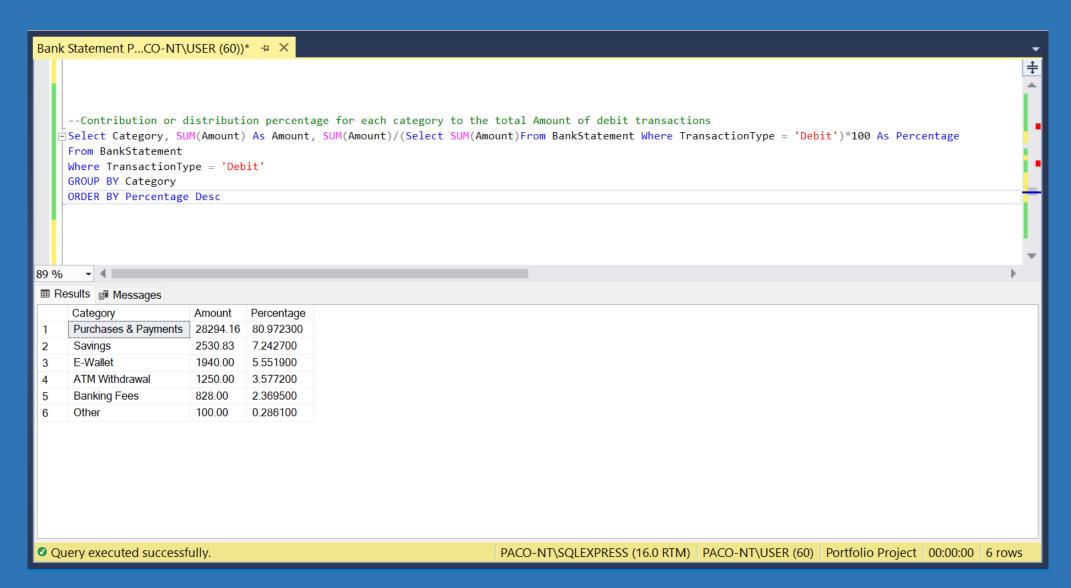


'BANKSTATEMENT' TABLE OVERVIEW



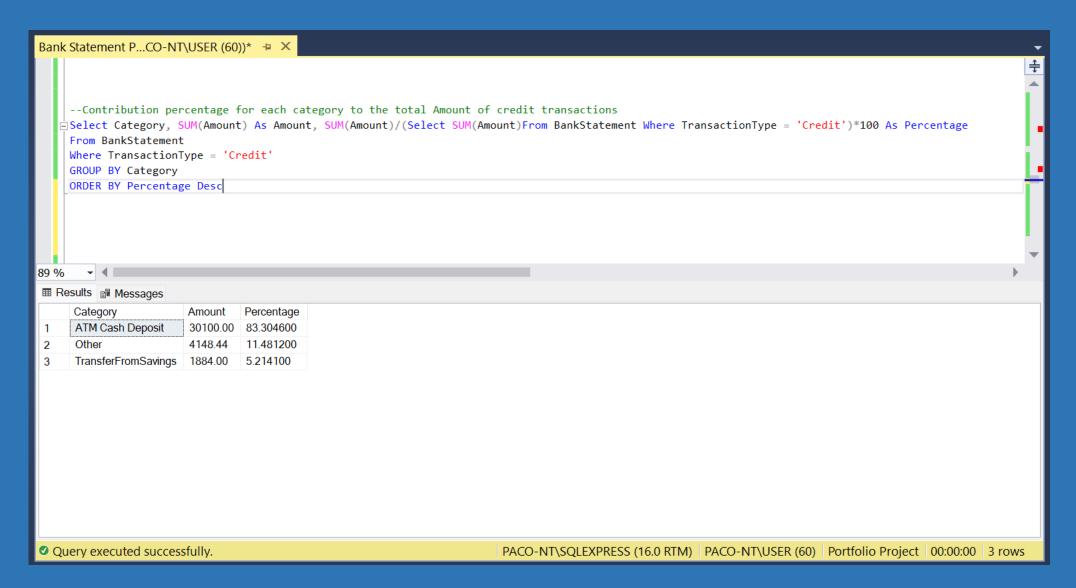
3. DATA EXPLORATION – EXPENSE AND INCOME TRACKING

CONTRIBUTION PERCENTAGE PER CATEGORY FOR DEBIT TRANSACTIONS



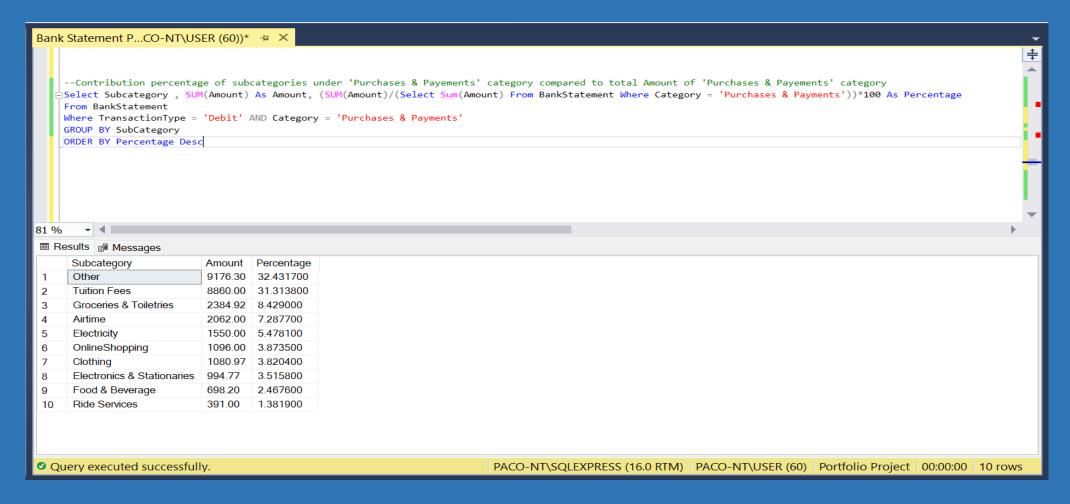
2. DATA EXPLORATION – EXPENSE AND INCOME TRACKING

CONTRIBUTION PERCENTAGE PER CATEGORY FOR CREDIT TRANSACTIONS



2. DATA EXPLORATION – EXPENSE AND INCOME TRACKING

CONTRIBUTION PERCENTAGE PER 'PURCHASES & PAYMENTS' SUBCATEGORIES



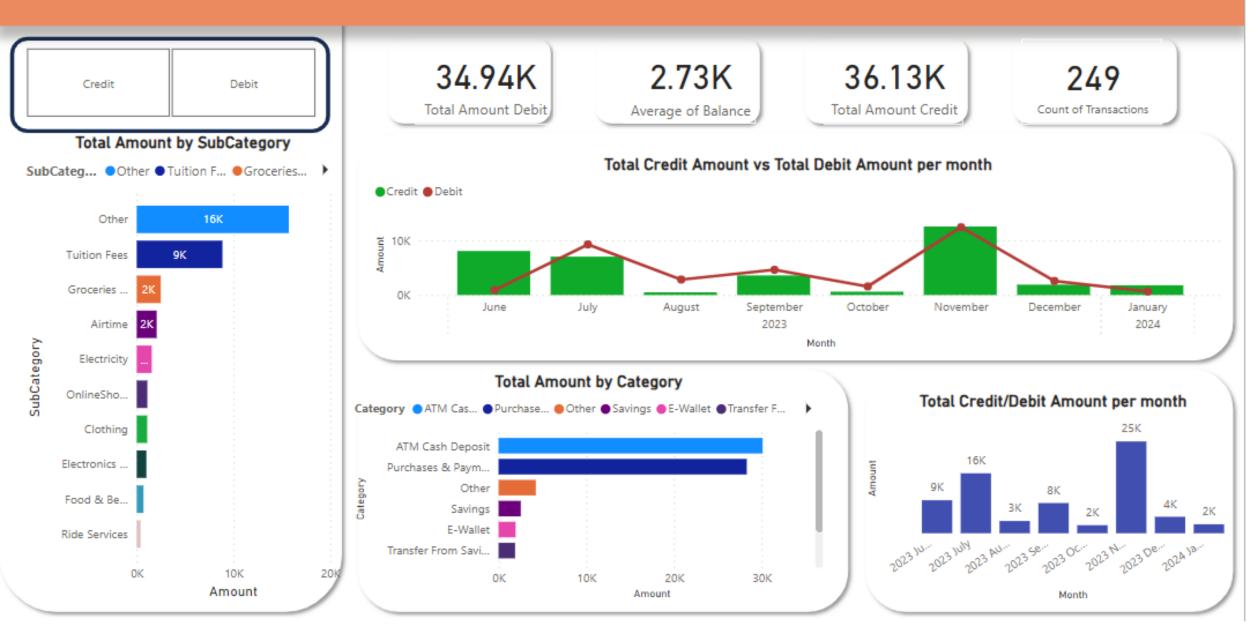
NOTE: CLICK ON THE FOLLOWING LINK TO SEE ALL THE QUERIES

https://github.com/PacificNt/Financial-Insights-from-Bank-Statement/blob/main/README.md

BANK ACCOUNT FINANCIAL INSIGHTS



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INSIGHTS SUMMARY

CREDIT

- +/- 83%(or R30100) of incoming money in the account from June 2023(the 15th) to January 2024(the 15th) came from ATM Cash Deposit, while only 5%(R1884) came from the savings account. The remaining contribution(~11% or R4148.44) is classified as other. But since it represent a good 11% of the total contribution, it is also important to have a closer look at it and find out, what it represents.
- The result shows that the highest Cash deposited on the account is R7100 and it was deposited on the 20th of November 2023 and as per the description it is referred to as 'Laptop Money'.

DEBIT

- Around 81%(or R28294.16) of the money that went out of the account in the period covered in this table(15 June 2023 to 15 January 2024) went to 'Purchases & Payments', 7%(or R2530.83) went into savings, around 6%(or R1940.00) went to E-Wallets, around 3%(or R1250.00) went to ATM Withdrawals and around 2%(R828.00) went to Banking fees. The remaining contribution(0.2%0=) is classified as 'Other'.
- The month of October was the month with the highest spending on 'Purchases & Payments' with R1276.3.
- The month of September was the month with the highest spending on 'Groceries & Toiletries' with R728.45 while the month of July had the lowest amount spent on 'Groceries & Toiletries' with just R95.06

INSIGHTS SUMMARY

• The biggest contribution(around 32% of total) in the 'Purchases & Payments' category is classified as 'Other' (We will have a closer look at it after). The second biggest contribution is 'Tuition Fees' which accounts around 31% of total contribution or R8860. The result shows that around R2062 (or around 7%) was spent on 'Airtime' which is quite close to the amount spent on 'Groceries & Toiletries' (R2384.92 or around 8%). We can also highlight 'Ride Services' which accounts around 1% of total 'Purchase & Payments'. It is important to note here the amount on 'Ride Services' does not really reflect the reality as this reflects only rides that we paid with the Bank card; the rides paid in cash are not reflected here.

BALANCE

- The average balance throughout the period covered in this project is R2730.
- The highest 'Balance' registered in the account is R14226.44 and it was was registered on the 12th of December 2023.
- The lowest 'Balance' was R0.45 and it was registered on the 27th of December 2023.