

BANK ACCOUNT FINANCIAL INSIGHT

[View in Power BI](#)

PACIFIQUE NTETA



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

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.

2. DATA PREPARATION

1. Table check

Bank Statement P...CO-NT\USER (60))*

--Table check

Select *

From JuneToJanuary

98 %

Results Messages

	Date	Description	Amount	Balance	Accrued Bank Charges
1	2023-06-15 00:00:00.000	ADT Cash Deposit 01623100 162310045789651	5700.00Cr	5700.00Cr	0
2	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 0837454428	25,00	5675.00Cr	0
3	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 27658170643	20,00	5655.00Cr	0
4	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 27658170643	20,00	5635.00Cr	0
5	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 0622520309	25,00	5610.00Cr	0
6	2023-06-20 00:00:00.000	FNB App Prepaid Airtime 27658170643	20,00	5590.00Cr	0
7	2023-06-20 00:00:00.000	Inward Swift R023Z541G0 100	1786,44Cr	7376.44Cr	0
8	2023-06-20 00:00:00.000	Forex Notes Fee R023Z541G0 Forex Notes Commission	150,00	7226.44Cr	0
9	2023-06-20 00:00:00.000	ATM Cash 01623101 457896*1293	300,00	6926.44Cr	0
10	2023-06-20 00:00:00.000	ADT Cash Deposit 01171007 Pacifique	600,00Cr	7526.44Cr	0
11	2023-06-21 00:00:00.000	Electricity Prepaid Electricity 04216499485	150,00	7376.44Cr	2,7
12	2023-06-23 00:00:00.000	POS Purchase Cash Crusaders Pret 457896*1293 21 J...	119,90	7256.54Cr	0
13	2023-06-24 00:00:00.000	Byc Debit 63057201708	50,10	7206.44Cr	0
14	2023-06-26 00:00:00.000	FNB App Prepaid Airtime 27658170643	20,00	7186.44Cr	0
15	2023-06-28 00:00:00.000	FNB App Prepaid Airtime 0748660822	10,00	7176.44Cr	0
16	2023-07-12 00:00:00.000	ADT Cash Deposit 01623101 Nteta	7050,00Cr	14226.4...	79,8
17	2023-07-15 00:00:00.000	FNB App Prepaid Airtime 27658170643	20,00	14206.4...	0
18	2023-07-15 00:00:00.000	FNB App Prepaid Airtime 27658170643	20,00	14186.4...	0
19	2023-07-15 00:00:00.000	Monthly Account Fee	65,00	14121.4...	0

Query executed successfully.

PACO-NT\SQLEXPRESS (16.0 RTM) | PACO-NT\USER (60) | Portfolio Project | 00:00:00 | 249 rows

2. DATA PREPARATION

2. Data Type Check

Bank Statement P...CO-NT\USER (60))*

```
--Checking Data Types
SELECT COLUMN_NAME, DATA_TYPE
FROM INFORMATION_SCHEMA.COLUMNS
WHERE TABLE_NAME = 'JuneToJanuary'
```

98 %

Results Messages

	COLUMN_NAME	DATA_TYPE
1	Date	datetime
2	Description	nvarchar
3	Amount	nvarchar
4	Balance	nvarchar
5	Accrued Bank Charges	float

✓ Query executed successfully. PACO-NT\SQLEXPRESS (16.0 RTM) PACO-NT\USER (60) Portfolio Project 00:00:00 5 rows

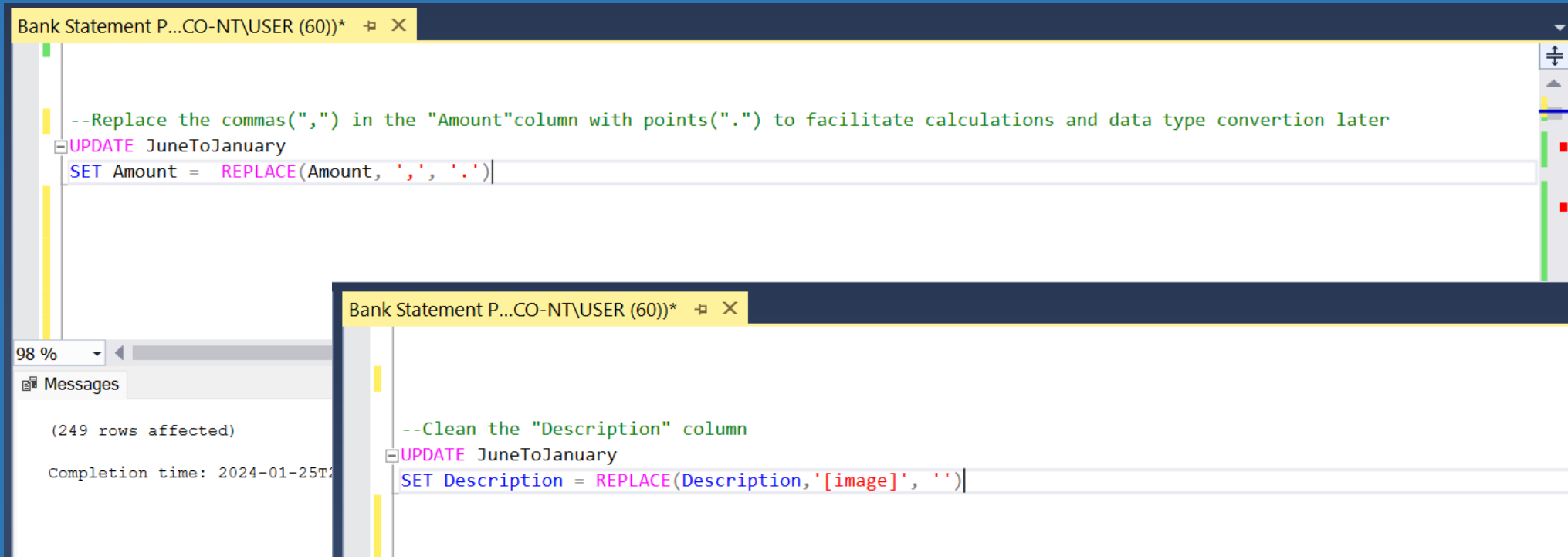
2. DATA PREPARATION

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.

2. DATA PREPARATION

DATA CLEANING

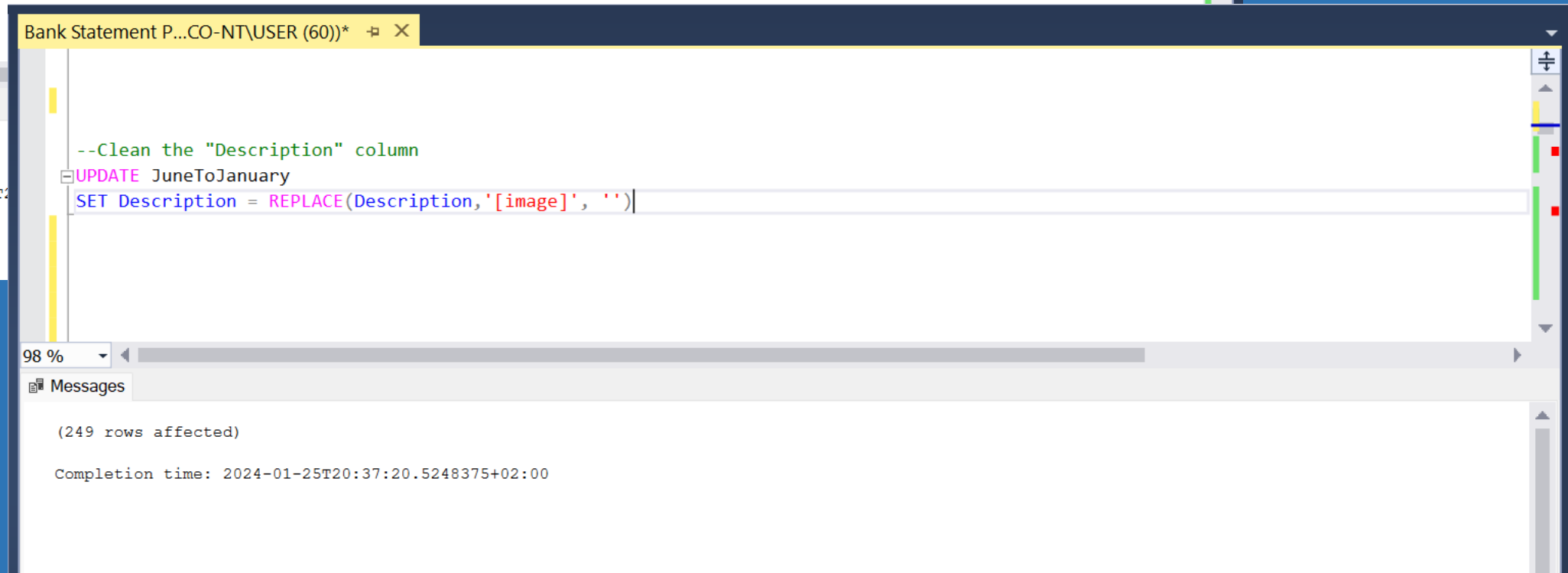


The screenshot shows a SQL Server Enterprise Manager window titled "Bank Statement P...CO-NT\USER (60))*". The main pane contains a T-SQL query:

```
--Replace the commas(",") in the "Amount"column with points(".") to facilitate calculations and data type conversion later
UPDATE JuneToJanuary
SET Amount = REPLACE(Amount, ',', '.')
```

The Messages pane at the bottom shows the execution results:

```
(249 rows affected)
Completion time: 2024-01-25T20:37:20.5248375+02:00
```



The screenshot shows a SQL Server Enterprise Manager window titled "Bank Statement P...CO-NT\USER (60))*". The main pane contains a T-SQL query:

```
--Clean the "Description" column
UPDATE JuneToJanuary
SET Description = REPLACE(Description, '[image]', '')
```

The Messages pane at the bottom shows the execution results:

```
(249 rows affected)
Completion time: 2024-01-25T20:37:20.5248375+02:00
```

2. DATA PREPARATION

DATA CLEANING

```
Bank Statement P...CO-NT\USER (60))* X
```

```
--Convert the "Date" column from datetime to date
ALTER TABLE JuneToJanuary
ALTER COLUMN Date DATE
```

98 %

Messages

(249 rows affected)

Completion time: 2024-01-25T20:

```
Bank Statement P...CO-NT\USER (60))* X
```

```
FROM JuneToJanuary

--- Add new columns for categorizations
Alter Table JuneToJanuary
Add Amount_Clean float,
Balance_clean float,
TransactionType nvarchar(50),
Category nvarchar(50),
SubCategory nvarchar(50)
```

98 %

Messages

Commands completed successfully.

Completion time: 2024-01-25T22:12:10.2972670+02:00

2. DATA PREPARATION

CLEANING 'AMOUNT' AND 'BALANCE' COLUMNS

The image displays two screenshots of a SQL IDE interface, likely SQL Server Enterprise Manager, showing the execution of SQL scripts to clean data columns.

Top Screenshot: The script editor shows a comment `-- Balance_Clean` followed by an `UPDATE` statement for the `JuneToJanuary` table. The `SET` clause assigns `Balance_Clean` to a `CAST` of a `SUBSTRING` of the `Balance` column, starting at position 1 and ending at `LEN(Balance) - 2`, with a data type of `DECIMAL(18, 2)`.

Bottom Screenshot: The script editor shows a comment `--- Set or add values to the 'Amount_Clean' Column` followed by an `UPDATE` statement for the `JuneToJanuary` table. The `SET` clause assigns `Amount_Clean` to a `CASE` expression. The `CASE` expression has two branches: `WHEN Amount LIKE '%Cr' THEN CAST(SUBSTRING(Amount, 1, LEN(Amount) - 2) AS DECIMAL(18, 2))` and `ELSE CAST(Amount AS DECIMAL(18, 2))`. The script ends with `END`.

Both screenshots show a progress bar at 98 % and a Messages pane indicating that 249 rows were affected. The completion time for the bottom script is 2024-01-26T01:12:53.9601084+02:00.

2. DATA PREPARATION

SET CONDITIONS FOR CATEGORIZATION – TRANSACTION TYPE AND DEBIT CATEGORIES

The image displays two screenshots of a SQL Server Enterprise Manager interface, showing SQL scripts for categorizing transactions.

Top Screenshot: The script is titled "Bank Statement P...CO-NT\USER (60))*". It contains the following SQL code:

```
-- TransactionType
UPDATE JuneToJanuary
SET TransactionType =
CASE
    WHEN Amount LIKE '%Cr%' THEN 'Credit'
    ELSE 'Debit'
END
```

The Messages pane shows: (249 rows affected) and Completion time: 2024-01-26.

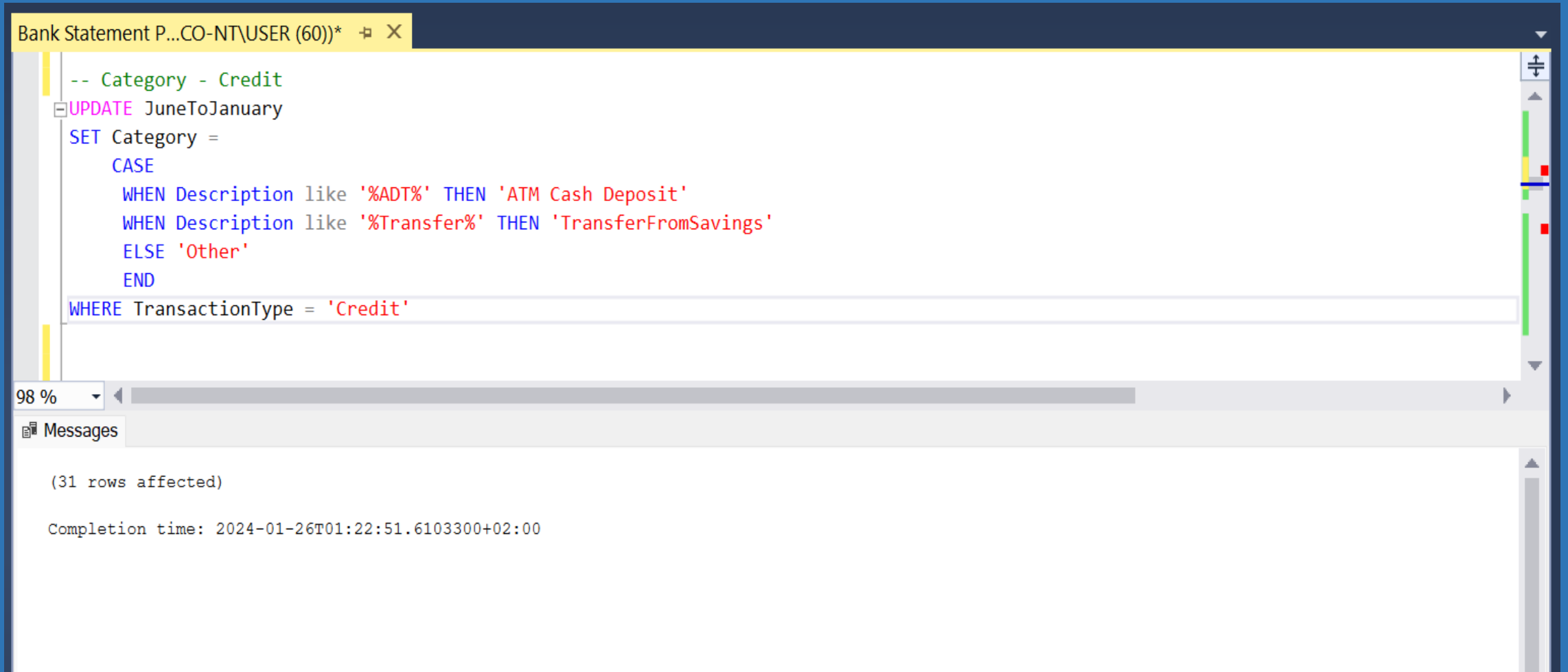
Bottom Screenshot: The script is titled "Bank Statement P...CO-NT\USER (60))*". It contains the following SQL code:

```
-- Category - Debit
UPDATE JuneToJanuary
SET Category =
CASE
    WHEN Description like '%Purchase%' THEN 'Purchases & Payments'
    WHEN Description like '%Prepaid%' THEN 'Purchases & Payments'
    WHEN Description like '%Byc%' THEN 'Savings'
    WHEN Description like '%saving%' THEN 'Savings'
    WHEN Description like '%Fee%' THEN 'Banking Fees'
    WHEN Description like '%ATM%' THEN 'ATM Withdrawal'
    WHEN Description like '%Send%Money%' THEN 'E-Wallet'
    ELSE 'Other'
END
WHERE TransactionType = 'Debit'
```

The Messages pane shows: (218 rows affected) and Completion time: 2024-01-26T01:24:07.6432653+02:00.

2. DATA PREPARATION

SET CONDITIONS FOR CATEGORIZATION – DEBIT CATEGORIES



The screenshot shows a SQL IDE window titled "Bank Statement P...CO-NT\USER (60))". The main editor contains the following T-SQL code:

```
-- 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'
```

The code is syntax-highlighted: comments are green, keywords are blue, string literals are red, and identifiers are black. A vertical scrollbar on the right indicates the code is scrollable.

Below the editor, a status bar shows "98 %" zoom level. A "Messages" pane at the bottom displays the execution results:

```
(31 rows affected)

Completion time: 2024-01-26T01:22:51.6103300+02:00
```

2. DATA PREPARATION

SET CONDITIONS FOR CATEGORIZATION – DEBIT SUBCATEGORIES

```
Bank Statement P...CO-NT\USER (60))*
--Subcategory - Debit
UPDATE JuneToJanuary
SET SubCategory =
CASE
    WHEN Description like '%Checker%' THEN 'Groceries & Toiletries'
    WHEN Description like '%PNP%' THEN 'Groceries & Toiletries'
    WHEN Description like '%PEP%' THEN 'Groceries & Toiletries'
    WHEN Description like '%Shoprite%' THEN 'Groceries & Toiletries'
    WHEN Description like '%Clicks%' THEN 'Groceries & Toiletries'
    WHEN Description like '%Riviera%' THEN 'Groceries & Toiletries'
    WHEN Description like '%Mr%Price%' THEN 'Clothing'
    WHEN Description like '%Clothing%' THEN 'Clothing'
    WHEN Description like '%Mcd%' THEN 'Food & Beverage'
    WHEN Description like '%Roman%' THEN 'Food & Beverage'
    WHEN Description like '%Starbucks%' THEN 'Food & Beverage'
    WHEN Description like '%Fish%Chip%' THEN 'Food & Beverage'
    WHEN Description like '%Takea%' THEN 'OnlineShopping'
    WHEN Description like '%Unisa%' THEN 'Tuition Fees'
    WHEN Description like '%Electricity%' THEN 'Electricity'
    WHEN Description like '%Bolt%' THEN 'Ride Services'
    WHEN Description like '%Airtime%' THEN 'Airtime'
    WHEN Description like '%PNA%' THEN 'Electronics & Stationaries'
    WHEN Description like '%Cash%Crusaders%' THEN 'Electronics & Stationaries'
    WHEN Description like '%Vodacom' THEN 'Electronics & Stationaries'
    WHEN Description like '%Game%' THEN 'Electronics & Stationaries'
    WHEN Description like '%Post%' THEN 'Electronics & Stationaries'
    ELSE 'Other'
END
WHERE TransactionType = 'Debit'
```

89 %

Messages

Query executed successfully. | PACO-NT\SQLEXPRESS (16.0 RTM) | PACO-NT\USER (60) | Portfolio Project | 00:00:00 | 0 rows

2. DATA PREPARATION

'JUNETOJANUARY' TABLE CHECK

Bank Statement P...CO-NT\USER (60))*

--Check the new added values to the table
Select *
From JuneToJanuary

89 %

Results Messages

	Date	Description	Amount	Balance	Accrued Bank Charges	Amount_Clean	Balance_clean	TransactionType	Categor
1	2023-06-15 00:00:00.000	ADT Cash Deposit 01623100 162310045789651	5700.00Cr	5700.00Cr	0	5700	5700	Credit	ATM Ca
2	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 0837454428	25.00	5675.00Cr	0	25	5675	Debit	Purchas
3	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 27658170643	20.00	5655.00Cr	0	20	5655	Debit	Purchas
4	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 27658170643	20.00	5635.00Cr	0	20	5635	Debit	Purchas
5	2023-06-17 00:00:00.000	FNB App Prepaid Airtime 0622520309	25.00	5610.00Cr	0	25	5610	Debit	Purchas
6	2023-06-20 00:00:00.000	FNB App Prepaid Airtime 27658170643	20.00	5590.00Cr	0	20	5590	Debit	Purchas
7	2023-06-20 00:00:00.000	Inward Swift R023Z541G0 100	1786.44Cr	7376.44Cr	0	1786,44	7376,44	Credit	Other
8	2023-06-20 00:00:00.000	Forex Notes Fee R023Z541G0 Forex Notes Commission	150.00	7226.44Cr	0	150	7226,44	Debit	Banking
9	2023-06-20 00:00:00.000	ATM Cash 01623101 457896*1293	300.00	6926.44Cr	0	300	6926,44	Debit	ATM Wi
10	2023-06-20 00:00:00.000	ADT Cash Deposit 01171007 Pacifique	600.00Cr	7526.44Cr	0	600	7526,44	Credit	ATM Ca
11	2023-06-21 00:00:00.000	Electricity Prepaid Electricity 04216499485	150.00	7376.44Cr	2,7	150	7376,44	Debit	Purchas
12	2023-06-23 00:00:00.000	POS Purchase Cash Crusaders Pret 457896*1293 21 J...	119.90	7256.54Cr	0	119,9	7256,54	Debit	Purchas
13	2023-06-24 00:00:00.000	Byc Debit 63057201708	50.10	7206.44Cr	0	50,1	7206,44	Debit	Savings
14	2023-06-26 00:00:00.000	FNB App Prepaid Airtime 27658170643	20.00	7186.44Cr	0	20	7186,44	Debit	Purchas
15	2023-06-28 00:00:00.000	FNB App Prepaid Airtime 0748660822	10.00	7176.44Cr	0	10	7176,44	Debit	Purchas
16	2023-07-12 00:00:00.000	ADT Cash Deposit 01623101 Nteta	7050.00Cr	14226.4...	79,8	7050	14226,44	Credit	ATM Ca
17	2023-07-15 00:00:00.000	FNB App Prepaid Airtime 27658170643	20.00	14206.4...	0	20	14206,44	Debit	Purchas

Query executed successfully.

PACO-NT\SQLEXPRESS (16.0 RTM) | PACO-NT\USER (60) | Portfolio Project | 00:00:00 | 249 rows

2. DATA PREPARATION

CREATE 'BANKSTATEMENT' TABLE

```
Bank Statement P...CO-NT\USER (60))* X
--Create the final table - BankStatement which will contain clean data
CREATE TABLE BankStatement (
    Date DATE,
    Description NVARCHAR(255), -- I chose NVARCHAR(255) because when I tried inserting the 'Description' column from my initial table in this 'Descrip
    Amount DECIMAL(18, 2),
    Balance DECIMAL(18, 2),
    TransactionType NVARCHAR(50),
    Category NVARCHAR(255),
    SubCategory NVARCHAR(255)
)
```

```
Bank Statement P...CO-NT\USER (60))* X
INSERT INTO BankStatement
SELECT
    Date,
    Description,
    Amount_Clean,
    Balance_Clean,
    TransactionType,
    Category,
    SubCategory
FROM JuneToJanuary

(249 rows affected)

Completion time: 2024-01-26T01:46:08.8806354+02:00
```

'BANKSTATEMENT' TABLE OVERVIEW

Bank Statement P...CO-NT\USER (60))*

Select *
From BankStatement

89 %

Results Messages

	Date	Description	Amount	Balance	TransactionType	Category	SubCategory
1	2023-06-15	ADT Cash Deposit 01623100 162310045789651	5700.00	5700.00	Credit	ATM Cash Deposit	Other
2	2023-06-17	FNB App Prepaid Airtime 0837454428	25.00	5675.00	Debit	Purchases & Payments	Airtime
3	2023-06-17	FNB App Prepaid Airtime 27658170643	20.00	5655.00	Debit	Purchases & Payments	Airtime
4	2023-06-17	FNB App Prepaid Airtime 27658170643	20.00	5635.00	Debit	Purchases & Payments	Airtime
5	2023-06-17	FNB App Prepaid Airtime 0622520309	25.00	5610.00	Debit	Purchases & Payments	Airtime
6	2023-06-20	FNB App Prepaid Airtime 27658170643	20.00	5590.00	Debit	Purchases & Payments	Airtime
7	2023-06-20	Inward Swift R023Z541G0 100	1786.44	7376.44	Credit	Other	Other
8	2023-06-20	Forex Notes Fee R023Z541G0 Forex Notes Commission	150.00	7226.44	Debit	Banking Fees	Other
9	2023-06-20	ATM Cash 01623101 457896*1293	300.00	6926.44	Debit	ATM Withdrawal	Other
10	2023-06-20	ADT Cash Deposit 01171007 Pacifique	600.00	7526.44	Credit	ATM Cash Deposit	Other
11	2023-06-21	Electricity Prepaid Electricity 04216499485	150.00	7376.44	Debit	Purchases & Payments	Electricity
12	2023-06-23	POS Purchase Cash Crusaders Pret 457896*1293 21 J...	119.90	7256.54	Debit	Purchases & Payments	Electronics & Stationaries
13	2023-06-24	Byc Debit 63057201708	50.10	7206.44	Debit	Savings	Other
14	2023-06-26	FNB App Prepaid Airtime 27658170643	20.00	7186.44	Debit	Purchases & Payments	Airtime
15	2023-06-28	FNB App Prepaid Airtime 0748660822	10.00	7176.44	Debit	Purchases & Payments	Airtime
16	2023-07-12	ADT Cash Deposit 01623101 Nteta	7050.00	14226...	Credit	ATM Cash Deposit	Other
17	2023-07-15	FNB App Prepaid Airtime 27658170643	20.00	14206...	Debit	Purchases & Payments	Airtime
18	2023-07-15	FNB App Prepaid Airtime 27658170643	20.00	14186...	Debit	Purchases & Payments	Airtime
19	2023-07-15	Monthly Account Fee	65.00	14121...	Debit	Banking Fees	Other
20	2023-07-15	Service Fees	2 70	14118	Debit	Banking Fees	Other

Query executed successfully.

PACO-NT\SQLEXPRESS (16.0 RTM) | PACO-NT\USER (60) | Portfolio Project | 00:00:00 | 249 rows

3. DATA EXPLORATION – EXPENSE AND INCOME TRACKING

CONTRIBUTION PERCENTAGE PER CATEGORY FOR DEBIT TRANSACTIONS

Bank Statement P...CO-NT\USER (60))*

```
--Contribution or distribution percentage for each category to the total Amount of debit transactions
Select Category, SUM(Amount) As Amount, SUM(Amount)/(Select SUM(Amount)From BankStatement Where TransactionType = 'Debit')*100 As Percentage
From BankStatement
Where TransactionType = 'Debit'
GROUP BY Category
ORDER BY Percentage Desc
```

89 %

Results Messages

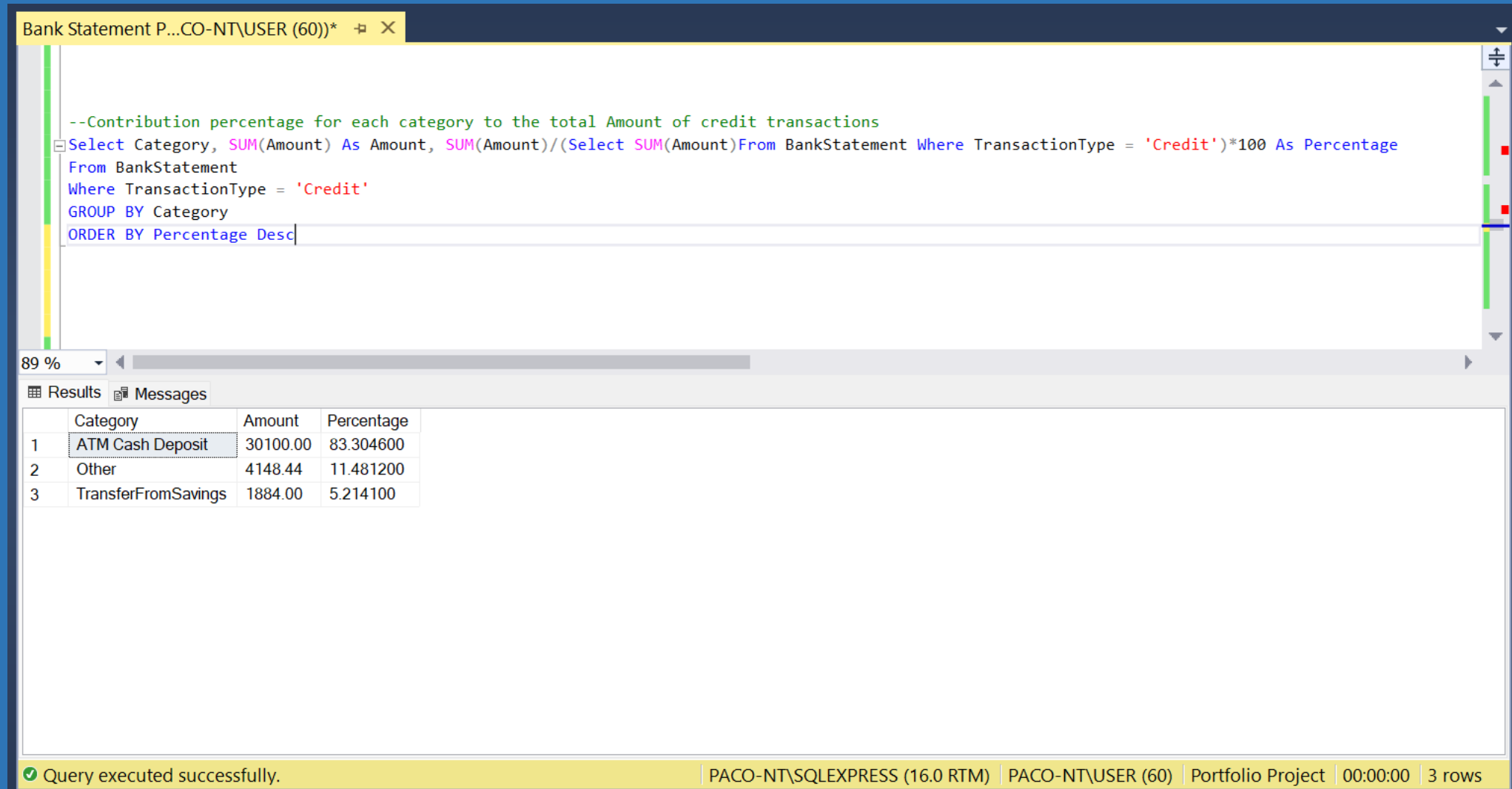
	Category	Amount	Percentage
1	Purchases & Payments	28294.16	80.972300
2	Savings	2530.83	7.242700
3	E-Wallet	1940.00	5.551900
4	ATM Withdrawal	1250.00	3.577200
5	Banking Fees	828.00	2.369500
6	Other	100.00	0.286100

Query executed successfully.

PACO-NT\SQLEXPRESS (16.0 RTM) | PACO-NT\USER (60) | Portfolio Project | 00:00:00 | 6 rows

2. DATA EXPLORATION – EXPENSE AND INCOME TRACKING

CONTRIBUTION PERCENTAGE PER CATEGORY FOR CREDIT TRANSACTIONS



The screenshot displays the SQL Server Enterprise Manager interface. The top pane shows a query window with the following SQL code:

```
--Contribution percentage for each category to the total Amount of credit transactions
Select Category, SUM(Amount) As Amount, SUM(Amount)/(Select SUM(Amount)From BankStatement Where TransactionType = 'Credit')*100 As Percentage
From BankStatement
Where TransactionType = 'Credit'
GROUP BY Category
ORDER BY Percentage Desc
```

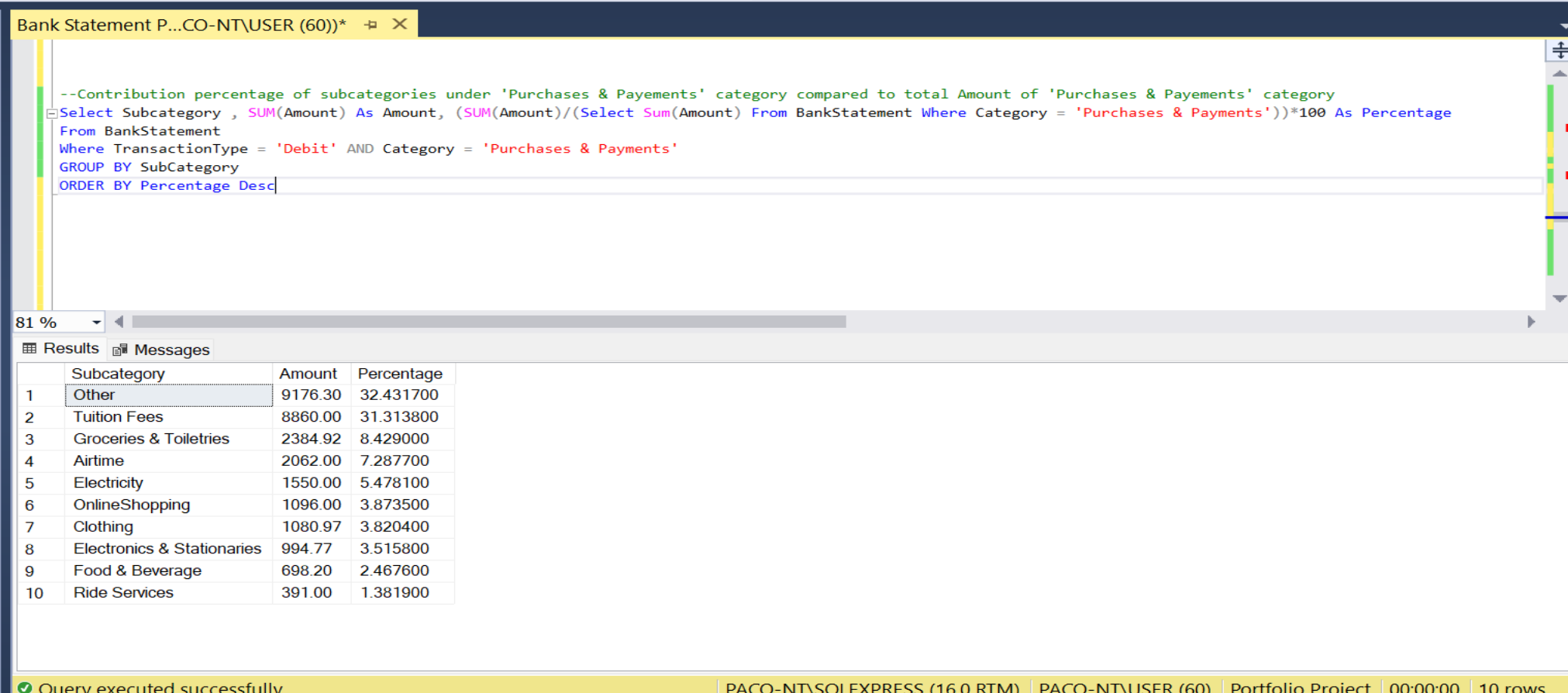
The bottom pane shows the query results in a table format. The table has four columns: an index, Category, Amount, and Percentage. The results are as follows:

	Category	Amount	Percentage
1	ATM Cash Deposit	30100.00	83.304600
2	Other	4148.44	11.481200
3	TransferFromSavings	1884.00	5.214100

The status bar at the bottom indicates: Query executed successfully. PACO-NT\SQLEXPRESS (16.0 RTM) | PACO-NT\USER (60) | Portfolio Project | 00:00:00 | 3 rows

2. DATA EXPLORATION – EXPENSE AND INCOME TRACKING

CONTRIBUTION PERCENTAGE PER 'PURCHASES & PAYMENTS' SUBCATEGORIES



The screenshot displays a SQL Server Enterprise Manager window titled "Bank Statement P...CO-NT\USER (60))*". The query editor contains the following SQL code:

```
--Contribution percentage of subcategories under 'Purchases & Payments' category compared to total Amount of 'Purchases & Payments' category
Select Subcategory , SUM(Amount) As Amount, (SUM(Amount)/(Select Sum(Amount) From BankStatement Where Category = 'Purchases & Payments'))*100 As Percentage
From BankStatement
Where TransactionType = 'Debit' AND Category = 'Purchases & Payments'
GROUP BY SubCategory
ORDER BY Percentage Desc
```

The query results are displayed in a table with the following data:

	Subcategory	Amount	Percentage
1	Other	9176.30	32.431700
2	Tuition Fees	8860.00	31.313800
3	Groceries & Toiletries	2384.92	8.429000
4	Airtime	2062.00	7.287700
5	Electricity	1550.00	5.478100
6	OnlineShopping	1096.00	3.873500
7	Clothing	1080.97	3.820400
8	Electronics & Stationaries	994.77	3.515800
9	Food & Beverage	698.20	2.467600
10	Ride Services	391.00	1.381900

The status bar at the bottom indicates: "Query executed successfully. | PACO-NT\SQLEXPRESS (16.0 RTM) | PACO-NT\USER (60) | Portfolio Project | 00:00:00 | 10 rows".

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

Credit

Debit

34.94K

Total Amount Debit

2.73K

Average of Balance

36.13K

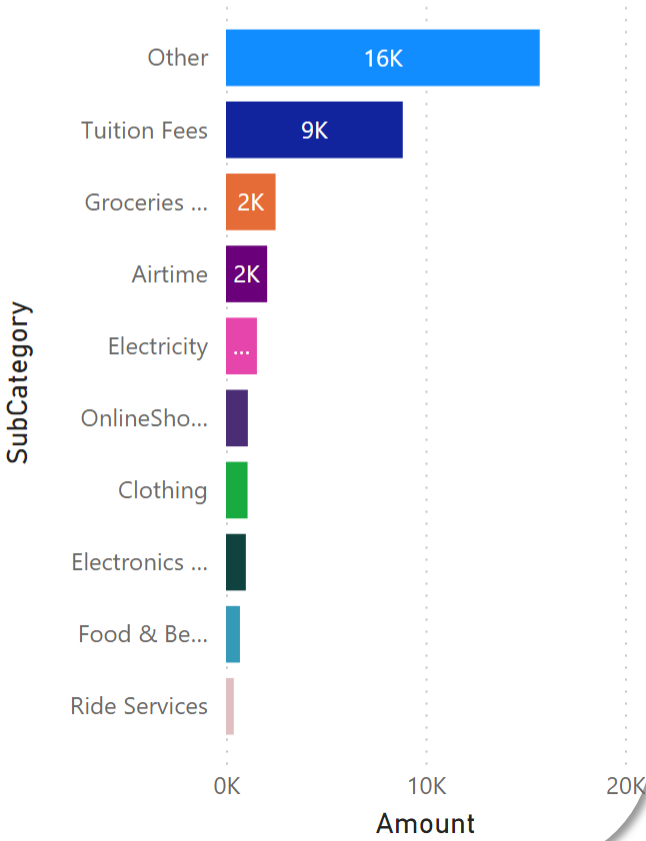
Total Amount Credit

249

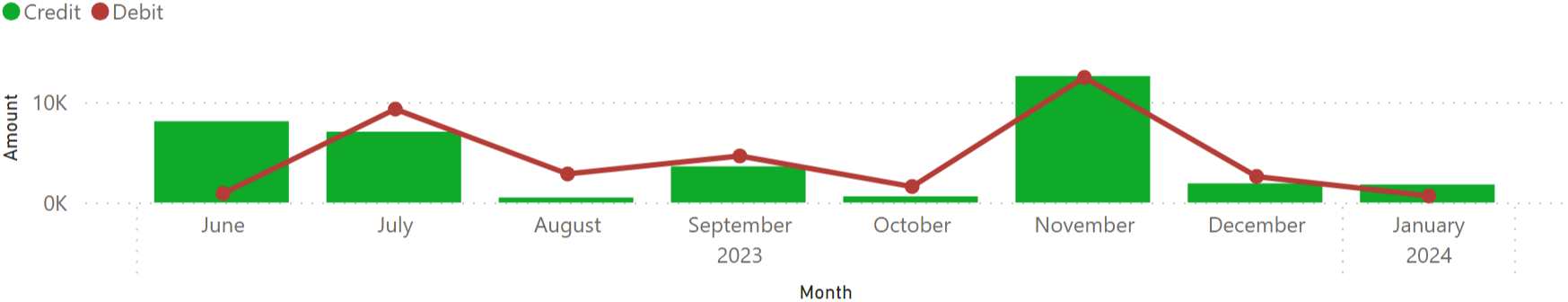
Count of Transactions

Total Amount by SubCategory

SubCateg... ● Other ● Tuition F... ● Groceries...

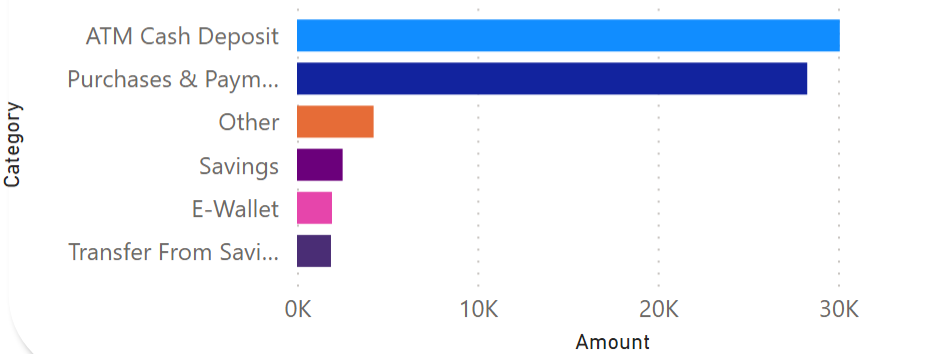


Total Credit Amount vs Total Debit Amount per month

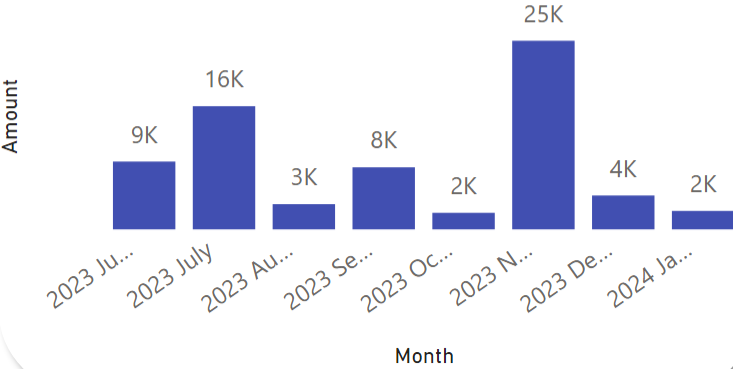


Total Amount by Category

Category ● ATM Cas... ● Purchase... ● Other ● Savings ● E-Wallet ● Transfer F...



Total Credit/Debit Amount per month



BANK ACCOUNT FINANCIAL INSIGHTS

14.23K

Highest Balance

0.45

Lowest Balance

Balance over time



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.

ACTIONS TO TAKE

1. MULTIPLY OR DIVERSIFY SOURCES OF INCOME.

As seen during the analysis, the account holder relies heavily on 'ATM Cash Deposit' (accounting for around 83% of income). Finding another source of income will help the account holder reduce dependence on 'ATM Cash Deposit' and lower associated banking fees.

2. BUDGET.

Budget Expenses

Many economists suggest a 50/30/20 or 50/40/10 budget plan, allocating 50% to savings, 30 to 40% to needs, and 10 to 20% wants. The account holder is spending around 81% on 'Purchases and Payments' which are not even all needs. He should review his spendings and allocate specific budgets to his needs and wants to fit the 30 to 40 and 10 to 20 model mentioned above, leaving the 50% remaining to savings.

The expense budget should also go down as far as to subcategories. A fixed amount should be allocated to all subcategories. Spending on 'Airtime' and 'Groceries & Toiletries' for example, are too close whereas one is a 'need' and the other is a 'want'. The spending on 'Airtime' should be reduced and such adjustment should be made on all subcategories by budgeting and reducing unnecessary spending.

Budget Savings

The account holder should review spendings and aim to allocate 50% of income to savings, which is currently at 7%. He should also adjust spending habits to achieve a more balanced budget.

ACTIONS TO TAKE

3. Manage Balance Fluctuations.

There is a significant difference between the highest and lowest balance. This inconsistency in balance is noticable throughout the whole period. The account holder can address this by applying above measures and maintaining financial discipline.