**ACCOUNT STATEMENT ANALYSIS**

**Objective**

The objective is to comprehensively analyse an account statement by examining balances, transactions, and patterns to identify cash flow status, spending habits, significant transactions, and recurring payments. This analysis aims to provide insights into financial health and areas for potential improvement.

**1. Account Overview**

Account statement period will be divided into smaller periods and for each period this will be identified and analysed.

Opening Balance: The amount in the account at the start of the statement period.

Closing Balance: The amount in the account at the end of the statement period, reflecting all transactions.

The opening and closing balances are key indicators of an account's cash flow status for the period under review. By comparing the opening and closing balances, we can determine if the account has more (net gain) or less (net loss) money at the end of the period compared to the beginning. This comparison gives us a quick sense of the account's cash flow.

* A net gain might suggest savings or income growth.
* Net loss could indicate higher spending or decreased income.

**2. Transaction Analysis**

Total Deposits: Sum of all deposits during the period.

Total Withdrawals: Sum of all withdrawals during the period.

Bucket Analysis:

Dividing the transaction in to buckets (e.g. <1000, 1100-10000 etc.)

Analysing the count for each bucket for each period.

This can be done for both deposits and withdrawals.

**3. Transaction Categories**

Identifying the number for these transactions from the divided periods

* Funds Transfer (TFR)
* Automated Teller Machine (ATM)
* Online Payments (UPI)
* Payments Interface (UPI)
* Point of Sale (POS)
* Minimum Balance Charges (CHRG)
* Foreign Transaction (FOREX)

**4. Significant Transactions**

Large Deposits: Identify any unusually large deposits for further investigation or confirmation.

Large Withdrawals: Review large withdrawals for their purpose and necessity.

**How will analysis this?**

Standard Deviation: Compute the standard deviation of transaction sizes to understand the variability of transactions from the average. Transactions that fall beyond a certain threshold (e.g., more than 2 standard deviations from the average) could be flagged as unusual.

**5. Recurring Transactions**

Regular Payments: Identify recurring payments for subscriptions, utilities, or other regular expenses.

Regular Deposits: Identify consistent incoming transfers, which could indicate salary or regular income sources.

Methodology:

**For Regular Payments:**

Review Transaction Descriptions: Start by looking at the descriptions of each withdrawal. Recurring payments often have similar or identical descriptions, such as the name of a utility company, subscription service, or lender.

Analyse Transaction Dates: Regular payments, such as for subscriptions or utilities, typically occur on a predictable schedule (e.g., monthly, quarterly). Look for patterns in the transaction dates.

Categorize Payments: Group the transactions by category (e.g., utilities, rent/mortgage, subscriptions) based on their descriptions and amounts. This helps in identifying which payments are regular.

**For Regular Deposits:**

Examine Deposit Sources: Look for recurring deposit descriptions that indicate a regular income source, such as payroll deposits from an employer, which might be marked with the employer's name or a consistent transaction ID.

Check Deposit Timing: Regular income sources like salaries are usually deposited on a predictable schedule (e.g., bi-weekly, monthly). Identify patterns in deposit dates.

**6. Cash Flow Patterns**

High Activity Days: Determine days with the highest number of transactions or the highest volume of transaction activity.

Low Activity Periods: Identify any periods with little to no account activity.

**7. Balance Management**

Minimum Daily Balance: The lowest balance maintained in the account on any given day.

Average Monthly Balance: The average of the daily balances over the course of the month.

**8. Future Transaction Prediction**

Using historical data and predictive analytics, forecast future transactions to anticipate cash flows and expenses. Methods include time series analysis, machine learning models, and scenario analysis. This aids in budgeting and financial planning, ensuring preparedness for upcoming financial obligations.