**Credit Card Use Data Analysis**

**-- Data correction**

update credit\_card

SET Week\_Start\_Date = STR\_TO\_DATE(Week\_Start\_Date, '%d-%m-%Y');

ALTER TABLE credit\_card

MODIFY COLUMN Week\_Start\_Date DATE;

ALTER TABLE credit\_card

CHANGE COLUMN `Use Chip` `use\_chip` text;

ALTER TABLE credit\_card

CHANGE COLUMN `Exp Type` `exp\_type` text; -- use brackets insted of this

ALTER TABLE credit\_card

CHANGE COLUMN ï»¿Client\_Num client\_No text;

**-- 1. Total Spending per Card i.e Chip and Swipe :**

select \* from credit\_card;

select sum(Total\_Trans\_Amt) as Total\_card\_transaction

from credit\_card

where use\_chip = 'Chip ' or use\_chip ='Swipe ';

**-- 2. Monthly Spending Trend for a Card:**

select month(Week\_Start\_Date) as Month, sum(Total\_Trans\_Amt) as Total\_monthly\_spending

from credit\_card

group by 1 order by 1;

**-- 3. Highest Transaction Amount per Card:**

select Total\_Trans\_Amt as Highest\_transaction\_amount from credit\_card

order by 1 desc limit 1;

select Total\_Trans\_Amt as Highest\_transaction\_amount from credit\_card

order by 1 desc limit 5;

**-- 4. Top expenses Based on Spending:**

select exp\_type, Total\_Trans\_Amt from credit\_card

order by 2 desc limit 5;

**-- 5. Average Transaction Amount per Card:**

select avg(Total\_Trans\_Amt) as Avg\_transaction\_amt from credit\_card;

**-- 6. Find Cards with the highest int rate and annual fee:**

select client\_No,Annual\_Fees, Interest\_Earned from credit\_card

order by 2, 3 desc limit 10;

**-- 7. User's Total Spending in each category:**

select exp\_type, sum(Total\_Trans\_Amt) as Total\_amt\_spend from credit\_card group by 1 order by 2;

**/\* 8. Users Who Spent Over a Certain Amount**

**This query finds users who spent more than a certain amount within a time period (e.g., $5,000 between 2024-01-01 and 2024-12-31): \*/**

select Week\_Start\_Date,exp\_type, Total\_Trans\_Amt from credit\_card

where Total\_Trans\_Amt > 5000

and Week\_Start\_Date between '2023-10-10' and '2023-12-24' ;

**-- 9. Days with Highest Spending:**

SELECT Week\_Start\_Date, SUM(Total\_Trans\_Amt) AS total\_spent

FROM credit\_card

WHERE exp\_type = 'Grocery'

GROUP BY Week\_Start\_Date

ORDER BY 2 DESC

LIMIT 10;

**-- 10. Active Cards with No Transactions in Last 30 Days:**

SELECT card\_id

FROM cards

WHERE card\_id NOT IN (

SELECT DISTINCT card\_id

FROM transactions

WHERE transaction\_date >= CURRENT\_DATE - INTERVAL '30 days'

)

ORDER BY card\_id;

**-- 11. Find the Cardholder with the Highest Credit Limit:**

select client\_No, Credit\_Limit from credit\_card

order by Credit\_Limit desc limit 1;

**-- 12. Update the Balance of a Credit Card:**

select \* from credit\_card;

update credit\_card

set credit\_limit =2000

where client\_No = 708082083;