**Data Story:**

There are 3 different tables to look for starting the exploratory data analysis.Table **CI\_customer** contains the customer information like age, income, marital status, etc who has taken the loan. Table **CI\_loan** contains more and detailed information about the loan like interest rate, credit score of the customer, etc. Table **CI\_economics** contains the indian macro economic parameters like GDP,Unemployment rate, etc from year 2018 to 2020 at monthly level.

-- Question 1

-- 1/1 point (graded)

-- Story: When we begin the exploratory data analysis, the first thing we do is go through all of the related tables.

-- To start With, we will check how many different types of loans are given by the CI capital.

-- What are the different types of loans given by CI Capital?

-- Question: How many distinct loan types are given by CI Capital?

SELECT \* FROM CI\_loan

SELECT COUNT (DISTINCT loan\_type) FROM CI\_loan

-- Question 2

-- 1/1 point (graded)

-- Story: Companies should know the distribution of the different loans to find out the gaps

-- so that they can target more where the loan has been given less than the actual target.

-- Find out the number of loans for each loan type.

-- Question: How many Auto loans for two-wheelers have been given?

SELECT \* FROM CI\_loan

SELECT loan\_type, COUNT(total\_loans) AS number\_loans

FROM CI\_loan

WHERE loan\_type='AL2'

GROUP BY loan\_type

-- Question 3

-- 1/1 point (graded)

-- Story: Age is a very important variable while giving out the loan. A younger applicant is considered to have more employment

-- and earning opportunities against an older applicant.

-- Therefore, if you are in your 20's, you are more eligible to get a personal loan of a longer

-- tenure as compared to someone who is in the 50s. Let’s check the distribution of loans by age.

-- Find out the customers who are less than 30 years old and have taken loans?

-- Question: What is the age of account\_no CI11?

SELECT \* FROM CI\_customer

SELECT account\_no, age

FROM CI\_customer

WHERE age<30 AND account\_no='CI11'

-- Question 4

-- 1/1 point (graded)

-- Story: A credit score is a number between 300–850 that depicts a consumer's creditworthiness.

-- The higher the score, the better a borrower looks to potential lenders. A credit score is based on credit history: number of open accounts, total levels of debt, and

-- repayment history, and other factors. Let’s check the loan type which is in more risk due to low credit score?

-- How many loans have been given where credit score is less than 580 by different loan types?

-- Question: What is the minimum credit score for the Housing Loan?

SELECT \* FROM CI\_loan

SELECT loan\_type,

Count(account\_no) AS count\_of\_loans

FROM CI\_loan

WHERE credit\_score < 580

GROUP BY loan\_type;

SELECT COUNT(\*)

FROM(

SELECT \*

FROM CI\_loan

WHERE credit\_score < 580

AND loan\_type ="hl"

ORDER BY credit\_score)B

-- Question 5

-- 1/1 point (graded)

-- Story: Even when a customer's credit score is high,Borrower can fall behind on loan repayments. We will investigate whether income plays a role in this phase.

-- Find out the average income of customers who have credit scores more than 700 and have been defaulted?

-- Question: What is the average annual income of the customers who have defaulted?

SELECT b.if\_default,

Avg(annual\_income) AS Average\_annual\_income

FROM CI\_customer a

INNER JOIN CI\_loan b

ON a.account\_no = b.account\_no

WHERE b.credit\_score > 700

GROUP BY b.if\_default

-- Question 6

-- 1/1 point (graded)

-- Story: When conducting exploratory research, it is important to consider the relationship between variables in order

-- to gain insights into how one variable follows the flow of another variable.

-- What is the average credit score by different marital status?

-- Question: What is the average credit score for widower?

SELECT a.marital\_status,

Avg(b.credit\_score) AS Average\_credit\_Score

FROM CI\_customer a

INNER JOIN CI\_loan b

ON a.account\_no = b.account\_no

GROUP BY a.marital\_status;

-- Question 7

-- 1/1 point (graded)

-- Story: Is education level important while giving out the loan? Let’s check the relation between the education level and loan defaulters?

-- How many customers have more than or equal to 5 defaults by different education levels?

-- Question: How many customers who are doing Masters education have been defaulted?

SELECT a.education\_level,

Sum(b.if\_default) as default\_count

FROM CI\_customer a

INNER JOIN CI\_loan b

ON a.account\_no = b.account\_no

GROUP BY a.education\_level

HAVING default\_count >= 5

-- Question 8

-- 1/1 point (graded)

-- Story: External factors such as the country's GDP and unemployment rate affects the loan demand. As a result,

-- we must recognize this when developing new policies and rules for the business.

-- Create a report that shows the relationship between the number of loans granted for each month and respective unemployment rate.

-- It should be sorted by unemployment rate, from lowest to highest.

-- Note: The CI\_economics table has data from 2018 to 2020.

-- Report Should contain the following Columns in the same exact sequence:

-- Report\_Month,

-- Real\_GDP\_in\_Lakh\_Crore,

-- unemp\_rate,

-- Count of Loans

-- Question: What is the unemployment rate of the country in Feb 2019?

SELECT \* FROM CI\_economics

SELECT

a.report\_month,

a.real\_gdp\_in\_lakh\_crore,

a.Unemp\_Rate,

Count(b.account\_no) AS count\_of\_loans

FROM

CI\_economics a

LEFT JOIN CI\_loan b

ON Year(a.report\_month) = Year(b.start\_date)

AND Month(a.report\_month) = Month(b.start\_date)

GROUP

BY a.report\_month,

a.real\_gdp\_in\_lakh\_crore,

a.Unemp\_Rate

ORDER

BY a.unemp\_rate ASC