**Assessement –5**

1. **Write SQL query to solve the problem given below**

**Here we are talking about the Bank related information of a person.**

**For which you need to create three tables named as Bank, Account holder and Loan table.**

**And solve the problem stated below.**

**Create a Bank table, attributes are : branch id, branch name, branch city**

**Create a Loan table, attributes are : loan no, branch id, account holder’s id, loan amount and loan type**

**Create a table named as Account holder for the same scenario containing the attributes are account holder’s id, account no, account holder’s name, city,contact, date of account created, account status (active or terminated), account type and balance.**

**Consider an example where there’s an account holder table where we are doing an intra bank transfer i.e. a person holding account A is trying to transfer $100 to account B.**

**For this you have to make a transaction in sql which can transfer fund from account A to B**

**Make sure after the transaction the account information has to be updated for both the credit account and the debited account**

**Also fetch the details of the account holder who are related from the same city**

**Write a query to fetch account number and account holder name, whose accounts were created after 15th of any month**

**Write a query to display the city name and count the branches in that city. Give the count of branches an alias name of Count\_Branch.**

**Write a query to display the account holder’s id, account holder’s name, branch id, and loan amount for people who have taken loans. (NOTE : use sql join concept to solve the query)**

**Ans.**

**create database BANK;**

**USE bank;**

**CREATE TABLE Bank**

**(branch\_id INT PRIMARY KEY,**

**branch\_name VARCHAR(100),**

**branch\_city VARCHAR(100));**

**CREATE TABLE AccountHolder**

**(account\_holder\_id INT PRIMARY KEY,**

**account\_no VARCHAR(20) UNIQUE,**

**account\_holder\_name VARCHAR(100),**

**city VARCHAR(100),**

**contact VARCHAR(20),**

**date\_of\_account\_created DATE,**

**account\_status VARCHAR(20),**

**account\_type VARCHAR(50),**

**balance DECIMAL(10, 2));**

**CREATE TABLE Loan**

**(loan\_no INT PRIMARY KEY,**

**branch\_id INT,**

**account\_holder\_id INT,**

**loan\_amount DECIMAL(12, 2),**

**loan\_type VARCHAR(50),**

**FOREIGN KEY (branch\_id) REFERENCES Bank(branch\_id),**

**FOREIGN KEY (account\_holder\_id) REFERENCES AccountHolder(account\_holder\_id));**

**START TRANSACTION;**

**UPDATE AccountHolder**

**SET balance = balance - 100**

**WHERE account\_no = 'A' AND balance >= 100;**

**UPDATE AccountHolder**

**SET balance = balance + 100**

**WHERE account\_no = 'B';**

**COMMIT;**

**SELECT account\_no, account\_holder\_name**

**FROM AccountHolder**

**WHERE DAY(date\_of\_account\_created) > 15;**

**SELECT branch\_city, COUNT(\*) AS Count\_Branch**

**FROM Bank**

**GROUP BY branch\_city;**

**INSERT INTO Bank (branch\_id, branch\_name, branch\_city) VALUES**

**(1, 'Central Bank', 'Rajkot'),**

**(2, 'City Bank', 'Junagadh'),**

**(3, 'ICICI Bank', 'Ahmedabad'),**

**(4, 'BOB Bank', 'Vanthali');**

**INSERT INTO AccountHolder**

**(account\_holder\_id, account\_no, account\_holder\_name, city, contact,**

**date\_of\_account\_created, account\_status, account\_type, balance) VALUES**

**(101, 031120, 'Janki', 'Rajkot', '1234567890', '2025-05-16', 'active', 'savings', 500.00),**

**(102, 110698, 'Bhagirath', 'Vanthali', '2345678901', '2025-05-20', 'active', 'current', 300.00),**

**(103, 201023, 'Jivansh', 'Ahmedabad', '3456789012', '2025-05-10', 'active', 'savings', 700.00),**

**(104, 171020, 'Ridhan', 'Chicago', '4567890123', '2025-04-18', 'terminated', 'current', 0.00),**

**(105, 190719, 'Shagun', 'Los Angeles', '5678901234', '2025-05-19', 'active', 'savings', 900.00)**

**(106, 225222, 'Denish', 'Rajkot', '5154621011', '2025-05-14', 'active', 'savings', 900.00);**

**INSERT INTO Loan (loan\_no, branch\_id, account\_holder\_id, loan\_amount, loan\_type) VALUES**

**(201, 1, 101, 10000.00, 'home'),**

**(202, 2, 103, 5000.00, 'car'),**

**(203, 4, 104, 15000.00, 'business');**

**SELECT \***

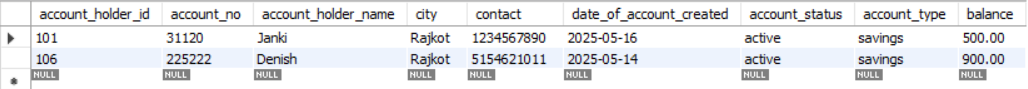
**FROM AccountHolder ah1**

**WHERE EXISTS**

**(SELECT 1**

**FROM AccountHolder ah2**

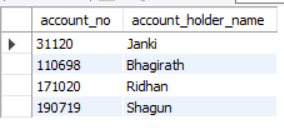
**WHERE ah1.city = ah2.city AND ah1.account\_holder\_id != ah2.account\_holder\_id);**

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**SELECT branch\_city, COUNT(\*) AS Count\_Branch**

**FROM Bank**

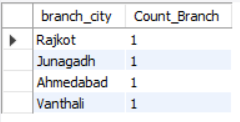
**GROUP BY branch\_city;**

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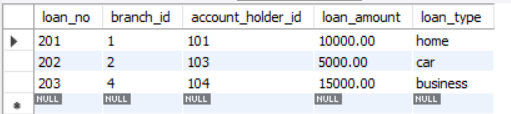
**SELECT branch\_city, COUNT(\*) AS Count\_Branch**

**FROM Bank**

**GROUP BY branch\_city;**

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**select \* from loan;**

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