#### 1. Create Tables

```
-- Create Bank table
CREATE TABLE Bank (
  branch id INT PRIMARY KEY,
  branch_name VARCHAR(100),
  branch city VARCHAR(100)
);
-- Create Account_Holder table
CREATE TABLE Account Holder (
  acc holder id INT PRIMARY KEY,
  account no VARCHAR(20) UNIQUE,
  acc_holder_name VARCHAR(100),
  city VARCHAR(100),
  contact VARCHAR(15),
  date_of_account_created DATE,
  account_status VARCHAR(20), -- 'active' or 'terminated'
  account type VARCHAR(50),
  balance DECIMAL(15, 2)
);
-- Create Loan table
CREATE TABLE Loan (
  loan no INT PRIMARY KEY,
  branch_id INT,
  acc holder id INT,
  loan_amount DECIMAL(15, 2),
  loan type VARCHAR(50),
  FOREIGN KEY (branch_id) REFERENCES
Bank(branch id),
  FOREIGN KEY (acc_holder_id) REFERENCES
Account Holder(acc holder id)
);
```

# 2. SQL Transaction for Fund Transfer (\$100 from Account A to B)

- -- Assuming A and B are account numbers START TRANSACTION;
- -- Deduct \$100 from Account A UPDATE Account\_Holder SET balance = balance - 100 WHERE account\_no = 'A' AND balance >= 100;
- -- Add \$100 to Account B UPDATE Account\_Holder SET balance = balance + 100 WHERE account\_no = 'B';
- -- Check if both updates succeeded before committing
- -- You can use conditions in application logic or stored procedures COMMIT;

## 3. Fetch Details of Account Holders from the Same City

SELECT ah1.acc\_holder\_id, ah1.acc\_holder\_name, ah1.city FROM Account\_Holder ah1

JOIN Account\_Holder ah2 ON ah1.city = ah2.city AND ah1.acc\_holder\_id != ah2.acc\_holder\_id;

## 4. Account Number and Name Where Accounts Were Created After the 15th of Any Month

SELECT account\_no, acc\_holder\_name FROM Account\_Holder WHERE DAY(date\_of\_account\_created) > 15;

# 5. Display City Name and Count of Branches (alias as Count\_Branch)

SELECT branch\_city, COUNT(\*) AS Count\_Branch FROM Bank GROUP BY branch\_city;

#### 6. Join Query for Account Holders Who Took Loans

```
SELECT
ah.acc_holder_id,
ah.acc_holder_name,
l.branch_id,
l.loan_amount
FROM Account_Holder ah
JOIN Loan I ON ah.acc holder id = l.acc holder id;
```