Q : 1 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 have to be updated for both the credit account and the debited account

Ans : Bank Table :

```
CREATE TABLE Bank (
branch_id INT PRIMARY KEY,
branch_name VARCHAR(100),
branch_city VARCHAR(100)
);
```

Account Holder Table :

```
CREATE TABLE AccountHolder (
    account_holder_id int PRIMARY KEY,
    account_no VARCHAR(20),
    account_holder_name VARCHAR(100),
    city VARCHAR(100),
    contact VARCHAR(15),
    account_created_date DATE,
    account_status VARCHAR(20),
    account_type VARCHAR(50),
    balance int
```

```
 );
```

Loan Table :

```
CREATE TABLE Loan (
    loan_no int PRIMARY KEY,
    branch_id int,
    account_holder_id int,
    loan_amount int,
    loan_type VARCHAR(50),

    FOREIGN KEY (branch_id) REFERENCES Bank(branch_id),
    FOREIGNKEY(account_holder_id)REFERENCESAccountHolder(account_holder_id)
);
```

i). 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 have to be updated for both the credit account and the debited account
-

```
START TRANSACTION;

UPDATE AccountHolder
SET balance = balance - 100
WHERE account_no = 'A';

UPDATE AccountHolder
SET balance = balance + 100
WHERE account_no = 'B';

COMMIT;
```

Q : 2 Also fetch the details of the account holder who are related from the same city

Ans : SELECT *

```
FROM AccountHolder
JOIN Bank
ON AccountHolder.city = Bank.branch_city
```

Q : 3 Write a query to fetch account number and account holder name, whose accounts were created after 15th of any month.

Ans :
```
SELECT account_no, account_holder_name
FROM AccountHolder
WHERE DAY(account_created_date) > 15;
```

Q : 4 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.

Ans :
```
SELECT branch_city, COUNT(*) AS Count_Branch
FROM Bank
GROUP BY branch_city;
```

Q : 5 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 :
```
SELECT
AccountHolder.account_holder_id,
AccountHolder.account_holder_name,
Loan.branch_id,
Loan.loan_amount
FROM Loan
JOIN AccountHolder
ON Loan.account_holder_id = AccountHolder.account_holder_id;
```