SQL Assessment

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

```sql
CREATE TABLE Bank (
    branch_id int not null PRIMARY KEY,
    branch_name varchar(40),
    branch_city varchar(20)
);
```

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

```sql
CREATE TABLE Loan (
    loan_no int PRIMARY KEY,
    branch_id int(20),
    account_holder_id int(40),
    loan_amount decimal(10, 2),
    loan_type varchar(40),

    FOREIGN KEY (branch_id) REFERENCES Bank(branch_id),
    FOREIGN KEY (account_holder_id) REFERENCES Account_holder(account_holder_id)
);
```

- *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.*

```sql
CREATE TABLE Account_holder (
    account_holder_id int PRIMARY KEY,
    account_no varchar(30),
    account_holder_name varchar(60),
    city varchar(10),
    contact varchar(30),
    date_of_account_created DATE,
    account_status varchar(30),
    account_type varchar(40),
    balance decimal(10, 2)
);
```

- *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*

```sql
BEGIN
UPDATE Account_holder
SET balance = balance - 100  WHERE account_no = 'A';

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

commit;
```

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

```sql
SELECT * FROM Account_holder
WHERE city IN (
                SELECT DISTINCT city
    FROM Account_holder GROUP BY city
    HAVING COUNT(*) > 1
);
```

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

```sql
SELECT account_no, account_holder_name
FROM Account_holder
WHERE DAY(date_of_account_created) > 15;
```

- *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.*

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

- *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)*

```
SELECT ah.account_holder_id, ah.account_holder_name, l.branch_id, l.loan_amount
FROM Account_holder ah

JOIN Loan l ON ah.account_holder_id = l.account_holder_id;

```