EXPERIMENT 3

**Q1.** Perform following queries on bank database:

1. Insert an account A-978245 at the Park Street branch and that is has a balance of Rs. 12000.

2. Insert an customer Ram who live in street is main street and city is Ichalkarnji

3. Insert at least 5 rows in each table

4. Change the assests of Perryridge branch to 3400

5. Add 2% interest to all bank account balances with a balance of 500 or less

6. Transfer the accounts and loans of Perryridge branch to Downtown branch

7. Transfer Rs. 100 from account A-101 to A-215.

8. Delete the branch Perryridge

9. Remove all the customer who live in “Downtown”

10. Remove all the accounts

11. List all branch names and their assests

12. List all loans with amount greater than 1000.

13. Find bank accounts with a balance under 700

14. List all accounts of Perryridge branch with balance less than1000

15. Find the names of all branches in the loan relation

16. Find all loan numbers for loans made at the Park Street branch with loan amounts greater that Rs. 10000.

17. Find the loan number of those loans with loan amounts between Rs. 10000 and Rs. 50000

18. Find the names of all customers.

19. Find the names of all branches in the loan relation, don't display duplicates.

20. Display the entire Branch table.

21. Find the account number for all accounts where the balance is greater than $700.

22. Find the account number and balance for all accounts from Brighton where the balance is greater than 800.

23. Display the branch name and assets from all branches in thousands of dollars and rename the assets column to 'assets in thousands'.

24. Find the name of all branches with assets between one and four million dollars.

25. Find the names of all customers whose street address includes the substring ‘Main’.

26. List all Accounts where the Bank\_Branch begins with a ‘C’ and has ‘a’ as the second character

27. List all Accounts where the Bank\_Branch column has ‘a’ as the second character and has at least 3 character.

28. Find all loan numbers that appear in the loan relation with null values for amount.

ANS-

CREATE TABLE BRANCH (

Branchname VARCHAR(20) NOT NULL PRIMARY KEY,

Branchcity VARCHAR(20) NOT NULL,

asset NUMBER CHECK (asset > 0) NOT NULL

);

CREATE TABLE CUSTOMER(

Custname VARCHAR(20) PRIMARY KEY,

Custstreet VARCHAR(20),

Custcity VARCHAR(20) NOT NULL

);

CREATE TABLE ACCOUNT(

Accnum NUMBER PRIMARY KEY,

Branchname VARCHAR(20),

Balance NUMBER CHECK (Balance > 500)

);

CREATE TABLE LOAN(

Loanno NUMBER PRIMARY KEY,

Branchname VARCHAR(20),

Ammount NUMBER CHECK(Ammount>0)

);

ALTER TABLE ACCOUNT MODIFY(Accnum VARCHAR(20));

INSERT INTO ACCOUNT VALUES('A-978245','Park Street',12000);

INSERT INTO CUSTOMER VALUES('RAM','main street','ICHALKARANJI');

INSERT INTO BRANCH VALUES('ST STAND','ICHALKARANJI',3200);

INSERT INTO BRANCH VALUES('CIVIL ROAD','SANGLI',2000);

INSERT INTO BRANCH VALUES('RAJWADA','ICHALKARANJI',4500);

INSERT INTO BRANCH VALUES('GANDHI CHOWK','ICHALKARANJI',5500);

INSERT INTO BRANCH VALUES('VISHRAMBHAG','SANGLI',1200);

SELECT \* FROM BRANCH;

INSERT INTO CUSTOMER VALUES('VIRAJ','SANGLI ROAD','SANGLI');

INSERT INTO CUSTOMER VALUES('ATHARV','RAJWADA','ICHALKARANJI');

INSERT INTO CUSTOMER VALUES('OMKAR','BMC ROAD','MUMBAI');

INSERT INTO CUSTOMER VALUES('ABHI','GANDHI CHOWK','ICHALKARANJI');

INSERT INTO CUSTOMER VALUES('SHRIKANT','KRANTI NAGAR','LATUR');

SELECT \* FROM CUSTOMER;

INSERT INTO ACCOUNT VALUES('A-456987','ST STAND',12443);

INSERT INTO ACCOUNT VALUES('A-554687','CIVIL ROAD',25483);

INSERT INTO ACCOUNT VALUES('A-578787','RAJWADA',45483);

INSERT INTO ACCOUNT VALUES('A-235787','GANDHI CHOWK',784483);

INSERT INTO ACCOUNT VALUES('A-812787','VISHRAMBHAG',12483);

SELECT \* FROM CUSTOMER;

INSERT INTO LOAN VALUES(001,'ST STAND',5000);

INSERT INTO LOAN VALUES(002,'CIVIL ROAD',3000);

INSERT INTO LOAN VALUES(003,'RAJWADA',2000);

INSERT INTO LOAN VALUES(004,'GANDHI CHOWK',4000);

INSERT INTO LOAN VALUES(005,'VISHRAMBHAG',6000);

SELECT \* FROM LOAN;

UPDATE BRANCH SET asset=4500 WHERE Branchname='ST STAND';

SELECT \* FROM BRANCH;

UPDATE ACCOUNT SET Balance=balance\*0.02 WHERE BALANCE<500;

SELECT \* FROM ACCOUNT;

UPDATE ACCOUNT SET Branchname='CIVIL ROAD' WHERE Branchname='GANDHI CHOWK';

UPDATE LOAN SET Branchname='CIVIL ROAD' WHERE Branchname='GANDHI CHOWK';

UPDATE ACCOUNT SET Balance=Balance-1000 WHERE Accnum='A-456987';

UPDATE ACCOUNT SET Balance=Balance+1000 WHERE Accnum='A-554687';

DELETE FROM BRANCH WHERE Branchname='ST STAND';

DELETE FROM ACCOUNT WHERE Branchname='ST STAND';

DELETE FROM LOAN WHERE Branchname='ST STAND';

DELETE FROM CUSTOMER WHERE BranchName = 'GANDHI CHOWK';

DELETE FROM ACCOUNT;

SELECT Branchname,asset FROM BRANCH;

SELECT Ammount FROM LOAN WHERE Ammount>4000;

SELECT Accnum FROM ACCOUNT WHERE Balance<13000;

SELECT Branchname FROM LOAN;

SELECT Loanno FROM LOAN WHERE Ammount>2000;

SELECT Loanno FROM LOAN WHERE Ammount BETWEEN 1000 AND 2000;

SELECT Custname FROM CUSTOMER;

SELECT DISTINCT Branchname FROM LOAN;

SELECT \* FROM BRANCH;

SELECT Accnum FROM ACCOUNT WHERE Balance>40000;

SELECT Accnum,Balance FROM ACCOUNT WHERE Branchname='RAJWADA' AND Balance>40000;

SELECT Branchname,asset / 1000 AS "assets in thousands" FROM BRANCH;

SELECT Branchname FROM BRANCH WHERE asset BETWEEN 2.0 AND 3.0;

SELECT Custname FROM CUSTOMER WHERE Custstreet LIKE '%main%';

SELECT Loanno FROM LOAN WHERE Ammount=NULL;