# **MORE QUERIES ON BANK DATABASE**

**Week4**

Branch (branch-name: String, branch-city: String, assets: real)

BankAccount(accno: int, branch-name: String, balance: real)

BankCustomer (customer-name: String, customer-street: String,

customer-city: String)

Depositer(customer-name: String, accno: int)

loan (loan-number: int, branch-name: String, amount: real)

1.Create the above tables by properly specifying the primary keys and the foreignkeys.

2.Enter at least five tuples for each relation.

3.Find all the customers who have an account at all the branches located in a specific city (Ex. Delhi).

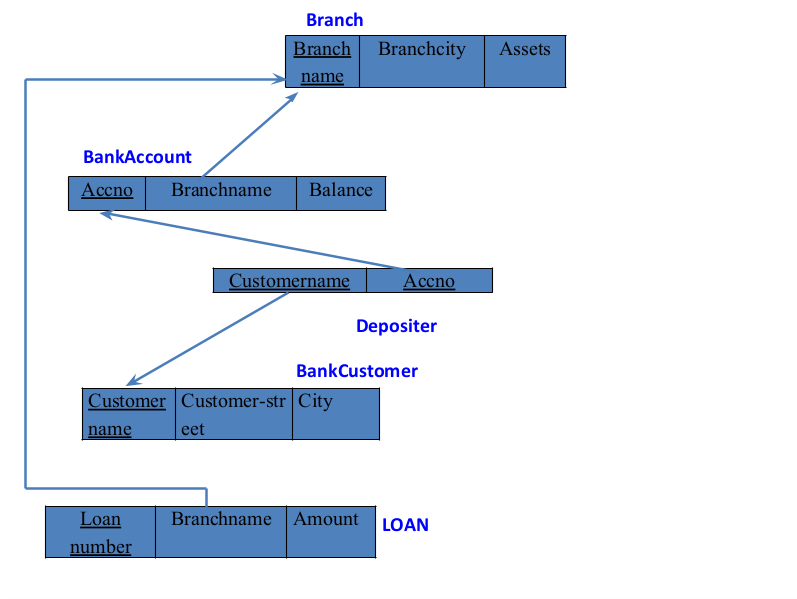
4.Find all customers who have a loan at the bank but do not have an account.

5.Find the names of all branches that have greater assets than all branches located in

Bangalore.

6.Demonstrate how you delete all account tuples at every branch located in a specific city

**Schema diagram:**



**Create database**

create database bank1;

use bank1;

**create table**

create table branch (

branch\_namevarchar(25),

branch\_cityvarchar(15),

assets int,

primary key (branch\_name)

);

create table bank\_account (

accno int,

branch\_namevarchar(25),

balance int,

primary key (accno),

foreign key (branch\_name) references branch(branch\_name)

);

create table bank\_customer (

customer\_namevarchar(10),

customer\_streetvarchar(25),

customer\_cityvarchar(15),

primary key (customer\_name)

);

create table depositer (

customer\_namevarchar(10),

accno int,

primary key(customer\_name, accno),

foreign key (customer\_name) references bank\_customer(customer\_name),

foreign key(accno) references bank\_account(accno)

);

create table loan (

loan\_number int,

branch\_namevarchar(25),

amount int,

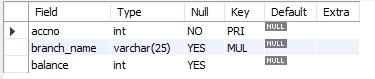
primary key (loan\_number),

foreign key (branch\_name) references branch(branch\_name)

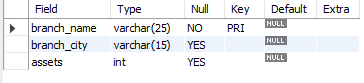
);

**Structure of the table**

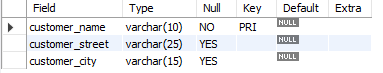
DESC bank\_account;



DESC branch;



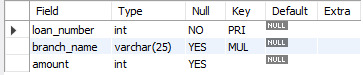
DESC bank\_customer;



DESC depositer;



DESC loan;



**Inserting values to the table**

insert into branch values('SBI\_Chamrajpet', 'Bangalore', 50000);

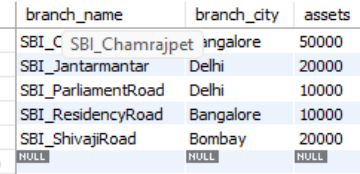
insert into branch values('SBI\_ResidencyRoad', 'Bangalore', 10000);

insert into branch values('SBI\_ShivajiRoad', 'Bombay', 20000);

insert into branch values('SBI\_ParliamentRoad', 'Delhi', 10000);

insert into branch values('SBI\_Jantarmantar', 'Delhi', 20000);

select \* from branch;



insert into bank\_accountvalues(1, 'SBI\_Chamrajpet', 2000);

insert into bank\_accountvalues(2, 'SBI\_ResidencyRoad', 5000);

insert into bank\_accountvalues(3, 'SBI\_ShivajiRoad', 6000);

insert into bank\_accountvalues(4, 'SBI\_ParliamentRoad', 9000);

insert into bank\_accountvalues(5, 'SBI\_Jantarmantar', 8000);

insert into bank\_accountvalues(6, 'SBI\_ShivajiRoad', 4000);

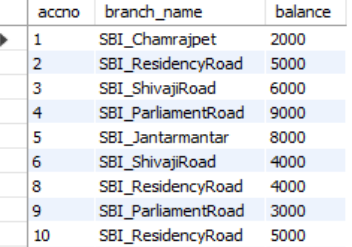
insert into bank\_accountvalues(8, 'SBI\_ResidencyRoad', 4000);

insert into bank\_accountvalues(9, 'SBI\_ParliamentRoad', 3000);

insert into bank\_accountvalues(10, 'SBI\_ResidencyRoad', 5000);

insert into bank\_accountvalues(11, 'SBI\_Jantarmantar', 2000);

select \* from bank\_account;



insert into bank\_customer values ('Avinash', 'Bull\_Temple\_Road', 'Bangalore');

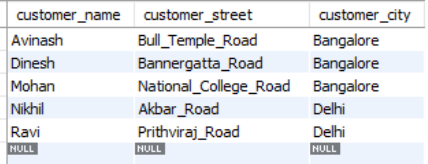
insert into bank\_customer values ('Dinesh', 'Bannergatta\_Road', 'Bangalore');

insert into bank\_customer values ('Mohan', 'National\_College\_Road', 'Bangalore');

insert into bank\_customer values ('Nikhil', 'Akbar\_Road', 'Delhi');

insert into bank\_customer values ('Ravi', 'Prithviraj\_Road', 'Delhi');

select \* from bank\_customer;



insert into depositervalues('Avinash', 1);

insert into depositervalues('Dinesh', 2);

insert into depositervalues('Nikhil', 4);

insert into depositervalues('Ravi', 5);

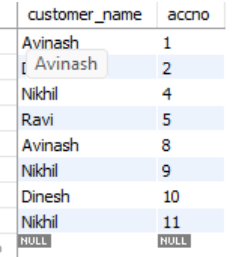
insert into depositervalues('Avinash', 8);

insert into depositervalues('Nikhil', 9);

insert into depositervalues('Dinesh', 10);

insert into depositervalues('Nikhil', 11);

select \* from depositer;



insert into loan values(1, 'SBI\_Chamrajpet', 1000);

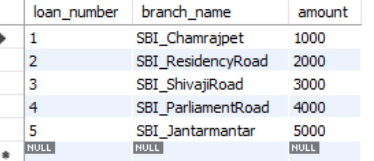
insert into loan values(2, 'SBI\_ResidencyRoad', 2000);

insert into loan values(3, 'SBI\_ShivajiRoad', 3000);

insert into loan values(4, 'SBI\_ParliamentRoad', 4000);

insert into loan values(5, 'SBI\_Jantarmantar', 5000);

select \* from loan;



**Queries**

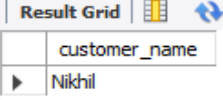
1).Find all the customers who have an account at all the branches located in a specific city(Ex. Delhi).

Select distinct d.customer\_name

from depositerd,bank\_accountba,branch b

where d.accno=ba.accno and b.branch\_name=ba.branch\_name and b.branch\_city="delhi"

group by d.customer\_name having count(b.branch\_name)>1;



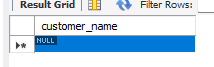
2).Find all customers who have a loan at the bank but do not have an account.

SELECT customer\_name

FROM bank\_customer

WHERE customer\_name IN (SELECT branch\_name FROM loan)

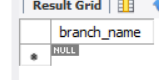
AND customer\_name NOT IN (SELECT customer\_name FROM depositer);



3).Find the names of all branches that have greater assets than all branches located inBangalore.

select branch\_name from BRANCH where assets > all (select assets from branch

where branch\_city = 'Bangalore');



4).Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay)

delete from BANK\_ACCOUNT

where branch\_name in (

select branch\_name from branch

where branch\_city = 'Bombay');

SELECT \* FROM BANK\_ACCOUNT;

