# BANK DATABASE

**Question**

(**Week3**)

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 foreign keys.

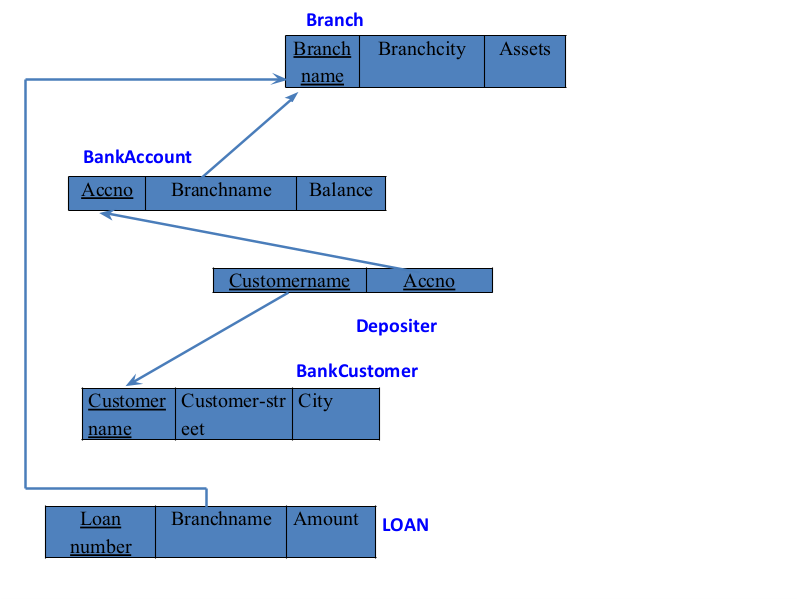
2.Enter at least five tuples for each relation.

3.Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.

4.Find all the customers who have at least two accounts at the same branch (ex.SBI\_ResidencyRoad).

5.create a view which gives each branch the sum of the amount of all the loans at the branch.

**Schema diagram:**



**Create database**

create database bank1;

use bank1;

**create table**

create table branch (

branch\_name varchar(25),

branch\_city varchar(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,

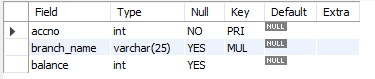
primary key (loan\_number),

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

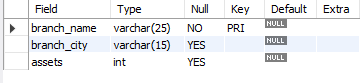
);

**Structure of the table**

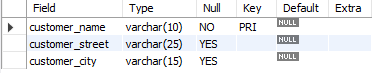
DESC bank\_account;



DESC branch;



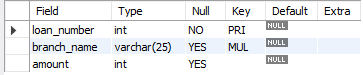
DESC bank\_customer;



DESC depositer;



DESC loan;



**Inserting values to the table**

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

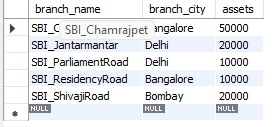
insert into branch values('SBI\_ResidencyRoad', 'Bangalore', 10000);

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);

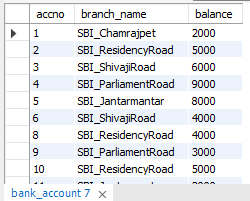
insert into bank\_accountvalues(8, 'SBI\_ResidencyRoad', 4000);

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');

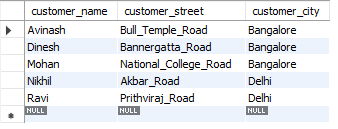
insert into bank\_customer values ('Dinesh', 'Bannergatta\_Road', 'Bangalore');

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);

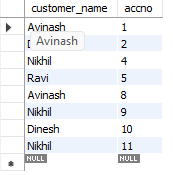
insert into depositervalues('Avinash', 8);

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);

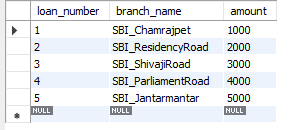
insert into loan values(2, 'SBI\_ResidencyRoad', 2000);

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

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

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

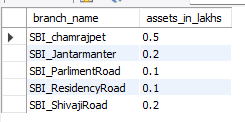
select \* from loan;



**Queries**

1). Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.

select branch\_name,(assets/100000) as assets\_in\_lakhs from branch;



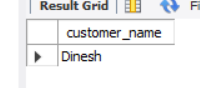
2).Find all the customers who have at least two accounts at the same branch (ex.SBI\_ResidencyRoad).

select d.customer\_name from depositer d,

Bank\_account b where b.branch\_name='SBI\_RESIDENCYROAD'

and d.ACCNO=b.accno group by d.customer\_name

having count(d.accno)>=2;



3). create a view which gives each branch the sum of the amount of all the loans at the branch.

create view sum\_of\_loan1 as select branch\_name, sum(amount) from loan group by branch\_name;

select \* from sum\_of\_loan1;

