**LAB -3**

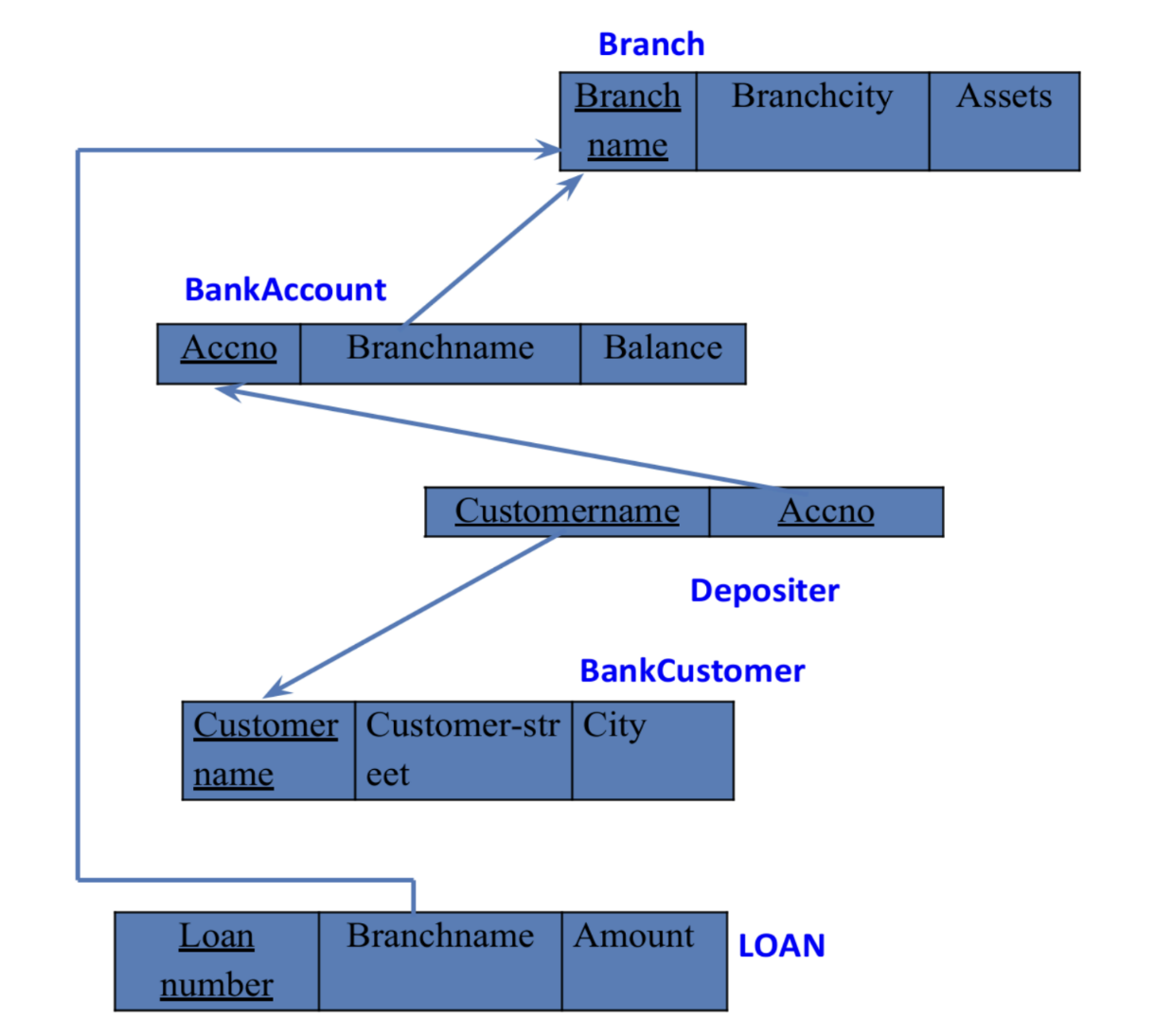
**Bank Database**

**Question**

**(Week 3)**

* 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)
* Create the above tables by properly specifying the primary keys and the foreign keys. - Enter at least five tuples for each relation.
* Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.
* Find all the customers who have at least two accounts at the same branch (ex. SBI\_ResidencyRoad).
* Create a view which gives each branch the sum of the amount of all the loans at the branch.

**Schema Diagram**

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**Create database**

create database bank\_101;

USE bank\_101;

**Create table**

create table branch\_101(

branch\_name varchar(20),

branch\_city varchar(20),

assets int,

primary key(branch\_name));

create table bankacc\_101(

accno int,

branch\_name varchar(20),

balance int,

primary key(accno),

foreign key(branch\_name) references branch\_101(branch\_name));

create table bankcustomer\_101(

customer\_name varchar(20),

customer\_street varchar(20),

city varchar(20),

primary key(customer\_name));

create table depositor\_101(

customer\_name varchar(20),

accno int,

foreign key(customer\_name) references bankcustomer\_101(customer\_name),

foreign key(accno) references bankacc\_101(accno));

create table loan\_101(

loan\_number int,

branch\_name varchar(20),

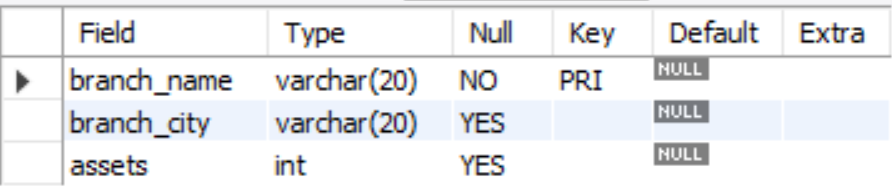
amount int,

primary key(loan\_number),

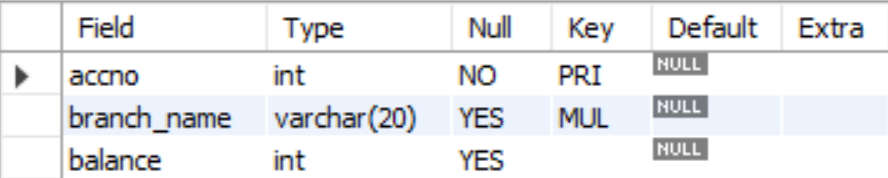
foreign key (branch\_name) references branch\_101(branch\_name));

**Structure of tables**

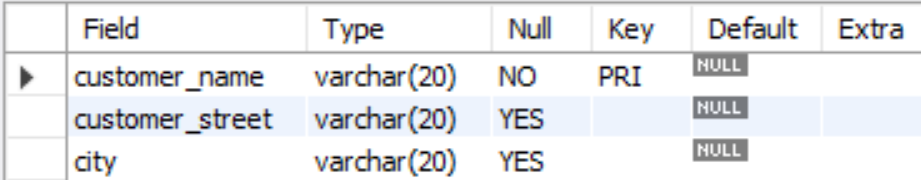
desc branch\_101;



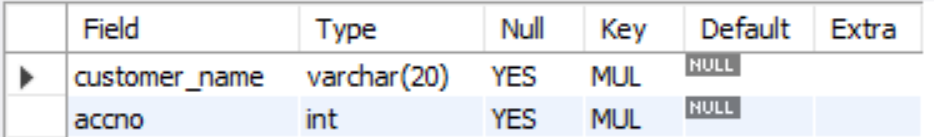
desc bankacc\_101;

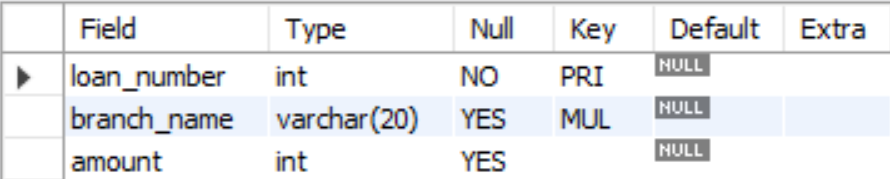


desc bankcustomer\_101;



desc depositor\_101;

**** desc loan\_101;



**Inserting Values to the table**

insert into branch\_101 values("SBI\_Chamarajpet","Bangalore",50000);

insert into branch\_101 values("SBI\_ResidencyRoad","Bangalore",10000);

insert into branch\_101 values("SBI\_ShivajiRoad","Bombay",20000);

insert into branch\_101 values("SBI\_ParliamentRoad","Delhi",10000);

insert into branch\_101 values("SBI\_Jantarmantar","Delhi",20000);

insert into bankacc\_101 values(1,"SBI\_Chamarajpet",2000);

insert into bankacc\_101 values(2,"SBI\_ResidencyRoad",5000);

insert into bankacc\_101 values(3,"SBI\_ShivajiRoad",6000);

insert into bankacc\_101 values(4,"SBI\_ParliamentRoad",9000);

insert into bankacc\_101 values(5,"SBI\_Jantarmantar",8000);

insert into bankacc\_101 values(6,"SBI\_ShivajiRoad",4000);

insert into bankacc\_101 values(8,"SBI\_ResidencyRoad",4000);

insert into bankacc\_101 values(9,"SBI\_ParliamentRoad",3000);

insert into bankacc\_101 values(10,"SBI\_ResidencyRoad",5000);

insert into bankacc\_101 values(11,"SBI\_Jantarmantar",2000);

insert into bankcustomer\_101 values("Avinash","Bull\_temple\_road","Bangalore");

insert into bankcustomer\_101 values("Dinesh","Bannergatta\_Road","Bangalore");

insert into bankcustomer\_101 values("Mohan","NationalCollege\_Road","Bangalore");

insert into bankcustomer\_101 values("Nikil","Akbar\_Road","Delhi");

insert into bankcustomer\_101 values("Ravi","Prithviraj\_Road","Delhi");

insert into depositor\_101 values("Avinash",1);

insert into depositor\_101 values("Dinesh",2);

insert into depositor\_101 values("Nikil",4);

insert into depositor\_101 values("Ravi",5);

insert into depositor\_101 values("Avinash",8);

insert into depositor\_101 values("Nikil",9);

insert into depositor\_101 values("Dinesh",10);

insert into depositor\_101 values("Nikil",11);

insert into loan\_101 values(1,"SBI\_Chamarajpet",1000);

insert into loan\_101 values(2,"SBI\_ResidencyRoad",2000);

insert into loan\_101 values(3,"SBI\_ShivajiRoad",3000);

insert into loan\_101 values(4,"SBI\_ParliamentRoad",4000);

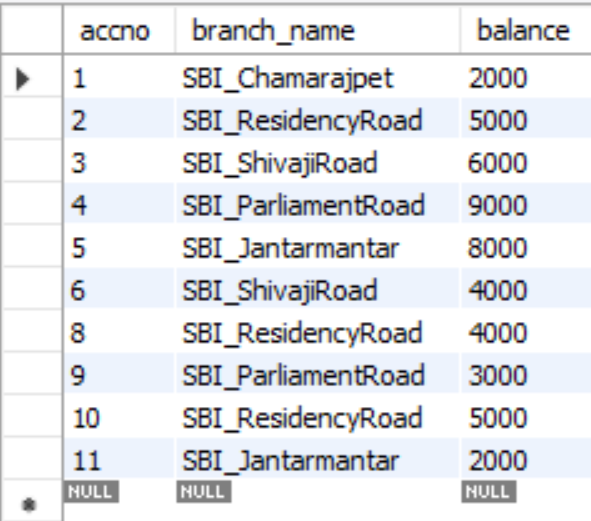
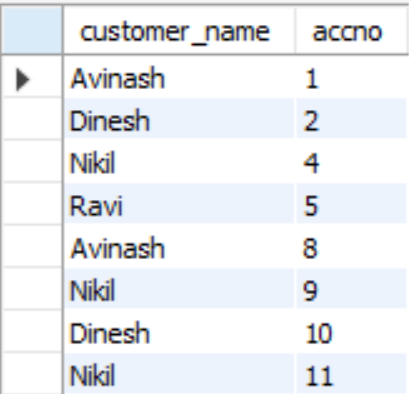
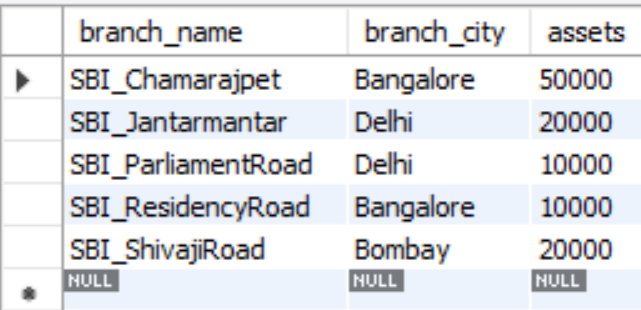
insert into loan\_101 values(5,"SBI\_Jantarmantar",5000);

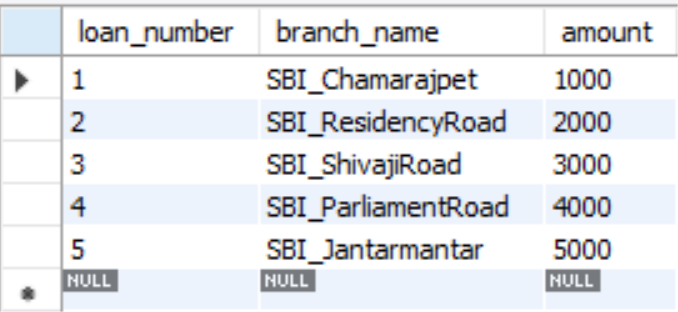
select \* from branch\_101;

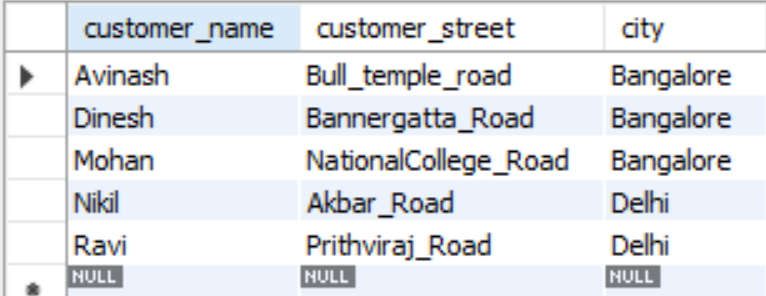
select \* from depositor\_101;

select \* from loan\_101;

select \* from bankcustomer\_101;

****select \* from bankacc\_101;

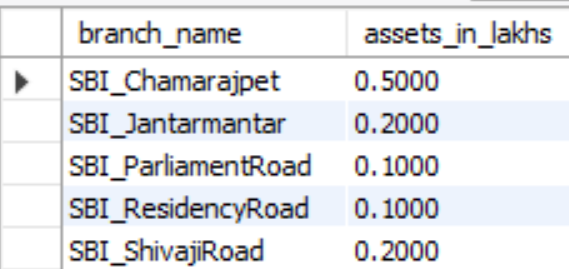
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**Queries**

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

select branch\_name,assets/100000 as assets\_in\_lakhs

from branch\_101;

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

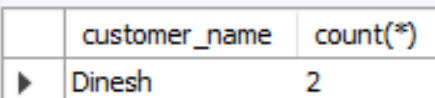
select customer\_name,count(\*)

from depositor\_101,bankacc\_101

where bankacc\_101.accno=depositor\_101.accno

and branch\_name="SBI\_ResidencyRoad"

group by customer\_name

having count(\*)>1;

* **Create a view which gives each branch the sum of the amount of all the loans at the branch.**

create view loansum as (

select branch\_name, sum(amout)

from loans\_101

group by branch\_name

);

select \* from loansum;

