create database Bank\_Database\_160;

use Bank\_Database\_160;

create table Branch(

Name varchar(20),

City varchar(20),

Assets varchar(20),

primary key(Name));

create table BankAccount(

accno varchar(20),

Name varchar(20),

Balance varchar(20),

primary key(accno,Name),

foreign key(Name) references Branch(Name));

create table Customer(

name varchar(20),

street varchar(20),

city varchar(20),

primary key(name));

create table Depositer(

name varchar(20),

accno varchar(20),

primary key(name,accno),

foreign key (name) references Customer (name),

foreign key (accno) references BankAccount(accno));

create table Loan(

Loan\_no varchar(20),

Name varchar (20),

Amount varchar (20),

primary key(Name),

foreign key (Name) references Branch (Name));

insert into Branch

values

("SBI\_Chamrajpet","Bangalore",50000),

("SBI\_ResidencyRoad", "Bangalore", 10000),

("SBI\_ShivajiRoad", "Bombay", 200000),

("SBI\_ParlimentRoad", "Delhi", 10000),

("SBI\_Jantarmantar", "Delhi", 20000);

insert into BankAccount

values

(1, "SBI\_Chamrajpet",2000 ),

(2, "SBI\_ResidencyRoad", 5000),

(3, "SBI\_ShivajiRoad", 6000),

(4, "SBI\_ParlimentRoad", 9000),

(5, "SBI\_Jantarmantar", 8000),

(6, "SBI\_ShivajiRoad", 8000),

(8, "SBI\_ResidencyRoad", 8000),

(9, "SBI\_ParlimentRoad", 8000),

(10, "SBI\_ResidencyRoad", 8000),

(11, "SBI\_Jantarmantar", 8000);

insert into Customer

values

("Avinash", "Bull temple road","Bangalore" ),

("Dinesh", "Bannerghatta Road","Bangalore" ),

("Mohan", "NationalCollegeRoad","Bangalore" ),

("Nikhil", "Akbar Road","Delhi" ),

("Ravi", "Prithviraj Road","Delhi" );

insert into Depositer

values

("Avinash", 1),

("Dinesh", 2),

("Mohan", 3),

("Nikhil", 4),

("Ravi", 5),

("Avinash", 8),

("Nikhil", 9),

("Dinesh", 10),

("Nikhil", 11);

insert into Loan

values

(1, "SBI\_Chamrajpet", 1000),

(2, "SBI\_ResidencyRoad", 2000),

(3, "SBI\_ShivajiRoad", 3000),

(4, "SBI\_ParlimentRoad", 4000),

(5, "SBI\_Jantarmantar", 5000);

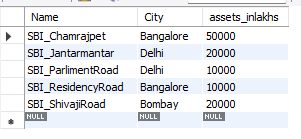
**Queries**

**Q1. Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.**

alter table Branch

change assets assets\_inlakhs real;

select \* from Branch;



**Q2. Find all the customers who have at least two accounts at the same branch (ex.**

**SBI\_ResidencyRoad).**

select d.name from Depositer d, BankAccount b

where b.Name = 'SBI\_ResidencyRoad' and d.accno = b.accno

group by d.name having count(d.accno)>=2;



**Q3. CREATE A VIEW WHICH GIVES EACH BRANCH THE SUM OF THE AMOUNT OF ALL THE LOANS AT THE BRANCH.**

create view br

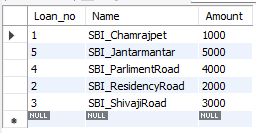
as

select name, sum(amount)

from Loan

group by name;

select \* from br;



**More queries on Bank Database**

**Q1. Find all the customers who have an account at all the branches located in a specific city**

**(Ex. Delhi).**

select distinct d.name

from Depositer d, BankAccount ba, Branch b

where d.accno = ba.accno and ba.Name = b.Name and b.City = "Delhi"

group by d.name having count(b.Name)>1;



**Q2. Find all customers who have a loan at the bank but do not have an account.**

select l.Name

from Loan l

where l.Loan\_no not in(select d.accno from Depositer d

where l.Loan\_no = d.accno);



**Q3. Find all customers who have both an account and a loan at the Bangalore branch**

select b.name

from Loan b

where b.Loan\_no in(select d.accno from Depositer d,BankAccount ba, Branch b

where b.Loan\_no=d.accno and d.accno=ba.accno and

ba.Name=b.Name

and b.City="Bangalore");



**Q4. Find the names of all branches that have greater assets than all branches located in Bangalore.**

select Name

from Branch

where assets\_inlakhs > all (select assets\_inlakhs from Branch

where City="Bangalore");



**Q5. Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay).**

delete from branchaccount ba

where ba.branch\_name=(select b.branch\_name from branch b where

branch\_city="Bombay");

select \* from branchaccount;



**Q6. Update the Balance of all accounts by 5%**

update BankAccount

set Balance=Balance+((5\*Balance)/100) where accno in(1,2,4,5,8,9,10,11,12);

select \* from BankAccount;

