**BANK-DATABASE**

create database 1bm21cs062\_bankDb;

use 1bm21cs062\_bankDb;

create table branch(

branch\_name varchar(20),

branch\_city varchar(10),

assets real,

PRIMARY KEY(branch\_name)

);

create table bankCustomer(

customer\_name varchar(20),

customer\_street varchar(20),

customer\_city varchar(15),

PRIMARY KEY(customer\_name)

);

create table loan(

loan\_no int,

branch\_name varchar(20),

amount real,

PRIMARY KEY(loan\_no),

FOREIGN KEY(branch\_name) REFERENCES branch(branch\_name)

ON UPDATE CASCADE ON DELETE CASCADE

);

create table bankAccount(

accno int,

branch\_name varchar(20),

balance real,

PRIMARY KEY(accno),

FOREIGN KEY(branch\_name) REFERENCES branch(branch\_name)

ON UPDATE CASCADE ON DELETE CASCADE

);

create table depositor(

customer\_name varchar(20),

accno int,

FOREIGN KEY(customer\_name) REFERENCES bankCustomer(customer\_name)

ON UPDATE CASCADE ON DELETE CASCADE,

FOREIGN KEY(accno) REFERENCES bankAccount(accno)

ON UPDATE CASCADE ON DELETE CASCADE

);

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 bankAccount values(1,'sbi\_chamrajpet',2000);

insert into bankAccount values(2,'sbi\_residencyRoad',5000);

insert into bankAccount values(3,'sbi\_shivajiRoad',6000);

insert into bankAccount values(4,'sbi\_parliamentRoad',9000);

insert into bankAccount values(5,'sbi\_jantarMantar',8000);

insert into bankAccount values(6,'sbi\_shivajiRoad',4000);

insert into bankAccount values(8,'sbi\_residencyRoad',4000);

insert into bankAccount values(9,'sbi\_parliamentRoad',3000);

insert into bankAccount values(10,'sbi\_residencyRoad',5000);

insert into bankAccount values(11,'sbi\_jantarMantar',2000);

select \* from bankAccount;

insert into bankCustomer values('avinash','bull\_temple\_road','bangalore');

insert into bankCustomer values('dinesh','bannergatta\_road','bangalore');

insert into bankCustomer values('mohan','nationalCollege\_road','bangalore');

insert into bankCustomer values('nikil','akbar\_road','delhi');

insert into bankCustomer values('ravi','prithviraj\_road','delhi');

select \* from bankCustomer;

insert into depositor values('avinash',1);

insert into depositor values('dinesh',2);

insert into depositor values('nikil',4);

insert into depositor values('ravi',5);

insert into depositor values('avinash',8);

insert into depositor values('nikil',9);

insert into depositor values('dinesh',10);

insert into depositor values('nikil',11);

select \* from depositor;

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;

select branch\_name, concat(assets/100000,'lakhs')as assesst\_in\_lakhs

from branch;

select d.customer\_name as CUSTOMER\_NAME

from bankAccount depositor d

where b.branch\_name='sbi\_residencyRoad' and b.accno=d.accno

group by d.customer\_name

having count(d.accno)>=2;

create view sum\_of\_loan

as select branch\_name,sum(balance)

from bankAccount

group by branch\_name;

select \* from sum\_of\_loan

**WEEK 3 – QUERIES**

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

**SQL>**

|  |  |
| --- | --- |
|  | create table branch( |
|  | branch\_name varchar(20), |
|  | branch\_city varchar(10), |
|  | assets real, |
|  | PRIMARY KEY(branch\_name) |
|  | );  Table **branch** |
|  | create table bankCustomer( |
|  | customer\_name varchar(20), |
|  | customer\_street varchar(20), |
|  | customer\_city varchar(15), |
|  | PRIMARY KEY(customer\_name) |
|  | );  Table **bankCustomer** |
|  | create table loan( |
|  | loan\_no int, |
|  | branch\_name varchar(20), |
|  | amount real, |
|  | PRIMARY KEY(loan\_no), |
|  | FOREIGN KEY(branch\_name) REFERENCES branch(branch\_name) |
|  | ON UPDATE CASCADE ON DELETE CASCADE |
|  | );  Table **loan** |
|  | create table bankAccount( |
|  | accno int, |
|  | branch\_name varchar(20), |
|  | balance real, |
|  | PRIMARY KEY(accno), |
|  | FOREIGN KEY(branch\_name) REFERENCES branch(branch\_name) |
|  | ON UPDATE CASCADE ON DELETE CASCADE |
|  | );  Table **bankAccount** |
|  | create table depositor( |
|  | customer\_name varchar(20), |
|  | accno int, |
|  | FOREIGN KEY(customer\_name) REFERENCES bankCustomer(customer\_name) |
|  | ON UPDATE CASCADE ON DELETE CASCADE, |
|  | FOREIGN KEY(accno) REFERENCES bankAccount(accno) |
|  | ON UPDATE CASCADE ON DELETE CASCADE  );  Table **depositor** |

**2.** **Enter at least five tuples for each relation.**

**SQL>**

insert into branch values('sbi\_chamrajpet','bangalore',50000);

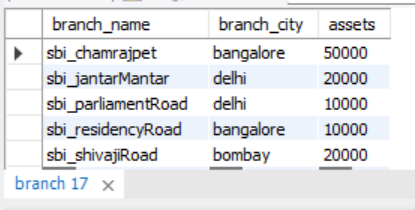
insert into branch values('sbi\_residencyRoad','bangalore',10000);

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 bankAccount values(1,'sbi\_chamrajpet',2000);

insert into bankAccount values(2,'sbi\_residencyRoad',5000);

insert into bankAccount values(3,'sbi\_shivajiRoad',6000);

insert into bankAccount values(4,'sbi\_parliamentRoad',9000);

insert into bankAccount values(5,'sbi\_jantarMantar',8000);

insert into bankAccount values(6,'sbi\_shivajiRoad',4000);

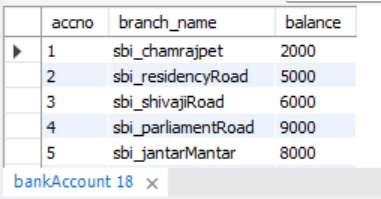
insert into bankAccount values(8,'sbi\_residencyRoad',4000);

insert into bankAccount values(9,'sbi\_parliamentRoad',3000);

insert into bankAccount values(10,'sbi\_residencyRoad',5000);

insert into bankAccount values(11,'sbi\_jantarMantar',2000);

select \* from bankAccount;



insert into bankCustomer values('avinash','bull\_temple\_road','bangalore');

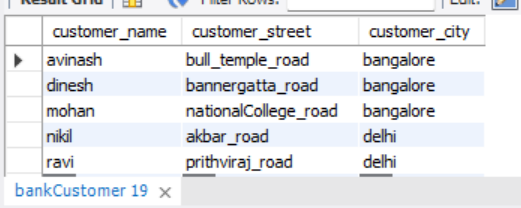
insert into bankCustomer values('dinesh','bannergatta\_road','bangalore');

insert into bankCustomer values('mohan','nationalCollege\_road','bangalore');

insert into bankCustomer values('nikil','akbar\_road','delhi');

insert into bankCustomer values('ravi','prithviraj\_road','delhi');

select \* from bankCustomer;



insert into depositor values('avinash',1);

insert into depositor values('dinesh',2);

insert into depositor values('nikil',4);

insert into depositor values('ravi',5);

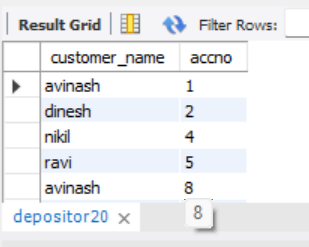
insert into depositor values('avinash',8);

insert into depositor values('nikil',9);

insert into depositor values('dinesh',10);

insert into depositor values('nikil',11);

select \* from depositor;



insert into loan values(1,'sbi\_chamrajpet',1000);

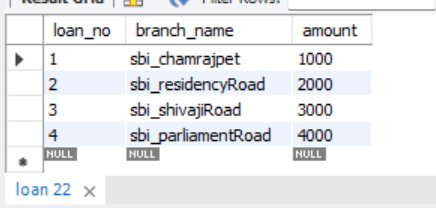
insert into loan values(2,'sbi\_residencyRoad',2000);

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;



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

**the assets column to 'assets in lakhs'.**

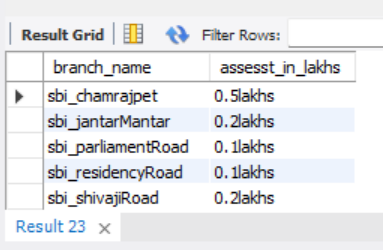
**SQL>**

select branch\_name,

concat(assets/100000,'lakhs')

as assesst\_in\_lakhs

from branch;



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

**SBI\_ResidencyRoad).**

**SQL>**

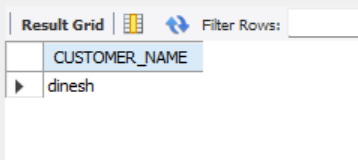
select d.customer\_name as CUSTOMER\_NAME

from bankAccount b,depositor d

where b.branch\_name='sbi\_residencyRoad' and b.accno=d.accno

group by d.customer\_name

having count(d.accno)>=2;



**5.** **Create a view which gives each branch the sum of the**

**amount of all the loans at the branch.**

**SQL>**

create view sum\_of\_loan

as select branch\_name,sum(balance)

from bankAccount

group by branch\_name;

select \* from sum\_of\_loan;

