```
create database 1BM21CS046BankDb;
use 1BM21CS046BankDb;
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 depositer(
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 depositer values('avinash',1);
insert into depositer values('dinesh',2);
insert into depositer values('nikil',4);
insert into depositer values('ravi',5);
insert into depositer values('avinash',8);
insert into depositer values('nikil',9);
insert into depositer values ('dinesh', 10);
insert into depositer values('nikil',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;
select branch_name, concat(assets/100000)as assets_in_lakhs
from branch;
select d.customer_name as CUSTOMER_NAME
from bankAccount b,depositer 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

	Field	Type	Null	Key	Default	Extra
•	customer_name	varchar(20)	NO	PRI	NULL	
	customer_street	varchar(20)	YES		NULL	
	customer city	varchar(15)	YES		NULL	

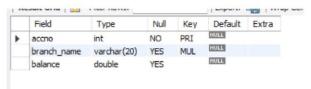
create table loan(
loan_no int,
branch_name varchar(20),
amount real,
PRIMARY KEY(loan_no),
FOREIGN KEY(branch_name) REFERENCES
branch(branch_name)
ON UPDATE CASCADE ON DELETE CASCADE
);

Table loan

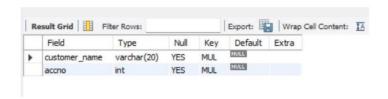


create table bankAccount(
accno int,
branch_name varchar(20),
balance real,
PRIMARY KEY(accno),
FOREIGN KEY(branch_name) REFERENCES
branch(branch_name)
ON UPDATE CASCADE ON DELETE CASCADE
);

Table bankAccount



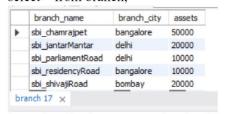
create table depositor(
customer_name varchar(20),
accno int,
FOREIGN KEY(customer_name) REFERENCES
bankCustomer(customer_name)
ON UPDATE CASCADE ON DELETE CASCADE,
FOREIGN KEY(accno) REFERENCES bankAccount(accno)
ON UPDATE CASCADE ON DELETE CASCADE
);
Table depositor



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;



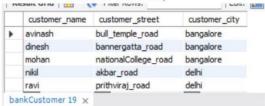
insert into bankAccount values(1,'sbi_chamrajpet',2000); insert into bankAccount values(2,'sbi_residencyRoad',5000); insert into bankAccount values(3,'sbi_shivajiRoad',6000);

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;

accno branch_name balance 1 sbi_chamrajpet 2000 2 sbi_residencyRoad 5000 3 sbi_shivajiRoad 6000 4 sbi_parliamentRoad 9000 5 sbi_jantarMantar 8000 bankAccount 18 ×

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;



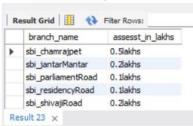
insert into loan values(1,'sbi_chamrajpet',1000); insert into loan values(2,'sbi_residencyRoad',2000); insert into loan values(3,'sbi_shivajiRoad',3000); insert into loan values(4,'sbi_parliamentRoad',4000); insert into loan values(5,'sbi_jantarMantar',5000); select * from loan;



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 :rom branch;



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

SBI_ResidencyRoad).

SQL>

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;

