

WEEK3
BANKDATABASE

```
create database Bank253;
use Bank253;
create table Branch(
Branch_name varchar(25),
Branch_city varchar(15),
Assets float,
primary key(Branch_name));
```

```
create table Bank_account(
Accno int,
Branch_name varchar(25),
Balance float,
primary key(Accno),
foreign key(Branch_name) references Branch(Branch_name) on delete cascade on update cascade);
```

```
create table Bank_customer(
Customer_name varchar(20),
Customer_street varchar(20),
Customer_city varchar(10),
primary key(Customer_name));
```

```
create table Depositor(
Customer_name varchar(20),
Accno int,
primary key(Customer_name,Accno),
foreign key(Customer_name) references Bank_customer(Customer_name) on delete cascade on update cascade,
foreign key(Accno) references Bank_account(Accno) on delete cascade on update cascade);
```

```

create table Loan(
Loan_number int,
Branch_name varchar(30),
Ammount float,
primary key(Loan_number),
foreign key(Branch_name) references Branch(Branch_name) on delete cascade on update cascade);

```

insert into Branch values

```

('SBI_Chamrajpet','Bangalore',50000),('SBI_ResidencyRoad','Bangalore',10000),('SBI_ShivajiRoad','Bo
mbay',20000),('SBI_ParlimentRoad','Delhi',10000),

('SBI_Jantarmentar','Delhi',20000);

```

insert into Bank_account values

```

(1,'SBI_Chamrajpet',2000),(2,'SBI_ResidencyRoad',5000),(3,'SBI_ShivajiRoad',6000),(4,'SBI_Parliment
Road',9000),(5,'SBI_Jantarmentar',8000),(6,'SBI_ShivajiRoad',4000),

(8,'SBI_ResidencyRoad',4000),(9,'SBI_ParlimentRoad',3000),(10,'SBI_ResidencyRoad',5000),(11,'SBI_J
antarmentar',2000);

```

insert into Bank_customer values

```

('Avinash','Bull_Temple_Road','Bangalore'),('Dinesh','Bannerghatta_Road','Bangalore'),('Mohan','Nat
ionalCollege_Road','Bangalore'),

('Nikil','Akbar_Road','Delhi'),('Ravi','Prithviraj_Road','Delhi');

```

insert into Depositor values

```

('Avinash',1),('Dinesh',2),('Nikil',4),('Ravi',5),('Avinash',8),('Nikil',9),('Dinesh',10),('Nikil',11);

```

insert into Loan values

```

(1,'SBI_Chamrajpet',1000),(2,'SBI_ResidencyRoad',2000),(3,'SBI_ShivajiRoad',3000),(4,'SBI_Parliment
Road',4000),(5,'SBI_Jantarmentar',5000);

```

QUERY 1

Find all the customers who have at least two accounts at the same branch

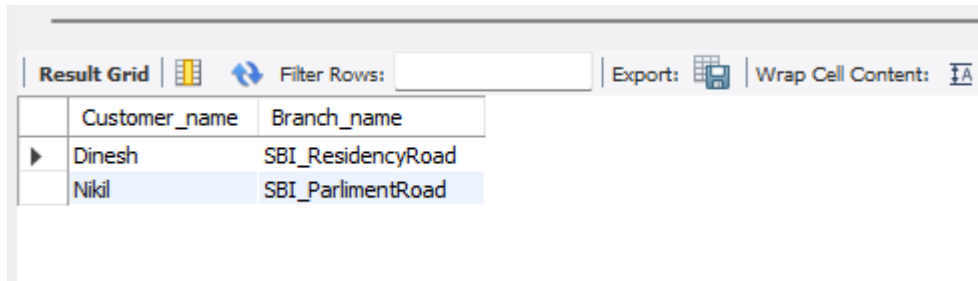
```
select Customer_name,Branch_name from depositor d
```

```
inner join Bank_account b on d.Accno=b.Accno
```

```
group by Customer_name,Branch_name
```

```
having count(*)>=2;
```

OUTPUT



The screenshot shows a database interface with a 'Result Grid' tab. The grid contains two rows of data. The first row has 'Dinesh' under 'Customer_name' and 'SBI_ResidencyRoad' under 'Branch_name'. The second row has 'Nikil' under 'Customer_name' and 'SBI_ParliamentRoad' under 'Branch_name'. Above the grid, there are controls for 'Filter Rows', 'Export', and 'Wrap Cell Content'.

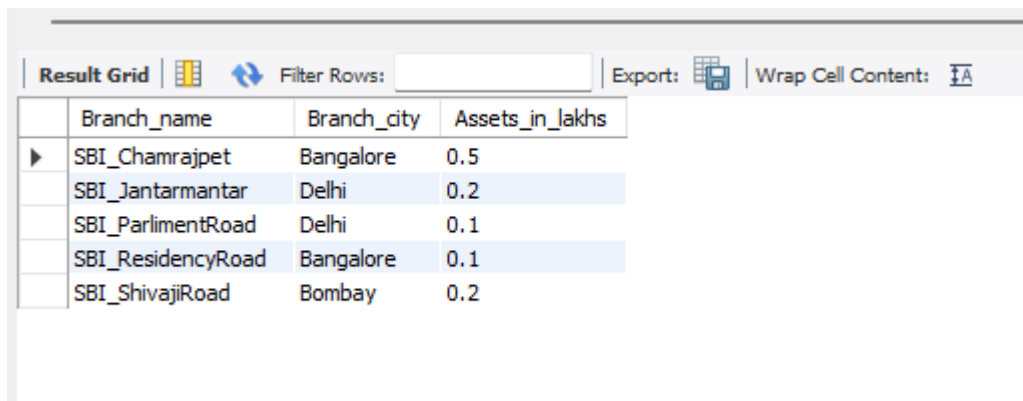
	Customer_name	Branch_name
▶	Dinesh	SBI_ResidencyRoad
	Nikil	SBI_ParliamentRoad

QUERY 2

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, Branch_city, (Assets_in_lakhs/100000) Assets_in_lakhs from Branch;
```

OUTPUT



The screenshot shows a database interface with a 'Result Grid' tab. The grid contains five rows of data. The first row has 'SBI_Chamrajpet' under 'Branch_name', 'Bangalore' under 'Branch_city', and '0.5' under 'Assets_in_lakhs'. The second row has 'SBI_Jantarmantar' under 'Branch_name', 'Delhi' under 'Branch_city', and '0.2' under 'Assets_in_lakhs'. The third row has 'SBI_ParliamentRoad' under 'Branch_name', 'Delhi' under 'Branch_city', and '0.1' under 'Assets_in_lakhs'. The fourth row has 'SBI_ResidencyRoad' under 'Branch_name', 'Bangalore' under 'Branch_city', and '0.1' under 'Assets_in_lakhs'. The fifth row has 'SBI_ShivajiRoad' under 'Branch_name', 'Bombay' under 'Branch_city', and '0.2' under 'Assets_in_lakhs'. Above the grid, there are controls for 'Filter Rows', 'Export', and 'Wrap Cell Content'.

	Branch_name	Branch_city	Assets_in_lakhs
▶	SBI_Chamrajpet	Bangalore	0.5
	SBI_Jantarmantar	Delhi	0.2
	SBI_ParliamentRoad	Delhi	0.1
	SBI_ResidencyRoad	Bangalore	0.1
	SBI_ShivajiRoad	Bombay	0.2

QUERY 3

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

```
insert into Loan values(6,'SBI_Chamrajpet',10000);
```

```
create view Loan_sum
```

```
as
```

```
select Branch_name, sum(Ammount)
```

from Loan

group by Branch_name;

select * from Loan_sum;

OUTPUT

Result Grid			Filter Rows:	Export:	Wrap Cell Con
	Branch_name	sum(Ammount)			
▶	SBI_Chamrajpet	11000			
	SBI_Jantarmantar	5000			
	SBI_ParlimentRoad	4000			
	SBI_ResidencyRoad	2000			
	SBI_ShivajiRoad	3000			