

Week 4

```
create database 1bm21cs054_bank2;

use 1bm21cs054_bank2;

create table branch(
branchname varchar(20),
branchcity varchar(20),
assets int,
primary key(branchname)
);

create table bankcustomer(
customername varchar(20),
customerstreet varchar(20),
customercity varchar(20),
primary key(customername)
);

create table bankacc(
accno int,
branchname varchar(20),
balance int,
primary key(accno),
foreign key(branchname) references branch(branchname)
on delete cascade
on update cascade
);

create table depositer(
customername varchar(20),
accno int,
primary key(customername, accno),
foreign key(customername) references bankcustomer(customername),
foreign key(accno) references bankacc(accno)
on delete cascade
```

```
on update cascade
);
create table loan(
loannumber int,
branchname varchar(20),
amount int,
primary key(loannumber),
foreign key(branchname) references branch(branchname)
on delete cascade
on update cascade
);
create table borrower(
customername varchar(20),
loannumber int,
primary key(loannumber, customername),
foreign key (customername) references bankcustomer(customername),
foreign key (loannumber) references loan(loannumber)
on delete cascade
on update cascade
);
insert into branch values('SBI_Chamarajpet','bangalore',50000);
insert into branch values('SBI_Residencyroad','bangalore',10000);
insert into branch values('SBI_Shivajinagar','bombay',20000);
insert into branch values('SBI_Parlimentroad','delhi',10000);
insert into branch values('SBI_Jantarmantar','delhi',20000);
insert into branch values('SBI_Mantrimarg','delhi',200000);

insert into bankcustomer values('Avinash','BullTempleRoad','bangalore');
insert into bankcustomer values('Dinesh','BannerghattaRoad','bangalore');
insert into bankcustomer values('Mohan','NationalCollegeRoad','bangalore');
insert into bankcustomer values('Nikhil','AkbarRoad','delhi');
```

```
insert into bankcustomer values('Ravi','PrithvirajRoad','delhi');
```

```
insert into bankacc values(1,'SBI_Chamarajpet',2000);
```

```
insert into bankacc values(2,'SBI_Residencyroad',5000);
```

```
insert into bankacc values(3,'SBI_Shivajinagar',6000);
```

```
insert into bankacc values(4,'SBI_Parlimentroad',9000);
```

```
insert into bankacc values(5,'SBI_Jantarmentar',8000);
```

```
insert into bankacc values(6,'SBI_Shivajinagar',4000);
```

```
insert into bankacc values(8,'SBI_Residencyroad',4000);
```

```
insert into bankacc values(9,'SBI_Parlimentroad',3000);
```

```
insert into bankacc values(10,'SBI_Residencyroad',5000);
```

```
insert into bankacc values(11,'SBI_Jantarmentar',2000);
```

```
insert into bankacc values(12,'SBI_Mantrimarg',2000);
```

```
insert into depositer values('Avinash',1);
```

```
insert into depositer values('Dinesh',2);
```

```
insert into depositer values('Nikhil',4);
```

```
insert into depositer values('Ravi',5);
```

```
insert into depositer values('Avinash',8);
```

```
insert into depositer values('Nikhil',9);
```

```
insert into depositer values('Dinesh',10);
```

```
insert into depositer values('Nikhil',11);
```

```
insert into depositer values('Nikhil',12);
```

```
insert into loan values(1,'SBI_Chamarajpet',1000);
```

```
insert into loan values(2,'SBI_Residencyroad',2000);
```

```
insert into loan values(3,'SBI_Shivajinagar',3000);
```

```
insert into loan values(4,'SBI_Parlimentroad',4000);
```

```
insert into loan values(5,'SBI_Jantarmentar',5000);
```

```
insert into borrower values('Avinash',1);
```

insert into borrower values('Dinesh',2);

insert into borrower values('Mohan',3);

insert into borrower values('Nikhil',4);

insert into borrower values('Ravi',5);

TO DO

```
1. select distinct customername,count(distinct ba.branchname)
from depositer d,bankacc ba, branch b
where d.accno=ba.accno and ba.branchname=b.branchname and b.branchcity='delhi'
group by customername
having count(distinct b.branchname) = (select count(distinct x.branchname)
from branch x inner join bankacc y
on x.branchname=y.branchname
where branchcity='delhi')
```

The screenshot shows a database query editor interface. The SQL query is as follows:

```
98 • select distinct customername,count(distinct ba.branchname)
99 from depositer d,bankacc ba, branch b
100 where d.accno=ba.accno and ba.branchname=b.branchname and b.branchcity='delhi'
101 group by customername
102 having count(distinct b.branchname) = (select count(distinct x.branchname)
103 from branch x inner join bankacc y
104 on x.branchname=y.branchname
105 where branchcity='delhi')
```

Below the query editor, the 'Result Grid' is displayed, showing the results of the query:

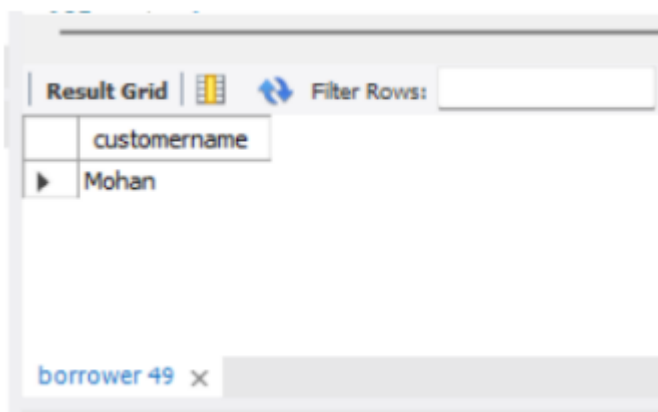
customername	count(distinct ba.branchname)
Nikhil	3

The interface includes a toolbar at the top with various icons for file operations, a 'Limit to 1000 rows' dropdown, and a 'Filter Rows' input field. On the right side, there are buttons for 'Result Grid', 'Form Editor', and 'Field Types'. At the bottom, there is a 'Read Only' indicator.

```

2.select customername
from borrower
where customername not in(
select customername
from depositer
);

```



The screenshot shows a database query result window. At the top, there is a 'Result Grid' tab and a 'Filter Rows' input field. Below this, a table is displayed with one column labeled 'customername' and one row containing the value 'Mohan'. At the bottom of the window, there is a tab labeled 'borrower 49' with a close button (X).

customername
Mohan

```

3. select customername
from borrower
where customername in(
select customername
from depositer
where accno= any
(
select accno
from bankacc ba inner join branch b
on ba.branchname=b.branchname
where b.branchcity='bangalore' )
);

```

```
115 • select customername
116   from borrower
117  where customername in(
118   select customername
119   from depositor
120  where accno= any
121  (
122
```

Limit to 1000 rows

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

customername
Avinash
Dinesh

Result Grid
Form Editor

4. select branchname
from branch
where assets>
(select sum(assets)
from branch
where branchcity='bangalore');

```
128 • select branchname
129   from branch
130  where assets>
131  (select sum(assets)
132   from branch
133   where branchcity='bangalore');
134
```

Limit to 1000 rows

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

branchname
SBI_Mantrimarg
NULL

Result Grid
Form Editor

5. delete from bankacc
where branchname=any
(select branchname
from branch
where branchcity='bombay');

6.select * from bankacc;

140 • `select * from bankacc;`

Result Grid

Filter Rows:

Edit: Export/Import: Wrap Cell Content:

	accno	branchname	balance
▶	1	SBI_Chamarajpet	2000
	2	SBI_Residencyroad	5000
	3	SBI_Shivajinagar	6000
	4	SBI_Parlimentroad	9000
	5	SBI_Jantarmantar	8000
	6	SBI_Shivajinagar	4000
	8	SBI_Residencyroad	4000
	9	SBI_Parlimentroad	3000
	10	SBI_Residencyroad	5000
	11	SBI_Jantarmantar	2000
	12	SBI_Mantrimarg	2000
*	NULL	NULL	NULL

bankacc 4 x

Result Grid

Form Editor

Field Types

Apply