

WEEK 4

```
create database 1bm21cs043_bank2;

use 1bm21cs043_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)

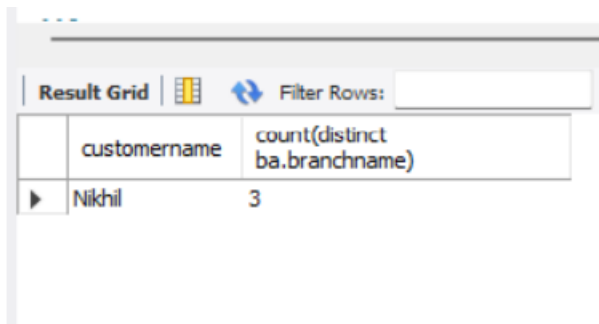
on delete cascade
```

```
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

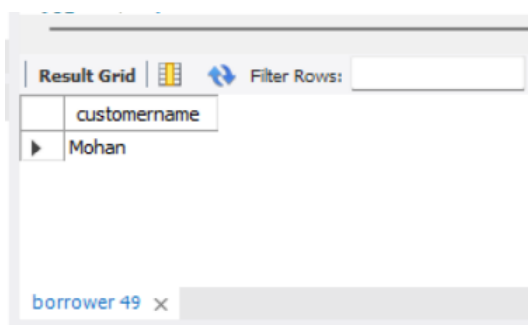
```
1.select distinct customername,count(distinct ba.branchname)
from depositer d,bankacc ba, branch b
where d.accno=ba.accno and ba.branchname=b.branchname and b.branchcity='delhi'
group by customername
having count(distinct b.branchname) = (select count(distinct x.branchname)
from branch x inner join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



The screenshot shows a 'Result Grid' window with a 'Filter Rows' input field. The grid contains two columns: 'customername' and 'count(distinct ba.branchname)'. There is one data row with 'Nikhil' in the first column and '3' in the second column.

	customername	count(distinct ba.branchname)
▶	Nikhil	3

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



The screenshot shows a 'Result Grid' window with a 'Filter Rows' input field. The grid contains one column: 'customername'. There is one data row with 'Mohan' in the first column. At the bottom, there is a tab labeled 'borrower 49' with a close button 'x'.

	customername
▶	Mohan

borrower 49 x

```

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' )
);

```

Result Grid		Filter Rows:
	customername	
▶	Avinash	
	Dinesh	

borrower 52	×
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```

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

```

Result Grid		Filter Rows:	Edit:
	branchname		
▶	SBI_Mantrimarg		
*	NULL		

branch 51 x

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

Result Grid		Filter Rows:	Edit:
	accno	branchname	balance
▶	1	SBI_Chamarajpet	2000
	2	SBI_Residencyroad	5000
	4	SBI_Parliamentroad	9000
	5	SBI_Jantarmantar	8000
	8	SBI_Residencyroad	4000
	9	SBI_Parliamentroad	3000
	10	SBI_Residencyroad	5000
	11	SBI_Jantarmantar	2000
	12	SBI_Mantrimarg	2000
*	NULL	NULL	NULL

bankacc 17 x

Output

6. update bankacc
 set balance=(balance+0.05*balance);
 select *from bankacc;

Result Grid			
		Filter Rows:	
Edit:			
	accno	branchname	balance
▶	1	SBI_Chamarajpet	2100
	2	SBI_Residencyroad	5250
	3	SBI_Shivajinagar	6300
	4	SBI_Parliamentroad	9450
	5	SBI_Jantarmantar	8400
	6	SBI_Shivajinagar	4200
	8	SBI_Residencyroad	4200
	9	SBI_Parliamentroad	3150
	10	SBI_Residencyroad	5250
	11	SBI_Jantarmantar	2100
	12	SBI_Mantrimarg	2100
•	NULL	NULL	NULL

bankacc 15 ×

delete from branch

where branchcity='bangalore';

Result Grid			
		Filter Rows:	
	branchname	branchcity	assets
▶	SBI_Jantarmantar	delhi	20000
	SBI_Mantrimarg	delhi	200000
	SBI_Parliamentroad	delhi	10000
	SBI_Shivajinagar	bombay	20000
•	NULL	NULL	NULL

branch 18 ×