BANK DATABASE

```
create database bank;
use bank;

create table branch(
branch_name varchar(30) primary key,
branch_city varchar(30),
assests decimal(6,2)
);

drop table accounts;

create table accounts(
accno int primary key,
branch_name varchar(30),
balance decimal(7,2),
foreign key(branch_name) references branch(branch_name)
);

create table depositor(
customer_name varchar(30),
customer_street varchar(30),
customer_city varchar(30)
);

alter table depositor
add column accno int;

alter table depositor
add constraint fori
foreign key(accno) references accounts(accno);
```

```
alter table depositor
drop foreign key fori;

create table loan(
loan_number int primary key,
branch_name varchar(30),
amt decimal(7,2)
);

alter table loan
add constraint fk_1
foreign key(branch_name) references branch(branch_name);

create table borrower(
customer_name varchar(30),
loan_number int,
foreign key(loan_number) references loan(loan_number)
);

desc branch;
```

Your SQL query has been executed successfully.

```
desc branch
```

+ Options

Field	Type	Null	Key	Default	Extra
branch_name	varchar(30)	NO	PRI	NULL	
branch_city	varchar(30)	YES		NULL	
assests	decimal(6,2)	YES		NULL	

desc accounts;

Your SQL query has been executed successfully.

```
desc accounts
```

+ Options

Field	Type	Null	Key	Default	Extra
accno	int(11)	NO	PRI	NULL	
branch_name	varchar(30)	YES	MUL	NULL	
balance	decimal(7,2)	YES		NULL	

desc depositor;

Your SQL query has been executed successfully.

```
desc depositor
```

+ Options

Field	Type	Null	Key	Default	Extra
customer_name	varchar(30)	YES		NULL	
customer_street	varchar(30)	YES		NULL	
customer_city	varchar(30)	YES		NULL	
accno	int(11)	YES	MUL	NULL	

desc loan;

Your SQL query has been executed successfully.

```
desc loan
```

+ Options

Field	Type	Null	Key	Default	Extra
loan_number	int(11)	NO	PRI	NULL	
branch_name	varchar(30)	YES	MUL	NULL	
amt	decimal(7,2)	YES		NULL	

desc borrower;

Your SQL query has been executed successfully.

```
desc borrower
```

+ Options

Field	Type	Null	Key	Default	Extra
customer_name	varchar(30)	YES		NULL	
loan_number	int(11)	YES	MUL	NULL	

truncate table depositor;

insert into branch(branch_name,branch_city,assests) values('SBH KOPPAL','KOPPAL',1234.56),('SBI HOSPET','HOSPET',4567.89),('SBI BANGLORE','BANGLORE RURAL',9687.25),('SBI GAGAG','GADAG',1000.25),('SBI TUMKUR','TUMKUR',2000.24);

insert into accounts(accno,branch_name,balance) values(1234,'SBH KOPPAL',40000.00),(4567,'SBI HOSPET',50000.00),(2345,'SBI BANGLORE',60000.00),(1000,'SBI TUMKUR',70000.00),(1024,'SBI GAGAG',10000.00);

insert into depositor(customer_name,customer_street,customer_city,accno) values('Hari','GADAG ROAD','KOPPAL',1234),('Saquib','TIPP SANDRA','BANGLORE',4567),('Praveen','Devi Camp','TUMKUR',2345),('Subhas','Chamrajpet','Bijapur',1000),('Balagi','Basavangudi','KGF',1024);

insert into loan(loan_number,branch_name,amt) values(1,'SBH KOPPAL',10000.00),(2,'SBH KOPPAL',15000.00),(3,'SBI HOSPET',20000.00),(4,'SBI HOSPET',25000.00),(5,'SBI TUMKUR',24000.00);

insert into borrower(customer_name,loan_number) values('Mayank',1),('Pooran',2),('Gayle',3),('Shah Rukh Khan',4),('Arshdeeep Singh',5);

insert into branch(branch_name,branch_city,assests) values('SBI KOPPAL','KOPPAL',1234.56);

insert into accounts(accno,branch_name,balance) values(1233,'SBH KOPPAL',40000.00);

insert into accounts(accno,branch_name,balance) values(1232,'SBI KOPPAL',40000.00);

insert into depositor(customer_name,customer_street,customer_city,accno) values('Prahlad','Basava Nagar','Kuknoor',1233);

insert into depositor(customer_name,customer_street,customer_city,accno) values('Prahlad K','Basava Nagar','KOPPAL',1232);

insert into accounts(accno,branch_name,balance) values(1220,'SBH KOPPAL',40000.00);

insert into depositor(customer_name,customer_street,customer_city,accno) values('Hari','GADAG ROAD','KOPPAL',1220);

insert into accounts(accno,branch_name,balance) values(1221,'SBH KOPPAL',40000.00);

insert into depositor(customer_name,customer_street,customer_city,accno) values('Hari','GADAG ROAD','KOPPAL',1221);

insert into accounts(accno,branch_name,balance) values(1120,'SBH KOPPAL',40000.00);

insert into depositor(customer_name,customer_street,customer_city,accno) values('Avani','GADAG ROAD','KOPPAL',1220);

insert into accounts(accno,branch_name,balance) values(1128,'SBH KOPPAL',40000.00);

insert into depositor(customer_name,customer_street,customer_city,accno) values('Avani','GADAG ROAD','KOPPAL',1220);

select * from branch;

Showing rows 0 - 5 (6 total, Query took 0.0022 seconds.)

```
select * from branch
```

Profiling [

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	branch_name	branch_city	assests
Edit Copy Delete	SBH KOPPAL	KOPPAL	1234.56
Edit Copy Delete	SBI BANGLORE	BANGLORE RURAL	9687.25
Edit Copy Delete	SBI GAGAG	GADAG	1000.25
Edit Copy Delete	SBI HOSPET	HOSPET	4567.89
Edit Copy Delete	SBI KOPPAL	KOPPAL	1234.56
Edit Copy Delete	SBI TUMKUR	TUMKUR	2000.24

select * from accounts;

```
select * from accounts
```

Profiling [E

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

	accno	branch_name	balance
Edit Copy Delete	1000	SBI TUMKUR	70000.00
Edit Copy Delete	1024	SBI GAGAG	10000.00
Edit Copy Delete	1120	SBH KOPPAL	40000.00
Edit Copy Delete	1128	SBH KOPPAL	40000.00
Edit Copy Delete	1220	SBH KOPPAL	40000.00
Edit Copy Delete	1221	SBH KOPPAL	40000.00
Edit Copy Delete	1232	SBI KOPPAL	40000.00
Edit Copy Delete	1233	SBH KOPPAL	40000.00
Edit Copy Delete	1234	SBH KOPPAL	40000.00
Edit Copy Delete	2345	SBI BANGLORE	60000.00
Edit Copy Delete	4567	SBI HOSPET	50000.00

select * from depositor;

Showing rows 0 - 10 (11 total, Query took 0.0010 seconds.)

```
select * from depositor
```

Profiling [E

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

customer_name	customer_street	customer_city	accno
Hari	GADAG ROAD	KOPPAL	1234
Saquib	TIPP SANDRA	BANGLORE	4567
Praveen	Devi Camp	TUMKUR	2345
Subhas	Chamrajpet	Bijapur	1000
Balagi	Basavangudi	KGF	1024
Prahlad	Basava Nagar	Kuknoor	1233
Prahlad K	Basava Nagar	KOPPAL	1232
Hari	GADAG ROAD	KOPPAL	1220
Hari	GADAG ROAD	KOPPAL	1221
Avani	GADAG ROAD	KOPPAL	1220
Avani	GADAG ROAD	KOPPAL	1220

select * from loan;

Showing rows 0 - 4 (5 total, Query took 0.0017 seconds.)

```
select * from loan
```

Show all | Number of rows: 25 Filter rows: Search this table Sc

+ Options

	loan_number	branch_name	amt
Edit Copy Delete	1	SBH KOPPAL	10000.00
Edit Copy Delete	2	SBH KOPPAL	15000.00
Edit Copy Delete	3	SBI HOSPET	20000.00
Edit Copy Delete	4	SBI HOSPET	25000.00
Edit Copy Delete	5	SBI TUMKUR	24000.00

select * from borrower;

Showing rows 0 - 4 (5 total, Query took 0.0009 second

```
select * from borrower
```

Show all | Number of rows: 25 Filte

+ Options

customer_name	loan_number
Mayank	1
Pooran	2
Gayle	3
Shah Rukh Khan	4
Arshdeeep Singh	5

<u>QUERY 3:</u> Find Find all the customers who have at least two deposits at the same branch (Ex. 'SBI_ResidencyRoad').

```
select  C.customer_name
from Depositor C
where exists (
        select D.customer_name, count(D.customer_name)
        from depositer D, Accounts BA
        where
            D.accno = BA.accno AND
            C.customer_name = D.customer_name AND
             BA.branch_name = 'GADAG ROAD'
       group by D. customer_name
       having count(D.customer_name)>=2;
            );
```

+ Options

customer_name	customer_street	customer_city	accno
Hari	GADAG ROAD	KOPPAL	1234
Hari	GADAG ROAD	KOPPAL	1220
Hari	GADAG ROAD	KOPPAL	1221
Avani	GADAG ROAD	KOPPAL	1220
Avani	GADAG ROAD	KOPPAL	1220

<u>QUERY 4:</u> Find all the customers who have an account at *all* the branches located in a specific city (Ex. Delhi).

```
select BC.customer_name
from Depositor BC
where not exists  (
                    select bracnhname from Branch where branch_city='Delhi'
                    minus
                    (select BA.branch_name from Depositer D, Accounts BA
                      where D.accno=BA.accno and BC.customer_name=D.customer_name)
                   );
```

<u>QUERY 5:</u> Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bomay).

```
delete  from Accounts
where branch_name IN (
                      select branch_name
                      from Branch
                      where branch_city='KOPPAL'
                        );
```

7 rows affected. (Query took 0.0714 seconds.)

```
delete from Accounts where branch_name IN (select branch_name from branch where branch_city="KOPPAL")
```

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