## PROGRAM 2: BANKING ENTERPRISE

Consider the following database for a banking enterprise. Branch (branch-name: String, branch-city: String, assets: real) BankAccount(accno: int, branch-name: String, balance: real) BankCustomer (customer-name: String, customer-street: String, customer-city: String) Depositer(customer-name: String, accno: int) Loan (loan-number: int, branch-name: String, amount: real) i. Create the above tables by properly specifying the primary keys and the foreign keys. ii. Enter at least five tuples for each relation. iii. Find all the customers who have at least two accounts at the Main branch (ex. SBI\_ResidencyRoad). iv. Find all the customers who have an account at all the branches located in a specific city (Ex. Delhi). v. Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay). 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(

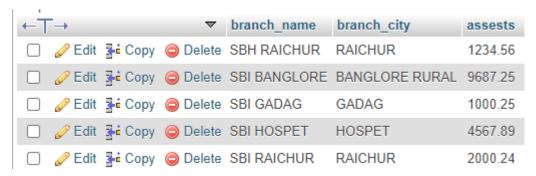
```
accno int primary key,
branch_name varchar(30),
balance decimal(7,2),
foreign key(branch_name) references branch(branch_name)
);
create table depositor(
customer_name varchar(30),
customer_street varchar(30),
customer_city varchar(30)
);
alter table depositor
add column accno int;
alter table depositor
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)
);

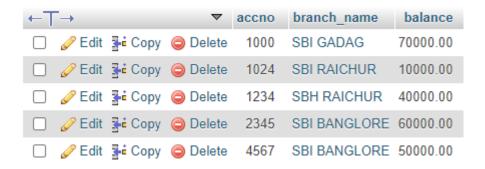
desc branch;
desc accounts;
desc depositor;
desc loan;
desc borrower;
```

truncate table depositor;

insert into branch(branch\_name,branch\_city,assests) values('SBH RAICHUR','RAICHUR',1234.56),('SBI HOSPET','HOSPET',4567.89),('SBI BANGLORE','BANGLORE RURAL',9687.25),('SBI GAGAG','GADAG',1000.25),('SBI RAICHUR','RAICHUR',2000.24);



insert into accounts(accno,branch\_name,balance) values(1234,'SBH RAICHUR',40000.00),(4567,'SBI BANGLORE',50000.00),(2345,'SBI BANGLORE',60000.00),(1000,'SBI GADAG',70000.00),(1024,'SBI RAICHUR',10000.00);



insert into depositor(customer\_name,customer\_street,customer\_city,accno) values('Hari','ALMERI','KOPPAL',1234),('Saquib','BTM LAYOUT,'BANGLORE',4567),('Praveen','SINDHNUR',' RAICHUR ',2345),('Subhas','CHAMRAJPET','BIJAPUR',1000),('BalaJi','MUDIRABAD','KOLAR',1024);

customer_name	customer_street	customer_city	accno
Hari	ALMERI	KOPPAL	1234
Saquib	BTM LAYOUT	BANGLORE	4567
Praveen	SINDHNUR	RAICHUR	2345
Subhas	CHAMRAJPET	BIJAPUR	1000
BalaJi	MUDIRABAD	KOLAR	1024
Pramod	Vasavi Nagar	Sindhanur	1233
Pramod	Vasavi Nagar	RAICHUR	1232
Hari	GADAG ROAD	RAICHUR	1220
Hari	GADAG ROAD	RAICHUR	1221
Arya	MANNUR ROAD	RAICHUR	1220
Arya	MANNUR ROAD	RAICHUR	1220

insert into loan(loan\_number,branch\_name,amt) values(1,'SBI GADAG',10000.00),(2,'SBI RAICHUR',15000.00),(3,'SBH RAICHUR,20000.00),(4,'SBI BANGLORE',25000.00),(5,'SBI BANGLORE',24000.00);



insert into borrower(customer\_name,loan\_number)
values('Mayur',1),('Pooja',2),('Gagan',3),('Sufail,4),('Akash,5);

customer_name	loan_number
Mayur	1
Pooja	2
Gagan	3
Sufail	4
Akash	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('Pramod','Vasavi Nagar','Sindhanur',1233);

insert into depositor(customer\_name,customer\_street,customer\_city,accno) values('Pramod','Vasavi Nagar',' RAICHUR ',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',' RAICHUR ',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',' RAICHUR ',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('Arya','MANNUR ROAD',' RAICHUR ',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('Arya','MANNUR ROAD',' RAICHUR ',1220);

customer_name	customer_street	customer_city	accno
Hari	ALMERI	KOPPAL	1234
Saquib	BTM LAYOUT	BANGLORE	4567
Praveen	SINDHNUR	RAICHUR	2345
Subhas	CHAMRAJPET	BIJAPUR	1000
BalaJi	MUDIRABAD	KOLAR	1024
Pramod	Vasavi Nagar	Sindhanur	1233
Pramod	Vasavi Nagar	RAICHUR	1232
Hari	GADAG ROAD	RAICHUR	1220
Hari	GADAG ROAD	RAICHUR	1221
Arya	MANNUR ROAD	RAICHUR	1220
Arya	MANNUR ROAD	RAICHUR	1220

```
select * from branch;
select * from accounts;
select * from depositor;
select * from loan;
select * from borrower;
select c.customer_name,a.branch_name from depositor c join accounts a on c.accno=a.accno group
by c.customer_name having count(*)>1;
create table joined as(
select br.branch_city,acn.branch_name from branch br left join accounts acn on
br.branch_name=acn.branch_name
);
create table final as(
select bran.branch_name,anc.accno from branch bran join accounts anc on
bran.branch_name=anc.branch_name
);
select * from final;
select * from joined;
```

select dpt.customer\_name from depositor dpt left join joined jn on dpt.branch\_name=jn.branch\_name where jn.branch\_city='RAICHUR';

branch_city	branch_name	
RAICHUR	SBH RAICHUR	
BANGLORE RURAL	NULL	
GADAG	NULL	
HOSPET	NULL	
RAICHUR	SBI RAICHUR	

```
create table f_join as(
```

```
select fl.branch_name,fl.accno,bc.branch_city from final fl join branch bc on fl.branch_name=bc.branch_name
```

select \* from f\_join;

);

select distinct customer\_name,branch\_city from depositor f,f\_join fn where f.accno=fn.accno and fn.branch\_city='RAICHUR';

branch_name	accno	branch_city
SBH RAICHUR	1120	RAICHUR
SBH RAICHUR	1128	RAICHUR
SBH RAICHUR	1220	RAICHUR
SBH RAICHUR	1221	RAICHUR
SBH RAICHUR	1233	RAICHUR
SBI RAICHUR	1232	RAICHUR

```
SET SQL_SAFE_UPDATES=0;
```

delete from accounts

where branch\_name in(

select branch\_name from branch where branch\_city='RAICHUR'

);

## √ 2 rows affected. (Query took 0.1337 seconds.)

 $\underline{\texttt{delete}} \text{ from accounts where branch\_name } \underline{\texttt{in}}( \ \underline{\texttt{select}} \ \texttt{branch\_name from branch where branch\_city='RAICHUR'})$ 

[Edit inline] [ Edit ] [ Create PHP code ]