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1BM19CS230

CSE - 4A

Lab Program - 2

create database banking;

use banking;

```
create table Branch(  
    branch_name varchar(20) not null,  
    branch_city varchar(20) not null,  
    assets real not null,  
    primary key(branch_name)  
);
```

```
create table BankAccount(  
    accno int not null,  
    branch_name varchar(20) not null,  
    balance real not null,  
    primary key(accno),  
    foreign key(branch_name) references Branch(branch_name)  
);
```

```
create table BankCustomer(  
    customer_name varchar(20) not null,  
    customer_street varchar(20) not null,  
    customer_city varchar(20) not null,  
    primary key(customer_name)
```

);

```
create table Depositor(  
    customer_name varchar(20) not null,  
    accno int not null,  
    primary key(customer_name,accno),  
    foreign key(customer_name) references BankCustomer(customer_name),  
    foreign key(accno) references BankAccount(accno)  
);
```

```
create table Loan(  
    loanno int not null,  
    branch_name varchar(20) not null,  
    amount real not null,  
    primary key(loanno),  
    foreign key(branch_name) references Branch(branch_name)  
);
```

```
insert into Branch(branch_name,branch_city,assets)  
values ('SBI_Chamrajpet','Bangalore',50000),  
       ('SBI_ResidencyRoad','Bangalore',10000),  
       ('SBI_ShivajiRoad','Bombay',20000),  
       ('SBI_ParliamentRoad','Delhi',10000),  
       ('SBI_Jantarmentar','Delhi',20000);
```

```
insert into BankAccount(accno,branch_name,balance)  
values (1,'SBI_Chamrajpet',2000),  
       (2,'SBI_ResidencyRoad',5000),
```

```
(3,'SBI_ShivajiRoad',6000),  
(4,'SBI_ParliamentRoad',9000),  
(5,'SBI_Jantarmanatar',8000),  
(6,'SBI_ShivajiRoad',4000),  
(8,'SBI_ResidencyRoad',4000),  
(9,'SBI_ParliamentRoad',3000),  
(10,'SBI_ResidencyRoad',5000),  
(11,'SBI_Jantarmanatar',2000);
```

```
insert into BankCustomer(customer_name,customer_street,customer_city)  
values ('Avinash','Bull_Temple_Road','Bangalore'),  
('Dinesh','Bannerghatta_Road','Bangalore'),  
('Mohan','NationalCollege_Road','Bangalore'),  
('Nikil','Akbar_Road','Delhi'),  
('Ravi','Prithviraj_Road','Delhi');
```

```
insert into Depositor(customer_name,accno)  
values ('Avinash',1),  
('Dinesh',2),  
('Nikil',4),  
('Ravi',5),  
('Avinash',8),  
('Nikil',9),  
('Dinesh',10),  
('Nikil',11);
```

```
insert into Loan(loanno,branch_name,amount)  
values (1,'SBI_Chamrajpet',1000),
```

```
(2,'SBI_ResidencyRoad',2000),  
(3,'SBI_ShivajiRoad',3000),  
(4,'SBI_ParliamentRoad',4000),  
(5,'SBI_Jantarmanatar',5000);
```

-- Branch,BankAccount,BankCustomer,Depositor,Loan

-- find all the customers who have at least two accounts at the
'SBI_ResidencyRoad'

```
select distinct d.customer_name from Depositor d,BankAccount ba,Branch b  
where d.accno = ba.accno and ba.branch_name = b.branch_name and  
ba.branch_name = 'SBI_ResidencyRoad'  
and 2 <= (select count(accno) from Depositor where customer_name =  
d.customer_name);
```

	customer_name
▶	Dinesh
	Avinash

-- find all the customers who have an account at all branches in Delhi

```
select d.customer_name from Depositor d,BankAccount ba,Branch b  
where d.accno = ba.accno and b.branch_name = ba.branch_name and  
b.branch_city = 'Delhi'  
group by d.customer_name  
having count(d.accno) >= (select count(branch_name) from Branch where  
branch_city = 'Delhi');
```

	customer_name
▶	Nikhil

-- demonstrate how you delete all account tuples at every branch located at a
Bombay

delete from BankAccount

where branch_name in (select branch_name from Branch where branch_city =
'Bombay');

select * from BankAccount;

	accno	branch_name	balance
▶	1	SBI_Chamrajpet	2000
	2	SBI_ResidencyRoad	5000
	4	SBI_ParliamentRoad	9000
	5	SBI_Jantarantar	8000
	8	SBI_ResidencyRoad	4000
	9	SBI_ParliamentRoad	3000
	10	SBI_ResidencyRoad	5000
	11	SBI_Jantarantar	2000