

WEEK 3: BANK DATABASE

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```
create database bank;

use bank;

create table branch
(
    branch_name varchar(20) primary key,
    branch_city varchar(15),
    assets real
);

show tables;

desc branch;

create table bank_account
(
    accno int primary key,
    branch_name varchar(20),
    balance real,
    foreign key(branch_name) references branch(branch_name) on delete cascade
);

desc bank_account;

create table bank_customer
(
    customer_name varchar(20) primary key,
    customer_street varchar(20),
    customer_city varchar(15)
);

create table depositer
(
    customer_name varchar(20),
    accno int,
```

```

        primary key(customer_name,accno),
foreign key(customer_name) references bank_customer(customer_name) on delete cascade,
foreign key(accno) references bank_account(accno) on delete cascade
);
create table loan
(
        loan_number int primary key,
        branch_name varchar(20),
        amount real,
        foreign key(branch_name) references branch(branch_name) on delete cascade
);

```

```

insert into branch
values('SBI_Chamrajpet','Bangalore',50000),('SBI_ResidencyRoad','Bangalore',10000),

('SBI_ShivajiRoad','Bombay',20000),('SBI_ParlimentRoad','Delhi',10000),

('SBI_Jantarmatar','Delhi',20000);

```

```

insert into bank_account values(1,'SBI_Chamrajpet',2000);
insert into bank_account values(2,'SBI_ResidencyRoad',5000);
insert into bank_account values(3,'SBI_ShivajiRoad',6000);
insert into bank_account values(4,'SBI_ParlimentRoad',9000);
insert into bank_account values(5,'SBI_Jantarmatar',8000);
insert into bank_account values(6,'SBI_ShivajiRoad',4000);
insert into bank_account values(8,'SBI_ResidencyRoad',4000);
insert into bank_account values(9,'SBI_ParlimentRoad',3000);
insert into bank_account values(10,'SBI_ResidencyRoad',5000);
insert into bank_account values(11,'SBI_Jantarmatar',2000);
desc bank_account;
select * from bank_account;

```

```

insert into bank_customer values('Avinash','Bull_Temple_Road','Bangalore');

```

```
insert into bank_customer values('Dinesh','Bannerghatta_Road','Bangalore');
insert into bank_customer values('Mohan','NationalCollege_Road','Bangalore');
insert into bank_customer values('Nikil','Akbar_Road','Delhi');
insert into bank_customer values('Ravi','Prithviraj_Road','Delhi');
select * from bank_customer;
```

```
insert into depositer values('Avinash',1);
insert into depositer values('Dinesh',2);
insert into depositer values('Nikil',4);
insert into depositer values('Ravi',5);
insert into depositer values('Avinash',8);
insert into depositer values('Nikil',9);
insert into depositer values('Dinesh',10);
insert into depositer values('Nikil',11);
select * from depositer;
```

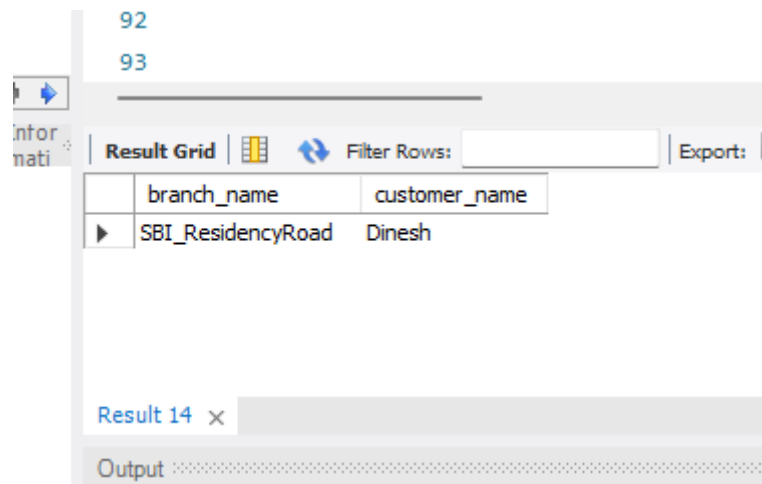
```
insert into loan values(1,'SBI_Chamrajpet',1000);
insert into loan values(2,'SBI_ResidencyRoad',2000);
insert into loan values(3,'SBI_ShivajiRoad',3000);
insert into loan values(4,'SBI_ParlimentRoad',4000);
insert into loan values(5,'SBI_Jantarmatar',5000);
select * from loan;
```

```
select b.branch_name,d.customer_name
      from bank_account b, depositer d
     where d.accno=b.accno and branch_name='SBI_ResidencyRoad'
    group by b.branch_name, d.customer_name
   having count(d.customer_name)>1;
select name ,assets assets_in_lakhs from branch;
```

```
create view sum_loans as select name, sum(amount) from loan group by name; select * from
sum_loans;
```

OUTPUTS

1. Find all the customers who have at least two accounts at the same branch (ex. SBI_ResidencyRoad)



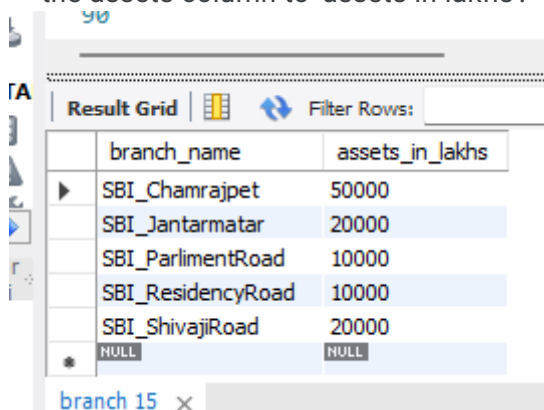
Result Grid

branch_name	customer_name
SBI_ResidencyRoad	Dinesh

Result 14 x

Output

2. Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.

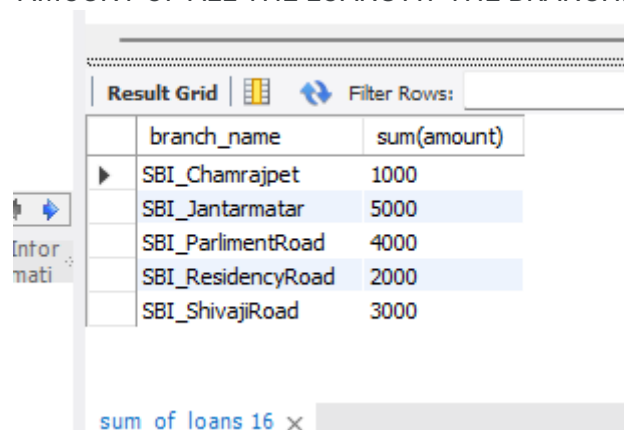


Result Grid

branch_name	assets_in_lakhs
SBI_Chamrajpet	50000
SBI_Jantarmatar	20000
SBI_ParliamentRoad	10000
SBI_ResidencyRoad	10000
SBI_ShivajiRoad	20000
NULL	NULL

branch 15 x

3. CREATE A VIEW WHICH GIVES EACH BRANCH THE SUM OF THE AMOUNT OF ALL THE LOANS AT THE BRANCH.



Result Grid

branch_name	sum(amount)
SBI_Chamrajpet	1000
SBI_Jantarmatar	5000
SBI_ParliamentRoad	4000
SBI_ResidencyRoad	2000
SBI_ShivajiRoad	3000

sum of loans 16 x