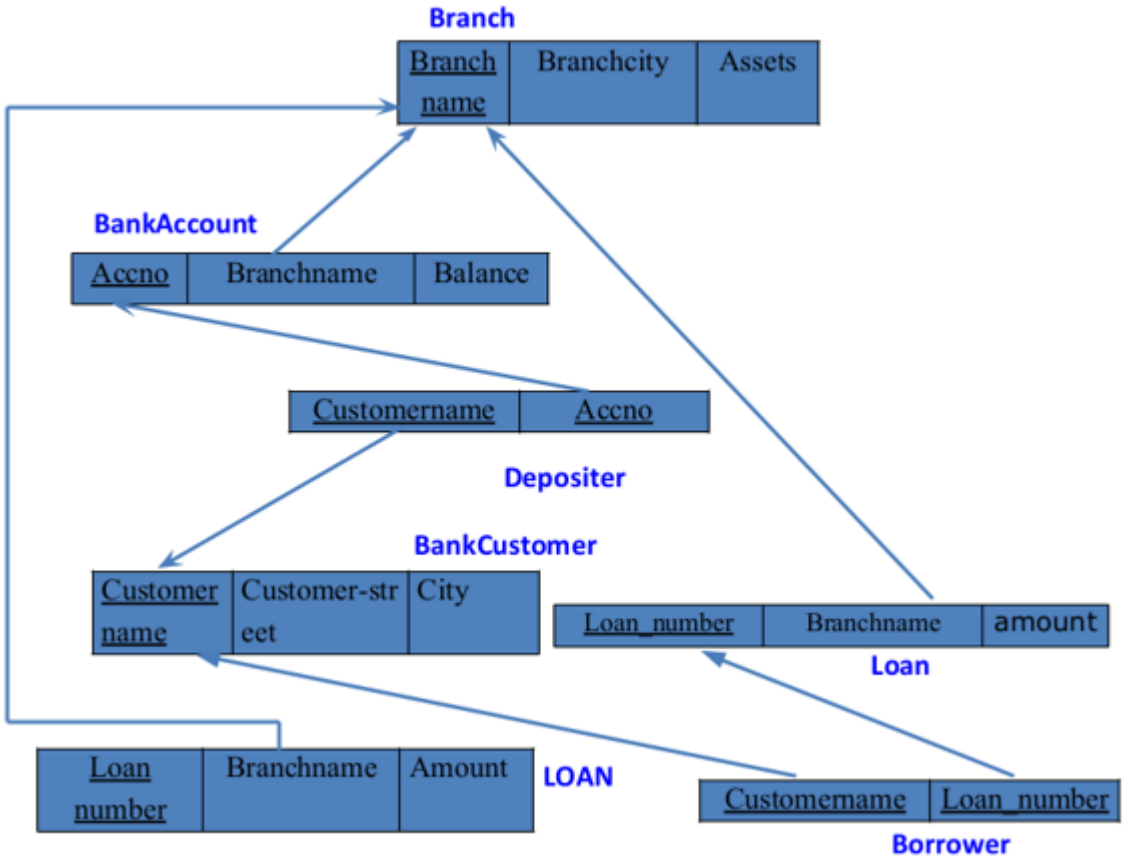
WEEK 4 – MORE QUERIES ON BANK DATABASE



Create Borrower table by properly specifying the primary keys and foreign keys. (CREATION)

```
create table Borrower(
Customername varchar(20),
Loan_number int,
foreign key(Customername) references BankCustomer(Customername),
foreign key(Loan_number) references Loan(Loan_number)
);
```

Insert values into the Borrower table. (INSERTION)

```
insert into Borrower values("Avinash",1);
insert into Borrower values("Dinesh",2);
```

insert into Borrower values("Mohan",3);

insert into Borrower values("Nikil",4);

insert into Borrower values("Ravi",5);

Extra insert queries.

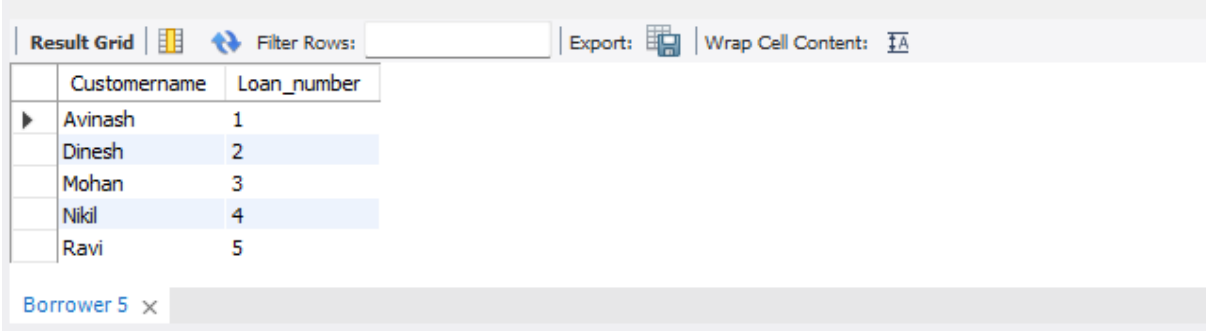
insert into branch values("SBI_MantriMarg","Delhi",200000);

insert into BankAccount values(12,"SBI_MantriMarg",2000);

insert into Depositer values("Nikil",12);

Select new table. (SELECTION)

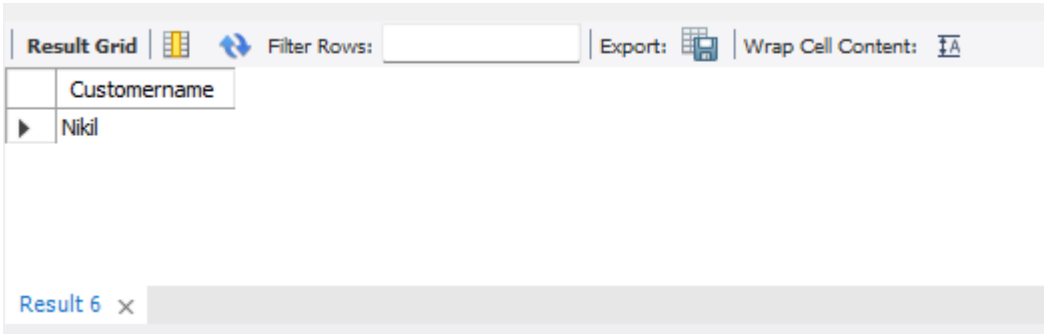
select * from Borrower;



QUERIES- TO DO:

1. **Find all the customers who have an account at all the branches located in a specific city (Ex. Delhi).**

   select d.Customername from branch b, Depositer d, BankAccount ba where
   b.Branch_city='Delhi' and d.Accno=ba.Accno and
   b.Branch_name=ba.Branch_name
   group by d.Customername having count(distinct b.Branch_name)=
   (select count(distinct b.Branch_name) from branch b where
   b.Branch_city='Delhi';



2. **Find all customers who have a loan at the bank but do not have an account.**

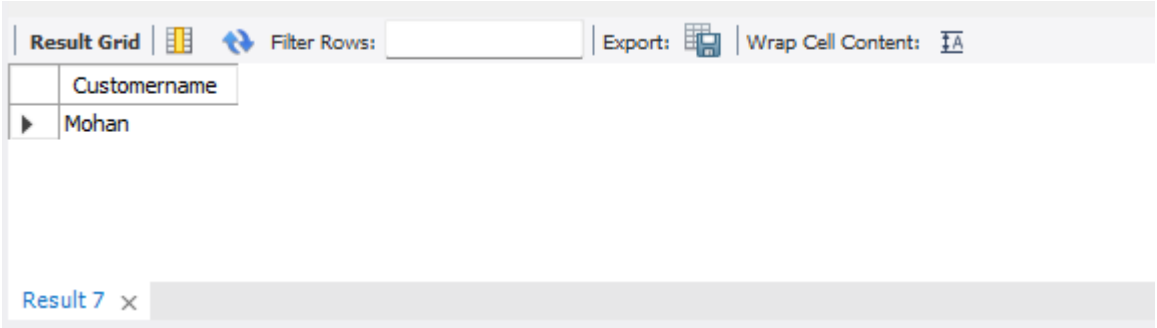
   select distinct b.Customername from Borrower b, Depositer d

   where b.Customername NOT IN(

   select d.Customername from Loan l,Depositer d, Borrower b

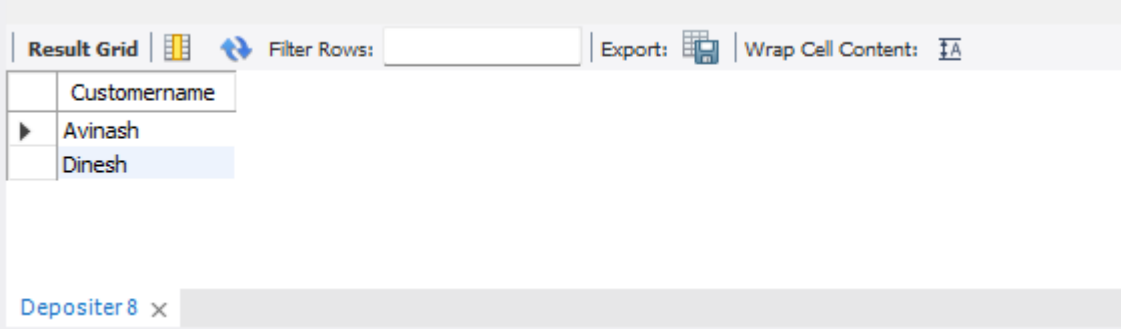
   where l.Loan_number=b.Loan_number and
   d.Customername=b.Customername

   );



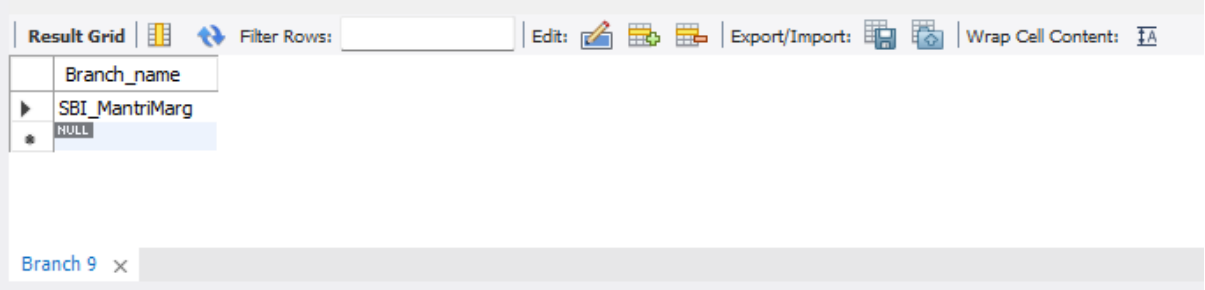
3. **Find all customers who have both an account and a loan at the Bangalore branch.**

```
select distinct d.Customername from Depositer d
where d.Customername IN(
        select d.Customername from branch br,Depositer d,
        BankAccount ba
        where br.Branch_city='Bangalore' and
        br.Branch_name=ba.Branch_name
        and ba.accno=d.accno and Customername IN(
            select Customername from Borrower)
);
```



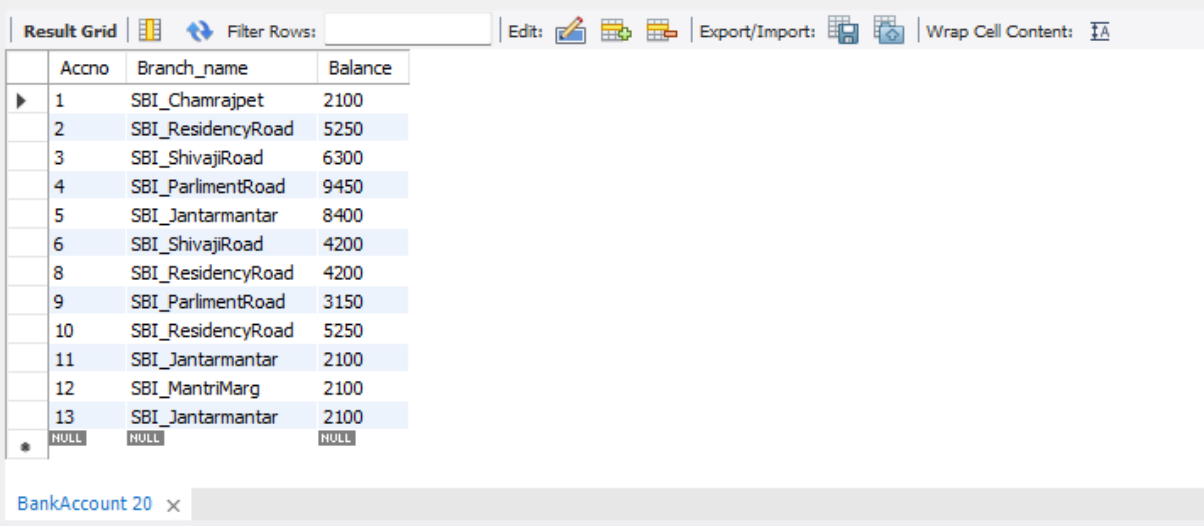
4. **Find the names of all branches that have greater assets than all branches located in Bangalore.**

```
select b.Branch_name from Branch b
where b.assets> ALL (
select SUM(b.assets) from Branch b
        where b.Branch_City='Bangalore' );
```



5. **Update the Balance of all accounts by 5%**

UPDATE BankAccount set Balance=(Balance + (Balance*0.05));



Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

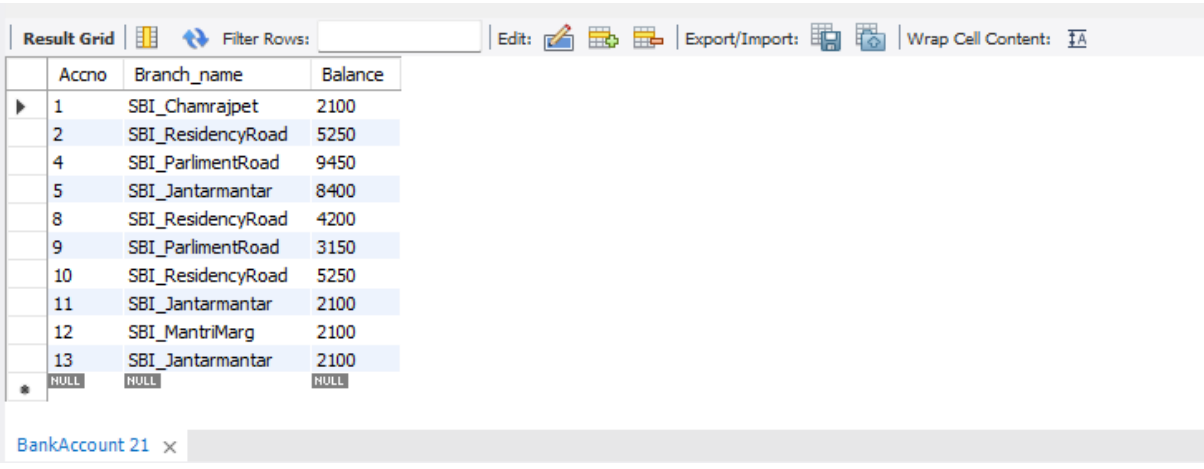
Accno	Branch_name	Balance
1	SBI_Chamrajpet	2100
2	SBI_ResidencyRoad	5250
3	SBI_ShivajiRoad	6300
4	SBI_ParlimentRoad	9450
5	SBI_Jantarmantar	8400
6	SBI_ShivajiRoad	4200
8	SBI_ResidencyRoad	4200
9	SBI_ParlimentRoad	3150
10	SBI_ResidencyRoad	5250
11	SBI_Jantarmantar	2100
12	SBI_MantriMarg	2100
13	SBI_Jantarmantar	2100
NULL	NULL	NULL

BankAccount 20

6. **Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay).**

delete ba.* from BankAccount ba, branch b where branch_city='Bombay' and ba.Branch_name=b.Branch_name;

select * from BankAccount;



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Accno	Branch_name	Balance
1	SBI_Chamrajpet	2100
2	SBI_ResidencyRoad	5250
4	SBI_ParlimentRoad	9450
5	SBI_Jantarmantar	8400
8	SBI_ResidencyRoad	4200
9	SBI_ParlimentRoad	3150
10	SBI_ResidencyRoad	5250
11	SBI_Jantarmantar	2100
12	SBI_MantriMarg	2100
13	SBI_Jantarmantar	2100
NULL	NULL	NULL

BankAccount 21

SPOT QUERY: Demonstrate how to delete all the branches located in Bangalore

delete b.* from branch b where Branch_city='Bangalore';

select * from branch;

branch_name	branch_city	assets
sbi_jantarMantar	delhi	20000
sbi_mantriMarg	delhi	200000
sbi_parliamentRoad	delhi	10000
sbi_shivajiRoad	bombay	20000
NULL	NULL	NULL

select * from BankAccount;

accno	branch_name	balance
4	sbi_parliamentRoad	9450
5	sbi_jantarMantar	8400
9	sbi_parliamentRoad	3150
11	sbi_jantarMantar	2100
12	sbi_mantriMarg	2100
NULL	NULL	NULL

select * from Loan;

loan_no	branch_name	amount
3	sbi_shivajiRoad	3000
4	sbi_parliamentRoad	4000
5	sbi_jantarMantar	5000
NULL	NULL	NULL