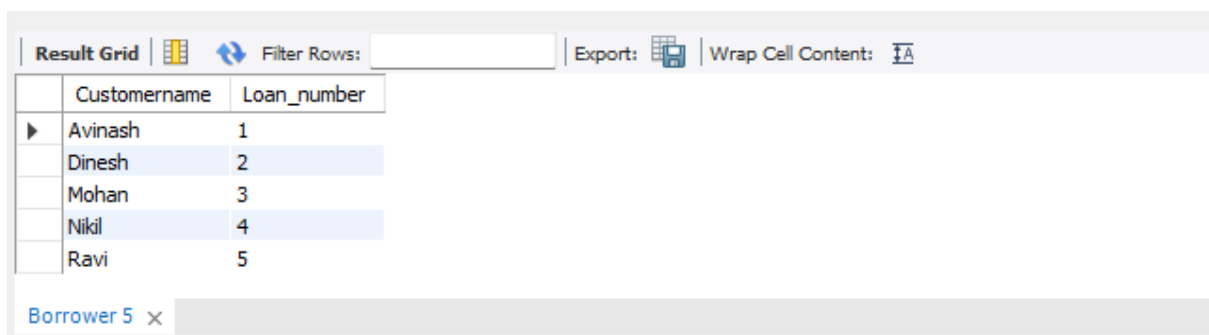


WEEK 4 – QUERIES - BANK DATABASE

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



The screenshot shows a database query result grid. At the top, there are tabs for 'Result Grid' and 'Filter Rows:'. To the right of 'Filter Rows:' is an 'Export' button with a grid icon and a 'Wrap Cell Content' button with a text icon. Below these is a table with two columns: 'Customername' and 'Loan_number'. The table contains five rows of data. The first row is highlighted with a blue background. At the bottom of the grid, there is a tab labeled 'Borrower 5' with a close button (X).

	Customername	Loan_number
▶	Avinash	1
	Dinesh	2
	Mohan	3
	Nikil	4
	Ravi	5

Borrower 5 x

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

```
select d.Custormername 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.Custormername having count(distinct b.Branch_name)=
(select count(distinct b.Branch_name) from branch b where
b.Branch_city='Delhi');
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Custormername			
▶	Nikil			

Result 6 x

2.

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

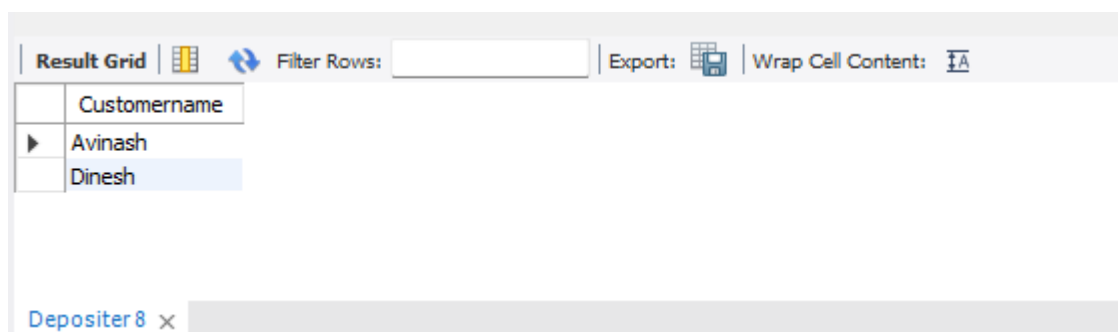
```
select distinct b.Custormername from Borrower b, Depositer d
where b.Custormername NOT IN(
    select d.Custormername from Loan l,Depositer d, Borrower b
    where l.Loan_number=b.Loan_number and
    d.Custormername=b.Custormername
);
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Custormername			
▶	Mohan			

Result 7 x

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

```
select distinct d.Custormername from Depositer d
where d.Custormername IN(
    select d.Custormername 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 Custormername IN(
        select Custormername from Borrower)
);
```

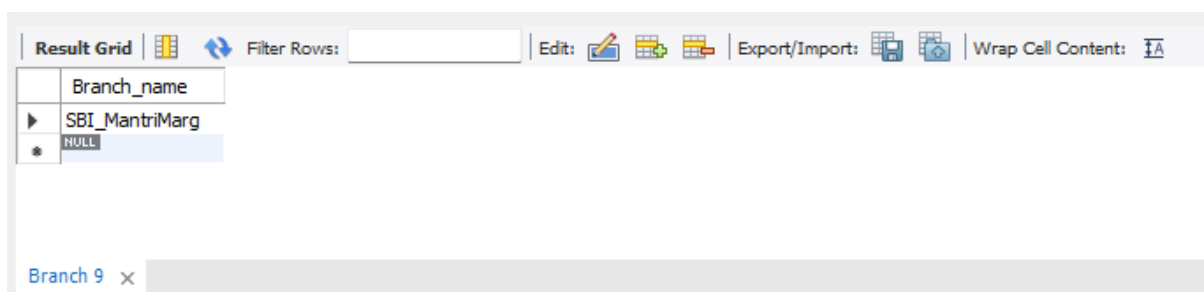


The screenshot shows a database query result grid. The toolbar includes 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. The table has one column, 'Custormername', with two rows: 'Avinash' and 'Dinesh'. The table is titled 'Depositer8'.

Custormername
Avinash
Dinesh

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' );
```



The screenshot shows a database query result grid. The toolbar includes 'Result Grid', 'Filter Rows', 'Edit', 'Export/Import', and 'Wrap Cell Content'. The table has one column, 'Branch_name', with two rows: 'SBI_MantriMarg' and 'NULL'. The table is titled 'Branch 9'.

Branch_name
SBI_MantriMarg
NULL

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;

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