

Week-4

```
create table borrower(customername varchar(50), loannumber int,  
foreign key(customername) references bankcustomer(customername),  
foreign key(loannumber) references loan(loannumber));
```

```
insert into borrower values("Avinash",1),("Dinesh",2),("Mohan",3),("Nikil",4),("Ravi",5);
```

- 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.branchcity='Delhi' and d.accno=ba.accno and b.branchname=ba.branchname  
group by d.customername having count(customername)>1;
```

	customername
▶	Nikil

- 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.loannumber=b.loannumber and  
d.customername=b.customername );
```

	customername
▶	Mohan

- 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, depositor d, bankaccount ba where
br.branchcity="Bangalore" and br.branchname=ba.branchname and
ba.accno=d.accno and d.customername in(
select customername from borrower));
```

	customername
▶	Avinash
	Dinesh

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

```
select b.branchname from branch b
where b.assets > all (
select sum(b.assets) from branch b
where b.branchcity='Bangalore' );
```

	branchname
▶	SBI_MantriMarg
•	HULS

- 5) 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 branchcity='Bombay' and
ba.branchname=b.branchname;
select * from bankaccount;
```

	acno	branchname	balance
▶	1	SBI_Chamrajpet	2100
	2	SBI_ResidencyRoad	5250
	4	SBI_ParliamentRoad	9450
	5	SBI_Jantarmantra	8400
	8	SBI_ResidencyRoad	4200
	9	SBI_ParliamentRoad	3150
	10	SBI_ResidencyRoad	5250
	11	SBI_Jantarmantra	2100
	12	SBI_MatriMarg	2100
•	NULL	NULL	NULL

6) Update the Balance of all accounts by 5%

```
update bankaccount set balance=(balance+(balance*0.05));
```

```
select * from bankaccount;
```

	acno	branchname	balance
▶	1	SBI_Chamrajpet	2100
	2	SBI_ResidencyRoad	5250
	3	SBI_ShivajiRoad	6300
	4	SBI_ParliamentRoad	9450
	5	SBI_Jantarmantra	8400
	6	SBI_ShivajiRoad	4200
	8	SBI_ResidencyRoad	4200
	9	SBI_ParliamentRoad	3150
	10	SBI_ResidencyRoad	5250
	11	SBI_Jantarmantra	2100
	12	SBI_MatriMarg	2100
•	NULL	NULL	NULL

bankaccount 15 x

7) Demonstrate how to delete branches located in bangalore

```
delete b.*,ba.* from branch b, bankaccount ba,loan l
```

```
Where b.branchcity="Bangalore" and b.branchname=ba.branchname
```

```
And l.branchname=ba.branchname;
```

```

select * from branch;
select * from bankaccount;
select * from loan;

```

	branchname	branchcity	assets
▶	SBI_Jantarmantra	Delhi	20000
	SBI_MatriMarg	Delhi	200000
	SBI_ParliamentRoad	Delhi	10000
	SBI_ShivajiRoad	Bombay	20000
•	NULL	NULL	NULL

	loannumber	branchname	amount
▶	3	SBI_ShivajiRoad	3000
	4	SBI_ParliamentRoad	4000
	5	SBI_Jantarmantra	5000
•	NULL	NULL	NULL

	acno	branchname	balance
▶	4	SBI_ParliamentRoad	9450
	5	SBI_Jantarmantra	8400
	9	SBI_ParliamentRoad	3150
	11	SBI_Jantarmantra	2100
	12	SBI_MatriMarg	2100
•	NULL	NULL	NULL

Spot query

- Find the names of all the branches that have assets greater than total assets of all the branches located in Bangalore.

```

update branch set assets=90000 where
branch_name='SBI_ParliamentRoad';
select branch_name
from branch
where assets>(select sum(assets) from
branch where
branch_city='Bangalore');

```