

## WEEK 3

### Creating database :

```
create database bank_insurance;
```

```
use bank_insurance;
```

- **Create the above tables by properly specifying the primary keys and the foreign keys.**

### creating table bankcustomer:

```
create table bankcustomer(  
  customername varchar(20),  
  customerstreet varchar(30),  
  city varchar(20),  
  primary key(customername)  
);  
desc bankcustomer;
```

### creating table branch :

```
create table branch(  
  branchname varchar(30),  
  branchcity varchar(20),  
  assests real,  
  primary key(branchname)  
);  
desc branch;
```

### creating table bankaccount :

```
create table bankaccount(  
  accno int,  
  branchname varchar(30),  
  balance real,  
  primary key(accno),  
  foreign key(branchname) references branch(branchname)  
);
```

```
desc bankaccount;
```

**creating table depositer :**

```
create table depositer(  
    customername varchar(20),  
    accno int,  
    primary key(customername,accno),  
    foreign key(customername) references bankcustomer(customername),  
    foreign key(accno) references bankaccount(accno)  
);  
desc depositer;
```

**creating table loan :**

```
create table loan(  
    loannumber int,  
    branchname varchar(30),  
    amount real,  
    primary key(loannumber),  
    foreign key(branchname) references branch(branchname)  
);  
desc loan;
```

- **Enter at least five tuples for each relation.**

**inserting values into table and displaying it:**

```
insert into bankcustomer values('avinash','bull_temple_road','banglore');  
insert into bankcustomer values('dinesh','bannerghatta_road','banglore');  
insert into bankcustomer values('mohan','nationalcollege_road','banglore');  
insert into bankcustomer values('nikil','akbar_road','delhi');  
insert into bankcustomer values('ravi','prithviraj_road','delhi');  
select * from bankcustomer;
```

Result Grid		
customername	customerstreet	city
▶ avinash	bull_temple_road	banglore
dinesh	bannerghatta_road	banglore
mohan	nationalcollege_road	banglore
nikil	akbar_road	delhi
ravi	prithviraj_road	delhi
NULL	NULL	NULL

**inserting values into table and displaying it:**

```
insert into branch values('SBI_chamrajpet','banglore',50000);
insert into branch values('SBI_residencyroad','banglore',10000);
insert into branch values('SBI_shivajiroad','bombay',20000);
insert into branch values('SBI_parlimentroad','delhi',10000);
insert into branch values('SBI_jantarmentar','delhi',20000);
select * from branch;
```

Result Grid		
branchname	branchcity	asests
▶ SBI_chamrajpet	banglore	50000
SBI_jantarmentar	delhi	20000
SBI_parlimentroad	delhi	10000
SBI_residencyroad	banglore	10000
SBI_shivajiroad	bombay	20000
NULL	NULL	NULL

**inserting values into table and displaying it:**

```
insert into bankaccount values(1,'SBI_chamrajpet',2000);
insert into bankaccount values(2,'SBI_residencyroad',5000);
insert into bankaccount values(3,'SBI_shivajiroad',6000);
insert into bankaccount values(4,'SBI_parlimentroad',9000);
insert into bankaccount values(5,'SBI_jantarmentar',8000);
insert into bankaccount values(6,'SBI_shivajiroad',4000);
insert into bankaccount values(8,'SBI_residencyroad',4000);
insert into bankaccount values(9,'SBI_parlimentroad',3000);
insert into bankaccount values(10,'SBI_residencyroad',5000);
insert into bankaccount values(11,'SBI_jantarmentar',2000);
select * from bankaccount;
```

Result Grid			Filter Rows:
	accno	branchname	balance
▶	1	SBI_chamrajpet	2000
	2	SBI_residencyroad	5000
	3	SBI_shivajiroad	6000
	4	SBI_parliamentroad	9000
	5	SBI_jantarmantar	8000
	6	SBI_shivajiroad	4000
	8	SBI_residencyroad	4000
	9	SBI_parliamentroad	3000
	10	SBI_residencyroad	5000
	11	SBI_jantarmantar	2000
•	NULL	NULL	NULL

#### inserting values into table and displaying it:

```
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;
```

Result Grid		Filter Rows:
	customername	accno
▶	avinash	1
	dinesh	2
	nikil	4
	ravi	5
	avinash	8
	nikil	9
	dinesh	10
	nikil	11
•	NULL	NULL

#### inserting values into table and displaying it:

```
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_parliamentroad',4000);
```

```
insert into loan values(5,'SBI_jantarmantar',5000);
```

```
select * from loan;
```

Result Grid			
Filter Rows:			
	loannumber	branchname	amount
▶	1	SBI_chamrajpet	1000
	2	SBI_residencyroad	2000
	3	SBI_shivajiroad	3000
	4	SBI_parlamentroad	4000
	5	SBI_jantarmantar	5000
*	NULL	NULL	NULL

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

select branchname,assets/100000 as assets\_in\_lakhs from branch;

Result Grid			
Filter Rows:			
	branchname	assets_in_lakhs	
▶	SBI_chamrajpet	0.5	
	SBI_jantarmantar	0.2	
	SBI_parlamentroad	0.1	
	SBI_residencyroad	0.1	
	SBI_shivajiroad	0.2	

- Find all the customers who have at least two accounts at the same branch (ex. SBI\_ResidencyRoad).

select customername from depositer where accno IN (select accno from bankaccount where branchname="SBI\_residencyroad" group by customername having count(accno)>=2);

Result Grid			
Filter Rows:			
	customername		
▶	dinesh		

- Create a view which gives each branch the sum of the amount of all the loans at the branch  
create view sum\_of\_loan  
as select branchname,sum(balance)  
from bankaccount  
group by branchname;  
select \* from sum\_of\_loan;

Result Grid			
Filter Rows:			
	branchname	sum(balance)	
▶	SBI_chamrajpet	2000	
	SBI_jantarmantar	10000	
	SBI_parlamentroad	12000	
	SBI_residencyroad	14000	
	SBI_shivajiroad	10000	

