

## WEEK – 3

### Bank Database

Branch (branch-name: String, branch-city: String, assets: real)  
BankAccount(accno: int, branch-name: String, balance: real)  
BankCustomer (customer-name: String, customer-street: String,  
customer-city: String)  
Depositer(customer-name: String, accno: int)  
LOAN (loan-number: int, branch-name: String, amount: real)

- i. Create the above tables by properly specifying the primary keys and the foreign keys.
- ii. Enter at least five tuples for each relation.
- iii. Display the branch name and assets from all branches in lakhs of rupees and rename the assets column to 'assets in lakhs'.
- vi. Find all the customers who have at least two accounts at the same branch (ex.SBI\_ResidencyRoad).
- v. Create A View Which Gives Each Branch The Sum Of The Amount Of All The Loans At The Branch.

#### **Create tables :-**

```
create database bank;
use bank;

create table branch(
    branch_name varchar(30) primary key,
    branch_city varchar(30),
    assets int);

create table bankacc(
    acc_no int primary key,
    branch_name varchar(30),
    balance int,
    foreign key(branch_name) references branch(branch_name));
```

```

> create table bankcust(
  customer_name varchar(20) primary key,
  customer_street varchar(20),
  city varchar(10));

create table depositer(
customer_name varchar(20) ,
acc_no int ,
primary key(customer_name,acc_no),
foreign key(customer_name) references bankcust(customer_name),
foreign key(acc_no) references bankacc(acc_no));

> create table loan(
loan_no int,
branch_name varchar(30),
amount int,
primary key(loan_no),
foreign key(branch_name) references branch(branch_name));

```

### Inserting values:-

```

insert into branch values('sbi_chamraj','bangalore',50000),
('sbi_residency','bangalore',10000),
('sbi_shivaji','bombay',20000),
('sbi_parliment','delhi',10000),
('sbi_jantarmantur','delhi',20000);

insert into bankcust values
('avinash','Bull_temple_road','bangalore'),
('Dinesh','Bannergatta_road','bangalore'),
('mohan','nationacollege_road','bangalore'),
('nikil','akbar_road','delhi'),
('ravi','prithviraj_road','delhi');

```

```

insert into bankacc values(1,'sbi_chamraj',2000),
(2,'sbi_residency',5000),
(3,'sbi_shivaji',6000),
(4,'sbi_parliment',9000),
(5,'sbi_jantarmantar',8000),
(6,'sbi_shivaji',4000),
(7,'sbi_residency',4000),
(8,'sbi_parliment',3000),
(9,'sbi_residency',5000),
(10,'sbi_jantarmantar',2000);
insert into depositer values
('avinash',1),
('Dinesh',2),
('nikil',4),
('ravi',5),
('avinash',7),
('nikil',8),
('Dinesh',9),
('nikil',10);
insert into loan values
(1,'sbi_chamraj',1000),
(2,'sbi_residency',2000),
(3,'sbi_shivaji',3000),
(4,'sbi_parliment',4000),
(5,'sbi_jantarmantar',5000);
insert into loan values(6,'sbi_shivaji',3000),(7,'sbi_parliment',4000);

```

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

```

alter table branch
rename column assets to assets_in_lakhs ;

```

	Field	Type	Null	Key	Default	Extra
▶	branch_name	varchar(30)	NO	PRI	NULL	
	branch_city	varchar(30)	YES		NULL	
	assets_in_lakhs	int	YES		NULL	

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

```
select d.customer_name , b.branch_name , count(*) as numofdepo
from depositer d
join bankacc b on d.acc_no = b.acc_no
group by b.branch_name,d.customer_name
having count(*) >=2;
```

	customer_name	branch_name	numofdepo
▶	Dinesh	sbi_residency	2
	nikil	sbi_parliment	2

**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 sum(amount) as sum_of_loan,branch_name from loan
group by branch_name ;
select * from sum_of_loan;
```

	sum_of_loan	branch_name
▶	1000	sbi_chamraj
	5000	sbi_jantarmantar
	8000	sbi_parliment
	2000	sbi_residency
	6000	sbi_shivaji