

## WEEK – 4

### More Queries on 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. Find all the customers who have an account at all the branches located in a specific city (Ex. Delhi).
- ii. Find all customers who have a loan at the bank but do not have an account.
- iii. Find all customers who have both an account and a loan at the Bangalore branch
- iv. Find the names of all branches that have greater assets than all branches located in Bangalore.
- v. Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay).
- vi. Update the Balance of all accounts by 5%

```
> create table borrower(  
  loan_no int primary key,  
  customer_name varchar(20),  
  foreign key(loan_no) references loan(loan_no),  
  foreign key(customer_name) references bankcust(customer_name));  
  
insert into borrower values  
(1,'avinash'),  
(2,'dinesh'),  
(3,'avinash'),  
(4,'nikil'),  
(5,'ravi');
```

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

```
select distinct(d.customer_name),b.branch_name,a.branch_city  
from depositer d  
join bankacc b on d.acc_no=b.acc_no  
join branch a on b.branch_name=a.branch_name  
where a.branch_city = 'delhi';
```

	customer_name	branch_name	branch_city
▶	ravi	sbi_jantarmantar	delhi
	nikil	sbi_jantarmantar	delhi
	nikil	sbi_parliament	delhi

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

```
SELECT customer_name
FROM bankcust
WHERE customer_name NOT IN (
    SELECT customer_name
    FROM borrower
);
```

	customer_name
▶	mohan
•	NULL

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

```
select distinct(b.customer_name) from borrower b
join loan l on l.loan_no = b.loan_no
join bankacc a on l.branch_name = a.branch_name
join depositer d on a.acc_no = d.acc_no
where d.customer_name = b.customer_name;
```

	customer_name
▶	avinash
	dinesh
	nikil
	ravi

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_in_lakhs > all(
select assets_in_lakhs from branch
where branch_city = "bangalore");
```

	branch_name
*	NULL

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

```
delete from bankacc
where branch_name in (
select branch_name from branch
where branch_city = "bombay");
```

	acc_no	branch_name	balance
▶	1	sbi_chamraj	2000
	2	sbi_residency	5000
	4	sbi_parliment	9000
	5	sbi_jantarmantar	8000
	7	sbi_residency	4000
	8	sbi_parliment	3000
	9	sbi_residency	5000
	10	sbi_jantarmantar	2000
*	NULL	NULL	NULL

Update the Balance of all accounts by 5%

```
update bankacc  
set balance = balance * 1.05;
```

	acc_no	branch_name	balance
▶	1	sbi_chamraj	2100
	2	sbi_residency	5250
	4	sbi_parliment	9450
	5	sbi_jantarmantar	8400
	7	sbi_residency	4200
	8	sbi_parliment	3150
	9	sbi_residency	5250
	10	sbi_jantarmantar	2100
•	NULL	NULL	NULL