**LAB-4**

**Bank Database**

**Question**

**(Week 4)**

- 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)

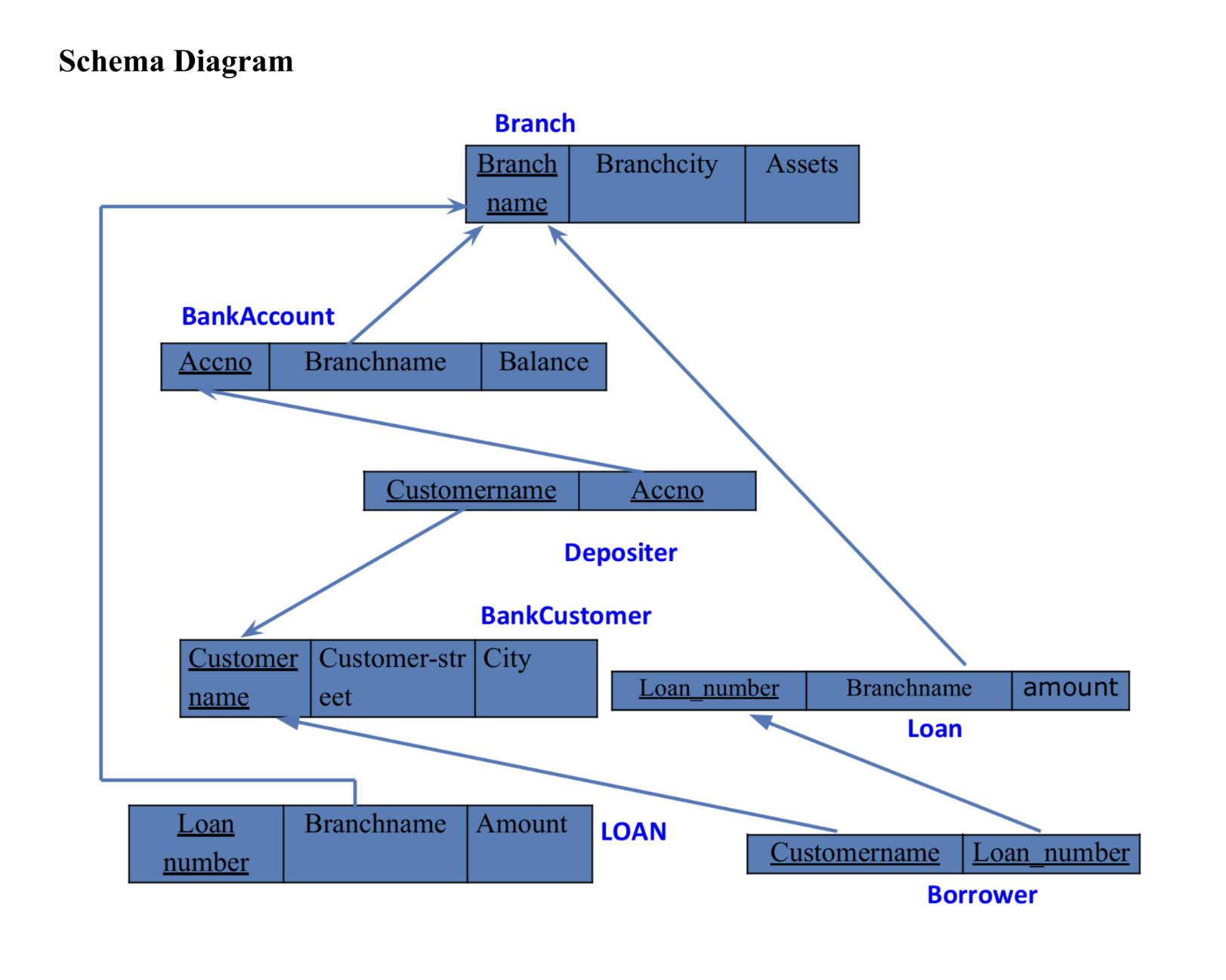
- Find all the customers who have an account at all the branches located in a specific city (Ex. Delhi).

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

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

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

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

- Update the Balance of all accounts by 5%

**Creating Table:**

create table borrower\_101(

customer\_name varchar(20),

loan\_number int,

foreign key(customer\_name) references bankcustomer\_101(customer\_name),

foreign key(loan\_number) references loan\_101(loan\_number)

);

**Inserting values:**

insert into branch\_101 values ("SBI\_MantriMarg", "Delhi", 200000);

insert into bankacc\_101 values (12, "SBI\_MantriMarg", 2000);

insert into depositor\_101 values("Nikil", 12);

insert into borrower\_101 values ("Avinash", 1), ("Dinesh", 2), ("Mohan", 3), ("Nikil", 4), ("Ravi", 5);

**Queries**

**● Find all the customers who have an account at all the branches located in a**

**specific city (Ex. Delhi).**

select customer\_name

from bankcustomer\_101

where city="Delhi";



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

select customer\_name, loan\_101.loan\_number

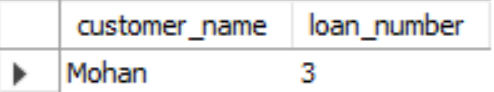
from (borrower\_101 right outer join loan\_101

on loan\_101.loan\_number = borrower\_101.loan\_number)

where customer\_name not in (select customer\_name

from depositor\_101, bankacc\_101 where depositor\_101.accno = bankacc\_101.accno

group by customer\_name, branch\_name);



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

**branch.**

select distinct customer\_name from depositor\_101

where customer\_name in (select depositor\_101.customer\_name from branch\_101,

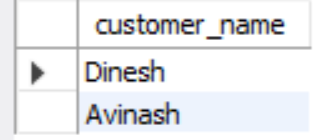
bankacc\_101, depositor\_101

where branch\_101.branch\_city = "Bangalore" and branch\_101.branch\_name =

bankacc\_101.branch\_name and bankacc\_101.accno = depositor\_101.accno) and

customer\_name in (select customer\_name from borrower\_101, loan\_101 where branch\_name in

(select branch\_name from branch\_101 where branch\_city = "Bangalore"));

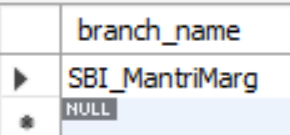


* **Find the names of all branches that have greater assets than all branches located in Bangalore.**

select branch\_name from branch\_101

where assets > all(select assets

from branch\_101 where branch\_city = "Bangalore");



* **Update the Balance of all accounts by 5%**

update bankacc\_101 set balance = 1.05\*balance;

* **Demonstrate how you delete all account tuples at every branch located in a**

**specific city (Ex. Bombay).**

delete from bankacc\_101

where branch\_name in (select branch\_name

from branch\_101

where branch\_city = "Bombay");