

## PROGRAM 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).

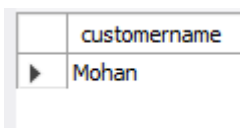
```
SELECT D.customername
FROM Depositer D
JOIN BankAccount A ON D.accno = A.accno
JOIN Branch B ON A.branchname = B.branchname
WHERE B.branchcity = 'Delhi'
GROUP BY D.customername;
```



	customername
▶	Ravi
	Nikki

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

```
SELECT DISTINCT C.customername
FROM BankCustomer C
JOIN Branch B ON C.customercity = B.branchcity
JOIN Loan L ON B.branchname = L.branchname
WHERE C.customername NOT IN (
    SELECT customername FROM Depositer
);
```



	customername
▶	Mohan

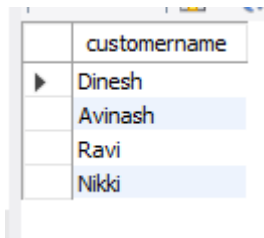
iii. Find all customers who have both an account and a loan at the Bangalore branch

```
SELECT C.customername
```

```

FROM BankCustomer C
JOIN Branch B ON C.customercity = B.branchcity
JOIN Loan L ON B.branchname = L.branchname
WHERE C.customername IN (
    SELECT customername FROM Depositer
)
group by C.customername;

```



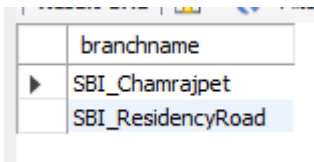
	customername
▶	Dinesh
	Avinash
	Ravi
	Nikki

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

```

select branchname from branch
where branchcity = "bangalore"
order by assets desc;

```



	branchname
▶	SBI_Chamrajpet
	SBI_ResidencyRoad

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

```

DELETE FROM BankAccount
WHERE branch_name IN (
    SELECT branch_name
    FROM Branch
    WHERE branch_city = 'Bombay'
);

```

	ACCNO	BRANCHNAME	BALANCE
▶	1	SBI_Chamrajpet	2100
	2	SBI_ResidencyRoad	5250
	4	SBI_ParliamentRoad	9450
	5	SBI_Jantarmanatar	8400
	7	SBI_ResidencyRoad	5250
	8	SBI_ResidencyRoad	4200
	9	SBI_ParliamentRoad	3150
	10	SBI_ResidencyRoad	5250
	11	SBI_Jantarmanatar	2100
*	NULL	NULL	NULL

vi. Update the Balance of all accounts by 5%

UPDATE BankAccount

SET balance = balance \* 1.05;

	ACCNO	BRANCHNAME	BALANCE
▶	1	SBI_Chamrajpet	2205
	2	SBI_ResidencyRoad	5512.5
	4	SBI_ParliamentRoad	9922.5
	5	SBI_Jantarmanatar	8820
	7	SBI_ResidencyRoad	5512.5
	8	SBI_ResidencyRoad	4410
	9	SBI_ParliamentRoad	3307.5
	10	SBI_ResidencyRoad	5512.5
	11	SBI_Jantarmanatar	2205
*	NULL	NULL	NULL