

PROGRAM 4: BANK DATABASE (13/10)

Query 1: Find all the customers who have an account at all the branches located in a specific city (Ex. Delhi).

```
1
2 •   Select D.customername
3     From depositer D, bankaccount BA, branch B
4     where D.accno=BA.accno and BA.branch_name= B.branch_name and B.branch_city='Delhi'
5     group by D.customername
6     Having count(distinct(B.branch_name)) =
7     (select count(branch_name) from branch where branch_city = 'Delhi');
8
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

customername
Nikil

Query 2: Find all customers who have a loan at the bank but do not have an account.

```
18 •   select customername from borrower
19     where customername not in (select customername from depositer);
20
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

customername
Mohan

Query 3: Find the names of all branches that have greater assets than all branches located in Bangalore.

```
21 •   select branch_name from branch
22     where branch_city='Bangalore'
23     and assets = (select max(assets) from branch where branch_city='Bangalore');
24
```

A screenshot of a database query results grid. The grid has a header row with 'branch_name'. Below it, there is one data row containing 'SBI_Chamrajpet'. A third row is partially visible at the bottom, showing an asterisk (*) and the word 'NULL'.

branch_name
SBI_Chamrajpet
*

Query 4: Find all customers who have both an account and a loan at the Bangalore branch.

```
25 •   select customername from borrower b, loan l
26     where b.loannumber=l.loannumber and
27       l.branch_name in
28     (select branch_name from depositer,bankaccount ba where depositer.accno=ba.branch_name in
29      (select branch_name from branch where branch.branch_city="Bangalore"));
```

A screenshot of a database query results grid. The grid has a header row with 'customername'. Below it, there are two data rows containing 'Avinash' and 'Dinesh' respectively.

customername
Avinash
Dinesh

Query 5: Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay).

```
31 •    delete from bankaccount where branch_name in (select branch_name from branch where branch_city='Bombay');
32 •    select * from bankaccount;
```

A screenshot of a database query results grid. The grid has three columns: accno, branch_name, and Balance. The data shows 11 rows of account information, with the last row being a header row indicated by an asterisk (*). The first 10 rows represent accounts from various branches, while the last row represents a summary or header row.

	accno	branch_name	Balance
▶	1	SBI_Chamrajpet	2000
	2	SBI_ResidencyRoad	5000
	4	SBI_ParliamentRoad	9000
	5	SBI_Jantarmantar	8000
	8	SBI_ResidencyRoad	4000
	9	SBI_ParliamentRoad	3000
	10	SBI_ResidencyRoad	5000
	11	SBI_Jantarmantar	2000
*	NULL	NULL	NULL

Query 6: Update the Balance of all accounts by 5%

```
3 •    update branch
4        set assets=assets+(assets*0.5);
5 •    select * from branch;
6
```

A screenshot of a database query results grid. The grid has four columns: branch_name, branch_city, and assets. The data shows 5 rows of branch information, with the last row being a header row indicated by an asterisk (*). The first 4 rows represent branches located in Bangalore and Delhi, while the last row represents a summary or header row.

	branch_name	branch_city	assets
▶	SBI_Chamrajpet	Bangalore	112500
	SBI_Jantarmantar	Delhi	45000
	SBI_ParliamentRoad	Delhi	22500
	SBI_ResidencyRoad	Bangalore	22500
	SBI_ShivajiRoad	Bombay	45000
*	NULL	NULL	NULL