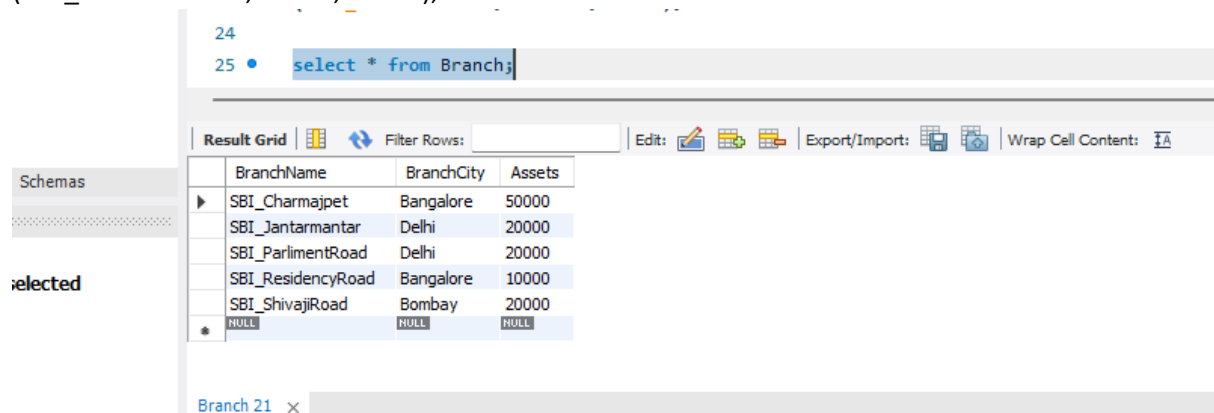


Week-3

```
CREATE TABLE Branch (  
    BranchName VARCHAR(30) PRIMARY KEY,  
    BranchCity VARCHAR(20),  
    Assets INT  
);
```

```
INSERT INTO Branch VALUES  
( 'SBI_Charmajpet', 'Bangalore', 50000),  
( 'SBI_ResidencyRoad', 'Bangalore', 10000),  
( 'SBI_ShivajiRoad', 'Bombay', 20000),  
( 'SBI_ParliamentRoad', 'Delhi', 20000),  
( 'SBI_Jantarmantar', 'Delhi', 20000);
```



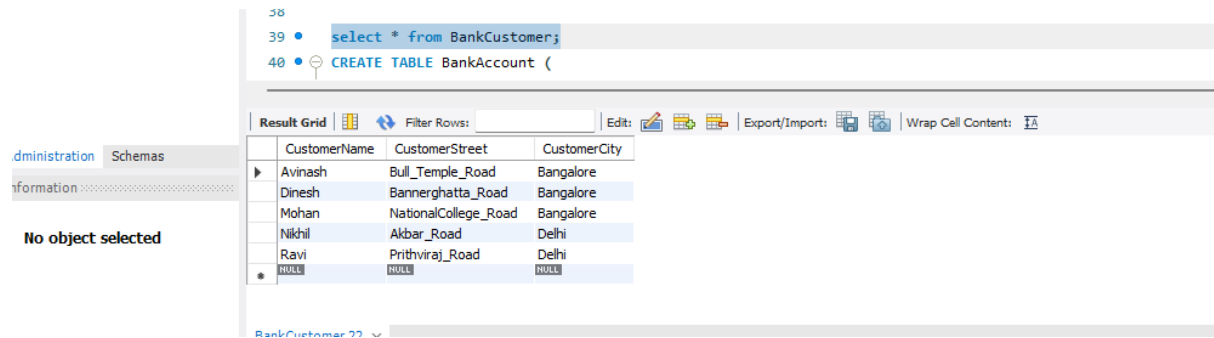
The screenshot shows a database management tool interface. At the top, a SQL query is entered: `select * from Branch;`. Below the query, a 'Result Grid' displays the data. The grid has three columns: 'BranchName', 'BranchCity', and 'Assets'. The data rows are as follows:

BranchName	BranchCity	Assets
SBI_Charmajpet	Bangalore	50000
SBI_Jantarmantar	Delhi	20000
SBI_ParliamentRoad	Delhi	20000
SBI_ResidencyRoad	Bangalore	10000
SBI_ShivajiRoad	Bombay	20000
NULL	NULL	NULL

On the left side, there is a 'Schemas' pane with a tree view. Below it, a 'Selected' pane is empty. At the bottom, a tab labeled 'Branch 21' is visible.

```
CREATE TABLE BankCustomer (  
    CustomerName VARCHAR(30) PRIMARY KEY,  
    CustomerStreet VARCHAR(30),  
    CustomerCity VARCHAR(20)  
);
```

```
INSERT INTO BankCustomer VALUES  
( 'Avinash', 'Bull_Temple_Road', 'Bangalore'),  
( 'Dinesh', 'Bannerghatta_Road', 'Bangalore'),  
( 'Mohan', 'NationalCollege_Road', 'Bangalore'),  
( 'Nikhil', 'Akbar_Road', 'Delhi'),  
( 'Ravi', 'Prithviraj_Road', 'Delhi');
```



```

CREATE TABLE BankAccount (
    AccNo INT PRIMARY KEY,
    BranchName VARCHAR(30),
    Balance INT,
    FOREIGN KEY (BranchName) REFERENCES Branch(BranchName)
);

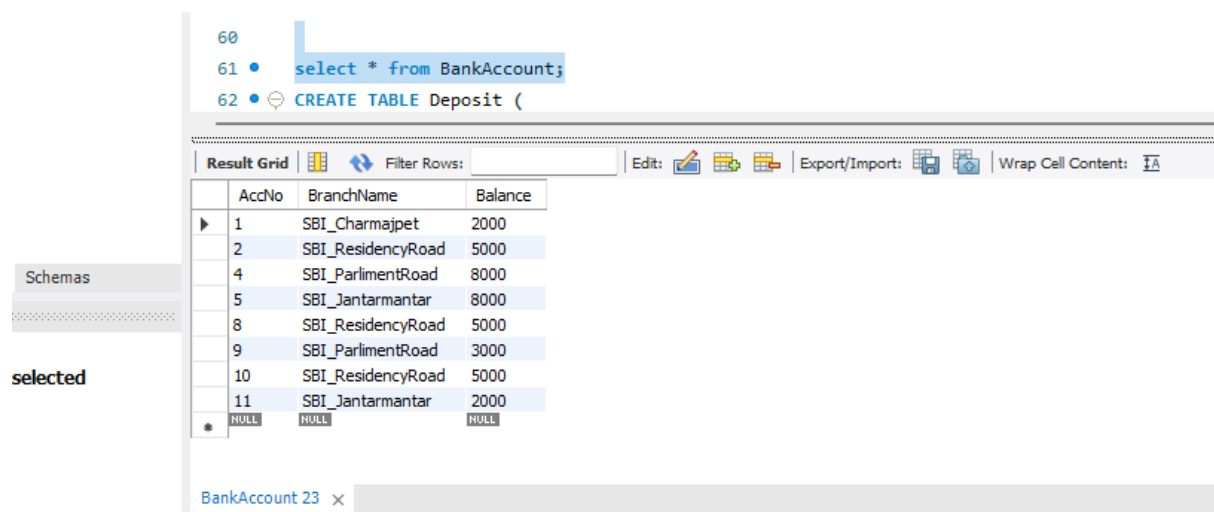
```

INSERT INTO BankAccount VALUES

```

(1, 'SBI_Charmajpet', 2000),
(2, 'SBI_ResidencyRoad', 5000),
(3, 'SBI_ShivajiRoad', 6000),
(4, 'SBI_ParlimentRoad', 8000),
(5, 'SBI_Jantarmantar', 8000),
(6, 'SBI_ShivajiRoad', 4000),
(8, 'SBI_ResidencyRoad', 5000),
(9, 'SBI_ParlimentRoad', 3000),
(10, 'SBI_ResidencyRoad', 5000),
(11, 'SBI_Jantarmantar', 2000);

```



```

CREATE TABLE Deposit (
    CustomerName VARCHAR(30),

```

```

AccNo INT,
PRIMARY KEY (CustomerName, AccNo),
FOREIGN KEY (CustomerName) REFERENCES BankCustomer(CustomerName),
FOREIGN KEY (AccNo) REFERENCES BankAccount(AccNo)
);

```

INSERT INTO Deposit VALUES

```

('Avinash', 1),
('Dinesh', 2),
('Nikhil', 4),
('Ravi', 5),
('Avinash', 8),
('Nikhil', 9),
('Dinesh', 10),
('Nikhil', 11);

```

60

61 • `select * from Deposit;`

62 • `CREATE TABLE Deposit (`

**Result Grid** | | Filter Rows:  | Edit: | Export/Import:

	CustomerName	AccNo
▶	Avinash	1
	Dinesh	2
	Nikhil	4
	Ravi	5
	Avinash	8
	Nikhil	9
	Dinesh	10
	Nikhil	11
*	NULL	NULL

**Schemas**

**selected**

```

CREATE TABLE Loan (
    LoanNumber INT PRIMARY KEY,
    BranchName VARCHAR(30),
    Amount INT,
    FOREIGN KEY (BranchName) REFERENCES Branch(BranchName)
);

```

INSERT INTO Loan VALUES

```

(1, 'SBI_Charmajpet', 1000),
(2, 'SBI_ResidencyRoad', 2000),
(3, 'SBI_ShivajiRoad', 3000),
(4, 'SBI_ParlimentRoad', 4000),
(5, 'SBI_Jantarmantar', 5000);

```

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

SQL Editor:

```

98 • SELECT BranchName AS 'Branch Name', assets / 100000.0 AS 'Assets in Lakhs'
99 FROM Branch;
100
101

```

Result Grid:

Branch Name	Assets in Lakhs
SBI_Charmajpet	0.5000
SBI_Jantarmantar	0.2000
SBI_ParliamentRoad	0.2000
SBI_ResidencyRoad	0.1000
SBI_ShivajiRoad	0.2000

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

SQL Editor:

```

103 • SELECT d.CustomerName, b.BranchName,
104 COUNT(*) AS num_accounts
105 FROM Deposit d
106 INNER JOIN BankAccount b ON d.AccNo = b.AccNo
107 GROUP BY d.CustomerName, b.BranchName
108 HAVING COUNT(*) >= 2;
109
110

```

Result Grid:

CustomerName	BranchName	num_accounts
Dinesh	SBI_ResidencyRoad	2
Nikhil	SBI_ParliamentRoad	2

5. CREATE A VIEW WHICH GIVES EACH BRANCH THE SUM OF THE AMOUNT OF ALL THE LOANS AT THE BRANCH.

SQL Editor:

```

112 • CREATE VIEW Summary AS
113 SELECT BranchName, SUM(Amount) AS total_loan_amount
114 FROM Loan
115 GROUP BY BranchName;
116 • SELECT * FROM Summary;
117
118 • SELECT d.CustomerName
119 FROM Deposit d

```

Result Grid:

BranchName	total_loan_amount
SBI_Charmajpet	1000
SBI_Jantarmantar	5000
SBI_ParliamentRoad	4000
SBI_ResidencyRoad	2000
SBI_ShivajiRoad	3000