

BANK DATABASE

```
CREATE DATABASE Bank;

USE Bank;

CREATE TABLE Branch (
    branch_name VARCHAR(30) PRIMARY KEY,
    branch_city VARCHAR(30),
    assets REAL
);

CREATE TABLE BankAccount (
    accno INT PRIMARY KEY,
    branch_name VARCHAR(30),
    balance REAL,
    FOREIGN KEY (branch_name) REFERENCES Branch(branch_name)
);

CREATE TABLE BankCustomer (
    customer_name VARCHAR(30) PRIMARY KEY,
    customer_street VARCHAR(50),
    customer_city VARCHAR(30)
);

CREATE TABLE Depositer (
    customer_name VARCHAR(30),
    accno INT,
    PRIMARY KEY (customer_name, accno),
    FOREIGN KEY (customer_name) REFERENCES BankCustomer(customer_name),
    FOREIGN KEY (accno) REFERENCES BankAccount(accno)
);

CREATE TABLE Loan (
    loan_number INT PRIMARY KEY,
    branch_name VARCHAR(30),
    amount REAL,
    FOREIGN KEY (branch_name) REFERENCES Branch(branch_name)
);

INSERT INTO Branch VALUES
('SBI_Chamrajpet', 'Bangalore', 50000),
('SBI_ResidencyRoad', 'Bangalore', 100000),
('SBI_ShivajiRoad', 'Bombay', 200000),
('SBI_ParliamentRoad', 'Delhi', 10000),
('SBI_Jantarmantar', 'Delhi', 20000);

INSERT INTO BankAccount VALUES
(1, 'SBI_Chamrajpet', 2000),
(2, 'SBI_ResidencyRoad', 5000),
(3, 'SBI_ShivajiRoad', 6000),
(4, 'SBI_ParliamentRoad', 9000),
(5, 'SBI_Jantarmantar', 8000),
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(6, 'SBI_ShivajiRoad', 4000),
(8, 'SBI_ParliamentRoad', 3000),
(9, 'SBI_ParliamentRoad', 3000),
(10, 'SBI_ResidencyRoad', 5000),
(11, 'SBI_Jantarmantar', 2000);

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');

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

INSERT INTO Loan VALUES
(1, 'SBI_Chamrajpet', 1000),
(2, 'SBI_ResidencyRoad', 2000),
(3, 'SBI_ShivajiRoad', 3000),
(4, 'SBI_ParliamentRoad', 4000),
(5, 'SBI_Jantarmantar', 5000);

```

1. Display the branch name and assets from all branches in lakhs of rupees and rename

the assets column to 'assets in lakhs'.

- QUERY:

```
SELECT branch_name, (assets / 100000) AS "assets in lakhs"
```

```
FROM Branch;
```

- OUTPUT

BranchName	assets in lakhs
SBI_Chamrajpet	0.5000
SBI_Jantarmantar	0.2000
SBI_ParliamentRoad	0.1000
SBI_ResidencyRoad	0.1000
SBI_ShivajiRoad	0.2000

2. Find all the customers who have at least two accounts at the same branch (ex. SBI_ResidencyRoad).

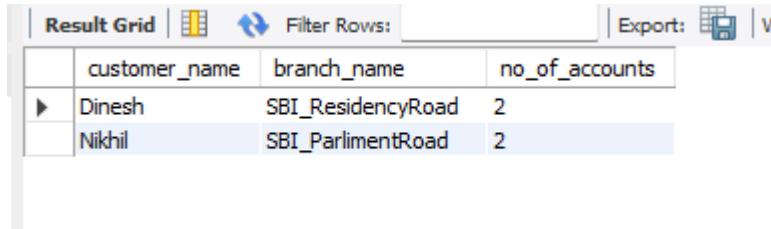
- QUERY:

```

SELECT
d.customer_name,
b.branch_name,
COUNT(*) AS no_of_accounts
FROM Depositer d
JOIN BankAccount b
ON d.accno = b.accno
GROUP BY d.customer_name, b.branch_name
HAVING COUNT(*) >= 2;

```

- OUTPUT:



The screenshot shows a database query results grid with the following structure:

	customer_name	branch_name	no_of_accounts
▶	Dinesh	SBI_ResidencyRoad	2
	Nikhil	SBI_ParliamentRoad	2

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

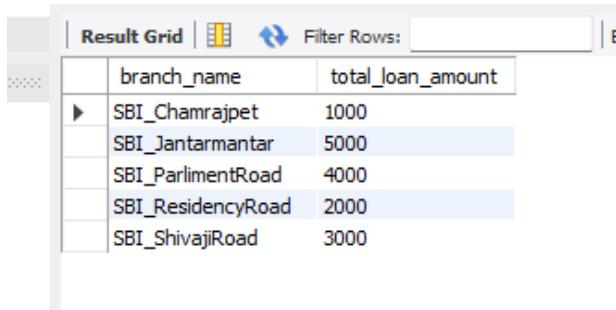
QUERY:

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CREATE VIEW BranchLoanSummary AS
SELECT branch_name, SUM(amount) AS total_loan_amount
FROM Loan
GROUP BY branch_name;
SELECT * FROM BranchLoanSummary;

```

OUTPUT:



The screenshot shows a database query results grid with the following structure:

	branch_name	total_loan_amount
▶	SBI_Chamrajpet	1000
	SBI_Jantarmantar	5000
	SBI_ParliamentRoad	4000
	SBI_ResidencyRoad	2000
	SBI_ShivajiRoad	3000