

DESC branch

```
6 • CREATE TABLE branch(  
7     branch_name VARCHAR(30) PRIMARY KEY,  
8     branch_city VARCHAR(30),  
9     assets REAL  
10 );  
11  
12 • desc branch;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	branch_name	varchar(30)	NO	PRI	NULL	
	branch_city	varchar(30)	YES		NULL	
	assets	double	YES		NULL	

```
53 • INSERT INTO branch VALUES  
54     ("SBI_Chamrajpet", "Bangalore", 50000),  
55     ("SBI_Residency_Road", "Bangalore", 10000),  
56     ("SBI_Shivaji_Road", "Bangalore", 20000),  
57     ("SBI_Parliament_Road", "Bangalore", 10000),  
58     ("SBI_Jantar_Mantar", "Delhi", 20000);  
59
```

DESC bank_account

```
15 • CREATE TABLE bank_account(  
16     account_no INTEGER PRIMARY KEY,  
17     branch_name VARCHAR(30),  
18     balance REAL,  
19     FOREIGN KEY(branch_name) REFERENCES branch(branch_name)  
20 );  
21  
22 • desc bank_account;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	account_no	int	NO	PRI	NULL	
	branch_name	varchar(30)	YES	MUL	NULL	
	balance	double	YES		NULL	

```

61 • INSERT INTO bank_account VALUES
62     (1, "SBI_Chamrajpet", 2000),
63     (2, "SBI_Residency_Road", 5000),
64     (3, "SBI_Shivaji_Road", 6000),
65     (4, "SBI_Parliament_Road", 9000),
66     (5, "SBI_Jantar_Mantar", 8000),
67     (6, "SBI_Shivaji_Road", 4000),
68     (8, "SBI_Residency_Road", 5000),
69     (9, "SBI_Parliament_Road", 3000),
70     (10, "SBI_Residency_Road", 5000),
71     (11, "SBI_Jantar_Mantar", 2000);
72

```

DESC bank_customer

```

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

```

```
DESC bank_customer;
```

Result Grid Filter Rows: Export: Wrap Cell Content:						
	Field	Type	Null	Key	Default	Extra
▶	customer_name	varchar(30)	NO	PRI	NULL	
	customer_street	varchar(30)	YES		NULL	
	customer_city	varchar(30)	YES		NULL	

74 • INSERT INTO bank_customer VALUES

```

75      ("Avinash", "Bull_Temple_Road", "Bangalore"),
76      ("Dinesh", "Bannerghatta_Road", "Bangalore"),
77      ("Mohan", "National_College_Road", "Bangalore"),
78      ("Nikhil", "Akbar_Road", "Delhi"),
79      ("Ravi", "Prithviraj_Road", "Delhi");

```

DESC depositor

```

33 • CREATE TABLE depositor(
34     customer_name VARCHAR(30),
35     account_no INTEGER,
36     PRIMARY KEY (customer_name, account_no),
37     FOREIGN KEY(customer_name) REFERENCES bank_customer(customer_name),
38     FOREIGN KEY(account_no) REFERENCES bank_account(account_no)
39 );
40
41 • DESC depositor;

```

Result Grid Filter Rows: Export: Wrap Cell Content:						
	Field	Type	Null	Key	Default	Extra
▶	customer_name	varchar(30)	NO	PRI	NULL	
	account_no	int	NO	PRI	NULL	

81 • INSERT INTO depositor VALUES

```

82      ("Avinash", 1),
83      ("Avinash", 8),
84      ("Dinesh", 2),
85      ("Nikhil", 4),
86      ("Nikhil", 9),
87      ("Dinesh", 10),
88      ("Nikhil", 11),
89      ("Ravi", 5);

```

DESC loan;

```
44 • CREATE TABLE loan(  
45     loan_number INTEGER PRIMARY KEY,  
46     branch_name VARCHAR(30),  
47     amount REAL,  
48     FOREIGN KEY(branch_name) REFERENCES branch(branch_name)  
49 );  
50  
51 • DESC loan;
```

Result Grid						
		Filter Rows:			Export:	Wrap Cell Content:
	Field	Type	Null	Key	Default	Extra
▶	loan_number	int	NO	PRI	NULL	
	branch_name	varchar(30)	YES	MUL	NULL	
	amount	double	YES		NULL	

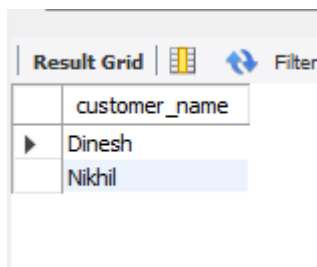
```
91 • INSERT INTO loan VALUES
```

```
92     (1, 'SBI_Chamrajpet', 1000),  
93     (2, 'SBI_Residency_Road', 2000),  
94     (3, 'SBI_Residency_Road', 3000),  
95     (4, 'SBI_Shivaji_Road', 4000),  
96     (5, 'SBI_Jantar_Mantar', 5000);  
97
```

QUERY 3

Find all the customers who have atleast two deposits at the same branch

```
99 • SELECT d.customer_name, count(d.customer_name) AS Number_of_Acoounts, ba.branch_name
.00 FROM depositor d
.01 NATURAL JOIN bank_account ba
.02 GROUP BY d.customer_name, ba.branch_name
.03 HAVING COUNT(d.account_no) >= 2;
```



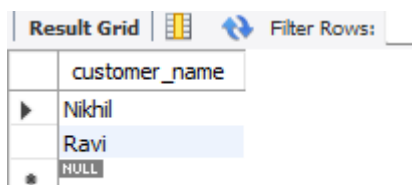
The screenshot shows a database query result grid with the following data:

customer_name
Dinesh
Nikhil

QUERY 4

Find all the customers who have an account at all the branches located in specific city ex: Delhi

```
SELECT bc.customer_name
FROM bank_customer bc
WHERE NOT EXISTS (
    SELECT branch_name
    FROM branch
    WHERE branch_city = "Delhi"
    AND branch_name NOT IN (
        SELECT ba.branch_name
        FROM depositor d
        JOIN bank_account ba ON d.account_no = ba.account_no
        WHERE d.customer_name = bc.customer_name
    )
);
```



The screenshot shows a database query result grid with the following data:

customer_name
Nikhil
Ravi
NULL

QUERY 5

Demonstrate how you delete all the account tuples at a branch located at ex: Shivaji Road

```
DELETE FROM bank_account
WHERE branch_name IN (
    SELECT branch_name
    FROM branch
    where branch_name = "SBI_Shivaji_Road"
);
```