

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: IA
	Field	Type	Null	Key	Default	Extra
▶	loan_number	int	NO	PRI	NULL	
	branch_name	varchar(30)	YES	MUL	NULL	
	amount	double	YES		NULL	

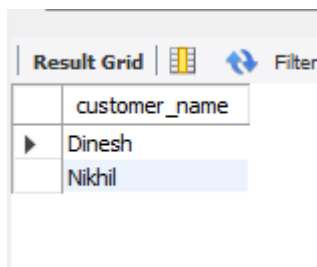
```
91 • INSERT INTO loan VALUES
```

```
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;
```



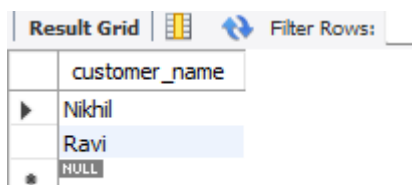
The screenshot shows a 'Result Grid' window with a table containing two rows of customer names. The first row is 'Dinesh' and the second row is 'Nikhil'. The 'Nikhil' row is highlighted in blue. Above the table, there are icons for 'Result Grid', a grid icon, a refresh icon, and a 'Filter' button.

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 'Result Grid' window with a table containing three rows of customer names. The first row is 'Nikhil', the second row is 'Ravi', and the third row is 'NULL'. The 'Ravi' row is highlighted in blue. Above the table, there are icons for 'Result Grid', a grid icon, a refresh icon, and a 'Filter Rows' button.

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"
);
```