```sql
create database banking;

/*BRANCH (branch-name: String, branch-city: String, assets: real)

ACCOUNTS (accno: int, branch-name: String, balance: real)

DEPOSITOR (customer-name: String, customer-street: String, customer-city: String)

LOAN (loan-number: int, branch-name: String, amount: real)

BORROWER (customer-name: String, loan-number: int) */


use banking;


create table BRANCH(branch_name varchar(20),branch_city varchar(10),assets real,primary
key(branch_name));

insert into BRANCH values('SBI_Chamrajpet','Bangalore',50000);

insert into BRANCH values('SBI_Residency road','Bangalore',10000);

insert into BRANCH values('SBI_shivajiroad','Bombay',20000);

insert into BRANCH values('SBI_parlimentroad','Delhi',10000);

insert into BRANCH values('SBI_jantarmantar','Delhi',20000);

commit;

select * from BRANCH;

create table ACCOUNTS(accno integer,branch_name varchar(20),balance real,primary
key(accno),foreign key(branch_name) references BRANCH(branch_name));

insert into ACCOUNTS values('1','SBI_Chamrajpet','2000');

insert into ACCOUNTS values('2','SBI_Residency road','5000');

insert into ACCOUNTS values('3','SBI_shivajiroad','6000');

insert into ACCOUNTS values('4','SBI_parlimentroad','9000');

insert into ACCOUNTS values('5','SBI_jantarmantar','8000');

insert into ACCOUNTS values('6','SBI_shivajiroad','4000');

insert into ACCOUNTS values('8','SBI_Residency road','4000');

insert into ACCOUNTS values('9','SBI_parlimentroad','3000');

insert into ACCOUNTS values('10','SBI_Residency road','5000');

insert into ACCOUNTS values('11','SBI_jantarmantar','2000');

commit;

select * from ACCOUNTS;
```

```
create table BANKCUST(customername varchar(20),customerstreet varchar(30),customercity
varchar(30),primary key(customername));

insert into BANKCUST values('AVINASH','Bulltemple','Bangalore');

insert into BANKCUST values('dinesh','banerghata','Bangalore');

insert into BANKCUST values('mohan','mgroad','Bangalore');

insert into BANKCUST values('nikhil','churchstreeet','Delhi');

insert into BANKCUST values('ravi','akbarroad','Delhi');

commit;

select * from BANKCUST;

create table DEPOSIT(customername varchar(20),accno integer,primary
key(accno,customername),foreign key(accno) references ACCOUNTS(accno),foreign
key(customername) references BANKCUST(customername));


insert into DEPOSIT values('AVINASH',1);

insert into DEPOSIT values('dinesh',2);

insert into DEPOSIT values('nikhil',4);

insert into DEPOSIT values('ravi',5);

insert into DEPOSIT values('AVINASH',8);

insert into DEPOSIT values('nikhil',9);

insert into DEPOSIT values('dinesh',10);

insert into  DEPOSIT values('nikhil',11);

commit;

select * from  DEPOSIT;

CREATE TABLE LOAN(loanno int,branch_name varchar(20),amt real,primary key(loanno),foreign
key(branch_name) references BRANCH(branch_name));

insert into LOAN values(1,'SBI_Chamrajpet',1000);

insert into LOAN values(2,'SBI_Residency road',2000);

insert into LOAN values(3,'SBI_shivajiroad',3000);

insert into LOAN values(4,'SBI_parlimentroad',4000);

insert into LOAN values(5,'SBI_jantarmantar',5000);

commit;

select * from LOAN;
```

/*Find all the customers who have at least two accounts at the Main branch (ex. SBI_ResidencyRoad).

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

v. Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay). */

/*3*/

select customername from DEPOSIT d,ACCOUNTS a

where d.accno=a.accno

group by customername

having count(d.customername) >=2;

/*5*/

delete from ACCOUNTS

where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='Bombay');

Select * from ACCOUNTS;

/*4*/

select d.customername from DEPOSIT d,BRANCH b,ACCOUNTS a

where b.branch_name=a.branch_name

AND a.accno=d.accno

and branch_city='Delhi'

group by d.customername

 HAVING COUNT(distinct b.branch_name)=(

        SELECT COUNT(branch_name)

        FROM branch

        WHERE branch_city='Delhi');

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Limit to 1000 rows

```
 9
10 •   create table BRANCH(branch_name varchar(20),branch_city varchar(10),assets real,primary key(branch_name));
11 •   insert into BRANCH values('SBI_Chamrajpet','Bangalore',50000);
12 •   insert into BRANCH values('SBI_Residency road','Bangalore',10000);
13 •   insert into BRANCH values('SBI_shivajiroad','Bombay',20000);
14 •   insert into BRANCH values('SBI_parlimentroad','Delhi',10000);
15 •   insert into BRANCH values('SBI_jantarmantar','Delhi1',20000);
16 •   commit;
17 •   select * from BRANCH;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

branch_name	branch_city	assets
SBI_Chamrajpet	Bangalore	50000
SBI_jantarmantar	Delhi	20000
SBI_parlimentroad	Delhi	10000
SBI_Residency road	Bangalore	10000
SBI_shivajiroad	Bombay	20000
NULL	NULL	NULL

BRANCH 1

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	10:59:39	select * from BRANCH LIMIT 0, 1000	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH...	0.000 sec
2	10:59:46	use banking	0 row(s) affected	0.000 sec
3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec

Information
No object selected

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

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Limit to 1000 rows

```
24 •   insert into ACCOUNTS values('6','SBI_shivajiroad','4000');
25 •   insert into ACCOUNTS values('8','SBI_Residency road','4000');
26 •   insert into ACCOUNTS values('9','SBI_parlimentroad','3000');
27 •   insert into ACCOUNTS values('10','SBI_Residency road','5000');
28 •   insert into ACCOUNTS values('11','SBI_jantarmantar','2000');
29 •   commit;
30 •   select * from ACCOUNTS;
31 •   create table BANKCUST(customername varchar(20),customerstreet varchar(30),customercity varchar(30),primary key(customername));
32 •   insert into BANKCUST values('AVINASH','Bulltemple','Bangalore');
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

branch_name	branch_city	assets
SBI_Chamrajpet	Bangalore	50000
SBI_jantarmantar	Delhi	20000
SBI_parlimentroad	Delhi	10000
SBI_Residency road	Bangalore	10000
SBI_shivajiroad	Bombay	20000
NULL	NULL	NULL

BRANCH 1

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	10:59:39	select * from BRANCH LIMIT 0, 1000	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH...	0.000 sec
2	10:59:46	use banking	0 row(s) affected	0.000 sec
3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec

Information
No object selected

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

OneDrive
Screenshot saved
The screenshot was added to your OneDrive.

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Limit to 1000 rows

```
36 •    insert into BANKCUST values('ravi','akbarroad','Delhi');
37 •    [Execute the selected portion of the script or everything, if there is no selection]
38 •    select * from BANKCUST;
39 •    create table DEPOSIT(customername varchar(20),accno integer,primary key(accno,customername),foreign key(accno) references ACCOUNTS(accno),fo
40
41 •    insert into DEPOSIT values('AVINASH',1);
42 •    insert into DEPOSIT values('dinesh',2);
43 •    insert into DEPOSIT values('nikhil',4);
44 •    insert into DEPOSIT values('ravi',5);
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

customername	customerstreet	customercity
AVINASH	Bulltemple	Bangalore
dinesh	banerghata	Bangalore
mohan	mgroad	Bangalore
nikhil	churchstreeet	Delhi
ravi	akbarroad	Delhi
NULL	NULL	NULL

Result Grid

Form Editor

BANKCUST 2 ×

Apply   Revert   Context Help Snippets

SQL Additions

Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Administration Schemas

Information

No object selected

Output

Action Output

#	Time	Action	Message	Duration / Fetch
❌ 1	10:59:39	select * from BRANCH LIMIT 0, 1000	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH...	0.000 sec
✓ 2	10:59:46	use banking	0 row(s) affected	0.000 sec
✓ 3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
✓ 4	11:00:16	select * from BANKCUST LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

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- Performance Schema Setup

Limit to 1000 rows

```
45 •    insert into DEPOSIT values('AVINASH',8);
46 •    insert into DEPOSIT values('nikhil',9);
47 •    insert into DEPOSIT values('dinesh',10);
48 •    insert into  DEPOSIT values('nikhil',11);
49 •    commit;
50 •    select * from  DEPOSIT;
51 •    CREATE TABLE LOAN(loanno int,branch_name varchar(20),amt real,primary key(loanno),foreign key(branch_name) references BRANCH(branch_name));
52 •    insert into LOAN values(1,'SBI_Chamrajpet',1000);
53 •    insert into LOAN values(2,'SBI_Residency road',2000);
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

customername	accno
AVINASH	1
AVINASH	8
dinesh	2
dinesh	10
nikhil	4
nikhil	9
nikhil	11

Result Grid

Form Editor

DEPOSIT 3 ×

Apply   Revert   Context Help Snippets

SQL Additions

Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Administration Schemas

Information

No object selected

Output

Action Output

#	Time	Action	Message	Duration / Fetch
❌ 1	10:59:39	select * from BRANCH LIMIT 0, 1000	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH...	0.000 sec
✓ 2	10:59:46	use banking	0 row(s) affected	0.000 sec
✓ 3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
✓ 4	11:00:16	select * from BANKCUST LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
✓ 5	11:00:24	select * from DEPOSIT LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

File Edit View Query Database Server Tools Scripting Help

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- Performance Schema Setup

Administration   Schemas

Information

No object selected

Object Info   Session

Limit to 1000 rows

```
54 •  insert into LOAN values(3,'SBI_shivajiroad',3000);
55 •  insert into LOAN values(4,'SBI_parlimentroad',4000);
56 •  insert into LOAN values(5,'SBI_jantarmantar',5000);
57 •  commit;
58 •  select * from LOAN;
59    /*Find all the customers who have at least two accounts at the Main branch (ex.
60    SBI_ResidencyRoad).
61    iv. Find all the customers who have an account at all the branches located in a
62    specific city (Ex. Delhi).
```

Result Grid | Filter Rows: Edit: Export/Import: Wrap Cell Content:

loanno	branch_name	amt
1	SBI_Chamrajpet	1000
2	SBI_Residency road	2000
3	SBI_shivajroad	3000
4	SBI_parlimentroad	4000
5	SBI_jantarmantar	5000
*	NULL	NULL

Result
Grid

Form
Editor

LOAN 4 ×

Apply   Revert   Context Help   Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
❌ 1	10:59:39	select * from BRANCH LIMIT 0, 1000	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH...	0.000 sec
✅ 2	10:59:46	use banking	0 row(s) affected	0.000 sec
✅ 3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
✅ 4	11:00:16	select * from BANKCUST LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
✅ 5	11:00:24	select * from DEPOSIT LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
✅ 6	11:00:38	select * from LOAN LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

File Edit View Query Database Server Tools Scripting Help

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Administration   Schemas

Information

No object selected

Object Info   Session

Limit to 1000 rows

```
63    v. Demonstrate how you delete all account tuples at every branch located in
64    a specific city (Ex. Bombay). */
65    /*3*/
66 •  select customername from DEPOSIT d,ACCOUNTS a
67    where d.accno=a.accno
68    group by customername
69    having count(d.customername) >=2;
70    /*5*/
71 •  delete from ACCOUNTS
```

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

customername
AVINASH
dinesh
nikhil

Result
Grid

Form
Editor

Result 5 ×

ⓘ Read Only   Context Help   Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
❌ 1	10:59:39	select * from BRANCH LIMIT 0, 1000	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH...	0.000 sec
✅ 2	10:59:46	use banking	0 row(s) affected	0.000 sec
✅ 3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
✅ 4	11:00:16	select * from BANKCUST LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
✅ 5	11:00:24	select * from DEPOSIT LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
✅ 6	11:00:38	select * from LOAN LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
✅ 7	11:01:55	select customername from DEPOSIT d,ACCOUNTS a where d.accno=a.accno group by customername having ...	3 row(s) returned	0.000 sec / 0.000 sec

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Screenshot 1 — MySQL Workbench

SQL Editor content:
```
66 ●  select customername from DEPOSIT d,ACCOUNTS a
67     where d.accno=a.accno
68     group by customername
69     having count(d.customername) >=2;
70     /*5*/
71 ●  delete from ACCOUNTS
72     where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='Bombay');
73 ●  Select * from ACCOUNTS;
74     /*4*/
```

Result Grid:

accno	branch_name	balance
1	SBI_Chamrajpet	2000
2	SBI_Residency road	5000
4	SBI_parlimentroad	9000 9000
5	SBI_jantarmantar	8000
8	SBI_Residency road	4000
9	SBI_parlimentroad	3000
10	SBI_Residency road	5000

ACCOUNTS 6

SQL Additions:
Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output — Action Output:

#	Time	Action	Message	Duration / Fetch
1	10:59:39	select * from BRANCH LIMIT 0, 1000	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH...	0.000 sec
2	10:59:46	use banking	0 row(s) affected	0.000 sec
3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
4	11:00:16	select * from BANKCUST LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
5	11:00:24	select * from DEPOSIT LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
6	11:00:38	select * from LOAN LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
7	11:01:55	select customername from DEPOSIT d,ACCOUNTS a where d.accno=a.accno group by customername having ...	3 row(s) returned	0.000 sec / 0.000 sec
8	11:02:14	delete from ACCOUNTS where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='B...	0 row(s) affected	0.000 sec
9	11:02:14	Select * from ACCOUNTS LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

---

Screenshot 2 — MySQL Workbench

SQL Editor content:
```
75 ●  select d.customername from DEPOSIT d,BRANCH b,ACCOUNTS a
76     where b.branch_name=a.branch_name
77     AND  a.accno=d.accno
78     and branch_city='Delhi'
79     group by d.customername
80     HAVING COUNT(distinct b.branch_name)=(
81              SELECT COUNT(branch_name)
82              FROM branch
83              WHERE branch_city='Delhi');
```

Result Grid:

customername
nikhl

Result 7

SQL Additions:
Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Output — Action Output:

#	Time	Action	Message	Duration / Fetch
2	10:59:46	use banking	0 row(s) affected	0.000 sec
3	10:59:55	select * from BRANCH LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
4	11:00:16	select * from BANKCUST LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
5	11:00:24	select * from DEPOSIT LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
6	11:00:38	select * from LOAN LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
7	11:01:55	select customername from DEPOSIT d,ACCOUNTS a where d.accno=a.accno group by customername havin...	3 row(s) returned	0.000 sec / 0.000 sec
8	11:02:14	delete from ACCOUNTS where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='...	0 row(s) affected	0.000 sec
9	11:02:14	Select * from ACCOUNTS LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
10	11:02:29	select d.customername from DEPOSIT d,BRANCH b,ACCOUNTS a where b.branch_name=a.branch_name A...	1 row(s) returned	0.000 sec / 0.000 sec