

LAB2 BANK

create database bank;

use bank;

create table branch (

 branch_name varchar(25),

 branch_city varchar(15),

 assets int,

 primary key (branch_name)

);

create table bank_account (

 accno int,

 branch_name varchar(25),

 balance int,

 primary key (accno),

 foreign key (branch_name) references branch(branch_name)

);

create table bank_customer (

 customer_name varchar(10),

 customer_street varchar(25),

 customer_city varchar(15),

 primary key (customer_name)

);

create table depositer (

customer_name varchar(10),

accno int,

primary key(customer_name, accno),

foreign key (customer_name) references bank_customer(customer_name),

foreign key (accno) references bank_account(accno)

);

create table loan (

loan_number int,

branch_name varchar(25),

amount int,

primary key (loan_number),

foreign key (branch_name) references branch(branch_name)

);

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

insert into branch values('SBI_ResidencyRoad', 'Bangalore', 10000);

insert into branch values('SBI_ShivajiRoad', 'Bombay', 20000);

insert into branch values('SBI_ParliamentRoad', 'Delhi', 10000);

insert into branch values('SBI_Jantarmantra', 'Delhi', 20000);

commit;

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

```
insert into bank_account values(2, 'SBI_ResidencyRoad', 5000);
insert into bank_account values(3, 'SBI_ShivajiRoad', 6000);
insert into bank_account values(4, 'SBI_ParliamentRoad', 9000);
insert into bank_account values(5, 'SBI_Jantarmanatar', 8000);
insert into bank_account values(6, 'SBI_ShivajiRoad', 4000);
insert into bank_account values(8, 'SBI_ResidencyRoad', 4000);
insert into bank_account values(9, 'SBI_ParliamentRoad', 3000);
insert into bank_account values(10, 'SBI_ResidencyRoad', 5000);
insert into bank_account values(11, 'SBI_Jantarmanatar', 2000);
commit;
```

```
insert into bank_customer values ('Avinash', 'Bull_Temple_Road', 'Bangalore');
insert into bank_customer values ('Dinesh', 'Bannerghatta_Road', 'Bangalore');
insert into bank_customer values ('Mohan', 'National_College_Road',
'Bangalore');
insert into bank_customer values ('Nikhil', 'Akbar_Road', 'Delhi');
insert into bank_customer values ('Ravi', 'Prithviraj_Road', 'Delhi');
commit;
```

```
insert into depositor values('Avinash', 1);
insert into depositor values('Dinesh', 2);
insert into depositor values('Nikhil', 4);
insert into depositor values('Ravi', 5);
insert into depositor values('Avinash', 8);
insert into depositor values('Nikhil', 9);
insert into depositor values('Dinesh', 10);
insert into depositor values('Nikhil', 11);
```

```
commit;
```

```
insert into loan values(1, 'SBI_Chamrajpet', 1000);  
insert into loan values(2, 'SBI_ResidencyRoad', 2000);  
insert into loan values(3, 'SBI_ShivajiRoad', 3000);  
insert into loan values(4, 'SBI_ParliamentRoad', 4000);  
insert into loan values(5, 'SBI_Jantarmanatar', 5000);  
commit;
```

```
select * from branch;  
select * from bank_account;  
select * from bank_customer;  
select * from depositer;  
select * from loan;
```

```
select c.customer_name  
from BankCustomer c  
where exists(  
select d.customer_name  
from Depositer d, BankAccount ba  
where  
d.accno=ba.accno and  
c.customer_name=d.customer_name and  
ba.branch_name='SBI_ResidencyRoad'  
group by d.customer_name
```

having count(d.customer_name)>=2

);

select distinct d.customer_name from Depositer d where exists(select * from BankAccount ba

where ba.accno=d.accno and exists (select * from Branch b where b.branch_name = ba.branch_name and b.branch_city='Delhi'));

delete from BankAccount where branch_name in (select branch_name from branch where branch_city = 'Bombay');

select *from BankAccount;

OUTPUT

1.

The screenshot shows a database application interface. At the top, there's a 'Result Grid' header with a search bar and icons for 'Edit', 'Export/Import', and 'Form Editor'. Below this is a table with columns 'accno', 'branch_name', and 'balance'. The table contains 11 rows of data, including SBI branches and their respective balances. To the right of the table is a sidebar with icons for 'Result Grid', 'Form Editor', 'Field Types', and 'Query Stats'. Below the table is a section labeled 'bank_account 1' with 'Apply' and 'Revert' buttons. At the bottom, there's an 'Action Output' section showing a log of database actions, including two SELECT queries and their execution times.

accno	branch_name	balance
1	SBI_Chamrajpet	2000
2	SBI_ResidencyRoad	5000
3	SBI_ShivajiRoad	6000
4	SBI_ParliamentRoad	9000
5	SBI_Jantarmantar	8000
6	SBI_ShivajiRoad	4000
8	SBI_ResidencyRoad	4000
9	SBI_ParliamentRoad	3000
10	SBI_ResidencyRoad	5000
11	SBI_Jantarmantar	2000
NULL	NULL	NULL

Time	Action	Response	Duration / Fetch Time
19 20:40:59	SELECT * FROM bank.depositor LIMIT 0, 1000	8 row(s) returned	0.0019 sec / 0.00002...
20 20:41:00	SELECT * FROM bank.loan LIMIT 0, 1000	5 row(s) returned	0.0018 sec / 0.00001...

2.

The screenshot shows a database application interface. At the top, there's a 'Result Grid' header with a search bar and icons for 'Edit', 'Export/Import', and 'Form Editor'. Below this is a table with columns 'customer_name', 'customer_street', and 'customer_ci...'. The table contains 6 rows of data, including customer names and their addresses. To the right of the table is a sidebar with icons for 'Result Grid', 'Form Editor', 'Field Types', and 'Query Stats'. Below the table is a section labeled 'bank_customer 1' with 'Apply' and 'Revert' buttons. At the bottom, there's an 'Action Output' section showing a log of database actions, including two SELECT queries and their execution times.

customer_name	customer_street	customer_ci...
Avinash	Bull_Temple_Road	Bangalore
Dinesh	Bannergatta_Road	Bangalore
Mohan	National_College_Road	Bangalore
Nikhil	Akbar_Road	Delhi
Ravi	Prithviraj_Road	Delhi
NULL	NULL	NULL

Time	Action	Response	Duration / Fetch Time
20 20:41:00	SELECT * FROM bank.loan LIMIT 0, 1000	5 row(s) returned	0.0018 sec / 0.00001...
21 20:43:28	SELECT * FROM bank.bank_customer LIMIT 0, 1000	5 row(s) returned	0.0035 sec / 0.00001...

3.

100% 1:1

Result Grid Filter Rows: Search Edit: Export/Import:

branch_name	branch_city	assets
SBI_Chamrajpet	Bangalore	50000
SBI_Jantamantar	Delhi	20000
SBI_ParliamentRoad	Delhi	10000
SBI_ResidencyRoad	Bangalore	10000
SBI_ShivajiRoad	Bombay	20000
NULL	NULL	NULL

branch 1 Apply Revert

Action Output

	Time	Action	Response	Duration / Fetch Time
✓	20 20:41:00	SELECT * FROM bank.loan LIMIT 0, 1000	5 row(s) returned	0.0018 sec / 0.00001...
✓	21 20:43:28	SELECT * FROM bank.bank_customer LIMIT 0, 1000	5 row(s) returned	0.0035 sec / 0.00001...

4.

100% 1:1

Result Grid Filter Rows: Search Edit: Export/Import:

customer_name	accno
Avinash	1
Dinesh	2
Nikhil	4
Ravi	5
Avinash	8
Nikhil	9
Dinesh	10
Nikhil	11
NULL	NULL

depositer 1 Apply Revert

Action Output

	Time	Action	Response	Duration / Fetch Time
✓	20 20:41:00	SELECT * FROM bank.loan LIMIT 0, 1000	5 row(s) returned	0.0018 sec / 0.00001...
✓	21 20:43:28	SELECT * FROM bank.bank_customer LIMIT 0, 1000	5 row(s) returned	0.0035 sec / 0.00001...

	customer_name
▶	Dinesh
●	NULL

5.

6.

	customer_name
▶	Ravi
	Nikhil

7.

100%

1:1

Result Grid

Filter Rows:

Search

Edit:

Export/Import:

loan_number	branch_name	amount
1	SBI_Chamrajpet	1000
2	SBI_ResidencyRoad	2000
3	SBI_ShivajiRoad	3000
4	SBI_ParliamentRoad	4000
5	SBI_Jantarmantar	5000
NULL	NULL	NULL

Result Grid

Form Editor

Field Types

loan 1

Apply

Revert

Action Output

	Time	Action	Response	Duration / Fetch Time
✓ 20	20:41:00	SELECT * FROM bank.loan LIMIT 0, 1000	5 row(s) returned	0.0018 sec / 0.00001...
✓ 21	20:43:28	SELECT * FROM bank.bank_customer LIMIT 0, 1000	5 row(s) returned	0.0035 sec / 0.00001...