

### 3.8.

---

*branch*(branch\_name, branch\_city, assets)  
*customer* (ID, customer\_name, customer\_street, customer\_city)  
*loan* (loan\_number, branch\_name, amount)  
*borrower* (ID, loan\_number)  
*account* (account\_number, branch\_name, balance )  
*depositor* (ID, account\_number)

---

**Figure 3.18** Banking database.

a.

```
mysql> select ID
-> from customer as C
-> where C.ID in (select ID from borrower) and
-> C.ID not in (select ID from depositor);
```

b.

```
mysql> select ID
-> from customer as C
-> where (C.customer_street,C.customer_city) in
-> (select customer_street,customer_city from customer where ID='12345');
```

c.

```
mysql> select distinct branch_name
-> from branch natural join account natural join depositor natural join customer
-> where customer_city='Harrison';
```

### 3.15.

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*branch*(branch\_name, branch\_city, assets)  
*customer* (ID, customer\_name, customer\_street, customer\_city)  
*loan* (loan\_number, branch\_name, amount)  
*borrower* (ID, loan\_number)  
*account* (account\_number, branch\_name, balance )  
*depositor* (ID, account\_number)

---

**Figure 3.18** Banking database.

a.

```
mysql> select customer_name
-> from customer natural join depositor natural join account natural join branch
-> where branch_name='every' and branch_city='Brooklyn';
```

b.

```
mysql> select sum(amount)
-> from loan;
```

c.

```
mysql> select A.branch_name
-> from branch as A
-> where A.assets>
-> (select min(B.assets) from
-> (select * from branch where branch_city='Brooklyn') as B);
```

### 3.17

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*employee* (ID, *person\_name*, *street*, *city*)  
*works* (ID, *company\_name*, *salary*)  
*company* (*company\_name*, *city*)  
*manages* (ID, *manager\_id*)

---

a.

```
mysql> update works
      -> set salary=salary*1.1
      -> where company_name='First Bank Corporation';
```

b.

```
mysql> update works
      -> set salary=salary*1.1
      -> where works.ID in (select ID from manages);
```

c.

```
mysql> delete from employee
      -> where employee.ID in
      -> (select ID from works where company_name='Small Bank Corporation');
```

```
mysql> delete from manages
      -> where manages.ID in
      -> (select ID from works where company_name='Small Bank Corporation');
```

```
mysql> delete from works
      -> where company_name='Small Bank Corporation';
```