

3.8

a.

```
select customer_name  
from depositor  
except  
select customer_name  
from borrower
```

b.

```
select customer_name  
from customer  
where (select customer_street, customer_city) = (customer_street, customer_city)  
from customer  
where customer_name = 'Smith'
```

c.

```
select distinct branch_name  
from account natural join depositor natural join customer  
where customer_city = 'Harrison'
```

3.9

a.

```
select employee_name, city  
from employee natural join works  
where company_name = 'First Bank Corporation'
```

b.

```
select employee_name, street, city  
from employee natural join works  
where company_name = 'First Bank Corporation' and salary > 10000
```

c.

```
select employee_name  
from employee  
except
```

```
select employee_name
from employee natural join works
where company_name = 'First Bank Corporation'
```

d.

```
select distinct employee_name
from works
where salary > (select max salary)
from works
where company_name = 'Samll Bank Corporation'
group by company_name
```

e.

```
select company_name
from company
where city in (select city
               from company
               where company_name = 'Small Bank Corporation')
```

f.

```
select company_name
from works
group by company_name
having count (employee_name) >= all (select count(employee_name)
                                       from works
                                       group by company_name)
```

g.

```
with A as (select company_name, avg(salary) as avg_salary
            from works
            group by company_name)
select company_name
from A
where avg_salary > (select avg_salary
                   from A
                   where company_name = 'First Bank Corporation')
```

3.13

```
create table person
( driver_id varchar(50)
  name varchar(50)
  address varchar(50)
  primary key(driver_id));
```

```
create table car
( license varchar(50)
  model varchar(50)
  year int
  primary key(license));
```

```
create table accident
( report_number int
  date datetime
  location varchar(50)
  primary key(report_number));
```

```
create table owns
( driver_id varchar(50)
  license varchar(50)
  primary key(driver_id, license)
  foreign key(driver_id) references person
  foreign key(license) references car);
```

```
create table participated
( report_number int
  license varchar(50)
  driver_id varchar(50)
  damage_amount int
  primary key(report_number, license)
  foreign key(license) references car
  foreign key(report_number) references accident);
```

3.16

a.

```
select employee_name
from works
where company_name = 'First Bank Corporation';
```

b.

```
select employee_name
from employee as A natural join works natural join company as B
where A.city = B.city;
```

c.

```
select employee_name
from employee A, employee B, managers C
where A.street = B.street and A.city = B.city and A.employee_name = C.manager_name and
B.employee_name = C.manager_name
```

d.

```
with avg_salary(company_name, avg_salary) as
  ( select company_name, avg(salary)
    from works
    group by company_name)
select employee_name
from works natural join company
where salary > avg_salary
```

e.

```
with salary_name_sum(company_name, salary_sum) as
  ( select company_name, sum(salary)
    from works
    group by company_name)
select company_name
from salary_name_sum
where salary_sum = min(salary_sum)
```