Homework #3

3.8

a.

```sql
select id
from depositor
where id not in(select id
                from borrower);
```

b.

```sql
select A.ID
from customer as A, customer as B
where A.customer_street = B.customer_stree
      and A.customer_city = B.customer_city
      and B.customer_ID = '12345'
      and A.customer_ID <> '12345'
```

c.

```sql
select distinct branch_name
from account, depositor, customer
where account.account_number = depositor.account_number
      and customer.id = depositor.id
      and customer_city = 'Harrison'
```

3.9

a.

```sql
select employee.ID, person_name, city
from employee, works
where employee.ID = works.ID
      and works.company_name = 'First Bank Corporation'
```

b.

```sql
select employee.ID, person_name, city
from employee, works
where employee.ID = works.ID
      and works.company_name = 'First Bank Corporation'
      and salary > 10000
```

c.

```
select ID
from employee
where ID not in
     (select ID
      from works
      where company_name = 'First Bank Corporation'
```

d.

```
select ID
from works
where salary > all (select salary
                    from works
                    where company_name = 'Small Bank Corporation')
```

e.

```
select A.company_name
from company as A
where not exists(select city
                from company
                where company_name = 'Small Bank Corporation')
                and B.city not in(select city
                                  from company
                                  where A.company_name = B.company_name))
```

f.

```
select company_name
from works
group by company_name
having count(distinct ID) >= all (select count(ditinct ID)
                                  from works
                                  group by company_name)
```

g.

```
select company_name
from works
group by company_name
having avg(salary) > (select avg(salary)
                      from work
                      where company_name = 'First Bank Corporation')
```