3.10

a

```sql
update employee
set city = 'Newton'
where person_name = 'Jones';
```

b

```sql
update works as W
set salary = case
            when 1.1*salary > 100000 then salary*1.03
            else salary*1.1
        end
where W.employee_name in (select manager_name from manages) and
W.company_name='First Bank Corporation';
```

3.11

a

```sql
select name
from student natural join takes natural join course as C
where C.dept_name = 'Comp.Sci.';
```

b

```sql
select ID, name
from student
except
select ID, name
from student natural join takes
where year < 2009;
```

c

```sql
select dept_name, max(salary)
from instructor
group by dept_name;
```

d

```
select min(msalary)
from (select dept_name, max(salary) as msalary
    from instructor
    group by dept_name);
```

3.15

a

```
select distinct customer_name
from customer as A
where not exists (
    select *
    from branch as Br
    where branch_city = 'Brooklyn' and not exists(
        select *
        from (customer natural join depositor natural join account natural join
branch) as B
        where A.customer_name = B.customer_name and B.branch_name =
Br.branch_name));
```

b

```
select sum(amount)
from loan;
```

c

```
select branch_name
from branch
where assets > some(
    select assets
    from branch
     where branch_city = 'Brooklyn');
```