## 3.10

a.
update employee
set city = 'Newton'
where employee_name ='Jones'

b.
update works
set salary = salary *1.03
where company_name = 'First Bank Corporation'
and employee_name in( select employee_name
                                from managers)
and salary > 100000

update works
set salary = salary *1.1
where company_name = 'First Bank Corporation'
and employee_name in( select employee_name
                                from managers)
and salary < 100000

## 3.11

a.
**select** distinct name
**from** student **natural join** takes **natural join** course
**where** dept_name ='Comp.Sci.'

b.
**select** name, ID
**from** student
**except**
**select** name, ID
**from** student **natural join** takes
**where** year < 2009

c.
**select** dept_name, **max**(salary)
**from** instructor
**group by** dept_name

d.

**select min**(salary)
**from**( **select** dept_name, **max**(salary)
      **from** instructor
      **group by** dept_name)


## 3.12

a.
insert into course
values( 'CS-001', 'Weekly Seminar', 'Com.Sci.', 0)

b.
insert into section( year, semester, sec_id)
vales( 2009, 'Autumn', 1)

c.
insert into takes
select ID, 'CS-001', 1, 'Autumn', '2009', NULL
from student
where dept_name = 'Com.Sci.'

d.
delete takes
where course_id = 'CS-001' and sec_id = 1 and semester = 'Autumn' and year = 2009 and
ID in( select ID
      from student
      where name ='Chavez'

e.
delete from takes
where course_id = 'CS-001'

delete from section
where course_id = 'CS-001'

delete from course
where course_id = 'CS-001'

//上面顺序不能改变，因为 takes 的 course_id 外码依赖于 section， section 的 course_id 外
码依赖于 course，改变顺序会导致外码冲突

f.
delete from takes

where course_id in( select course_id

        from course

        where lower(title) like '%database')


## 3.15

a.

select customer_name

from customer as a

where ( select *

   from branch natural join account natural join customer natural join depositor as b

   where branch_name ='Brooklyn' and a.customer_name = b.customer_name)


b.

select sum(amount)

from loan


c.

select branch_name

from branch

where assert > some( select branch_nsme

      from branch

      where branch_city = 'Brooklyn')


## 4.12

外连接

select employee_name

from employee natural left outer join manages

where manager_name is null


没有外连接

select employee_name

from employee as a

where not exists( select employee_name

       from manages as b

       where a.employee_name = b.employee name and b.manager_name is not

null)