

3.8 a. (select ID  
from depositor)  
except  
(select ID  
from borrower)

b. (select F.ID  
from customer F join customer S  
using (customer\_street, customer\_city)  
where S.ID = "12345")

c. (select branch\_name  
from account natural join depositor natural join customer  
where customer\_city = "Harrison")

3.9 a. (select ID, name, city  
from employee join works  
where company\_name = "First Bank Corporation")

b. (select ID, name, city  
from employee join works  
where company\_name = "First Bank Corporation" and salary > 10000)

c. (select ID  
from works  
where company\_name != "First Bank Corporation")

d. (select ID  
from works  
where company\_name = "Small Bank Corporation" and salary > All)

e. select T.company\_name  
from company T  
where (select R.city  
from company R  
where R.company\_name = T.company\_name)  
contain  
(select S.city  
from company S  
where S.company\_name = "Small Bank Corporation")

f. select company\_name  
from works  
having count(distinct employee\_name) >= all  
(select count(distinct employee\_name  
from works)

g. select company\_name  
from works  
group by company\_name  
have avg(salary) > (select avg(salary)  
from works  
where company\_name = "First Bank Corporation")

3.10 a. update employee  
set city = "Newton"  
where ID = '12345'

b. update works T  
set T.salary = T.salary \*  
(case  
when (T.salary \* 1.1 > 100000) then 1.03  
else 1.1  
)  
where T.employee\_name in (select manager\_name from manages)  
and T.company\_name = "First Bank Corporation"

3.11 a. select distinct ID, name  
from takes natural join student natural join course  
where title = Comp.sci

b. select distinct ID, name  
from takes natural join student  
group by ID  
where min(year) >= 2017

c. select max(salary)  
from department natural join instructor  
group by department

d. select min(salary)  
from select max(salary)  
from department natural join instructor  
group by department

3.15 a. select customer\_name  
from customer C  
where branchnum =  
(select count(distinct branch\_name)  
from customer natural join depositor natural join account  
natural join branch) as d  
where d.customer\_name = C.customer\_name  
with branchnum as (select count(\*)  
from branch  
where branch\_city = "Brooklyn")

b. select sum(amount)  
from loan

c. select branch\_name  
from branch  
where assets > (select min(assets)  
from branch  
where branch\_city = "Brooklyn")