**CS385 Homework 4**

**3.21**

a. Select name from member m, book b, borrowed bd where m.membo\_no = bd.memb\_no and b.isbn = bd.isbn and publisher = “McGraw-Hill”

b. Select distinct m.name from member m where not exists ((select isbn from books where publisher = “McGraw-Hill”) except (select isbn from borrowed bd where bd.memb\_no = m.memb\_no

c. Select publisher, name from (select publisher, name count(\*) isbn from member m, books b, borrowed bd where m.memb\_no = bd.memb\_no and bd.isbn = b.isbn group by publisher, name) as membpub(publisher, name, count\_books) where count\_books > 5

d. Select sum(num\_books)/count(memb\_no) from (select memb\_no, (select count(\*) from borrowed, member where member.memb\_no = borrowed.memb\_no) num\_books from member

**3.22**

Select 1 from course where title is not null group by title having count(\*) > 1

**3.23**

In this query joining section in the from clause as well wouldn’t change the result because it looks like sec\_id can be retrieved from the takes table. If you join section as well you would get more columns of information not used by this query.