**IST471**

**Classroom Assignment 2 (20 points)**

**Theme: Advanced Subqueries**

Instructions: Submit this classroom assignment via the **Dropbox** tool within **D2L**. One submission only for each team.

Note: You will earn a good portion of credit or a full score if you have put forth an adequate effort to answer the questions (even if some questions are not answered 100% correctly).

**1. Write a query as an alternative solution to Problem 7 (in Lecture 3) with the JOIN … USING method.**

SELECT DISTINCT b.title, b.retail, t.category, round(avg(t.retail),2) as cataverage

FROM books b, JOIN books t USING (category)

ORDER BY title,retail,category;

**2. Does the following query work? If not, why? How do you fix the errors?**

SELECT lastname, jobtitle, monthly\_salary

FROM emp

WHERE monthly\_salary **>ALL**

(SELECT monthly\_salary FROM emp WHERE jobtitle = 'CLERK')

AND jobtitle <> 'CLERK'

ORDER BY monthly\_salary;

The single row function in the subquery produces a result of more than one row. To fix this a >ALL function is needed

**3. Write a query as an alternative solution to Problem 9 (without using <ALL)**

SELECT lastname, jobtitle, monthly\_salary

FROM emp

WHERE monthly\_salary < (SELECT max(monthly\_salary) FROM emp WHERE jobtitle = 'CLERK')

AND jobtitle <> 'CLERK'

ORDER BY monthly\_salary;

**4. Write a query as an alternative solution to Problem 11 (without using <ANY)**

SELECT lastname, jobtitle, monthly\_salary

FROM emp

WHERE monthly\_salary =ANY

(SELECT monthly\_salary FROM emp WHERE jobtitle = 'CLERK')

AND jobtitle <> 'CLERK'

ORDER BY monthly\_salary;

**5. Is the following query valid? If not, why? How do you fix the errors?**

SELECT title, retail, category

FROM books

WHERE retail = (SELECT MAX(retail)

FROM books)

ORDER BY category;

There is a group by function in the subquery that should not be there to fix this issue take out the GROUP BY.

**6. Is the following query valid? If not, why? How do you fix the errors?**

SELECT title, retail, category

FROM books

WHERE retail IN

(SELECT category, MAX(retail) FROM books GROUP BY category)

ORDER BY category;

The query is trying to produce too many values to fix this the category needs to be removed from the subquery