IS 441 SQL Handout 3 – More Joining Tables; Subqueries

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This handout will provide guidance and “thought stimuli” in the form of questions.

**I. JOINING TABLES**

1. Joining multiple tables – Study PP. 295-297

Assuming there are four tables A, B, C, and D, with common columns A.Ka, B.Ka, B.Kb, C.Kb, C.Kc, D.Kc. If the intended result of the query contains fields from A, B, and D but not C,

* Should the query contain a clause stating the join condition involving C?

OUTER JOIN revisit - Study P. 294

In “A LEFT JOIN B”, which table will have all its records appearing in the result?

In “A RIGHT JOIN B”, which table will have all its records appearing in the result?

Can OUTER JOIN condition be easily applied to a join condition of three tables?

1. Self-Join (using “Employee” and “Manager” as example – PP. 297-298)
2. In a self-join, how can one table be used as two? – how is that implemented in a query?
3. How would one relate two records in a self-join?
4. Did you find a typo in the lower portion of P. 297?
5. In P. 298, what is the application situation of self-join other than in a unary relationship?

**II. SUBQUERIES**

1. Subquery basics

In a subquery, there is an outer query, and there is at least one inner query. Where (in which clause) can a subquery be used? (P. 305)

2. If subquery is used in WHERE clause, will the results of the subquery be displayed in final output? (P. 299)

3. What is the difference between JOIN and subquery? (PP. 299-301)

1. In the example on P. 301 (“Which customers have not placed any order for computer desk”), what if one uses the logic “Which customers have placed orders for NOT computer desk” – would the results be same?
2. What is the difference between EXIST and IN? (P. 302)
3. In the example of P. 305, why could the result of the subquery be displayed in final output?
4. What is the difference between the alias of a column and that of a table in terms of their use?