

Cpt-140 Database Concepts

Week 5: SQL Programming 1 (SQL2)

Learning Objectives.

In this topic we consider methods for using data from more than one table. Methods of joining tables is considered. Techniques for using sub-queries is also covered. The special operators that are used with sub-queries are also covered.

- ☐ Know what is meant by multi-relation query.
- ☐ Be able to use the common Join techniques.
- ☐ Know what a Cartesian Product is and how it comes about.
- ☐ Be able to explain under what conditions a self join is valuable.
- ☐ Be able to state the implied conditions when a natural join is used.
- ☐ Explain what conditions lead to incorrect output from Natural Joins in Oracle.
- ☐ Know the syntax for a Theta join and be able to use it.
- ☐ Understand the concept of a sub-query.
- ☐ Be able to write sub-queries that return values or sets of values or tables.
- ☐ Be able to explain how to use sub-queries in the FROM and WHERE clauses.
- ☐ Know the purpose of common sub-query operators (IN, EXISTS, ANY, ALL, NOT).
- ☐ Know the syntax and be able to use common sub-query operators.

Reading for this week

These Sections from the text book.

6.2 - 6.2.3 and 6.3