Database Programming with SQL

7-1: Oracle Equijoin and Cartesian Product

Practice Activities

Objectives

- Name the Oracle proprietary joins and their ANSI/ISO SQL: 1999 counterparts
- Describe the purpose of join conditions
- Construct and execute a SELECT statement that results in a Cartesian product
- Construct and execute SELECT statements to access data from more than one table using an equijoin
- Construct and execute SELECT statements that add search conditions using the AND operator
- Apply the rule for using column aliases in a join statement

Vocabulary

Identify the vocabulary word for each definition below.

	Results from an invalid or omitted join condition; all combinations of rows are displayed
	Values in a column in one table are equal to a value in another table; also called an inner join or simple join
	Connection command exclusive to a specific company
	Gives a table another name to simplify queries and improve per-formance
	Display data from two or more related tables

Try It / Solve It

1. Create a Cartesian product that displays the columns in the d_play_list_items and the d_track_listings in the DJs on Demand database.

2. Correct the Cartesian product produced in question 1 by creating an equijoin using a common column.

3. Write a query to display the title, type, description, and artist from the DJs on Demand database.

4. Rewrite the query in question 3 to select only those titles with an ID of 47 or 48.

5. Write a query that extracts information from three tables in the DJs on Demand database, the d_clients table, the d_events table, and the d_job_assignments table.

6. Create and execute an equijoin between DJs on Demand tables d_track_listings and d_cds. Return the song_id and the title only.

7. Mark T for the statements that are true and F for the statements that are false.
   ____ a. A join is a type of query that gets data from more than one table based on columns with the same name.
   ____ b. To join tables using an equijoin, there must be a common column in both tables and that column is usually a primary key in one of the tables.
   ____ c. A Cartesian product occurs because the query does not specify a WHERE clause.
   ____ d. Table aliases are required to create a join condition.
   ____ e. If a table alias is used for a table name in the FROM clause, it must be substituted for the table name throughout the SELECT statement.
   ____ f. Table alias must be only one character in length.
   ____ g. A simple join or inner join is the same as an equijoin.

8. What advantage does being able to combine data from multiple tables have for a business?