

Cross Joins and Natural Joins

Objectives

- Compose and execute a natural join using SQL join syntax
- Create a Cartesian product using SQL join syntax
- Define the relationship between a cross-join and a Cartesian product
- Define the relationship between a natural join and an equijoin
- Explain why it is important to have a standard for SQL as defined by ANSI

Vocabulary

Directions: Identify the vocabulary word for each definition below.

1. _____ Returns the Cartesian product from two tables.
2. _____ Joins two tables based on the same column name.

Try It / Solve It

Use the Oracle database for problems 1 - 4.

1. Create a cross-join that displays the last name and department name from the employees and departments tables.
2. What is the result of the query that you have used for question 1?
3. Create a query that uses a natural join to join the departments table and the locations table by the location_id column. Display the department id and name, location id, and city.
4. Rewrite problem 2 using equijoin syntax.
5. Create a query that uses a natural join to join the departments table by the location_id column. Restrict the output to only department IDs of 20 and 50. Display the department id and name, location id, and city.
6. Use an equijoin between the DJs on Demand database tables, d_songs and d_types. Display the type code, description and title. Limit the rows returned to those type codes between 70 and 80.
7. When using Oracle proprietary syntax, the join condition is always placed in the _____ clause of the SELECT statement.
8. When using ANSI/ISO SQL: 1999 syntax, the join condition is always placed in the _____ clause of the SELECT statement.

- 9.** What is the advantage of learning ANSI/ISO SQL: 1999 syntax?
- 10.** A/an _____ can be used to preface the column name in order to clarify which table and column are participating in the join.
- 11.** Table aliases are created in the _____ clause of the SELECT statement.