

Review of SQL Joins

Terminology

Directions: Identify the vocabulary word for each definition below:

1. _____ Combines rows that have equivalent values for the specified columns plus those rows in one of the tables that have no matching value in the other table.
2. _____ When a join query does not specify a condition in the WHERE clause.
3. _____ Sometimes called a simple join, it combines rows that have equal values for the specified columns.
4. _____ Combines tables that have no exact matching columns.

Try It/Solve It

1. Write and test an equijoin statement that lists each country's name, currency code, and currency name. Order the list by country name.
2. Write and test an equijoin statement that lists each language and the country or countries where it is official.
3. List the name of each country, its population, and the name of its region. Order the list by region name.
4. Display a list of currencies whose name begins with "R" and the country or countries in which they are used. Include currencies which are not used in any country.
5. There are 100 rows in table A and 250 rows in table B. The Cartesian product of A and B would yield this number of rows:
 - A. 250
 - B. 25000
 - C. 100
 - D. none of the above

6. Which statement is definitely wrong?
- A.

```
SELECT e.employee_id, d.dept_id
FROM employees e, department d
WHERE e.dept_id = d.dept_id(+);
```
 - B.

```
SELECT e.employee_id, d.dept_id
FROM employees e, department d
WHERE e.dept_id (+)= d.dept_id(+);
```
 - C.

```
SELECT e.employee_id, d.dept_id
FROM employees e, department d
WHERE e.dept_id (+)= d.dept_id;
```
 - D. none of the above
7. Which statement's results will include departments with no employees?
- A.

```
SELECT e.employee_id, d.department_id
FROM employees e, departments d
WHERE e.department_id = d.department_id(+);
```
 - B.

```
SELECT e.employee_id, d.department_id
FROM employees e, departments d
WHERE e.department_id (+)= d.department_id;
```
 - C. both A and B
 - D. none of the above
8. Which statement's results will include employees with no department?
- A.

```
SELECT e.employee_id, d.department_id
FROM employees e, departments d
WHERE e.department_id = d.department_id(+);
```
 - B.

```
SELECT e.employee_id, d.department_id
FROM employees e, departments d
WHERE e.department_id (+)= d.department_id;
```
 - C. both A and B
 - D. none of the above

9. Given the tables BEVERAGES and TEMPERATURE_RANGES, write a SQL statement that will display the beverage, temperature, and range as defined by the low and high values.

BEVERAGES	
Beverage	Temperature
Coffee	180
Wine	68
Soda	45

TEMPERATURE_RANGES		
Range	Low_Value	High_Value
Hot	120	212
Room	60	119
Cool	32	59
Very cool	0	31

Extension Exercise

1. Write SQL scripts to create the beverage and temperature range tables from question 9. Create the tables in Application Express. Create anonymous PL/SQL blocks to populate the tables with the data illustrated in exercise 10. Execute the blocks in Application Express. Using the two tables, write one of each of the types of joins you learned in this lesson (equijoin, nonequijoin, outer join, and Cartesian product).