 



Database Programming with SQL 6-2: Join Clauses

Practice Activities

# Objectives

* Construct and execute a natural join using ANSI-99 SQL join syntax
* Create a cross join using ANSI-99 SQL join syntax
* Explain the importance of having a standard for SQL as defined by ANSI
* Describe a business need for combining information from multiple data sources

# Vocabulary

Identify the vocabulary word for each definition below.

|  |  |
| --- | --- |
| USING clause | Allows a natural join based on an arbitrary condition or two columns with different names. |
| ON Clause | Performs an equijoin based on one specified column name |

# Try It / Solve It

Use the Oracle database for problems 1-6.

1. Join the Oracle database locations and departments table using the location\_id column. Limit the results to location 1400 only.

select \*

from departments join locations using (location\_id)

where location\_id = 1400

1. Join DJs on Demand d\_play\_list\_items, d\_track\_listings, and d\_cds tables with the JOIN USING syntax. Include the song ID, CD number, title, and comments in the output.

select song\_id, cd\_number, title, comments

from d\_play\_list\_items join d\_track\_listings using (song\_id) join d\_cds using (cd\_number)

1. Display the city, department name, location ID, and department ID for departments 10, 20, and 30 for the city of Seattle.

select city, department\_name,location\_id,department\_id

from departments join locations using (location\_id)

where department\_id in (10,20,30)

1. Display country name, region ID, and region name for Americas.

select country\_name, region\_id, region\_name

from countries join regions using (region\_id)

where region\_name='Americas'

1. Write a statement joining the employees and jobs tables. Display the first and last names, hire date, job id, job title, and maximum salary. Limit the query to those employees who are in jobs that can earn more than $12,000.

select first\_name, last\_name, hire\_date, job\_id, job\_title, max\_salary

from employees join jobs using (job\_id)

where max\_salary > 12000

1. Display job title, employee first name, last name, and email for all employees who are stock clerks.

select job\_title, first\_name, last\_name, email

from employees join jobs using (job\_id)

where job\_title = 'Stock Clerk'

The following questions use the JOIN…ON syntax:

1. Write a statement that displays the employee ID, first name, last name, manager ID, manager first name, and manager last name for every employee in the employees table. Hint: this is a self-join.

select E.employee\_id, E.first\_name, E.last\_name, E.manager\_id, M.first\_name, M.last\_name,M.manager\_id

from employees E join employees M on (E.manager\_id=M.manager\_id)

1. Use JOIN ON syntax to query and display the location ID, city, and department name for all Canadian locations.

select L.location\_id, L.city, D.department\_name, L.country\_id

from locations L join departments D on (L.location\_id=D.location\_id)

where L.country\_id='CA'

1. Query and display manager ID, department ID, department name, first name, and last name for all employees in departments 80, 90, 110, and 190.

select E.manager\_id, D.department\_id, D.department\_name, E.First\_name, E.last\_name

from employees E join departments D on (E.department\_id=D.department\_id)

where D.department\_id in (80,90,110,190)

1. Display employee ID, last name, department ID, department name, and hire date for those employees whose hire date was June 7, 1994.

select E.employee\_id, D.department\_id, D.department\_name, E.last\_name, E.hire\_date

from employees E join departments D on (E.department\_id=D.department\_id)

where E.hire\_date = '07-JUN-1994'

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