# Practices for Lesson 7: Displaying Data from Multiple Tables Using Joins

Practices for Lesson 7: Overview

Practice Overview

This practice covers the following topics:

Joining tables using an equijoin

Performing outer and self-joins

Adding conditions

Practice 7-1: Displaying Data from Multiple Tables by Using Joins

Overview

In this practice, you extract data from multiple tables using ANSI compliant joins.

Tasks

Write a query for the HR department to produce the addresses of all the departments. Use the LOCATIONS and COUNTRIES tables. Show the location ID, street address, city, state or province, and country in the output. Use a NATURAL JOIN to produce the results.

The HR department needs a report of all employees with corresponding departments. Write a query to display the last name, department number, and department name for these employees.

The HR department needs a report of employees in Toronto. Display the last name, job, department number, and the department name for all employees who work in Toronto.

Create a report to display employees’ last names and employee numbers along with their managers’ last names and manager numbers. Label the columns Employee, Emp#, Manager, and Mgr#, respectively. Save your SQL statement as lab\_07\_04.sql. Run the query.

Modify lab\_07\_04.sql to display all employees, including King, who has no manager. Order the results by employee number. Save your SQL statement as lab\_07\_05.sql. Run the query in lab\_07\_05.sql.

Create a report for the HR department that displays employee last names, department numbers, and all the employees who work in the same department as a given employee. Give each column an appropriate label. Save the script to a file named lab\_07\_06.sql.

…

The HR department needs a report on job grades and salaries. To familiarize yourself with the JOB\_GRADES table, first show the structure of the JOB\_GRADES table. Then create a query that displays the name, job, department name, salary, and grade for all employees.

If you want an extra challenge, complete the following exercises:

The HR department wants to determine the names of all employees who were hired after Davies. Create a query to display the name and hire date of any employee hired after employee Davies.

The HR department needs to find the names and hire dates of all employees who were hired before their managers, along with their managers’ names and hire dates. Save the script to a file named lab\_07\_09.sql.

Solution 7-1: Displaying Data from Multiple Tables by Using Joins

Write a query for the HR department to produce the addresses of all the departments. Use the LOCATIONS and COUNTRIES tables. Show the location ID, street address, city, state or province, and country in the output. Use a NATURAL JOIN to produce the results.

The HR department needs a report of all employees with corresponding departments. Write a query to display the last name, department number, and department name for these employees.

The HR department needs a report of employees in Toronto. Display the last name, job, department number, and department name for all employees who work in Toronto.

Create a report to display employees’ last names and employee numbers along with their managers’ last names and manager numbers. Label the columns Employee, Emp#, Manager, and Mgr#, respectively. Save your SQL statement as lab\_07\_04.sql. Run the query.

Modify lab\_07\_04.sql to display all employees, including King, who has no manager. Order the results by employee number. Save your SQL statement as lab\_07\_05.sql. Run the query in lab\_07\_05.sql.

Create a report for the HR department that displays employee last names, department numbers, and all employees who work in the same department as a given employee. Give each column an appropriate label. Save the script to a file named lab\_07\_06.sql. Run the query.

The HR department needs a report on job grades and salaries. To familiarize yourself with the JOB\_GRADES table, first show the structure of the JOB\_GRADES table. Then create a query that displays the name, job, department name, salary, and grade for all employees.

If you want an extra challenge, complete the following exercises:

The HR department wants to determine the names of all employees who were hired after Davies. Create a query to display the name and hire date of any employee hired after employee Davies.

The HR department needs to find the names and hire dates of all employees who were hired before their managers, along with their managers’ names and hire dates. Save the script to a file named lab\_07\_09.sql.