# Practices for Lesson 8: Using Subqueries to Solve Queries

Practices for Lesson 8: Overview

Practice Overview

This practice covers the following topics:

Creating subqueries to query values based on unknown criteria

Using subqueries to find values that exist in one set of data and not in another

Practice 8-1: Using Subqueries to Solve Queries

Overview

In this practice, you write complex queries using nested SELECT statements.

For practice questions, you may want to create the inner query first. Make sure that it runs and produces the data that you anticipate before you code the outer query.

Tasks

The HR department needs a query that prompts the user for an employee’s last name. The query then displays the last name and hire date of any employee in the same department as the employee whose name the user supplies (excluding that employee). For example, if the user enters Zlotkey, find all employees who work with Zlotkey (excluding Zlotkey).

Create a report that displays the employee number, last name, and salary of all employees who earn more than the average salary. Sort the results in ascending order by salary.

Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains the letter “u.” Save your SQL statement as lab\_08\_03.sql. Run your query.

The HR department needs a report that displays the last name, department number, and job ID of all employees whose department location ID is 1700.

Modify the query so that the user is prompted for a location ID. Save this to a file named

lab\_08\_04.sql.

Create a report for HR that displays the last name and salary of every employee who reports to King.

Create a report for HR that displays the department number, last name, and job ID for every employee in the Executive department.

Create a report that displays a list of all employees whose salary is more than the salary of any employee from department 60.

If you have time, complete the following exercise:

Modify the query in lab\_08\_03.sql to display the employee number, last name, and salary of all employees who earn more than the average salary, and who work in a department with any employee whose last name contains the letter “u.” Save lab\_08\_03.sql as lab\_08\_08.sql again. Run the statement in lab\_08\_08.sql.

Solution 8-1: Using Subqueries to Solve Queries

The HR department needs a query that prompts the user for an employee’s last name. The query then displays the last name and hire date of any employee in the same department as the employee whose name the user supplies (excluding that employee). For example, if the user enters Zlotkey, find all employees who work with Zlotkey (excluding Zlotkey).

**Note:** UNDEFINE and SELECT are individual queries; execute them one after the other or press Ctrl + A + F9 to run them together.

Create a report that displays the employee number, last name, and salary of all employees who earn more than the average salary. Sort the results in ascending order by salary.

Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains the letter “u.” Save your SQL statement as lab\_08\_03.sql. Run your query.

The HR department needs a report that displays the last name, department number, and job ID of all employees whose department location ID is 1700.

Modify the query so that the user is prompted for a location ID. Save this to a file named

lab\_08\_04.sql.

Create a report for HR that displays the last name and salary of every employee who reports to King.

Create a report for HR that displays the department number, last name, and job ID for every employee in the Executive department.

Create a report that displays a list of all employees whose salary is more than the salary of any employee from department 60.

If you have time, complete the following exercise:

Modify the query in lab\_08\_03.sql to display the employee number, last name, and salary of all employees who earn more than the average salary and who work in a department with any employee whose last name contains the letter “u.” Save lab\_08\_03.sql to lab\_08\_08.sql again. Run the statement in lab\_08\_08.sql.