

Database Programming with SQL

10-2: Single-Row Subqueries

Practice Activities

Objectives

- Construct and execute a single-row subquery in the WHERE clause or HAVING clause
- Construct and execute a SELECT statement using more than one subquery
- Construct and execute a SELECT statement using a group function in the subquery

Try It / Solve It

```
1.SELECT first_name, last_name  
FROM EMPLOYEES
```

```
WHERE salary > (SELECT salary FROM employees WHERE last_name = 'Lorentz') AND  
department_id = (SELECT department_id FROM employees WHERE last_name = 'Abel');
```

1. Write a query to return all those employees who have a salary greater than that of Lorentz and are in the same department as Abel.

```
2.  
SELECT first_name, last_name  
FROM EMPLOYEES
```

2. Write a query to return all those employees who have the same job id as Rajs and were hired after Davies.

```
WHERE job_id = (SELECT job_id FROM employees WHERE last_name = 'Rajs') AND hire_date > (SELECT  
hire_date FROM employees WHERE last_name = 'Davies') ;
```

3. What DJs on Demand events have the same theme code as event ID = 100?

```
SELECT id, name  
FROM d_events  
WHERE theme_code = (SELECT theme_code FROM d_events WHERE id = 100);
```

4. What is the staff type for those Global Fast Foods jobs that have a salary less than those of any Cook staff-type jobs?

```
SELECT staff_type, MAX(salary)  
FROM f_staffs  
GROUP BY staff_type HAVING MAX(salary) < (SELECT MAX(SALARY) FROM f_staffs  
WHERE staff_type = 'Cook');
```

5. Write a query to return a list of department id's and average salaries where the department's average salary is greater than Ernst's salary.

```
5.SELECT department_id, TO_CHAR(ROUND(AVG(salary),2),'$999999.99') "Average Salary"  
FROM employees  
GROUP BY department_id  
HAVING AVG(salary) > ( SELECT salary from employees WHERE last_name = 'Ernst');
```

```
6.SELECT department_id, TO_CHAR(ROUND(MIN(salary),2),'$999999.99') "Minimum Salary"  
FROM employees  
GROUP BY department_id  
HAVING MIN(salary) > ( SELECT MIN(salary) from employees WHERE department_id != 50);
```