

## Chapter 7

# How to code subqueries

### Exercises

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1. Write a SELECT statement that returns the same result set as this SELECT statement, but don't use a join. Instead, use a subquery in a WHERE clause that uses the IN keyword.

```
SELECT DISTINCT category_name
FROM categories c JOIN products p
  ON c.category_id = p.category_id
ORDER BY category_name
```

2. Write a SELECT statement that answers this question: Which products have a list price that's greater than the average list price for all products?

Return the product\_name and list\_price columns for each product.

Sort the results by the list\_price column in descending sequence.

3. Write a SELECT statement that returns the category\_name column from the Categories table.

Return one row for each category that has never been assigned to any product in the Products table. To do that, use a subquery introduced with the NOT EXISTS operator.

4. Write a SELECT statement that returns three columns: email\_address, order\_id, and the order total for each customer. To do this, you can group the result set by the email\_address and order\_id columns. In addition, you must calculate the order total from the columns in the Order\_Items table.

Write a second SELECT statement that uses the first SELECT statement in its FROM clause. The main query should return two columns: the customer's email address and the largest order for that customer. To do this, you can group the result set by the email\_address.

5. Write a SELECT statement that returns the name and discount percent of each product that has a unique discount percent. In other words, don't include products that have the same discount percent as another product.

Sort the results by the product\_name column.

6. Use a correlated subquery to return one row per customer, representing the customer's oldest order (the one with the earliest date). Each row should include these three columns: email\_address, order\_id, and order\_date.

NOTE: Exercises 7 – 10 have been removed. Apparently, they were only included here accidentally by the publisher.