

Test 03 — Joins

TSQL Query Fundamentals

This is a timed test. You have thirty minutes to complete the test. When you finish the test, email me your source file as a text document, and let me know that you have finished. I will ask you to run your program so that I can see that it compiles and runs.

Your deliverable will be a text document containing both your queries and the query results. You will use the Northwind database in SQLite to answer the following questions:

1. Write a report giving the employee id, first name, last name, and the average amount of all orders by that employee. Here is my output:

```
EmployeeID|FirstName|LastName|average_sale
7|Robert|King|802.818125
9|Anne|Dodsworth|775.364485981308
2|Andrew|Fuller|737.548796680498
3|Janet|Leverling|663.711214953271
5|Steven|Buchanan|645.878205128205
4|Margaret|Peacock|595.684404761905
1|Nancy|Davolio|585.923797101449
8|Laura|Callahan|512.696269230769
6|Michael|Suyama|465.464880952381
```

2. Write a report that lists our product categories and the average price of all products of that category. Include the category id, the category name, and the average price. Here is my output:

```
CategoryID|CategoryName|average_price
1|Beverages|37.9791666666667
2|Condiments|23.0625
3|Confections|25.16
4|Dairy Products|28.73
5|Grains/Cereals|20.25
6|Meat/Poultry|54.0066666666667
7|Produce|32.37
8|Seafood|20.6825
```

3. In some cities, we have customers, suppliers, and employees. Write a report that lists the customer's contact name, the supplier's contact name, the employee's name, and the city in which all three are located. Here is my output:

```
customer_contact|supplier_contact|employee_name|City
Thomas Hardy|Charlotte Cooper|Steven Buchanan|London
Thomas Hardy|Charlotte Cooper|Anne Dodsworth|London
Thomas Hardy|Charlotte Cooper|Robert King|London
Thomas Hardy|Charlotte Cooper|Michael Suyama|London
Victoria Ashworth|Charlotte Cooper|Steven Buchanan|London
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Victoria Ashworth|Charlotte Cooper|Anne Dodsworth|London
Victoria Ashworth|Charlotte Cooper|Robert King|London
Victoria Ashworth|Charlotte Cooper|Michael Suyama|London
Elizabeth Brown|Charlotte Cooper|Steven Buchanan|London
Elizabeth Brown|Charlotte Cooper|Anne Dodsworth|London
Elizabeth Brown|Charlotte Cooper|Robert King|London
Elizabeth Brown|Charlotte Cooper|Michael Suyama|London
Ann Devon|Charlotte Cooper|Steven Buchanan|London
Ann Devon|Charlotte Cooper|Anne Dodsworth|London
Ann Devon|Charlotte Cooper|Robert King|London
Ann Devon|Charlotte Cooper|Michael Suyama|London
Simon Crowther|Charlotte Cooper|Steven Buchanan|London
Simon Crowther|Charlotte Cooper|Anne Dodsworth|London
Simon Crowther|Charlotte Cooper|Robert King|London
Simon Crowther|Charlotte Cooper|Michael Suyama|London
Hari Kumar|Charlotte Cooper|Steven Buchanan|London
Hari Kumar|Charlotte Cooper|Anne Dodsworth|London
Hari Kumar|Charlotte Cooper|Robert King|London
Hari Kumar|Charlotte Cooper|Michael Suyama|London