

T-SQL Practice Questions

Week 2

Write T-SQL queries using the **Northwind** database to answer the following questions. If necessary, paste your SQL code below each question to assist you with revision.

1. Display the product name, supplier name, category name and unit price for all products
2. Display a list showing the employee first name, last name and how many employees reports to him/her only if the employee has more than 1 person reporting to him/her.
3. Which product is the most expensive? Show the product name and the unit price for that product only. (Accommodate cases where two or more products may have the same price)
4. Some customers have not made an order. List such customers. (Use two different methods)
5. Some products were sold at a price that is different from the standard price of the product. Display the list of order items whose unit price is different from the unit price in the products table. Show the Order ID, Product ID, product name, standard price, order price and the difference between the two prices.
6. Which shippers have shipped the most recent order? Show company name, phone and order date.
7. We need to know the number of orders made in the last 20 years for each product category. Show the category name and the number of orders. Use a Common Table Expression (CTE).
8. Display for each supplier, the Supplier ID, name, country, number of products supplied, the total quantity of products ordered and the total value of the orders. (Hint: the total value is the sum of Quantity * Unit Price). Use Common Table Expressions (CTE).
9. Use Common Table Expression (CTE) to display the most expensive product in each category. Show the category ID, product name and price sorted by category ID.

Category	Most Expensive Product	UnitPrice
1	Côte de Blaye	263.50
2	Vegie-spread	43.90
3	Sir Rodney's Marmalade	81.00
4	Raclette Courdavault	55.00
5	Gnocchi di nonna Alice	38.00
6	Thüringer Rostbratwurst	123.79
7	Manjimup Dried Apples	53.00
8	Carnarvon Tigers	62.50

10. Add the following new shipper to the database

ShipperID	CompanyName	Phone
4	Cargo Kings	(011) 241-5490

How do you resolve the error that arises?

How can you prevent users from adding duplicate shippers with the same name?

11. All suppliers in UK are increasing prices of their products by 6%. Effect this change on the database.
12. Delete all employees that have never handled an order. (Hint: their Employee IDs do not appear in Orders table)
13. Display the product name, units in stock and stock level for all products. The stock levels are classified as follows. Hint: Use a CASE statement.

UNITS IN STOCK	STOCK LEVEL
0	OUT OF STOCK
Below 50	CRITICAL
50 to 100	MODERATE
Above 100	ADEQUATE