

PostgreSQL assignment

Stored functions

Assignment #1

Top 5 customers

Write a stored function that takes a product ID and returns the top 5 customers who have purchased that product the most, along with the total quantity of the product they've purchased.

Assignment #2

Customer spending

Write a stored function that takes a customer ID and returns the total amount spent by that customer on all orders placed in a specific year (the year should be a function argument).

Assignment #3

Average delivery duration

Write a stored function that takes a category ID and returns the average time (in days) it takes for products in that category to be shipped to customers. You can assume that the order date and shipped date are stored in the orders table.

Assignment #4

Supplier revenue

Write a stored function that takes a supplier ID and returns the total revenue generated from all orders that include products supplied by that supplier.

Assignment #5

Yearly revenue by category

Write a stored function that takes a year and a category ID and returns the total revenue generated by that category in that year, along with the total revenue generated by all categories in that year. You can assume that the order date and shipped date are stored in the orders table.

Assignment #6

Customer orders

Write a stored function that takes a customer ID and returns a table of all orders placed by that customer, including the order ID, order date, shipped date, and total amount for each order.

Assignment #7

Table of products

Write a stored function that takes a category ID and returns a table of all products in that category, including the product ID, product name, supplier name, unit price, and units in stock. Additionally, include a column that calculates the total revenue generated by each product (unit price * units in stock).
