
Assignment 8 (45 points)
Due Date: Wednesday March 23, 2016 11:55 PM

Objectives:

This assignment focuses on the use of the aggregate functions. These functions combine all the results to perform a statistical operation that returns a single value.

This assignment uses the tables associated with the *bookstore* database.

Write SQL statements to perform the following queries:

Query 1: Write a SELECT statement that returns these columns:
The count of the number of Orders in the Orders table
The sum of the tax_amount columns in the Orders table

Query 2: Display the product ID and the number of orders placed for each product. Show the results in decreasing order, and label result column NumOrders.

Query 3: Write a SELECT statement that returns one row for each category that has products with these columns:

The category_name column from the Category table
The count of the products in the Product table
The list price of the most expensive product in the Product table
Sort the result set so the category with the most products appears first.

Query 4: Write a SELECT statement that returns one row for each customer that has orders with these columns:
The email_address column from the Customer table
The sum of the item price in the Order_Items table multiplied by the quantity in the Order_Items table
The sum of the discount amount column in the Order_items table multiplied by the quantity in the Order_items table
Sort the result set in descending sequence by the item price total for each customer.

Query 5: Write a SELECT statement that returns one row for each customer that has orders with these columns:
The email_address from the Customer table

A count of the number of orders
The total amount for each order (**Hint:** First, subtract the discount amount from the price. Then, multiply by the quantity.)
Return only those rows where the customer has more than 1 order.

Sort the result set in descending sequence by the sum of the line item amounts.

Query 6: Modify the solution to query 6 so it only counts and totals line items that have an item_price value that's greater than 400.

Query 7: Write a SELECT statement that answers this question: Which customers have ordered more than one product? Return these columns:
The email address from the customer table
The count of distinct products from the customer's orders

Query 8: Retrieve the number of products, average product price, lowest product price, and highest product price in the book product category.

Query 9: For each vendor, retrieve the vendor ID and the number of products with a product price of $100 or higher supplied by the vendor.

Query 10: Consider the groups of products where each group contains the products that are from the same category and supplied by the same vendor. For each such group that has more than one product, retrieve the vendor ID, product category ID, number of products in the group, and average price of the products in the group.

Submission

- You will need to label your assignment with your first initial, last name, and the name of the assignment.
- Zip the files to upload to Insight (yourname_assignment8.zip).
- Submit the zipped file containing the script and output TXT via Insight.
- Remember to include the query number as a comment at each step.
- Read your output TXT file before you turn it in.