INST733 – Database Design

Assignment 2 - See Canvas for the deadline

Questions

Be sure to complete all three questions.

Q.1) (33 points) Write a SELECT statement that displays the number of products, as well as the average and the maximum list prices for each category of products carried by the guitar shop. Include a last row that gives the average and maximum prices over all products.

Round the values on the average and maximum list price columns, so that the values include two decimal spaces. Sort the result set by category name.

Your result set should look like this, including results and formatting aspects:

category_name	num_products	avg_list_price	max_list_price
Basses	2	649.99	799.99
Drums	2	749.99	799.99
Guitars	6	936.50	2,517.00
NULL	10	841.90	2,517.00

(4 result rows returned)

Q.2) (33 points) Write a SELECT statement using two subqueries that lists the customer name, card type, card expiration date, order_id, and the total amount that the customer paid (including discounts and quantity of items purchased) for each of their orders, for the customers with a order total that is less than the average order total of all the orders; (Using the average order total to get customers with order totals less than the average will be done through a correlated subquery).

(Hint: Calculate each order_total amount as ((item_price – discount_amount) * quantity) for each item in the order)

Your result set should look like this, including results and formatting aspects:

Result Grid | Filter Rows: Search | Export:

customer_name	card_type	card_expires	order_id	order_total
David Goldstein	Visa	04/2019	9	489.30
Barry Zimmer	Visa	08/2019	2	303.79
Erin Valentino	Discover	04/2019	6	299.00
David Goldstein	Visa	04/2019	5	299.00

(4 result rows returned)

Q.3) (34 points) Write a SELECT statement, using two subqueries (without using a correlated subquery), that lists customer name, customer email address, billing city, the total number of orders a customer has made, and the total amount the customer has spent for all their orders (including discounts).

Your result set should look like this, including results and formatting aspects:

(Hint: Calculate each total_spent amount as ((item_price – discount_amount) * quantity) for each item in an order, for all orders made by the customer)

Result Grid | Filter Rows: Search | Export:

customer_name	email_address	billing_city	num_orders	total_spent
Allan Sherwood	allan.sherwood@yahoo.com	Woodcliff Lake, NJ	2	2300.61
Christine Brown	christineb@solarone.com	Beaverton, OR	1	1678.60
Frank Lee Wilson	frankwilson@sbcglobal.net	Denver, CO	1	1539.28
David Goldstein	david.goldstein@hotmail.com	San Francisco, CA	2	788.30
Gary Hernandez	gary_hernandez@yahoo.com	New York, NY	1	679.99
Barry Zimmer	barryz@gmail.com	Omaha, NE	1	303.79
Erin Valentino	erinv@gmail.com	Fresno, CA	1	299.00

(7 result rows returned)