DA 6223 Quiz 3

Note: To receive credit for this quiz, submit your SAS project (.egp) file before the submission deadline on Canvas. Discussions between students are NOT allowed. You may consult lecture notes, demonstrations, exercises, etc. Good luck!

You may organize your projects as you like.
You may use a program or a task to assign the ORION library.

Problem 1 (5 pts)
Creating a New Table in the Query Builder with an Advanced Filter
Use the **Employee_Payroll** table and create a table with employees who retired in December, regardless of the retirement year. Use the Query Builder to create a query named December Retirees Query and a table named DecemberRetirees. Include these columns: Employee_ID, Salary, and Employee_Term_Date. Label the Employee_Term_Date column as Termination Date and apply the DATE9. format. Apply DOLLAR11.2 format to Salary column. Include only those employees who retired in December. **Note**: Use the MONTH function. Order the output table by ascending Salary and then Employee_ID. Run the query and answer the following question.

How many rows are in the new DecemberRetirees table?

Problem 2 (5 pts)
Creating a Query with a Calculated Column Using a Function
Use the Query Builder to create a table from the **employee_donations** table with a new column that indicates the total contributions from each employee. Include the **Employee_ID, Recipients,** and **Paid_By** columns in the new table. Create a new column named Total_Donations, which totals the values of the four quarterly donations. Format the new column to display dollar signs, commas, and two decimal places. Hint: Use a function to calculate the total, and thereby ignore any missing values that might be in the input columns.

Which employees (list the Employee_IDs) made the largest donations?

Problem 3 (5 pts)
Using a Date Function for a Computed Column
Use **PROC SQL** to create a report that includes <u>active employees</u> (those with no termination date) and how old the employee was when hired. Use the **Employee_Payroll** table and select Employee_ID, Birth_Date, and Employee_Hire_Date columns. Create a new column named Hired_Age that prints the age of the employee when they were hired. Order the results by ascending Hired_Age.

How old was the youngest hired employee?

Problem 4 (5 pts)

Assigning Values Conditionally (You can copy your answer from Exercise #3 if you have already answered this question)

Use **PROC SQL** to create a report that will print the dependent status of each employee in the Employee_Payroll table. Use the CASE expression to create a categorical **Dependents_Status** column conditionally. Use the **Employee_Payroll** table and select Employee_ID and Dependents columns. If the value of Dependents is greater than 0, **Dependents_Status** column should take the value of "Yes" otherwise it should take the value "No".

Problem 5 (5 pts)

Calculating the Elapsed Time Intervals with the INTCK Function (You can copy your answer from Exercise #3 if you have already answered this question)

Use a PROC SQL step to analyze shipping methods in the **order_fact** table. Orion wants to calculate the number of weekdays between the order date and the delivery date for each order. The INTCK function can be used to count the number of various time intervals between a start date and an end date. Report the Customer_ID, Order_Date, Delivery_Date, and Product_ID columns. Use the INTCK function to create a new column named **WeekdaysToDeliver**. The new column values are the number of *weekdays* between Order_Date and Delivery_Date. Exclude all retail purchases (Order_Type = 1) because the items that are purchased in the store should not require shipping. Order the results so that the orders with the longest delivery times are at the top of the data set.

==What was the longest number of weekdays between Order_Date and Delivery_Date?==

Problem 6 (5 pts)

Using the Query Builder to Produce a Top-Ten Report

Orion Sports would like to know the top ten paying job titles that do not include 'Chief' in the title. Use Query Builder to group, summarize, and filter the **employee_master** data and obtain the requested table. Give an appropriate title to the report and rename the task accordingly.

- To produce a report instead of a data table, select Options in the Query Builder. Under Results, you can override the default result type: Generate a report rather than a data table.
- Limit the number of output rows to 10.

Review the results of the query as well as the log file. There is a warning sign on this query in the process pane. Find the reason for the warning in the Log File.

==What is the WARNING you get?==

Upload your project under Quiz 3.