DA 6223 Quiz 1

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.

Write your answer in a note that you create in the project.

Problem 1 (4 pts)

Using the One-Way Frequencies Task to Produce a Grouped Report

Use the One-Way Frequencies task on the **employee_master** table to analyze **Job_Title**, grouped by **Department**. Order the output report by descending frequencies. Add a custom title and remove the subtitle provided by SAS. Give the task a descriptive name. Run the task and review the results. Which job title has the highest percentage in the sales department?

Problem 2 (4 pts)

Filtering Data in a Task and Creating Multiple Output Files

Create a Grouped List Report for Employees from Australia by City. Your List Report must include the Employee_ID, Employee_Name, Street_Number, Street_Name, and Postal_Code columns from the **employee_addresses** table and the report should be grouped by City. The report should display the following labels: Employee ID, Street Number, Street Name, and Postal Code.

Use filtering in a task option to modify the dataset so that only the employees from Australia are included in the report. Provide an appropriate title for the reports and rename the task accordingly. In addition to HTML format, generate at least two more output files. These could be SAS reports, Excel, PDF, PPT, etc. Run the task and review the results.

Problem 3 (5 pts)

Creating a Subset of a Dataset

Explore the **Employee_Master** table and create a subset of United States employees with salaries more than $80,000. Select only the Employee_ID, Employee_Name, Employee_Hire_Date, Salary, City, Department, and Job_Title columns. Sort the data by ascending employee name. Use an appropriate Task, i.e., Filter and Sort Task, Query Builder or Explore Data, for this job.

Then, use Characterize Data task to answer the following questions regarding this subset of employees:

- What percentage work in the Sales Management Department?
- What cities do the employees work in?
- What is the average salary?
- What is the oldest hire date?

Problem 4 (5 pts)
Exploring a dataset from the ORION library

First, create a program and assign the ORION library using the LIBNAME statement. Next, choose a dataset you want to explore and practice the following steps. Write your answers to a note you create in the process flow. To show all your work, write a new PROC SQL step for each part.

a. Write a **DESCRIBE TABLE** statement to see the column attributes of the table you choose. Answer the following questions: Which dataset did you choose? How many numeric and character variables does this dataset have?

b. Write a **SELECT** statement that displays all the columns of the table. Limit the output report to 10 observations. Use either a dataset option or a PROC SQL option to limit the number of rows.

c. Choose only three columns that you want to display. Write a **SELECT** statement to display those three columns. Write the PROC SQL option that adds the Row column to show the observation (row) number. Again, limit the number of observations to 10.

Problem 5 (5 pts)
Creating a New Table in the Query Builder with a Simple Filter

Use the **Employee_Donations** table and create a table with employees who donated in Quarter 4 by Credit Card. (Hint: Exclude the rows if there's no donation amount) Use the Query Builder to create a query named Qtr4 Credit Card Donations and a table named Qtr4CreditCardDonations. Include these columns: Employee_ID, Recipients, and Qtr4. Label the Qtr4 column as Quarter 4 Donation Amount and apply the DOLLAR6.2 format. Sort the dataset in Quarter 4 donation amount in descending order.

- How many rows are in the new Qtr4CreditCardDonations table?
- Which employees made the highest donation by Credit Card in Qtr4? (list the Employee_IDs)

Upload your project under Quiz 1.