

## DA 6223 Quiz 4

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.

Assign the ORION library first. You may use a program or a task.

### Problem 1 (7 pts)

#### Group and Summarize Data

To answer this question, you may use Query Builder or PROC SQL, it is up to you.

Orion Start Sports and Outdoors would like to know the average salary paid in each city. The requested information can be obtained from the **employee\_master** table.

- Create an output table named AvgSal\_City.
- The output table should include only the City column and the calculated column: AVG\_of\_Salary.
- Sort the output table in decreasing order of the average salary.

In which city Orion pays the highest on average?

What is the average salary for that city?

### Problem 2 (8 pts)

#### Using PROC SQL to Group and Summarize, and Filter Data

Orion Star would like to see the number of employees and the total and average salaries of employees in the departments having more than ten employees. Use a PROC SQL step to group, summarize and filter the **employee\_master** data to obtain the requested table. Select the Department column in addition to the summary columns that you created and named appropriately.

Submit the query and view the results.

How many employees work in the Purchasing department?

### Problem 3 (7 pts)

Using PROC SQL to produce a list of top-paying job titles

Orion Sports would like to know the top paying job titles that do not include 'Chief' in the title. Write a PROC SQL step using the employee\_master table, select Job\_Title and average of Salary as AvgSalary. The filter should be defined as where 'Chief' is not in the job title and the job pays more than \$80,000. Sort the data in decreasing sequence of average salary. Submit the query and view the results.

How many job titles are on the list?

### Problem 4 (8 pts)

Using PROC SQL to CREATE TABLE

The **order\_fact** table contains information about selected Orion Star orders. Orders must be analyzed based on the day of the week on which the orders were placed and the order channel that they were placed.

In the first query, **create a table** in the WORK library named **OrderDayByType** from a query result: Select the columns Order\_Type and Order\_Date from order\_fact table.

**\*\*THE REST OF THIS QUESTION IS OPTIONAL\*\***

In the second query, alter the table to include the following numeric column: **OrderDOW**, which shows the order day of the week.

In the third query, **update** the empty OrderDOW column to take a value of 1 if the order is placed on a Sunday, 2 if the order is placed on a Monday, and so on.

In the fourth query, **modify** the format of the Order\_Date column so that it displays the values as follows: MM/DD/YYYY

Finally, use the **delete** statement to delete the rows associated with retail store sales. (Hint: Order\_Type 1 is retail sales)

**\*\*END OPTIONAL\*\***

Upload your project under Quiz 4.