DA 6223 Extra Credit Quiz

Note: The grade you get from this quiz will replace the lowest quiz grade. If you get the lowest grade from this quiz, then nothing will be replaced. So, you will only be better off, or no change will happen.

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 (5 pts)

Append Tables

Revisit the demonstration done in class. Orion Sports would like to have a single table for US, AU, and DE employees. Append EMPS_AU, EMPS_DE and EMPS_US tables.

1) In the EMPS_US table, create a Country column with the "US" value for all rows.
2) Make sure to complete other necessary **column manipulations,** such as converting numeric columns to characters or vice versa, before attempting this task.
3) Rename the final output table **EMPS_AU_DE_US**.

- Write a PROC SQL code to count the number of employees in each country.
- How many employees are from Germany (DE)?

Problem 2 (5 pts)

Isolating Nonmatches

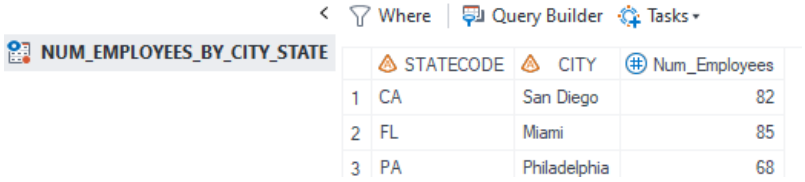
Use the **employee_donations** and **employee_addresses** tables to identify the address information of the employees who did not make donations. Include all columns from the employee_addresses table. Modify the join and filter the table so that the results show only the employees who did not donate.

- How many employees did not make a donation?

Problem 3 (5 pts)

Joining Data using PROC SQL

First, use the **employee_master** table to create a summary table named **Num_US_Employees_By_City_State** in the WORK library. This table shows the number of US employees in each City-State pair. In the same query, recode the Miami-Dade value in the City column as "Miami". An example is shown below:

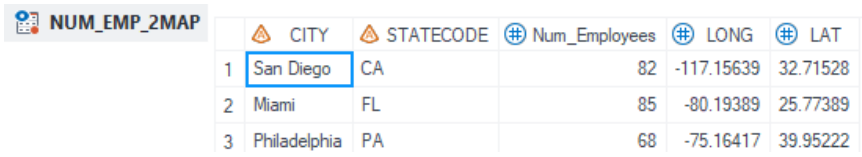


Where | Query Builder | Tasks

NUM_EMPLOYEES_BY_CITY_STATE

	STATECODE	CITY	Num_Employees
1	CA	San Diego	82
2	FL	Miami	85
3	PA	Philadelphia	68

Then, create a new table called **Num_Empoyees_2Map** by joining USCITY, which is a SAS dataset in the MAPSGFK library, and **Num_US_Employees_By_City_State** tables. **Num_Empoyees_2Map** table should include City, State, Num_Employees columns and all records in the **Num_Empoyees_2Map** table and LONG, LAT columns from the MAPSGFK.USCITY table. Please see the resulting table:



NUM_EMP_2MAP

	CITY	STATECODE	Num_Employees	LONG	LAT
1	San Diego	CA	82	-117.15639	32.71528
2	Miami	FL	85	-80.19389	25.77389
3	Philadelphia	PA	68	-75.16417	39.95222

Problem 4 (5 pts)

Joining Data Using a Non-Equijoin Condition

The **employee_detail** table contains the current salary information of the employees. Orion Stars wants to offer bonuses based on when the employee is hired. Two columns in the **bonus_schedule** data set, **Employed_After** and **Employ_Before,** define the time range for a given bonus percentage. Join the **employee_detail** and **bonus_schedule** tables so that if the hire date falls between employed before and after dates, then the employee receives the corresponding **Bonus_Percent**. Display Employee_ID, Employee_Name, Salary, and Bonus_Percent columns and a calculated column called **New_Salary**, which is the current Salary plus the bonus amount. Display the **New_Salary** column with a dollar sign, comma, and two decimal places. The bonus amount is the Bonus_Percent of the Salary. Filter only the active employees, i.e., the employee termination date is missing. Order the table by the New_Salary column.

- What is the New_Salary of Tulsidas Ould?

Upload your project under the Extra Credit Quiz.