

Stat 657

Assignment 11 - SAS

Scope:

This assignment uses macro and SQL techniques covered through Lecture 18. This assignment will use the files in the Orion library supplied with the SQL portion of this class and the **ncaam06** data set provided for an earlier assignment.

Specific Instructions for this Assignment:

1. Use all three system options that will cause macro resolution, macro code and macro execution information to be written to the log.
2. Copy the donations macro code created in step 4 of Assignment 9 and paste it into your new SAS program for this assignment. If you had difficulties with this assignment, you may use code from the solution posted on eCampus.
3. Change the macro definition so that the start date and end date are positional parameters and the library and gender are keyword parameters. Specify Female as the default gender and WORK as the default output library.
4. Add macro logic to your macro so that if the end date parameter is null, the macro will ignore the end date and return employees hired on or after the start date. If you used a between statement in your original where clause you may find it helpful to use a range (greater than or equal to, etc.) instead.
5. Use macro logic to display the appropriate title depending on whether there is an end date.
6. Call your new donations macro specifying only January 1, 2004 as the start date.
7. Call the macro again specifying parameters to produce a report for Male employees hired between January 1, 2000 and December 31, 2006.
8. The ncaam06 dataset provided earlier in the semester does not have a complete roster for each team in the field of 64 teams. Use PROC SQL to create a table with columns seed, school, region, player, ppg, and rpg from ncaam06 with only schools that have 5 or more players listed in the dataset. The note about remerging is expected for this step.
9. The report procedure below produces a summary of teams in the WDC region based on the dataset created in the previous step. At this point you are to create a data driven macro definition that will produce a separate report for each region in the data. The only parameter of the macro definition will be the name of the input dataset.

- a. Create a data set containing an unduplicated list of the regions.
- b. Use a data step to create macro variables for each region and the total number of regions.
- c. Replace the data set name and WDC in the code below with appropriate macro references and use a loop to iteratively process the report procedure once for each of the regions in the data.

```
proc report data=dsname nowd;  
where region='WDC';  
columns ('Region = WDC' seed school ppg rpg);  
define seed /group 'Seed';  
define school /group 'Team';  
define ppg /mean format=8.1 'Average Points';  
define rpg /mean format=8.1 'Average Rebounds';  
run;
```

10. Three PDF files must be uploaded to WebAssign. Convert your program and the SAS log to PDF files. The third file will contain all the requested output from ODS PDF. The program must contain a completed header block and comment blocks for each step.