

## PHPM 672/677 Lab #6: SAS Macros

**Due date: Submit on Blackboard by 11:59pm Monday 4/7/2015**

**NOTE: This is due in ONE WEEK. NOT the same as assignment.**

**Submission.** This lab will be the midpoint check, so is due in one week BEFORE the assignment 6. You should be submitting a total of 1 sas code, 2 logs, 2 outputs, 1 readme file, and N number of input files.

1. Regular SAS code with NO macros (lname\_lab6\_x.sas)
  - READ the provided sas codes (lab6.sas & config\_l6.sas) and write the regular SAS code that would be generated by the SAS macro preprocessor
2. Input files required by the program YOU WROTE in step 1 to run properly
  - READING the code you wrote, you will see what are the input files required (its names, how many they are, and the structure, where they should be located on your computer). Make small shells of files you need. The content of the input data DOES NOT MATTER. Just make one row of any values.
3. Log and output files generated from the sas code YOU WROTE in step 1 (this has no macros)
  - Note in order to run this code with no errors, you will have to generate the required input files
4. Log and output files generated from the sas code PROVIDED (this has macros)
  - Make sure you have the option mprint on.
5. Readme file: answer the following questions
  - What are the input files? Write the full path including the extension.
  - What are the output files? Write the full path including the extension.
  - Describe in plain English what you think the provided code lab6.sas does.

**Late Assignments.** Each student will be allowed one late assignment, due 7 days from the due date. NO other late assignments or make up will be accepted.

**Plagiarism:** If you consult any outside sources when doing your work, you are expected to further document these sources. Give credit where credit is due. Plagiarism will not be tolerated.

All handed in homework should state at the top any assistance with debugging and programming, as well as citations of any program segments copied from a website.

### Required readings for this assignment

1. [http://www.ats.ucla.edu/stat/sas/seminars/sas\\_macros\\_introduction/](http://www.ats.ucla.edu/stat/sas/seminars/sas_macros_introduction/)
2. The little SAS book (online book available from the library): Chapters 3.2, 3.3, & all of 7
3. OPTIONAL: <http://www.ats.ucla.edu/stat/sas/library/nesug99/bt108.pdf>

### Objective

By the end of this assignment, you should be able to

- Read and write SAS macro variables
- Read, use, and modify SAS macro functions

### Lab 6: SAS Macro variable and functions

**Setting Up:** Download the two files from the class website into the appropriate folder. Keep them in the same folder called lab6/

1. There should be two sas code (config\_l6.sas & lab6.sas).
2. Open lab6.sas and edit the code so that it can properly locate the config\_l6.sas code in your computer

3. Open config\_l6.sas and edit the code so that the libname is referencing the correct folder in your computer
4. Now *resolve*( “find and replace”) all macro variables and functions used
5. Save out as lname\_lab6\_x.sas (Submission 1)
6. Run the code EDITED in step 5
7. READ the log and fix any ERRORS in the Log. Iterate until no ERROR in the log.
8. READ the log to determine what are the input files SAS is looking for.
9. Generate these files (submission 2)

Hint: Use the table below as an example to make tables you need. (i.e. determine the file names you need as input files, and use the following table as an example of the content of the input file). You can make up the content for each input, and you only need one row in each table.

<b>rhp</b>	<b>fips</b>	<b>prov_tpi</b>	<b>igt_tpi</b>
rhp 3	48015	12345	123-45

10. Put them in the location (folder) that the code is expecting to find them
11. Now, rerun the code from step 5
12. Iterate until no ERRORS in the log
13. Submit the log and output when done. (submission 3)
14. Add at the very top of lab6.sas provided the following code  

```
options mprint symbolgen;
```
15. Run this code. (Remember to edit the code so that config\_l6.sas can be found on your computer)
16. Submit the log and output from running this code with the MACRO when done. (submission 4)
17. Answer the questions in the readme file. (submission 5)