IDS462 HW4

Download all the SAS datasets attached for this assignment, and see the problem descriptions below. The are 3 problems some with multiple parts in this assignment.

Your SAS code/program should start with the following:

/\* IDS462 HW4 \*/

/\* Name of student1 \*/

and if this is a team of more than 1 student contributed, then add the names of all students as

/\* Name of student2 \*/

….

Submit only one SAS code/program to solve all problems given, and make sure to put comments within in the beginning of each problem/part to show what you’re solving, for ex **\*Prob1-Part1;**

**Define your library name as mylib where all the datasets reside (5 points).**

**Following problems have 95 points in total.**

1. **Using SAS Date Constants:**  Use SAS dataset employee\_payroll for this problem.
   1. Modify the following program so that it subsets the data to return only the employees hired between January 1, 2007, and today. Use the automatic macro variable **SYSDATE9** to return today’s date.

**proc print data=mylib.employee\_payroll;**

**format Birth\_Date Employee\_Hire\_Date date9.;**

**run;**

PROC PRINT Output

Employee\_ Birth\_ Employee\_ Employee\_ Marital\_

Obs Employee\_ID Gender Salary Date Hire\_Date Term\_Date Status Dependents

310 121034 M 27110 23AUG1988 01JAN2007 . S 0

361 121085 M 32235 12NOV1986 01JAN2007 . S 0

364 121088 M 27240 10JUN1988 01JAN2007 . S 0

1. **Macro Variable References with Multiple Delimiters**

Use SAS dataset staff for this problem.

* 1. The following program analyzes the **mylib.staff** data to find the employee with the most seniority within a job title. Submit the program and examine the output that it creates.

**proc sort data=mylib.staff out=staffhires;  
 by Job\_Title Emp\_Hire\_Date;  
run;  
data FirstHired;**

**set staffhires;  
 by Job\_Title;  
 if First.Job\_Title;**

**run;  
proc print data=FirstHired;**

**id Job\_Title;  
 var Employee\_ID Emp\_Hire\_Date;  
 title "First Employee Hired within Each Job Title";**

**run;**

* 1. Create a macro variable that acts as a toggle such that the program selects employees with either the most seniority or the least seniority within their job title. Make sure that the title reflects this difference.

1. **Using Parameters That Contain Special Characters**

Use SAS dataset employee\_addresses for this problem.

* 1. Submit the following program to compile the macro.

**%macro specialchars(name);**

**proc print data=mylib.employee\_addresses;**

**where Employee\_Name="&name";**

**var Employee\_ID Street\_Number Street\_Name City State**

**Postal\_Code;**

**title "Data for &name";**

**run;**

**%mend specialchars;**

* 1. Execute the macro with a parameter value of *Abbott, Ray*.

PROC PRINT Output

Data for Abbott, Ray

Employee\_ Street\_ Postal\_

Obs ID Number Street\_Name City State Code

1 121044 2267 Edwards Mill Rd Miami-Dade FL 33135