**IDS 462 STATISTICAL SOFTWARE FOR BUSINESS**

**HOMEWORK 8**

**TEAM MEMBERS**:

1. Harish Visweswaraiya
2. Sriram Ravi
3. Vinodh Sankaran
4. Balachandhar Chekka Narayanasame

**Problem 1 – Using SAS Date Constants**

Use the automatic macro variable **SYSDATE9** to return today’s date.

**Code**

libname SAS\_HW8 '/folders/myfolders/SAS\_HW8';

/\* Problem 1 \*/

%put &sysdate9;

%let start\_date='01JAN2007'd;

%let end\_date="&sysdate9"d;

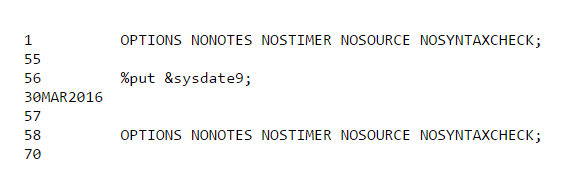
proc print data=SAS\_HW8.employee\_payroll;

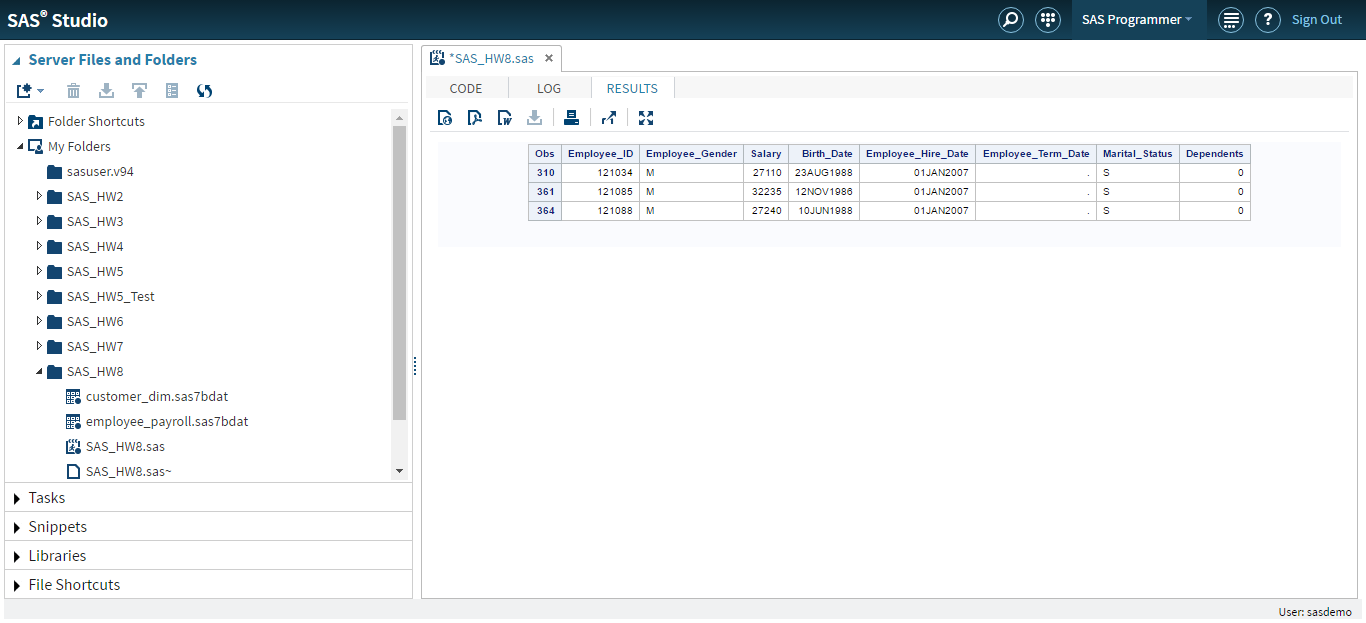
format Birth\_Date Employee\_Hire\_Date date9.;

where Employee\_Hire\_Date between &start\_date and &end\_date;

run;

**Output Data**





**Problem 2 - Macro Variable References with Multiple Delimiters**

1. The following program analyzes the **SAS\_HW8.staff** data to find the employee with the most seniority within a job title. Submit the program and examine the output that it creates.

**Code**

/\* Problem 2 \*/

/\* Part A \*/

proc sort data=SAS\_HW8.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;

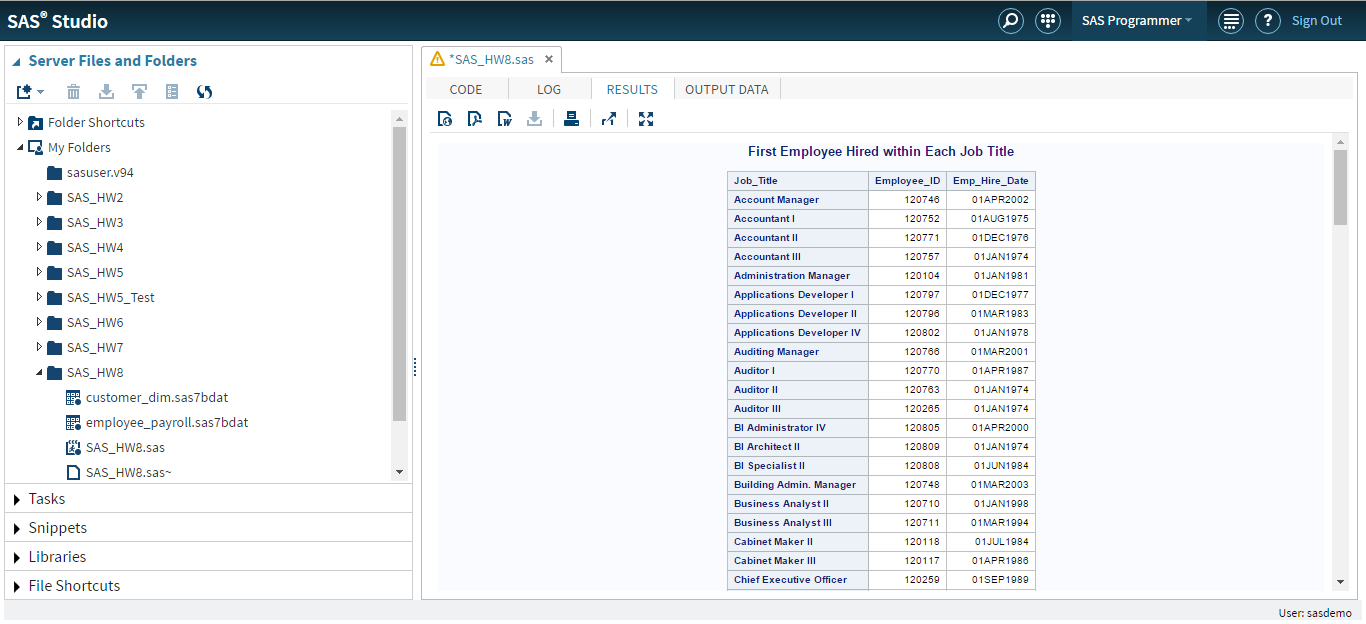
id Job\_Title;

var Employee\_ID Emp\_Hire\_Date;

title "First Employee Hired within Each Job Title";

run;

**Output Data**



The above program returns the employees who were hired first under each job title.

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.

**Toggle variable value set to “First” to get the list of employees with most seniority within their job title**

**Code**

/\* Part B – Toggle variable set to First \*/

%let toggle\_var=First;

proc sort data=SAS\_HW8.staff out=staffhires;

by Job\_Title Emp\_Hire\_Date;

run;

data &toggle\_var.Hired;

set staffhires;

by Job\_Title;

if &toggle\_var..Job\_Title;

run;

proc print data=&toggle\_var.Hired;

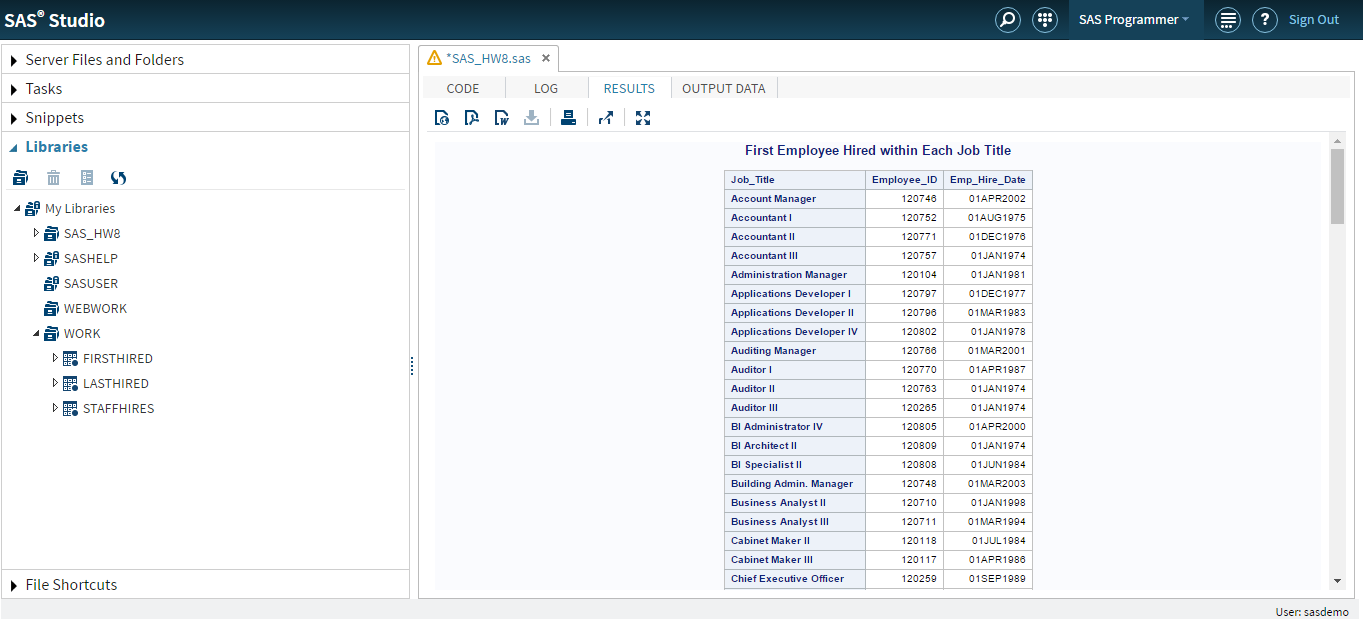
id Job\_Title;

var Employee\_ID Emp\_Hire\_Date;

title "&toggle\_var Employee Hired within Each Job Title";

run;

**Output Data**



**Toggle variable value set to “Last” to get the list of employees with least seniority within their job title**

**Code**

/\* Part B – Toggle variable set to Last \*/

%let toggle\_var=Last;

proc sort data=SAS\_HW8.staff out=staffhires;

by Job\_Title Emp\_Hire\_Date;

run;

data &toggle\_var.Hired;

set staffhires;

by Job\_Title;

if &toggle\_var..Job\_Title;

run;

proc print data=&toggle\_var.Hired;

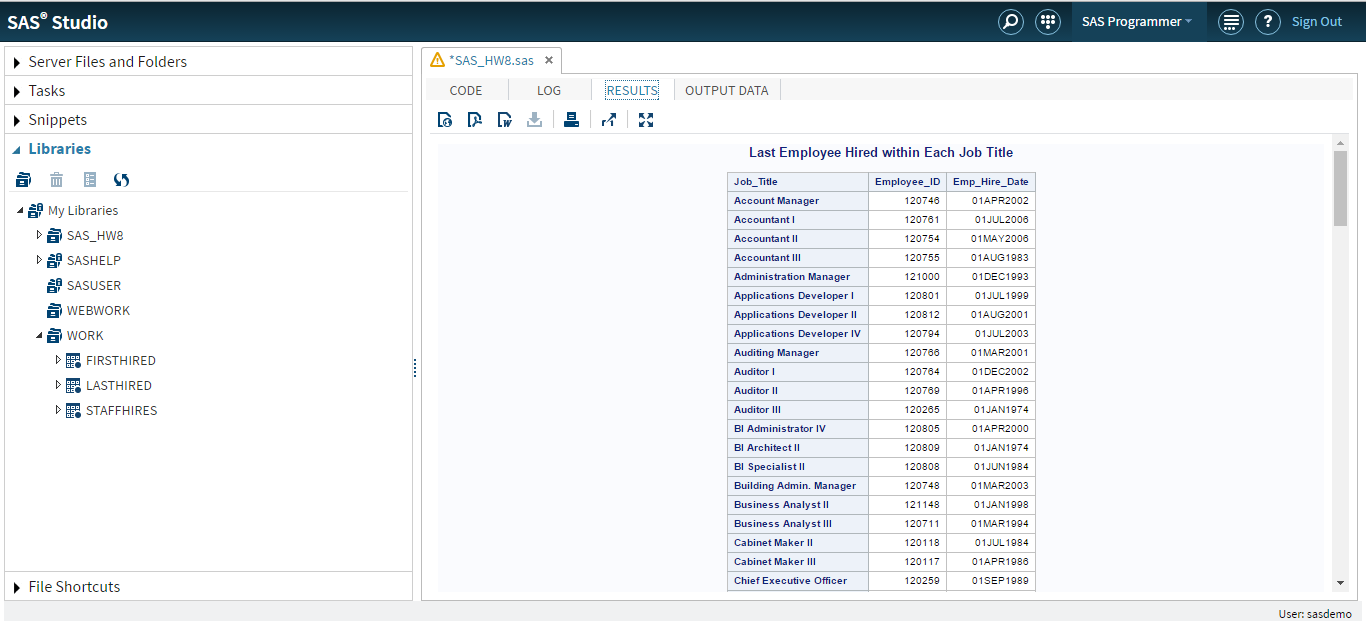
id Job\_Title;

var Employee\_ID Emp\_Hire\_Date;

title "&toggle\_var Employee Hired within Each Job Title";

run;

**Output Data**



**Problem 3 - Calling a Macro from a TITLE Statement**

1. Define a macro that issues the current time of day with the TIMEAMPM. format. Name the macro **Currtime**. Submit the macro definition.

**Code**

/\* Problem 3 \*/

/\* Part A \*/

%macro Currtime;

%sysfunc(time(),timeampm.)

%mend Currtime;

1. Add a TITLE2 statement to the following program. Call the **Currtime** macro from the TITLE2 statement. Submit the program and examine the output.

**Code**

/\* Problem 3 \*/

/\* Part B \*/

proc print data=SAS\_HW8.customer\_dim(obs=10);

var Customer\_Name Customer\_Group;

title 'Customer List';

title2 "The Current time is %Currtime";

run;

**Output Data**

