**Due Date: January 30, 2024**

**Direction:**

* **Two points for each problem**
* **Turn in only one single SAS file that contains answers to all problems**
* **Use a data library for all SAS data and another data library for all non-SAS data**
* **Turn in Assignment (SAS Code Only) in your Webcourses on or before 11:59 PM January 30, 2024**

**PART I**

**PB1:** Use data step to read the SAS data set “customer\_dim” and to create a SAS data set called “work.youngadult”. Use “keep statement” to keep just five variables: Customer\_Name, Customer\_Age, Customer\_BirthDate, Customer\_Gender, and Customer\_Group. Use “where” statement to select only female customer in “Gold” group between 18 and 36 years old.

**PB2:** Use data step to read the SAS data set “product\_dim” and to create a SAS data set called “work.sports”. Use “drop” statement to drop variables: Product\_ID, Product\_Line, Product\_Group, Supplier\_Name, and Supplier\_ID. Only select “sports” products from country 'GB', 'ES', or 'NL'.

**PB3:** Use data step to read the SAS data set “customer\_dim” and to create a SAS data set called “work.tony”. Only select customer name sounds like “Tony” and to keep two variables Customer\_FirstName and Customer\_LastName.

**PB4:** Repeat PB1 by adding permanent label and format for all variables.

**PB 5:** Repeat PB2 by adding permanent label and format for all variables.

**PB6:** Repeat PB3 by adding permanent label and format for all variables and the output should look like the following:

CUSTOMER CUSTOMER

Obs FIRST NAME LAST NAME

1 TONIE ASMUSSEN

2 TOMMY MCDONALD

**PART II**

**PB1:** Read the SAS data set “customer” and create a data set called “work.birthday”. The four variables kept in “work.birthday” are ustomer\_Name, Birth\_Date, BdayDOW2012, and Age2012 where BdayDOW2012 is the day of week for the birthday in 2012 and Age2012 is the age for this individual at her/his birthday in 2012. You need to add label and format statements.

**PB2:** Read the SAS data set “sales” and create a data set called “work.employees” that has three variables: Full\_Name (by combining First and Last Name), Hire\_Date, and Yrs2012 (number of years employeed at Janauary 1, 2012). Label and format statement should be used if it is necessary.

**PB3:** Read the SAS data set “employee\_donations” and create a data set called “work.bigdonations” that has all employees who made donation each quarter and donated more than 50 in four quarters combined.

**PB 4:** Read the SAS data set “orders” and create a data set called “work.ordertype” that has two additional variables “Type” and “SaleAd” created using the variable “Order\_Type”. The rules for creating these variables are as follows:

* Type = 'Catalog Sale' and SaleAd = 'Mail' if Order\_Type = 1
* Type = 'Internet Sale' and SaleAds='Email'if Order\_Type = 2
* Type = 'Retail Sale' if Order\_Type = 3.