**Due Date: February 13, 2024**

**Direction:**

* **Four points for each problem**
* **Turn in only SAS code and all five problems in one single SAS file**

**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.

**PB4:** Read the SAS data set “staff” and create a data set called “work.increase”. The new data set includes all employee hired after July 1, 2006 who has more than $3000 raise assume that the rate of raise is 10%.

**PB 5:** 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.