Lab 11

Stat 426

Spring 2021

Instructions:
Complete all questions. To prepare for the randomly collected lab, you will need to do the following to prepare the work for submission. These submission rules will apply to all labs throughout the semester.

(1) The file you will be working with is on the website as a csv file called `Orion.csv`. Use the appropriate INFILE and INPUT statements to read in the csv file. The three variables and their types are shown below:

Variable	Type
Customer_id	Character
Order_month	Numeric
Sale_amt	Numeric

Note that while `Customer_ID` has numeric values, they are being treated as character (but honestly, it does not really matter here).

(2) Use the global options statement, MPRINT, to allow the macro to print to the log.

(3) Write a macro with the %LET statement to find the sales amounts when the month=1 (of the `order_month` variable) and make sure it has a title that references the macro you wrote in terms of the month selected (something like "Orders for …").

(4) Next, write another macro that uses %MACRO and %MEND to create a program that will use a PROC PRINT to print the sales amounts (so the var statement will be Sale_Amt) and a PROC MEANS to generate the mean Sale_Amt

(5) Use the molar mass macro from lecture to calculate the molar masses of the following compounds. You will have to do some research to find the atomic weights of the compounds listed here.

   (a) Carbon dioxide
   (b) Methane
   (c) Glucose (not the same as sucrose as done in lecture)
   (d) Sulfur Dioxide
   (e) Sodium Nitrate
   (f) table salt
   (g) Iron oxide
   (h) Uranium hexaflouride