**Workshop 1-A**

**Cody's Book, Section # 2.5. Problems # 1 to 5**

**Question 1**

\*SAS program to read the raw data from stocks.txt file and compute values.  
Programmer : Aaron Gonsalves  
Date : 23rd May 2021  
;  
\*1-a;  
data Portfolio;  
 infile '/home/u58712040/my\_shared\_file\_links/u56456355/BAN130/stocks.txt';  
 input StockSymbol $ StockPrice Number\_of\_Shares;  
 Value = StockPrice\*Number\_of\_Shares;  
run;  
  
title "Portfolio Details";  
proc print data=Portfolio noobs;  
run;  
  
\*1-b;  
title "Average Price of the Portfolio";  
proc means data=Portfolio;  
 var StockPrice;  
run;  
   
title "Average Number of Shares of the Portfolio";  
proc freq data=Portfolio;  
 tables Number\_of\_Shares;  
run;

**Question 2**

data Prob2;

input ID $

Height /\* in inches \*/

Weight /\* in pounds \*/

SBP /\* systolic BP \*/

DBP /\* diastolic BP \*/;

\*Statements to compute four new variables. ;

WtKg = Weight / 2.2 /\* 1kg = 2.2 pounds\*/;

HtCm = Height \* 2.54 /\* 1 inch = 2.54 cm\*/;

AveBP = DBP + (SBP-DBP)/3;

HtPolynomial = 2 \* (HtCm\*\*2) + 1.5 \* (HtCm\*\*3);

\*Rest of the code. ;

datalines;

001 68 150 110 70

002 73 240 150 90

003 62 101 120 80

;

title "Listing of Prob2";

proc print data=Prob2;

run;

**Question 3**

You are given an equation to predict electromagnetic field (EMF) strength, as follows:

EMF = 1.45 x V + (R/E) x V3 - 125.

If your SAS data set contains variables called V, R and E, write a SAS assignment statement to compute the EMF strength.

**Ans:** EMF = 1.45 \* V + (R/E) \* V\*\*3 – 125

**Question 4**

What is wrong with this program?

001 data New-Data;

002 infile C: \books\learning\Prob4data.txt;

003 input x1 x2

004 y1 = 3(X1) + 2(x2);

005 y2 = x1 / x2;

006 New\_Variable\_from\_X1\_and\_X2 = X1 + X2 – 37;

007 run;

**Note:** Line numbers are for reference only.

**Ans:** The above code has following mistakes:

1. The data set name contains '-' in it. -- Shown in line 1 of the code.
2. The file location is not specified in quotes. – Shown in line 2 of the code.
3. There is no semicolon at the end of line 3.
4. There is no (\*) symbol; used to show multiplication, between neither 3 and (X1) nor 2 and (X2). – Shown in line 4 of the code.

**Question 5**

What is wrong with this program?

001 data XYZ;

002 infile "C:\books\learning\DataXYZ.txt";

003 input Gender X Y Z;

004 Sum = X + Y + Z;

005 run;

File C:\books\learning\DataXYZ.txt looks as follows:

Male 1 2 3

Female 4 5 6

Male 7 8 9

**Ans:** The above code needs symbol '$' after Gender in line 3 to specify that Gender is a character variable.

Input Gender $ X Y Z;