**Workshop2-A**

**Boot: Learning SAS by Example: A programmer's Guide**

**Section 4.10: Problems 1**

**Section 5.9: Problems 1,2,3**

**Question 1**

\*4.10-1 SAS program to create permanent data set, and run proc contents.;

libname learn '/home/u58712040/Programming\_Workshops';

data learn.Perm;

input ID : $3. Gender : $1. DOB : mmddyy10.

Height Weight;

label DOB = 'Date of Birth'

Height = 'Height in inches'

Weight = 'Weight in pounds';

format DOB date9.;

datalines;

001 M 10/21/1946 68 150

002 F 5/26/1950 63 122

003 M 5/11/1981 72 175

004 M 7/4/1983 70 128

005 F 12/25/2005 30 40

;

title 'Proc contents for Perm data set: ';

proc contents data=learn.perm;

run;

**Question 2**

\*5.9-1 SAS program to add formats and add labels.;

proc format;

value age\_range 0-30 = 'Till 30'

31-50 = 'Above 30 & Till 50'

51-70 = 'Above 50 & Till 70'

71-high = '71 and older';

value $Party 'D' = 'Democrat'

'R' = 'Republican';

value $likeness '1' = 'Strongly Disagree'

'2' = 'Disagree'

'3' = 'No Opinion'

'4' = 'Agree'

'5' = 'Strongly Agree';

run;

data Voter;

input Age Party : $1. (Ques1-Ques4)($1. + 1);

label Ques1 = 'The president is doing a good job'

Ques2 = 'Congress is doing a good job'

Ques3 = 'Taxes are too high'

Ques4 = 'Government should cut spending';

format Age age\_range.

Party $Party.

Ques1-Ques4 $likeness.;

datalines;

23 D 1 1 2 2

45 R 5 5 4 1

67 D 2 4 3 3

39 R 4 4 4 4

19 D 2 1 2 1

75 D 3 3 2 3

57 R 4 3 4 4

;

title 'Voter details :';

proc print data=voter label;

run;

title 'Frequencies for the 4 questions :';

proc freq data=voter;

tables Ques1-Ques4;

run;

**Question 3**

\*5.9-2 SAS program to print frequencies of 4 questions with new format.;

proc format;

value age\_range 0-30 = 'Till 30'

31-50 = 'Above 30 & Till 50'

51-70 = 'Above 50 & Till 70'

71-high = '71 and older';

value $Party 'D' = 'Democrat'

'R' = 'Republican';

value $likeness '1','2' = 'Generally Disagree'

/\* Combining Strongly Disagree and Disagree\*/

'3' = 'No Opinion'

'4','5' = 'Generally Agree';

/\* Combining Strongly Agree and Agree\*/

run;

data Voter1;

input Age Party : $1. (Ques1-Ques4)($1. + 1);

label Ques1 = 'The president is doing a good job'

Ques2 = 'Congress is doing a good job'

Ques3 = 'Taxes are too high'

Ques4 = 'Government should cut spending';

format Age age\_range.

Party $Party.

Ques1-Ques4 $likeness.;

datalines;

23 D 1 1 2 2

45 R 5 5 4 1

67 D 2 4 3 3

39 R 4 4 4 4

19 D 2 1 2 1

75 D 3 3 2 3

57 R 4 3 4 4

;

/\*title 'Voter details :';

proc print data=voter1 label;

run; This is optional. \*/

title 'Frequencies for the 4 questions :';

proc freq data=voter1;

tables Ques1-Ques4;

run;

**Question 4**

\*5.9-3 SAS Program to create dataset and format color groups.;

proc format;

value $color 'R','B','G' = 'Group 1'

'Y','O' = 'Group 2'

' ' = 'Not Given'

Other = 'Group 3';

run;

data Colors;

input Color : $1. @@;

datalines;

R R B G Y Y . . B G R B G Y P O O V V B

;

title "Group of Color Frequencies";

proc freq data=Colors;

tables color / missing;

format color $color.;

run;