**Workshop3-A**

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

**Section 10.16: Problems 1, 3, 4, 5, 9, 10, 12**

**Question 1**

\*10.16-1 Program to create 2 temporary data sets with given constraints

from a given dataset. ;

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

data Subset\_A (where=(Gender='Female' and BloodType='AB'))

Subset\_B (where=(Gender='Female' and BloodType='AB' and Combined>=14));

set pract.blood;

Combined = (0.001\*WBC)+RBC;

run;

title 'List of Females with blood group: AB';

proc print data=Subset\_A;

run;

title 'List of Females with blood group: AB and Combined >= 14';

proc print data=Subset\_B;

run;

**Question 2**

\* 10.16-3 Program to create 2 temporary data sets using single data step. ;

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

data Lowmale(where=(Chol<100 AND Chol is not missing AND Gender='Male'))

Lowfemale(where=(Chol<100 AND Chol is not missing AND Gender='Female'));

set pract.blood;

run;

title 'Males with low cholestrol';

proc print data=Lowmale;

run;

title 'Females with low cholestrol';

proc print data=Lowfemale;

run;

**Question 3**

\* 10.16-4 Program to create 2 temporary data sets and print them.;

data Mountain\_USA Road\_France;

set pract.bicycles;

if Country='USA' and Model='Mountain Bike'

then output Mountain\_USA;

else if Country='France' and Model='Road Bike'

then output Road\_France;

run;

title 'Mountain Bikes in USA';

proc print data=Mountain\_USA;

run;

title 'Road bikes in France';

proc print data=Road\_France;

run;

**Question 4**

\* 10.16-5 Program to create two data sets and print resulting dataset. ;

title 'Inventory details';

proc print data=pract.inventory;

run;

title 'New Products details';

proc print data=pract.newproducts;

run;

data Updated;

set pract.inventory pract.newproducts;

run;

title 'Final 'Updated' dataset (Inventory followed by NewProducts) ';

proc print data=Updated;

run;

proc sort data=Updated;

by Price;

run;

title 'Final 'Sorted' dataset ';

proc print data=Updated;

run;

**Question 5**

\* 10.16-9 Program to merge 2 datasets as per given conditions. ;

proc sort data=pract.purchase out=Purchase\_sorted;

by Model;

run;

proc sort data=pract.inventory out=Inventory\_sorted;

by Model;

run;

data Pur\_Price;

merge Purchase\_sorted(in=InPurchase\_sorted)

inventory\_sorted;

by Model;

if InPurchase\_sorted;

TotalCost = Quantity \* Price;

format TotalCost dollar11.2;

run;

title 'Purchase Price details';

proc print data=pur\_price;

run;

**Question 6**

\* 10.16-10 Program to print results as per given conditions. ;

proc sort data=pract.purchase out=Purchase\_sorted;

by Model;

run;

proc sort data=pract.inventory out=Inventory\_sorted;

by Model;

run;

data not\_pur;

merge Purchase\_sorted (in=InPurchase\_sorted)

Inventory\_sorted (in=InInventory\_sorted);

by Model;

if InInventory\_sorted AND NOT InPurchase\_sorted;

keep Model Price;

run;

title 'List of products that were not purchased :';

proc print data=not\_pur;

run;

**Question 7**

\* 10.16-12 Program to merge 2 datasets based on identifier. ;

proc sort data=pract.demographic\_id out=demoid;

by ID;

run;

proc sort data=pract.Survey1 out=sur1;

by Subj;

run;

data final;

merge demoid sur1(rename=(Subj=ID));

by ID;

run;

title 'Final merged dataset details :';

proc print data=final;

run;