1. Run the program here to create a temporary SAS data set called **Missing**:

**DATA** MISSING;

INFILE DATALINES DLM="";

INPUT HEIGHT WEIGHT AGE NAME : $10. SEX : $6.;

DATALINES;

163 65 55 SMITH FEMALE

999 72 999 ORLANDO FEMALE

172 999 29 RAMOS NA

175 74 27 KALET MALE

180 81 31 NA NA

174 70 999 HELAKU MALE

;

**RUN**;

Converting values of 999 to a SAS missing numeric values and converting values of NA to missing character values.

1. Run the program here to create two temporary SAS data sets called **LEFT** and **RIGHT**:

**DATA** LEFT;

INPUT SUBJ $ HEIGHT WEIGHT;

DATALINES;

001 68 155

002 75 220

003 65 99

005 79 266

006 70 190

009 61 122

;

**RUN**;

**DATA** RIGHT;

INPUT SUBJ $ SALARY : DOLLAR6.3;

DATALINES;

001 $46,000

003 $67,900

004 $28,200

005 $98,202

006 $88,000

007 $57,200

;

**RUN**;

Data sets Left and Right are shown here. Use DATA STEP or PROC SQL to create a new, temporary SAS data set (**Both**) containing Subj, Height, Weight, and Salary. Do this three ways: first, include only those subjects who are in both data sets, second, include all subjects from both data sets, and third, include only those subjects who are in data set Left.

1. Run the program here to create a temporary SAS data set called **Voter**:

**DATA** VOTER;

INPUT AGE PARTY:$1. (QUES1-QUES4)($1. +**1**);

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

;

**RUN**;

Add formats for Age (**0–30, 31–50, 51–70, 71+**), Party (**D = Democrat, R =**

**Republican**), and Ques1–Ques4 (**1=Strongly Disagree, 2=Disagree, 3=No**

**Opinion, 4=Agree, 5=Strongly Agree**). In addition, label Ques1–Ques4 as

follows:

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**

**Note:** Use PROC PRINT to list the observations in this data set and PROC FREQ to list frequencies for the four questions. (The default action of PROC PRINT

is to head each column with a variable name, not the label. To use labels as

column headings, use the LABEL option with PROC PRINT.)

1. Run the program here to create a temporary SAS data set called **PATIENTS**:

**DATA** PATIENTS;

INPUT @**1** ID $3.

@**4** DATE MMDDYY8.

@**12** HR **3.**

@**15** SBP **3.**

@**18** DBP **3.**;

FORMAT DATE MMDDYY10.;

DATALINES;

00710211983070120080

00712011983072130090

00909031983066110070

00507051983074140082

00501151982080180096

00506181982070170084

00507031983064140084

;

**RUN**;

This is a longitudinal data, suppose we are collecting data on a group of patients. Each time the patients come in for a visit, we fill out an encounter form. The data items we collect are:

ID: Patient ID

DATE: Date of Visit (Month Day Year)

HR: Heart Rate

SBP: Systolic Blood Pressure

DBP: Diastolic Blood Pressure

Do the following steps:

1. Keep patients who visits more than once
2. Calculate each patient’s difference between the last visit and the first visit for HR, SBP and DBP