CONTROLLING OUTPUT

In the data step, it is possible to create more than one dataset. This requires controlling when the Data Control Vector is output (see step 6 of DCV handout). In a simple data step, output occurs at the end of the data step code. These are known as **IMPLIED** outputs. However, we can force output at any point in the data step by using the **OUTPUT** statement. These are called **EXPLICIT** outputs. The following example will illustrate.

EXAMPLE 1

SAS Code:

```
DATA ONE;
     INFILE 'A:\EXP.DAT';
     INPUT SOIL $ TRT COUNT1 COUNT2;

     IF SOIL = 'A';

     RUN;
```

**IMPLIED
OUTPUT**

```
DATA TWO THREE;
     SET ONE;

     IF SOIL = 'A' THEN OUTPUT TWO;

     ELSE IF SOIL = 'B' THEN OUTPUT THREE;

  RUN;
```

**EXPLICIT
OUTPUT**

CONTROLLING OUTPUT (cont.)

Another aspect of controlling output is the ability to limit what elements of the **DCV** go out to the data set. In other words, what variables are kept in the data set. Many times we may have intermediate variables which are not used for the final analysis. To be efficient, we would like to eliminate these. SAS provides **Data Set Options** to deal with this problem. **Data Set Options** are key words that allow a user to throw out (**DROP**), retain (**KEEP**), or change the names of (**RENAME**) variables. In a previous example, we rearranged some repeated measures data. When finished, we only needed the 3 variables PLANT, TIME, and WEIGHT and could eliminate WT1, WT2, WT3, .., WT10. This can be done in 2 ways:

EXAMPLE 2

SAS Code:

```
DATA PLANTS (KEEP = PLANT TIME WEIGHT);
      INFILE 'A:\GROWTH.DAT';
      INPUT PLANT WT1 WT2 WT3 ... WT10;
      ARRAY WTS{10} WT1 - WT10;
      DO TIME = 1 TO 10;
            WEIGHT = WTS{TIME};
            OUTPUT
      END;
```

OR EQUIVALENTLY

```
DATA PLANTS (DROP = WT1 - WT10);
      INFILE 'A:\GROWTH.DAT';
      INPUT PLANT WT1 WT2 WT3 ... WT10;
      ARRAY WTS{10} WT1 - WT10;
      DO TIME = 1 TO 10;
            WEIGHT = WTS{TIME};
            OUTPUT
      END;
```