```
1  ************************************************************;
2  *  Using Conditional DO Loops                              *;
3  ************************************************************;
4  *  Syntax                                                  *;
5  *                                                          *;
6  *    DATA output-table;                                    *;
7  *       SET input-table;                                   *;
8  *       . . .                                              *;
9  *       DO UNTIL | WHILE (expression);                     *;
10 *          . . . repetitive code . . .                     *;
11 *          OUTPUT;                                         *;
12 *       END;                                               *;
13 *       DO index-column = start TO stop <BY increment>     *;
14 *          UNTIL | WHILE (expression);                     *;
15 *          . . . repetitive code . . .                     *;
16 *          OUTPUT;                                         *;
17 *       END;                                               *;
18 *       . . .                                              *;
19 *       OUTPUT;                                            *;
20 *    RUN;                                                  *;
21 ************************************************************;
22
23 ************************************************************;
24 *  Demo                                                    *;
25 *  1) Open the PG2.SAVINGS2 table. This table contains a   *;
26 *     column named Savings that is the current value of    *;
27 *     each person's savings account. Notice that Linda's   *;
28 *     value is already greater than 3000.                  *;
29 *  2) Notice the DO UNTIL expression is Savings equal to   *;
30 *     3000. Run the program. Because Savings is never      *;
31 *     equal to 3000, the program is in an infinite loop.   *;
32 *     Stop the infinite DO loop from running.              *;
33 *     * In SAS Enterprise Guide, click the Stop toolbar    *;
34 *       button on the Program tab.                         *;
35 *     * In SAS Studio, click Cancel in the Running pop-up  *;
36 *       window.                                            *;
37 *  3) Make the following modifications to the DATA step.   *;
38 *     a) Replace the equal sign with a greater than        *;
39 *        symbol.                                           *;
40 *     b) Add a sum statement inside the DO loop to create  *;
41 *        a column named Month that will increment by 1     *;
42 *        for each loop.                                    *;
43 *     c) Before the DO loop add an assignment statement    *;
44 *        to reset Month to 0 each time a new row is read   *;
45 *        from the input table.                             *;
46 *  4) Run the program. Notice that even though Linda       *;
47 *     began with 3600 for Savings, the DO LOOP executed    *;
48 *     once.                                                *;
49 *  5) Change the DO UNTIL expression to DO WHILE so that   *;
50 *     the condition will be checked at the top of the      *;
51
52
```

```
53 *     loop. Run the program and verify Linda's Savings    *;
54 *     amount is 3600.                                     *;
55 ********************************************************;
56
57 data MonthSavings;
58    set pg2.savings2;
59    do while (Savings<3000);
60       Savings+Amount;
61       Savings+(Savings*0.02/12);
62    end;
63    format Savings comma12.2;
64 run;
65
66
```