```
1  ************************************************************;
2  *  LESSON 3, PRACTICE 3                                    *;
3  *  a) The program contains a PROC SORT step that creates   *;
4  *     the WINTER2015_2016 table. This table contains rows  *;
5  *     with dates with some snowfall between October 1,     *;
6  *     2015, and April 1, 2016, sorted by Code and Date.    *;
7  *     Only the Name, Code, Date, and Snow columns are      *;
8  *     kept.                                                *;
9  *  b) Modify the DATA step to create the SNOWFORECAST      *;
10 *     table based on the following specifications:         *;
11 *     1) Process the data in groups by Code.               *;
12 *     2) For the first row within each Code group, create  *;
13 *        a new column named FirstSnow that is the date of  *;
14 *        the first snowfall for that code.                 *;
15 *     3) For the last row within each Code group, do the   *;
16 *        following:                                        *;
17 *        a) Create a new column named LastSnow that is     *;
18 *           the date of the first snowfall for that code.  *;
19 *        b) Create a new column named WinterLengthWeeks    *;
20 *           that counts the number of full weeks between   *;
21 *           the FirstSnow and LastSnow dates.              *;
22 *        c) Create a new column named ProjectedFirstSnow   *;
23 *           that is the same day of the first snowfall     *;
24 *           for the next year.                             *;
25 *        d) Output the row to the new table.               *;
26 *     4) Apply the DATE7. format to the FirstSnow,         *;
27 *        LastSnow, and ProjectedFirstSnow columns and      *;
28 *        drop the Date and Snow columns.                   *;
29 ************************************************************;
30
31
32 proc sort data=pg2.np_weather(keep=Name Code Date Snow)
33           out=winter2015_2016;
34     where date between '01Oct15'd and '01Jun16'd and Snow > 0;
35     by Code Date;
36 run;
37
38 data snowforecast;
39     set winter2015_2016;
40
41 run;
```