```
1  ************************************************************;
2  *  LESSON 3, PRACTICE 6                                    *;
3  *  a) Run the program. Notice that the Column1 column      *;
4  *     contains raw data with values separated by various   *;
5  *     symbols. The SCAN function is used to extract the    *;
6  *     ParkCode and ParkName values.                        *;
7  *  b) Examine the PROC CONTENTS report. Notice that        *;
8  *     ParkCode and ParkType have a length of 200, which    *;
9  *     is the same as Column1.                              *;
10 *     Note: When the SCAN function creates a new column,   *;
11 *     the new column will have the same length as the      *;
12 *     column listed as the first argument.                 *;
13 *  c) The ParkCode column should include only the first    *;
14 *     four characters in the string. Add a LENGTH          *;
15 *     statement to define the length of ParkCode as 4.     *;
16 *  d) The length for the ParkName column can be optimized  *;
17 *     by determining the longest string and setting an     *;
18 *     appropriate length. Modify the DATA step to create   *;
19 *     a new column named NameLength that uses the LENGTH   *;
20 *     function to return the position of the last          *;
21 *     non-blank character for each value of ParkName.      *;
22 *  e) Use a RETAIN statement to create a new column named  *;
23 *     MaxLength that has an initial value of zero.         *;
24 *  f) Use an assignment statement and the MAX function to  *;
25 *     set the value of MaxLength to either the current     *;
26 *     value of NameLength or MaxLength, whichever is       *;
27 *     larger.                                              *;
28 *  g) Use the END= option in the SET statement to create   *;
29 *     a temporary variable in the PDV named LastRow.       *;
30 *     LastRow will be zero for all rows until the last     *;
31 *     row of the table, when it will be 1. Add an IF-THEN  *;
32 *     statement to write the value of MaxLength to the     *;
33 *     log if the value of LastRow is 1.                    *;
34 ************************************************************;
35
36
37 data parklookup;
38     set pg2.np_unstructured_codes;
39     ParkCode=scan(Column1, 2, '{}:,"()-');
40     ParkName=scan(Column1, 4, '{}:,"()');
41 run;
42
43 proc print data=parklookup(obs=10);
44 run;
45
46 proc contents data=parklookup;
47 run;
48
```