## Restructuring a Table Using the DATA Step: Narrow to Wide

The **pg2.np_2016camping** table contains public use statistics for camping in 2016 from the National Park Service. To enable statistics to be calculated for individual camping locations, restructure the table as a wide table.

1. Examine the **pg2.np_2016camping** table to determine the three unique values of the **CampType** column.

   The three values of **CampType** are *Tent*, *RV*, and *Backcountry*.

2. Create a program.

   - Write a DATA step to read **pg2.np_2016camping** and create **camping_wide**.
   - Use IF-THEN/ELSE statements to assign **CampCount** to the **Tent**, **RV**, and **Backcountry** columns based on the value of **CampType**.
   - Use the RETAIN statement to hold the values of **ParkName**, **Tent**, **RV**, and **Backcountry** in the PDV each time that the PDV reinitializes.
   - Use the BY statement to group the data by **ParkName**.
   - Add a subsetting IF statement to output the last row for each value of **ParkName**.
   - Keep the **ParkName**, **Tent**, **RV**, and **Backcountry** columns.
   - Format **Tent**, **RV**, and **Backcountry** with commas.
   - Submit the program and confirm that a column exists for each unique camping location (**Tent**, **RV**, and **Backcountry**).

```
data work.camping_wide;
    set pg2.np_2016Camping;
    by ParkName;
    keep ParkName Tent RV Backcountry;
    format Tent RV Backcountry comma12.;
    retain ParkName Tent RV Backcountry;
    if CampType='Tent' then Tent=CampCount;
    else if CampType='RV' then RV=CampCount;
    else if CampType='Backcountry' then Backcountry=CampCount;
    if last.ParkName;
run;
```

3. How many rows are in the **camping_wide** table?

   The **camping_wide** table has 126 rows.