Restructuring a Table Using PROC TRANSPOSE: Wide to Narrow

The **pg2.np_2017camping** table contains public use statistics for camping in 2017 from the National Park Service. Convert the data from a wide table to a narrow table.

1. Open **p207p04.sas** from the **practices** folder. Submit the PROC PRINT step to display the first five rows of **pg2.np_2017camping**. Notice that the table contains three columns (**Tent**, **RV**, and **Backcountry**) with visitor counts for each value of **ParkName**. In addition, notice that the table is sorted by **ParkName**.

2. Modify the PROC TRANSPOSE step.

    - Add the OUT= option to create a table named **work.camping2017_t**.
    - Add the BY statement to group the data by **ParkName**. This creates one row in the output table for each unique value of **ParkName**.
    - Add the VAR statement to transpose the **Tent** and **RV** columns.
    - Submit the PROC TRANSPOSE step and examine the output data.

```
proc transpose data=pg2.np_2017camping
               out=work.camping2017_t;
    by ParkName;
    var Tent RV;
run;
```

3. How many rows and columns are in the **camping2017_t** table? What are the column names?

    The **camping2017_t** table has 254 rows and three columns. The column names are **ParkName**, **_NAME_**, and **COL1**.

4. Modify the program.

    - Use the NAME= option to specify **Location** as the name for the column that contains the names of the columns from the input table.
    - Use the RENAME= data set option after the output table to rename **COL1** as **Count**.
    - Submit the PROC TRANSPOSE step and verify the results.

```
proc transpose data=pg2.np_2017camping
               out=work.camping2017_t (rename=(COL1=Count)) name=Location;
    by ParkName;
    var Tent RV;
run;
```

5. What are the column names in the **camping2017_t** table?

    The column names are **ParkName**, **Location**, and **Count**.