Working with Date/Time Values

The **pg2.np_hourlyrain** table contains hourly rain amounts for the Panther Junction, TX, station located in Big Bend National Park. The **DateTime** column contains date/time values.

1. Open the **p203p02.sas** program from the **practices** folder. Submit the program and notice that each row includes a datetime value and rain amount. The **MonthlyRainTotal** column represents a cumulative total of **Rain** for each value of **Month**.

2. Modify the program.

   - Uncomment the subsetting IF statement to continue processing a row only if it is the last row within each month.
   - After the subsetting IF statement, create the following new columns:
     - **Date** – the date portion of the **DateTime** column
     - **MonthEnd** – the last day of the month
   - Format **Date** and **MonthEnd** as a date value.
   - Keep only the **StationName**, **MonthlyRainTotal**, **Date**, and **MonthEnd** columns.
   - Submit the program and examine the output data.

```
data rainsummary;
    set pg2.np_hourlyrain;
    by Month;
    if first.Month=1 then MonthlyRainTotal=0;
    MonthlyRainTotal+Rain;
    if last.Month=1;
    Date=datepart(DateTime);
    MonthEnd=intnx('month',Date,0,'end');
    format Date MonthEnd date9.;
    keep StationName MonthlyRainTotal Date MonthEnd;
run;
```

3. What are the values of **Date** and **MonthEnd** in row 1?

   Date has a value of *24JAN2017* and **MonthEnd** is *31JAN2017*.