## Determining Maximum Amounts

The RETAIN statement can be used for purposes other than accumulating columns. Use the **pg2.np_monthlytraffic** table, which contains monthly traffic counts at locations in national parks. Create new columns that sequentially store the maximum value to date for **Count**, as well as the corresponding values for **Month** and **Location**.

1. Create a table, **cuyahoga_maxtraffic**, from the **pg2.np_monthlytraffic** table. Use the following specifications:

    - Include only rows where **ParkName** is equal to *Cuyahoga Valley NP*.
    - Create three columns: **TrafficMax**, **MonthMax**, and **LocationMax**. Initialize **TrafficMax** to 0.
    - If the current traffic count is greater than the value in **TrafficMax**, then:
        - set the value of **TrafficMax** equal to **Count**
        - set the value of **MonthMax** equal to **Month**, and
        - set the value of **LocationMax** equal to **Location**
    - Format the **Count** and **TrafficMax** columns so that values are displayed with commas.
    - Keep only the **Location**, **Month**, **Count**, **TrafficMax**, **MonthMax**, and **LocationMax** columns in the output table.
    - Submit the program and examine the ouput data.

```
data cuyahoga_maxtraffic;
    set pg2.np_monthlyTraffic;
    where ParkName = 'Cuyahoga Valley NP';
    retain TrafficMax 0 MonthMax LocationMax;
    if Count>TrafficMax then do;
        TrafficMax=Count;
        MonthMax=Month;
        LocationMax=Location;
    end;
    format Count TrafficMax comma15.;
    keep Location Month Count TrafficMax MonthMax LocationMax;
run;
```

2. What is the value of **TrafficMax** in row 4, and why?

    **TrafficMax** retains the value of 1,447 from the previous row, because the 772 value of **Count** in row 4 is not greater than the current value of **TrafficMax**.