Controlling Execution of DO Loop Statements with CONTINUE and LEAVE

The **pg2.storm_summary** table contains information about storms, including storm name, basin, maximum wind speed, and the start and end dates. You want to calculate the duration of each storm in days and count the number of working days lost in 2015.

1. Open **p206p06.sas** from the **practices** folder. Submit the program and examine the results. Note that the values for **Duration** and **LostWork2015** are incorrect.

2. Modify the DATA step program to correctly calculate duration and the number of lost work days in 2015 for each storm.

   ○ When calculating **Duration**, include both the start and end dates in the number of days.
   ○ Use a DO loop and accumulating variable **LostWork2015** to calculate the number of work days lost. Within the DO loop, do the following:
      ▪ Test to see whether **ThisDay** is in the year 2015.
         ▪ If not, exit the DO loop because there will be no further work days that occur in 2015 for the given storm. Review the SAS documentation for the LEAVE statement.
      ▪ If the current day of the week is Sunday or Saturday, skip the remaining statements in the DO loop and go to the next iteration. Review the SAS documentation for the CONTINUE statement.
      ▪ Otherwise, increment **LostWork2015** by 1.
   ○ Submit the program and examine the results. The table **work.storm_workdays** should have 95 rows and seven columns.

```
data storm_workdays;
    set pg2.storm_summary;
    where year(StartDate)=2015 and name is not missing;
    Duration=EndDate-StartDate+1;
    LostWork2015=0;
    do ThisDay = StartDate to EndDate;
        /* if the current day is not in 2015, exit the DO loop */
        if year(ThisDay) ne 2015 then leave;
        /* if the current day is not a work day, skip the rest
           of the statements in the loop, and loop again*/
        if weekday(ThisDay) in (1,7) then continue;
        LostWork2015+1;
    end;
    keep Name Basin MaxWindMPH StartDate EndDate
         Duration LostWork2015;
run;

title1 'Work Days Lost in 2015 due to Storms';
title2 '(where started in 2015 and ended in 2016)';
proc print data=storm_workdays;
    where year(StartDate) ne year(EndDate);
run;
title;
```