4 <u>Step-by-Step Programming with</u> Base SAS

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Step-by-Step Programming with Base SAS





Performing More Than One Action in an IF-THEN Statement

Several changes are needed in the observations for Madrid and Amsterdam. One way to select those observations is to evaluate an IF condition in a series of IF-THEN statements, as follows:

```
/* multiple actions based on the same condition */
data updatedattractions;
set mylib.attractions;
if City = 'Madrid' then Museums = 3;
if City = 'Madrid' then Other = 2;
if City = 'Amsterdam' then TourGuide = 'Vandever';
if City = 'Amsterdam' then YearsExperience = 4;
run;
```

To avoid writing the IF condition twice for each city, use a DO group in the THEN clause, for example:

IF condition THEN

DO;
...more SAS statements...
END;

The DO statement causes all statements following it to be treated as a unit until a matching END statement appears. A group of SAS statements that begin with DO and end with END is called a DO group.

The following DATA step replaces the multiple IF-THEN statements with DO groups:

```
/* a more efficient method */
data updatedattractions2;
   set mylib.attractions;
   if City = 'Madrid' then
      do;
         Museums = 3;
         Other = 2;
      end;
   else if City = 'Amsterdam' then
         TourGuide = 'Vandever';
         YearsExperience = 4;
      end;
run;
proc print data=updatedattractions2;
   title 'Data Set MYLIB.UPDATEDATTRACTIONS';
run;
```

The following output displays the results.

Using DO Groups to Produce a Data Set