Updating a Custom Format by Using the CNTLOUT= Option

The **pg2.np_summary** table contains public use statistics from the National Park Service. The values of the **Type** column represent the park type as a code. A format is applied to display descriptive values for the park types.

1. Open **p204p06.sas** from the **practices** folder. Submit the program and review the results. Notice that some of the park types are still displayed as codes because the custom format does not include a label for those values.

2. Write a PROC FORMAT step.

   - Use the CNTLOUT= option to create a table named **typfmtout** from the existing $TypCode format.
   - Submit the step and view the output table.

   The **typfmtout** table contains several extra columns, but the critical columns for this practice are **FmtName**, **Start**, and **Label**. Notice that the values for **FmtName** do not include the $ as a prefix.

   ```
   proc format cntlout=typfmtout;
       select $TypCode;
   run;
   ```

3. Open the **pg2.np_newcodes** table. Notice that it contains the format name, the **Type** values, and the labels in the **FmtName**, **Start**, and **Label** columns.

4. Write a DATA step.

   - Create a table named **typfmt_update** by concatenating the output table from PROC FORMAT and the **pg2.np_newcodes** table.
   - Change the values of **FmtName** to *$TypCode*.
   - Keep only the **FmtName**, **Start**, and **Label** columns.
   - Submit this step.

   ```
   data typfmt_update;
       set typfmtout pg2.np_newcodes;
       keep FmtName Start Label;
       FmtName='$TypCode';
   run;
   ```

5. Write a PROC FORMAT step.

   - Re-create the $TypCode format using the CNTLIN= option to read the new table that contains the updated format values.
   - Submit this step.

   ```
   proc format cntlin=typfmt_update;
   run;
   ```

6. Submit the PROC FREQ step again and verify that all **Type** codes are displayed with labels.

7. What is the frequency value of **National Preserve**?

The frequency value of **National Preserve** is 7.