



## Practice

If you restarted your SAS session, open and submit the **libname.sas** program in the course files.

### Level 1

#### 1. Importing Excel Data from a Single Worksheet

Create a table that contains a copy of the data that is in an Excel workbook. The Excel workbook contains a single worksheet.

- a. Open **p102p01.sas** from the **practices** folder. Complete the PROC IMPORT step to read **eu\_sport\_trade.xlsx**. Create a SAS table named **eu\_sport\_trade** and replace the table if it exists.
- b. Modify the PROC CONTENTS code to display the descriptor portion of the **eu\_sport\_trade** table. Submit the program, and then view the output data and the results.

	▲ Sport_Product	▲ Geo_Code	▲ Country	⑫ Year	⑫ Amt_Import	⑫ Amt_Export
1	BALL	BE	Belgium	2000	26,115,000	7,915,000
2	BALL	BE	Belgium	2001	23,456,000	10,546,000
3	BALL	BE	Belgium	2002	33,800,000	14,738,000
4	BALL	BE	Belgium	2003	33,206,000	24,711,000
5	BALL	BE	Belgium	2004	33,360,000	15,890,000
6	BALL	BE	Belgium	2005	41,006,000	40,189,000
7	BALL	BE	Belgium	2006	43,169,000	35,566,000

Alphabetic List of Variables and Attributes						
#	Variable	Type	Len	Format	Informat	Label
6	Amt_Export	Num	8	COMMA15.		Amt_Export
5	Amt_Import	Num	8	COMMA15.		Amt_Import
3	Country	Char	37	\$37.	\$37.	Country
2	Geo_Code	Char	2	\$2.	\$2.	Geo_Code
1	Sport_Product	Char	7	\$7.	\$7.	Sport_Product
4	Year	Num	8	BEST.		Year

### Level 2

#### 2. Importing Data from a CSV File

Create a table from a comma-delimited CSV file.

##### np\_traffic.csv

```
ParkName,UnitCode,ParkType,Region,TrafficCounter,ReportingDate,TrafficCount
Big Hole NB,BIHO,National Battlefield,Pacific West,TRAFFIC COUNT AT BATTLE ROAD,31JAN2016,0
Big Hole NB,BIHO,National Battlefield,Pacific West,TRAFFIC COUNT AT BATTLE ROAD,29FEB2016,0
Big Hole NB,BIHO,National Battlefield,Pacific West,TRAFFIC COUNT AT BATTLE ROAD,31MAR2016,0
Big Hole NB,BIHO,National Battlefield,Pacific West,TRAFFIC COUNT AT BATTLE ROAD,30APR2016,183
Big Hole NB,BIHO,National Battlefield,Pacific West,TRAFFIC COUNT AT BATTLE ROAD,31MAY2016,289
```

- Create a new program. Write a PROC IMPORT step to read the **np\_traffic.csv** file and create the **traffic** SAS table. Add a PROC CONTENTS step to view the descriptor portion of the newly created table. Submit the program.
- Examine the data interactively. Scroll down to row 37. Notice that the values of **ParkName** and **TrafficCounter** seem to be truncated. Modify the program to resolve this issue.
- Submit the program and verify that **ParkName** and **TrafficCounter** are no longer truncated.

37	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31JAN2016	0
38	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	29FEB2016	0
39	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31MAR2016	0
40	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	30APR2016	0
41	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31MAY2016	5808
42	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	30JUN2016	3747
43	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31JUL2016	3655
44	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31AUG2016	4605
45	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	30SEP2016	3605
46	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31OCT2016	4422

## Challenge

### 3. Importing Data with a Specific Delimiter

Create a table from **np\_traffic.dat**. The values in the text file are delimited with a pipe (that is, a vertical bar).

```
ParkName|UnitCode|ParkType|Region|TrafficCounter|ReportingDate|TrafficCount
Big Hole NB|BIHO|National Battlefield|Pacific West|TRAFFIC COUNT AT BATTLE ROAD|31JAN2016|0
Big Hole NB|BIHO|National Battlefield|Pacific West|TRAFFIC COUNT AT BATTLE ROAD|29FEB2016|0
Big Hole NB|BIHO|National Battlefield|Pacific West|TRAFFIC COUNT AT BATTLE ROAD|31MAR2016|0
Big Hole NB|BIHO|National Battlefield|Pacific West|TRAFFIC COUNT AT BATTLE ROAD|30APR2016|183
Big Hole NB|BIHO|National Battlefield|Pacific West|TRAFFIC COUNT AT BATTLE ROAD|31MAY2016|289
```

- Access the [SAS Procedures Guide](#). Expand **Procedures** and find the **IMPORT Procedure** section. Review the syntax and examples to determine how to read a file that is delimited with a specific symbol.
- Use PROC IMPORT to import the **np\_traffic.dat** file and create the temporary **traffic2** SAS table.

Partial Results (rows 37-46 of 2,784)

37	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31JAN2016	0
38	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	29FEB2016	0
39	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31MAR2016	0
40	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	30APR2016	0
41	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31MAY2016	5808
42	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	30JUN2016	3747
43	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31JUL2016	3655
44	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31AUG2016	4605
45	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	30SEP2016	3605
46	City of Rocks NRES	CIRO	National Reserve	Pacific West	TRAFFIC COUNT AT CIRCLE CREEK ENTRANCE	31OCT2016	4422

### 4. SAS Studio: Assigning a Library Automatically at Start-Up

Recall that when SAS shuts down, library references are deleted. It might be helpful to have certain libraries that are automatically defined when SAS starts.

- In the Files and Folders section of the navigation pane, navigate to the folder where your course data is stored (for example **s:/workshop/data**). Right-click the folder and select **Create** ⇒ **Library**. If necessary, enter **PG1** in the **Name** field and click the **Re-create this library at start-up** check box. Click **OK**.
- A LIBNAME statement is added to an autoexec program that runs each time SAS starts. The program can be accessed and edited by selecting **More application options** ⇒ **Edit Autoexec File**.

- c. To test the library, select **More application options** ⇒ **Reset SAS Session**. Expand the **Libraries** section of the navigation pane and verify that the **pg1** library is available.

## 5. SAS Enterprise Guide: Assigning a Library Automatically at Start-Up

Recall that when SAS shuts down, library references are deleted. It might be helpful to have certain libraries that are automatically defined when SAS starts.

- a. Select **Tools** ⇒ **Options** ⇒ **SAS Programs**. Select the **Submit SAS code when server is connected** check box and click **Edit**. You can include any SAS code that you want to execute each time SAS starts. Type a LIBNAME statement, click **Save**, and then click **OK**.

**Note:** Change the path if necessary to match the location of your course data.

```
libname pg1 base "s:/workshop/data";
```

- b. To test the library, select **Local** in the Servers list, click **Disconnect**, and then click **Yes**. Expand **Local** to start SAS again, and then expand **Libraries** to confirm that **pg1** is available.

**End of Practices**