Practice

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

Level 1

1. **Concatenating Like-Structured Tables**

    Create a table that contains monthly public use statistics for 2015 and 2016 from the National Park Service.

    a. Open the **p205p01.sas** program in the **practices** folder. Complete the SET statement to concatenate the **pg2.np_2015** and **pg2.np_2016** tables to create a new table, **np_combine**.

    b. Use a WHERE statement to include only rows where **Month** is 6, 7, or 8.

    c. Create a new column named **CampTotal** that is the sum of **CampingOther**, **CampingTent**, **CampingRV**, and **CampingBackcountry**. Format the new column with commas.

    > **Note:** Use a column list to specify that all columns beginning with *Camping* be included as arguments in the SUM function.

|	ParkCode	ParkType	Region	State	Year	Month	DayVisits	LodgingOther	CampTotal
1	ABLI	National Historical Park	Southeast	KY	2015	6	20,274	0	0
2	ABLI	National Historical Park	Southeast	KY	2015	7	23,214	0	0
3	ABLI	National Historical Park	Southeast	KY	2015	8	18,854	0	0
4	ACAD	National Park	Northeast	ME	2015	6	359,661	0	25,185
5	ACAD	National Park	Northeast	ME	2015	7	606,597	0	44,944
6	ACAD	National Park	Northeast	ME	2015	8	666,767	0	44,276
7	ADAM	National Historical Park	Northeast	MA	2015	6	30,123	0	0
8	ADAM	National Historical Park	Northeast	MA	2015	7	29,219	0	0

Level 2

2. **Concatenating Unlike-Structured Tables**

    Create a table that contains monthly public use statistics for 2014, 2015, and 2016 from the National Park Service.

    a. Complete the Level 1 practice or open and run the **p205p01_s.sas** program in the **practices/solutions** folder.

    b. Open the **pg2.np_2014** table and compare the column names with the **np_combine** table. Which column or columns in **np_2014** must be renamed to match columns in **np_combine**?

    c. Modify the DATA step to concatenate the **pg2.np_2014**, **pg2.np_2015**, and **pg2.np_2016** tables. Rename the columns as necessary to align the columns with similar values.

    d. In addition to filtering rows by **Month**, also include only rows where **ParkType** is *National Park*.

e. Arrange the newly created table in ascending order by **ParkType**, **ParkCode**, **Year**, and **Month**.

	ParkCode	ParkType	Region	State	Year	Month	DayVisits	LodgingOther	CampTotal
1	ACAD	National Park	Northeast	ME	2014	6	338,845	0	24,894
2	ACAD	National Park	Northeast	ME	2014	7	561,073	0	43,781
3	ACAD	National Park	Northeast	ME	2014	8	638,152	0	45,117
4	ACAD	National Park	Northeast	ME	2015	6	359,661	0	25,185
5	ACAD	National Park	Northeast	ME	2015	7	606,597	0	44,944
6	ACAD	National Park	Northeast	ME	2015	8	666,767	0	44,276
7	ACAD	National Park	Northeast	ME	2016	6	445,410	0	33,729
8	ACAD	National Park	Northeast	ME	2016	7	696,854	0	52,053

End of Practices