



Module 4 Creating and Accessing SAS Data Sets and Importing Data

SAS names:

- Must start with an English letter or an _ (underscore)
- Cannot contain blanks
- Must be unique (i.e., variables names must be unique in their data set, data set names must be unique in their library).
- Should not use special characters (@, %, &, etc.), which in most cases are not allowed.

Creating a Library

3 things to decide before creating a library:

1. The name of the library.
2. The physical location where the data in the library will be stored.
3. Will the library name be saved and automatically available in future SAS sessions?

Libname statement syntax:

```
LIBNAME libraryname "location on computer\folder";
```

SASSI Specific Libname Statement:

```
LIBNAME sassi 'c:\temp\Sassi';
```

Libname statements must be run before you try to access the data in the library. Multiple libraries can be active in a given SAS session.

Creating a SAS Data Set

3 Things to decide before creating a data set.

1. The source of the data and where it is located on the computer, including file type.
2. The library where the data set will be stored.
3. The name of the new SAS data set.

Importing Data

You can use the Import Wizard to import data. The wizard provides instructions to perform this task. The wizard is found in the **File** drop down menu.

You can also use SAS's Access and Excel engines to create libnames that allow you to directly read Microsoft Access and Excel data as if these data were SAS data sets. The syntax for reading an Excel file is:

```
OPTIONS VALIDVARNAME=ANY;  
LIBNAME libraryname 'datapath\excelfile.xls';
```

For an Access file:

```
OPTIONS VALIDVARNAMES=ANY;  
LIBNAME libraryname 'datapath\accessfile.mdb';
```

To read an existing SAS data set and write the data set to a new file, use the following syntax:

```
DATA newdatasetname;  
SET olddatasetname;  
RUN;
```

Referring to data sets in SAS

Data set in a permanent library → libraryname.datasetname

Temporary data set in the work library → datasetname or work.datasetname

Practice Exercises

Included in the data sets downloaded for the module are practice excel, access and SAS data files. You may want to use them to practice importing and creating new data sets.