Quick SAS Tips

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High Level Things to Know

- SAS is a statistical software package well suited to handling large data sets
- Federal data sets are commonly stored as SAS data files (these end in the extension sas7bdat)
- SAS can handle multiple data sets simultaneously and keep them in its remote memory.
- SAS is not case sensitive and has extensions for using other languages particularly SQL and Python.

SAS Versions

SAS 9,4 is available for download for University of Maryland affiliates.

SAS can be accessed online via SAS Studio

The basics of doing anything in SAS

Loading in Data

- Most data is loaded, modified and saved within a data statement. This corresponds to:

```
data new; /*Saves new data*/
set existing; /*Loads existing data set*/
run; /*Runs or compiles the statement*/
```

- Performing analysis on an existing data follows the following structure:

The basics of doing anything in SAS

Analyzing Data

- Once the data is loaded, analysis can be run using the following general structure.

```
proc somecommand data=existing;
intermediate statements;
run;
```

Finding and Working with Data

- By default SAS looks for data and stores data within a temporary working directory. This can be found in SAS's explorer window.
- Data sets also exist in a directory internal to sas called sashelp.
- Users can tell SAS to look at external directories with a libname statement.

```
libname somename "/specified/full/location";
```

Working with Outside Data Locations

- Once a libname is specified, data can be loaded in and saved in other locations.
- Data can be saved by adding such a location to the data step.
- Here's a hypothetical example:

```
libname save "/specified/full/location";
libname load "/specified/full/location2";

data save.data;
set load.read;
run;
```

Exporting Data

- Data can be easily exported to other programs and format.
- Two formats frequently used are xlsx (excel) and dta (stata).

```
proc export data=somesasdata filename="\full
location\
dataname.extension" dbms=extension;
/*Example of common extensions
are .xlsx or .dta*/
run;
```

General Suggestions for Getting Started

- The commands shown here can be entered via SAS's program editor.
- The program editor will be the script that allows users to create and reproduce data and results.
- Always use the log file to confirm that code was executed correctly.
- Unless data needs to be shared, there isn't a need to save it to a physical location. The working directory works.
- It is good practice to use a different name for data in the data step versus the set step–this prevents data from being overwritten.