

Homework 1

Due: Thursday, January 13th (before 11:59 pm PST) on Gauchospace.

Instructions: For the General Knowledge Questions, answer as succinctly as possible. For the Programming Assignment, show a partial screenshot of your output. Submit your code separately as a SAS program file.

General Knowledge Questions

1. Which window is used to edit, execute, and save SAS programs?
2. Which keyboard shortcut can be used to create a new SAS program?
3. What is the key difference between the PROC and DATA steps?
4. Within the same SAS program, are the variable names *City* and *city* considered to be the same? Why or why not?
5. What is the purpose of writing comments within a program?
6. What are SAS libraries?
7. Why should SAS date variables be of numeric type?
8. When using a DATALINES statement, an ____ statement is required to help SAS process the raw data.
9. Write a statement that is equivalent to the following statement:

```
where score >= 90;
```
10. In the PRINT procedure, which statement is used to assign strings to replace variable names as column headers?

Programming Assignment

1. Create a folder called `data1` in your home folder in SAS Studio. Now create a library called **`data1`** that points to the `data1` folder.
2. Create a data set called `summer_olympics` that contains the following variables: `year`, `city`, `country`. The data is as follows:

```
2024 Paris France  
2021 Tokyo Japan  
2016 Rio Brazil  
2012 London England  
2008 Beijing China  
2004 Athens Greece  
2000 Sydney Australia
```

Create a report using your newly created data set. Suppress the observation column, and display 'Year', 'Host City', and 'Host Country' as column headers. What do you notice about the last observation?

3. Use the `person1` data set located in the `data1` library. Create a **single** report that meets the following criteria:
 - a) Only displays the variables for job code, first name, last name, and city (in this order).
 - b) Displays the following column headers: 'Job Code,' 'First Name', 'Last Name', and 'Location'.
 - c) Only displays observations where the city is Princeton or New York.
 - d) Displays the number of observations at the bottom of the report.