**Instructions:**

This is an individual exercise that will be submitted directly to the instructor using the assignment link provided on Blackboard. It is okay to ask for and help others with clarifications using the discussion board on Blackboard. Your final submission file should consist of a single zipped folder containing two Python (.py) files, one each for XML and JSON, and any flat files (e.g., .xml) that you need for your program to work.

# Assignment Objectives:

* Create a basic XML document using a text editor and process it using Python commands.
* Retrieve a JSON document using an API and process it using Python commands.
* Option: flip the objectives above – create a basic JSON document using a text editor and retrieve an XML document using an API prior to processing each using Python.

# Assignment:

**XML**

1. Select a current project or hobby that is of interest to you, and create an XML file describing a related recurring document or event. Some examples may include restaurant menus, media libraries, concert performances, or a basic project/task management list.
   1. Check your XML syntax at <http://www.w3schools.com/xml/xml_validator.asp>.
   2. Using Python’s xml libraries, load your XML from a file or a string variable. Use a loop in combination with xml library functions to display a list of items from your XML file.

**JSON**

1. Choose a JSON API and query it using Python. Several examples are provided in the text, one of which (Google Maps) doesn’t work unless you register for a key or use a workaround (there is a .py file on py4e.com that works). It is ok to use one of these (or other online) examples, on the conditions that you (1) cite your source (URL is ok), and (2) modify the code in a meaningful way, and include code comments specifying what you modified.
   1. Allow the user to enter one or more values to send to the API.
   2. Use Python’s json libraries to load the API results and display relevant data from the results.

**OPTION:** You may swap the file/string and API options such that you use an API to get XML and a file or string to load JSON, rather than the other way around as specified above.