# Lab Exercise

**GEOG 489 Programming for GIS**                                **Python basics**
**Lab 1**

Due: February 10th, 11:59:59 PM
Grading: 5 points
Late penalty: 1 point subtraction per day (No points after 5 days)

**Introduction**
This lab covers the fundamentals of Python programming, such as data types, data containers, functions, and control flows.

**Things to be submitted:**   **ONE** Jupyter notebook
(GEOG489_Lab1_[YOUR_NET_ID].ipynb).

**Tasks**

1. Launch CyberGISX (https://cybergisxhub.cigi.illinois.edu/) and create an empty Jupyter notebook (or you can reuse other notebooks created in earlier labs).

2. Copy and paste (or type) the following code into the cell you just created. This will download the lab materials from the GitHub repository to your CyberGISX environment.
   If you want to create a new cell, you can press 'b' on your keyboard or click Insert -> Insert Cell Below on the menu.

   !svn checkout https://github.com/jparkgeo/GEOG489/trunk/Labs/Lab1

```
In [1]: !svn checkout https://github.com/jparkgeo/GEOG489/trunk/Labs/Lab1

        A    Lab1/Lab1_Python_Basics.ipynb
        A    Lab1/README.md
        Checked out revision 29.
```

3. Navigate to the root folder of your CyberGISX environment. You will see a folder named 'Lab1'. Go inside of the folder and open 'Lab1_Python_Basics.ipynb'.

4. Finish the tasks described in the notebook and save the notebook in your local directory for submission.
   Name schema: 'GEOG489_Lab1_[YOUR_NET_ID].ipynb'

*Done!! Please submit the deliverables to learn.illinois.edu.*