

Creating and Running Python Programs

Note: KEEP this sheet as a reference!

You will need to follow these instructions (with minor variations) each time we meet for a Lab. I suggest keeping these instructions handy until you get comfortable with them.

Login and download lab materials

1. **Uncheck “Workstation only”** and use your Holy Cross username.

Note: If that does not work, try using the full user pathname: **.username.cl2012.stu.hcnet** (change 2012 to your class year, if necessary).

2. Open a browser and go to the course homepage:
<http://cs.holycross.edu/~csci110>
3. Click on **“Assignments”** and then **“Lab 1”**. You will see the directions for lab 1.
4. Double-click on **“My Computer”** and then on your **“P:”** drive. **Create a new folder on your P-drive named CSCI110**. Double click on the CSCI110 folder to open it. Create a new folder named Lab1. You will save all your files from the first lab in this folder.

Warning: If you use the local **“C:”** drive to save your programs, your work will be lost once you logout!

Creating a new Python program

1. Double-click on the **“IDLE (Python GUI)”** shortcut (located on the desktop).
2. Click **File→New Window**. Type your Python program in this new window.
3. When you are done, click **File→Save As**. Now select the location where you want to save your program: From the **“Save in”** drop-down menu, select **“My Computer”** and then **“P:”**, then **“CSCI110”** and **“Lab1”**. For the **“File name”** enter a suitable name ending in **“.py”**, e.g. **“hello.py”**.
Warning: Be sure to save your programs on the **“P:”** drive!

Running a Python program

1. Click on **Run→Check module**. This will highlight syntax errors in your program (if any).
2. If no errors are reported, click on **Run→Run Module** to run your program.

Modifying an existing Python program

1. Double-click on **“My Computer”** and select your P-drive and navigate to the folder that contains the program file (e.g. **“hello.py”**)
2. **Right-click** on the Python program you want to modify and select **“Edit with IDLE”**.
3. Make your modifications, and then save them by clicking **File→Save**.

Python Help

<http://docs.python.org>

This web site is the definitive Python reference. The "Library Reference" is probably the most useful as you start to learn more Python (and need to look up details about functions that you have forgotten). Some parts of the "Tutorials" might be useful, for example, to find snippets of Python code that you can borrow. (Note: be sure to cite your sources! Just put a comment in your program, like "# borrowed/modified from docs.python.org tutorial 10.8").

<http://learnpythonthehardway.org/>

This web site is really a book. It has 50+ exercises/lessons, starting from the very basics, all the way to writing your own web game in Python.

Installing Python 2.7.2 and IDLE on Your Own Computer

1. Use a web browser to go to: <http://www.python.org/download>
2. Download the appropriate **Python 2.7.2** installer for your computer, e.g. "Python 2.7.2 Windows Installer" or "Python 2.7.2 Mac OS X 64-bit/32-bit x86-64/i386 Installer".
Note: Python 3.2.2, or any other version of Python, might not be compatible with the version we are using in class. Be sure to download Python 2.7.2.
3. Run the downloaded installer and follow its instructions.

More detailed instructions for Mac users:

1. Use a web browser to go to: <http://www.python.org/download>
2. Click on the installer on the python web page:
"Python 2.7.2 Mac OS X 64-bit/32-bit x86-64/i386 Installer (for Mac OS X 10.6 and 10.7 [2])"
Note: If you have a much older computer, with an older system than 10.6, you may need the other MacOS link.
3. There should now be a disk image called "Python 2.7.2" on your desktop. Double click it to open it.
4. Click on the file "Python.mpkg"
5. Follow the instructions to install Python and IDLE on your computer
6. The IDLE application will be in a folder called "Python 2.7" in your Applications folder.
7. Double-click on the IDLE application to launch it.
8. You can now delete the "Python 2.7.2" disk image from your desktop

More detailed instructions for Windows users:

1. Use a web browser to go to: <http://www.python.org/download>
2. Click on the "Python 2.7.2 Windows Installer" link.
3. Click "Save File". Now, python-2.7.2.msi should be saved to your desktop.
4. Double click on "python-2.7.2.msi"
5. Follow the instructions to install Python and IDLE (mostly, just click "next").
6. The START menu should now have "IDLE (Python GUI)" on it. Click this to start IDLE.
7. If you like, create a desktop shortcut: right click on "IDLE (Python GUI)" in the START menu. Choose "Send To" and then choose "Desktop (create shortcut)" from the popup menu.