



Software skills for librarians

Module 3: Programming in Python Prerequisites

Thank you for your interest in this course. Because it is intended that there will be a strong practical component to the course, participants are strongly advised to bring a laptop if possible. If this is likely to be difficult then please contact me before the course as it should be quite acceptable for you to pair up with someone else.

Software installation

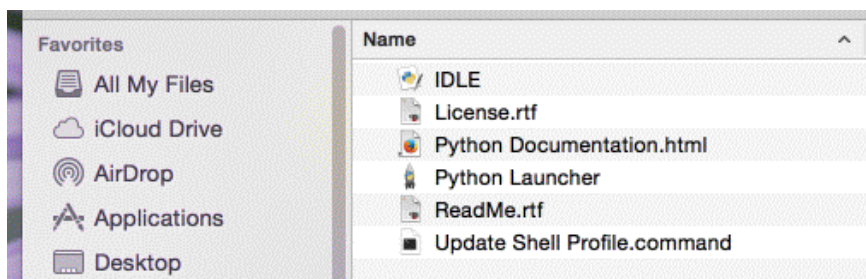
To enable the course to run as smoothly as possible, it would be helpful if you can read the following notes below and install any required software before attending. If you are borrowing a laptop, or trying this on a desktop machine in your library, then please make sure that you have the necessary privilege to install software. If you are unsure then please ask your computer officer for advice. For this part of the course you will need a version of the Python language installed on your machine. We recommend version 2.7, but if you already have another version it should be sufficient.

Linux users

Most linux distributions will have a recent version of Python installed by default. To try this, open a terminal window and type `python`. If you see a banner giving some information about the version and a prompt then all is well. If not, you can easily install the recommended version using the usual package manager on your system. On Ubuntu, and other distributions which use `apt-get`, type `sudo apt-get install python2.7`. During the course you will find a text editor useful; once again, most Linux distributions will have one installed ready (emacs is often used).

Mac users

Since about 2012, recent versions of Mac OS X already have Python installed. To see if this is the case, open your terminal window and type `which python`. If you see a pathname like `/usr/bin/python` then you will not need to install the language. If not, go to <http://www.python.org/downloads/mac-osx> and select the correct installer for version 2.7.13 for your machine. Open the download and follow the instructions, which will involve dragging the Python application to your applications directory. Installing Python in this way will also give you a simple graphical interface for writing and running programs, called IDLE. A typical installation will look something like this:

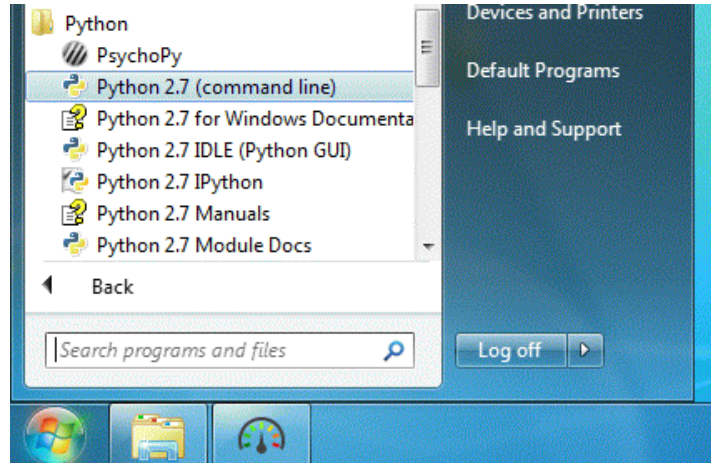


Mac OS X usually has a range of Unix like command-line text editors installed, or you can use IDLE for writing your programs. If you prefer, you may wish to install another text editor. In which case, TextWrangler is recommended. This is now free and may be downloaded from:

<http://www.barebones.com/products/textwrangler/download.html>

Windows users

Windows users will need to install the Python interpreter, and optionally a text editor. Firstly, download the correct installer for version 2.7.13 from <http://www.python.org/downloads/windows>. Now run the installer program if your browser does not offer to do this automatically, and continue by selecting the default options in most cases. If you wish to save some space on your machine, you can safely deselect the HTML help file, the utility scripts and test suite. If necessary it is possible to complete the installation without administrative rights. In this case, select 'advanced options' and 'non-admin install'. Once installation is complete, you will find an option to launch Python on your start menu:



You can either use the IDLE graphical interface to write your Python programs, or you may prefer to install another text editor. One possibility is Komodo edit available at:

<http://www.activestate.com/komodo-ide/downloads/edit>

If you choose to use this, download and run the installer. Once installation is complete, run the editor and select 'preferences' from the edit menu. From the 'Python' category, check that the pathname to the interpreter is correct. It is usually `c:\python27\python.exe`. Now choose add new command from the tools menu. In the window which appears rename your command to 'Run Python', and change the command to `%(python) %f`. Finally, under 'start in' enter `%D` and click on OK. This completes the installation.