

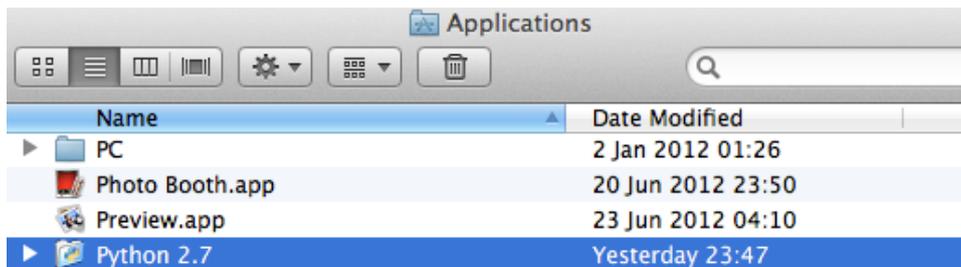
GEO_Download is a tool useful to download automatically a list of GSM samples from the GEO database (Gene Expression Omnibus).

Requirements: any operating system (Linux, Mac OS X, Windows, ...) with Python 2 or Python 3 and IDLE.

[GEO_Download_2.py](#) is for [Python 2](#).

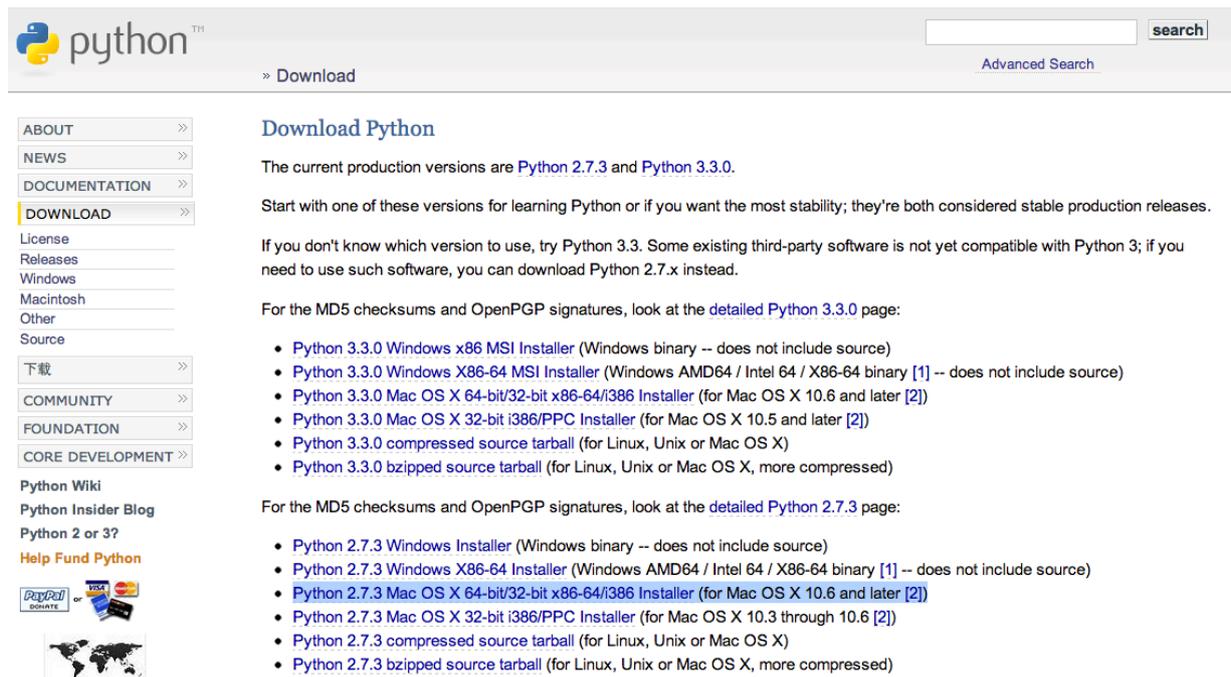
[GEO_Download_3.py](#) is for [Python 3](#).

Installation



In the "Applications" folder, verify which is the installed version of Python.

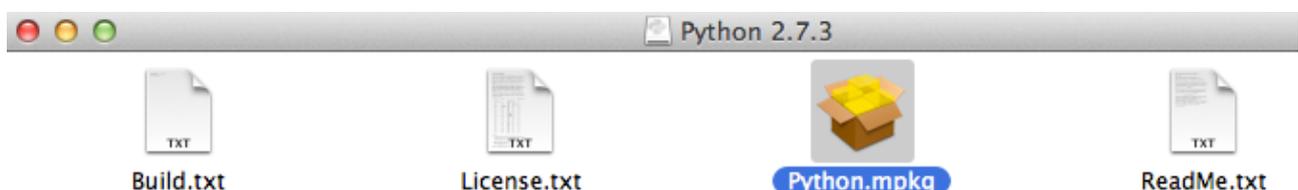
If none, download your preferred version from <http://www.python.org/download/>. (IDLE is included in these installers).



Install the downloaded version of Python as usual.

For example, for Mac users:

Double-click to open the downloaded ".dmg" file. The window represented in the following figure will open automatically: double-click on the "Python.mpkg" file to install Python.



When Python appears in the “Applications” folder, the system is well configured.

Usage

A text file with the GSM sample list and a copy of GEO_Download application need to be **in the same folder**. The following steps will guide the user to download the desired samples.

1. Create a folder (wherever and called as you prefer).
2. In this folder, save a copy of “GEO_Download_2.py” (if Python 2 is installed) or a copy of “GEO_Download_3.py” (for Python 3).
3. Create and save in the same folder a text file **exactly called “GSM_List.txt”**. This is the list of the GSM samples that you want to download. The GSM samples can be listed **one-to-one and/or as a series**, for example:

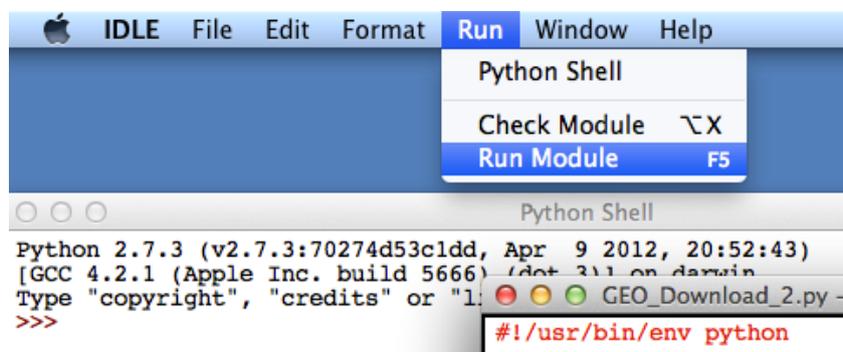
```
GSM3451...GSM3455  
GSM34512  
GSM34714  
GSM34720...GSM34724
```

Attention: do not type any space character.

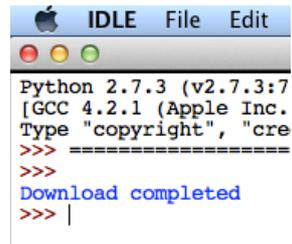
This file can be created with Word, Excel, Tex-Edit Plus, ... choosing “Save As...” and the option **“Text (txt)”**. **Please note that rtf file format is not supported.**

A “GSM_List.txt” example file is available in the folder along with this guide.

4. Double-click on the “GEO_Download_2.py” (or “GEO_Download_3.py”) file and two windows will appear: the “Python Shell” and “IDLE”.
5. Maintaining the “GEO_Download_2.py” (or “GEO_Download_3.py”) window active, select “Run Module” from the “Run” menu.



6. The program is finished when the “Download completed” message appears in the “Python Shell”.



```
Python 2.7.3 (v2.7.3:7  
[GCC 4.2.1 (Apple Inc.  
Type "copyright", "cre  
>>> =====  
>>>  
Download completed  
>>> |
```

The GSM files (named as “GSM3451.txt”, “GSM3452.txt”, ...) are downloaded as text files in the folder created in the first step.

