

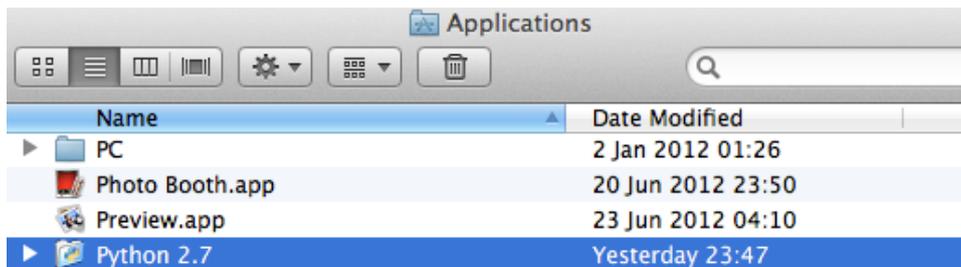
GEO\_GSM\_Download is a useful tool to automatically download a list of GSM samples from the GEO (Gene Expression Omnibus) database.

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

[GEO\\_GSM\\_Download\\_2.py](#) is for [Python 2](#).

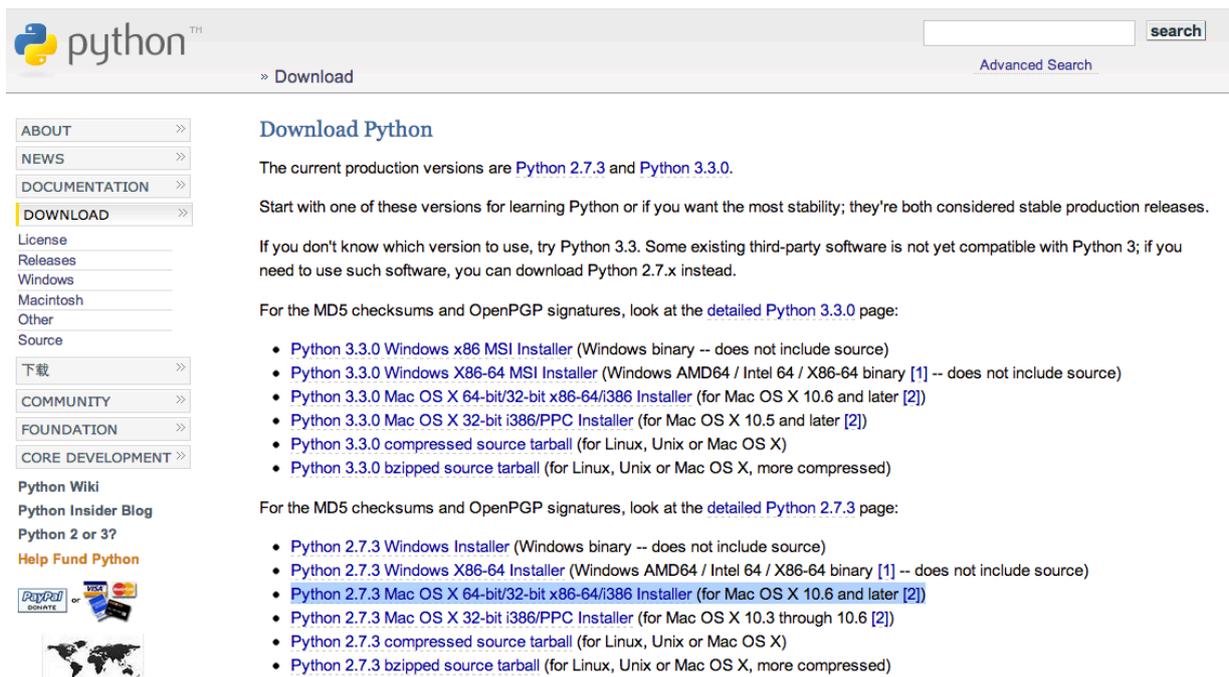
[GEO\\_GSM\\_Download\\_3.py](#) is for [Python 3](#).

## Installation



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

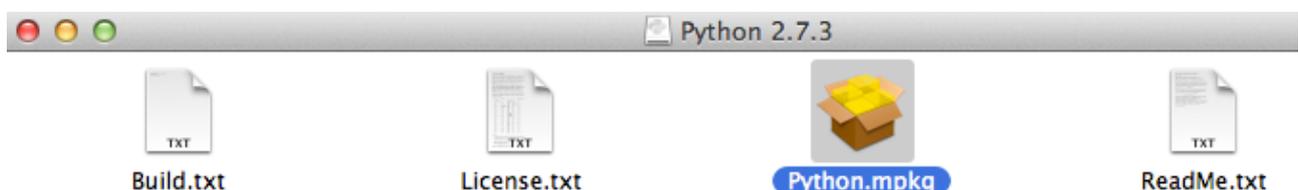
If none, download your preferred version from <http://www.python.org/download/> (IDLE is included in these installers).



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\_GSM\_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\_GSM\_Download\_2.py” (if Python 2 is installed) or a copy of “GEO\_GSM\_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:

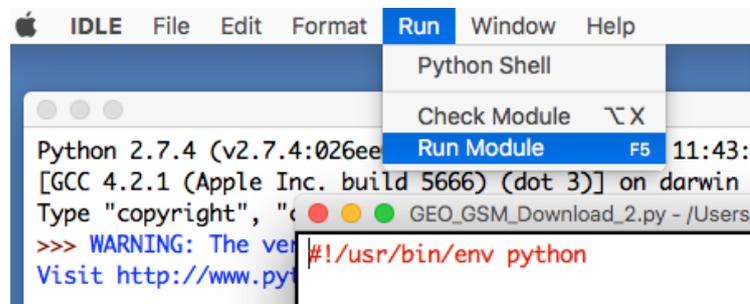
```
GSM3451...GSM3455  
GSM34512  
GSM34714  
GSM34720...GSM34724
```

**Attention: do not type any space character.**

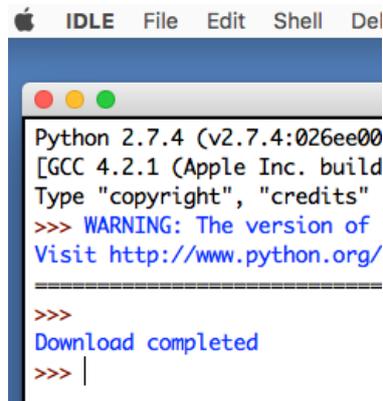
This file can be created with Word, Excel, Tex-Edit Plus, ... choosing “Save As...” and the option **“Text (txt)”**. **Please note that rtf file format is not supported.**

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

4. Double-click on the “GEO\_GSM\_Download\_2.py” (or “GSM\_Download\_3.py”) file and two windows of “IDLE” will appear: “GEO\_GSM\_Download\_2.py” and “Python Shell”.
5. Click on the “GEO\_GSM\_Download\_2.py” (or “GSM\_Download\_3.py”) window and select “Run Module” from the “Run” menu.



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



```
Python 2.7.4 (v2.7.4:026ee00  
[GCC 4.2.1 (Apple Inc. build  
Type "copyright", "credits"  
>>> WARNING: The version of  
Visit http://www.python.org/  
=====  
>>>  
Download completed  
>>> |
```

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

