Setup Guide for Intermediate Python 3

Overview

Any operating system can be used. **Python** is open source. Each student needs a computer (or remote account) with Python, some extra modules, an IDE (Integrated Development Environment), and the student files installed.

There is a separate section in this guide for each platform — Windows, Mac, and Linux.

NOTE	This setup guide should work in most environments, but is not guaranteed to work in all possible situations. Please call or email your contact with any questions.

Steps for installation

Setup for this class requires three separate installation steps:

1. Installing **Python**
2. Installing the lab files specific to this course
3. Installing **PyCharm**, an Integrated Development Environment for **Python**

Anaconda vs. manual installation

There are two approaches you can use for the **Python** installation. You can install the **Anaconda** bundle from Continuum Analytics or install basic **Python**, and then add the extra packages individually.

By far the easiest approach is to install the Anaconda bundle. This is a free (community) bundle that installs Python and many extra libraries in a single step. Installation is more or less the same on Windows, Linux, and OS X.

For each platform, follow either **Step1-A** or **Step 1-B**, but not both.

Student files

The student files contain examples, data, answers to labs, and setup data. They will be provided to you separately.

IDE/Editor

We recommend **PyCharm** as a Python IDE and it is part of the installation specifications below. However, some programmers already have a favorite IDE or editor. We do not *require* students to use **PyCharm**. If students are already using Komodo Edit, Spyder, vi, emacs, eclipse, Sublime Text, or other programmer's editor or IDE, that will not cause a problem.

Installing on Windows

(Win) Step 1-A: Installing the Anaconda Bundle

1. Download the Anaconda installer from https://store.continuum.io/cshop/anaconda/. Instal, using default values.

IMPORTANT | Download and install the Python 3, not Python 2.

(Win) Step 1-B: Installing Python

The Python language

Install Python 3 from http://www.python.org/download/ . Download the latest 64-bit Windows installer.

Once downloaded, double-click the MSI file to start installing.

Choose "Install Python 3.*x* for all users", and select the "Add python .exe to Path" option in the installer.

If the installation seems to be hanging, check to see if there's a Windows dialog asking for permission to proceed.

(Win) Step 2: Installing the student (lab) files

The lab file archives contain setup, example, data, and answer files for use in the labs.

The file name is **py3interm_1.0.zip**

The zip file should be extracted to the user's desktop. It will create a folder named **py3interm**.

When extracting, be sure the target folder is

```
C:\users\USERNAME\desktop
```

NOT

```
C:\users\USERNAME\desktop\py3interm
```

The extractor defaults to the second form, which adds a confusing extra **py3interm** folder.

(Win) Step 3: Installing PyCharm Community Edition

Install the latest version of PyCharm Community Edition from

```
http://www.jetbrains.com/pycharm/download
```

Do not install the Professional Edition!

Installing on OS X (Mac)

(Mac) Step 1-A: Installing the Anaconda Bundle

1. Download the Anaconda installer for OS X from https://store.continuum.io/cshop/anaconda/. Install, using default values.

Install the Python 3 version, not the Python 2 version.

(Mac) Step 1-B: Installing Python

The Python language

Install Python 3.4.x for OS X from http://www.python.org/download/. Choose the latest 3.x version.

(Mac) Step 2: Installing the student (lab) files

The file name is **py3interm_1.0.tar.gz**

Download or copy **py3interm_1.0.tar.gz** to the user's desktop. This gzipped tar archive should be extracted to the user desktop. It will create a directory named **py3interm**. Sample tar extraction command (execute as the user, not as root):

```
cd
tar xzvf py3interm_1.0.tar.gz
```

(Mac) Step 3: Installing PyCharm Community Edition

Install the latest version of PyCharm Community Edition from

```
http://www.jetbrains.com/pycharm/download
```

Do not install the Professional Edition!

Installing on Linux

(Linux) Step 1-A: Installing the Anaconda Bundle

1. Download the Anaconda installer from https://store.continuum.io/cshop/anaconda/. Use all installation defaults.
2. Once the Anaconda package has been installed, open a new terminal window (shell prompt).

IMPORTANT Be sure to download and install Python 3, not Python 2.

Remember to open a new terminal window after Anaconda installation is complete.

(Linux) Step 1-B: Installing Python

The Python language

Python may already be installed. If not, install Python 3.4 or later from http://www.python.org/download/.

(Linux) Step 2: Installing the student (lab) files

The file name is **py3interm_1.0.tgz**

Download or copy **py3interm_1.0.tgz** to the user's home directory. This gzipped tar archive should be extracted to the user's home directory. It will create a directory named **py3interm**. Sample tar extraction command (execute as the user, not as root):

```
cd
tar xzvf py3interm_1.0.tgz
```

(Linux) Step 3: Installing PyCharm Community Edition

Install the latest version of PyCharm Community Edition from

```
http://www.jetbrains.com/pycharm/download
```

Do not install the Professional Edition!