NOTE

Monty Python's Flying Circus was an alternative British comedy show first broadcast in the 1970s, and it remains hugely popular today among a certain audience. The show had sketches like "The Ministry of Silly Walks," "The Fish-Slapping Dance," and "The Cheese Shop" (which didn't sell any cheese).

A number of things about the Python programming language make it extremely useful for beginners. Most importantly, you can use Python to write simple, efficient programs really quickly. Python doesn't use quite as many complicated symbols as other programming languages, which makes it easier to read and a lot friendlier for beginners. (That isn't to say Python doesn't use symbols—they're just not used quite as heavily as in many other languages.)

INSTALLING PYTHON

Installing Python is fairly straightforward. Here, we'll go over the steps for installing it on Windows 7 and higher, Mac OS X, and Ubuntu. When installing Python, you'll also install the IDLE program, which is the *I*ntegrated *DeveLopment Environment* that lets you write programs for Python. If Python has already been installed on your computer, jump ahead to "Once You've Installed Python" on page 11.

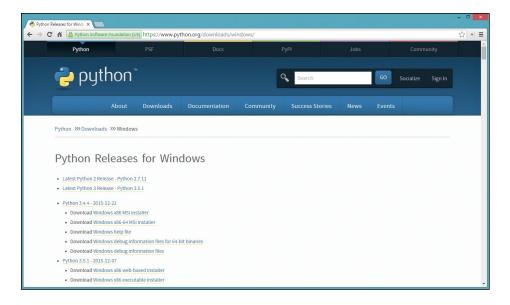
INSTALLING PYTHON ON WINDOWS 7 AND HIGHER

To install Python for Microsoft Windows 7 and higher, download a version of Python for Windows that is 3.5 or higher here: http://www.python.org/downloads/windows/.

NOTE

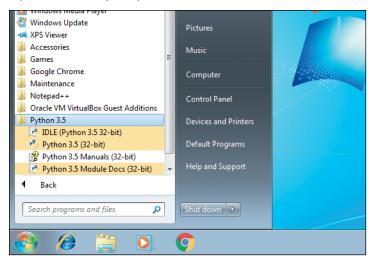
The exact version of Python that you download is not important, as long as it's at least version 3.5.

If your browser asks whether to save or keep your file, choose to save it.



Once you've downloaded the Python for Windows installation file you should be prompted to run it. If not, open your *Downloads* folder and double-click the file. Now, follow the installation instructions on screen to install Python in the default location, as follows:

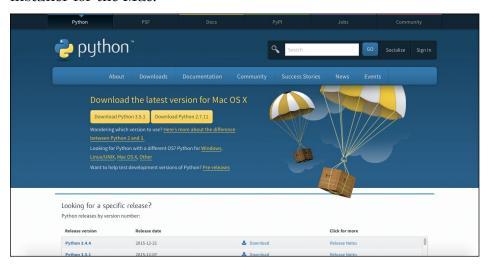
- 1. Click **Install Now**.
- 2. When asked whether to allow the program to make changes to your computer, choose **Next**.
- 3. Click **Close** once installation finishes, and you should see a Python 3 entry in your Windows Start menu:



Now skip to "Once You've Installed Python" on page 11 to get started with Python.

INSTALLING PYTHON ON MAC OS X

If you're using a Mac, you should find a version of Python preinstalled, but it's probably an older version of the language. To be sure that you're running the newest version, point your browser to http://www.python.org/getit/ to download the latest installer for the Mac.



There are two different installers. The one you should download depends on which version of Mac OS X you have installed. (To find out, click the **Apple** icon in the top menu bar, and choose **About this Mac**.) Choose the appropriate installer as follows:

- If you're running Mac OS X version 10.5 or higher, download the 32-bit version of Python 3 for i386/PPC.
- If you're running Mac OS X version 10.6 or higher, download the 64-bit/32-bit version of Python 3 for x86-64.

Once downloaded, double-click the file (it should be called something like *python-3.5.1-macosx10.6.pkg*). Agree to the license and follow the on-screen instructions to install the software. You should be prompted for the administrator password for your Mac before Python installs. If you don't have the password, ask your parents or whoever is the master of your machine.

On older versions of OS X you may also need to install an additional piece of software called ActiveTcl:

- 1. After installing Python, navigate to **Go** ▶ **Applications** and find Python 3.5 in the list of applications.
- 2. Double-click the *Python* folder and then double-click **IDLE**.



- 3. If you see some text like "WARNING: The version of Tcl/Tk in use may be unstable," you need to download ActiveTcl. If you don't see that text, you can ignore the remaining steps below.
- 4. Visit http://www.activestate.com/activetcl/downloads/ and download the latest version of ActiveTcl, being sure to select the version for Mac OS X.

Download Tcl: Other Platforms and Versions



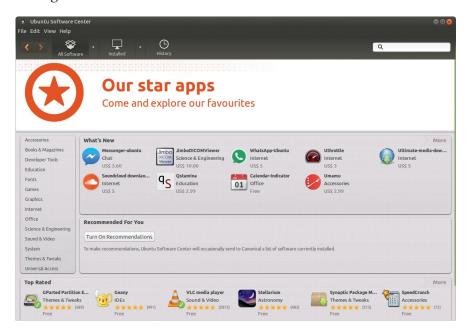
- 5. The name of the downloaded file should end with .dmg. Double-click the file, and then double-click the ActiveTcl package in the window that opens. Follow the on-screen instructions to install, agreeing to the license and installing to the default location. You should be prompted for the administrator password again.
- 6. Now reinstall Python by simply running the installer again.

Now skip to "Once You've Installed Python" on page 11 to get started with Python.

INSTALLING PYTHON ON UBUNTU

Python comes preinstalled on Ubuntu Linux, but you'll need to install IDLE in order to follow the instructions in this book. Here's how:

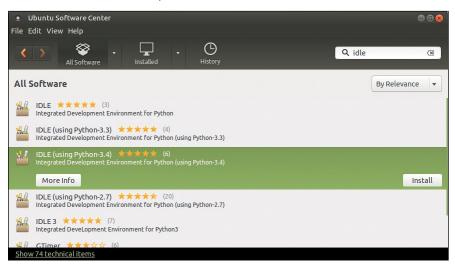
1. Click the icon that looks like an orange bag in the Sidebar to open the Ubuntu Software Center. If you don't see the icon, you can click the Dash Home icon and enter *Software* in the dialog.



2. Enter *idle* in the search box in the top-right corner of the Software Center.



3. In the list of software, select the latest version of IDLE:



- 4. Click **Install**.
- 5. Enter your administrator password to install the software, and then click **Authenticate**. (Don't have the administrator password? Your parent may need to enter it.)



NOTE

On some versions of Ubuntu you might only see Python (v3.2) in the main menu (rather than IDLE)—you can install this instead.

Now that you've got the latest version of Python installed, let's give it a try.