

Installing Python on your Windows laptop

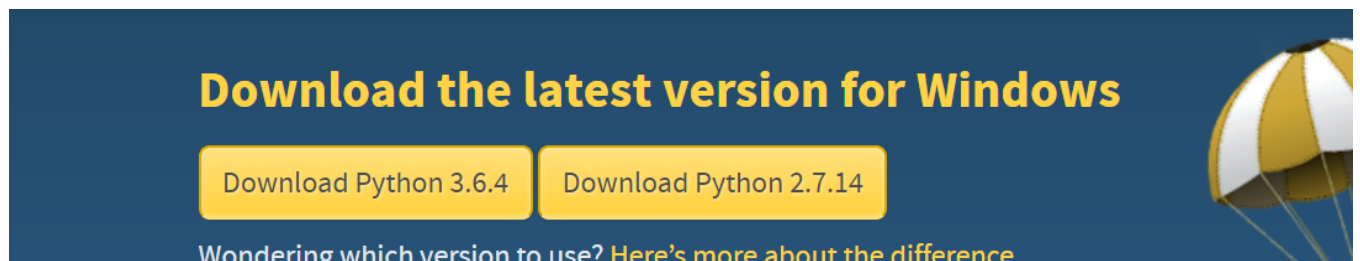
Step #1. Download a Python installation kit from the web

Visit the web page <https://www.python.org/downloads> .

Near the top of the page, it will say “Download the latest version of Python for Windows.” Just under that, there will be two bright yellow buttons. One is for a version of Python 2, and will say something like “Download Python 2.7.14.” Do not use that. Instead, find the one labeled “Download Python 3.6.4” (or something similar), which is for Python 3.

Click that button, and you will be prompted to download the file python-3.6.4.exe to your Desktop. Do so.

It’s never a bad idea to scan this file with your antivirus tool; hopefully it will be clean.



Step #2. Run the installation kit to install Python

Double-click the python-3.6.4.exe file that you just downloaded. A white rectangular window will pop up that guides you through the installation process.

To start it off, click on “Install Now” into the folder C:\Users\Joelg\AppData\Local\Programs (with “JoelG” replaced by your own username on your laptop). You will likely have to click “Yes” when your laptop asks you whether to give the installation program permission.

After just a minute or two, the installation window should say “Setup was successful”. At that point, you can hit the “Close” button on the lower right of the window.

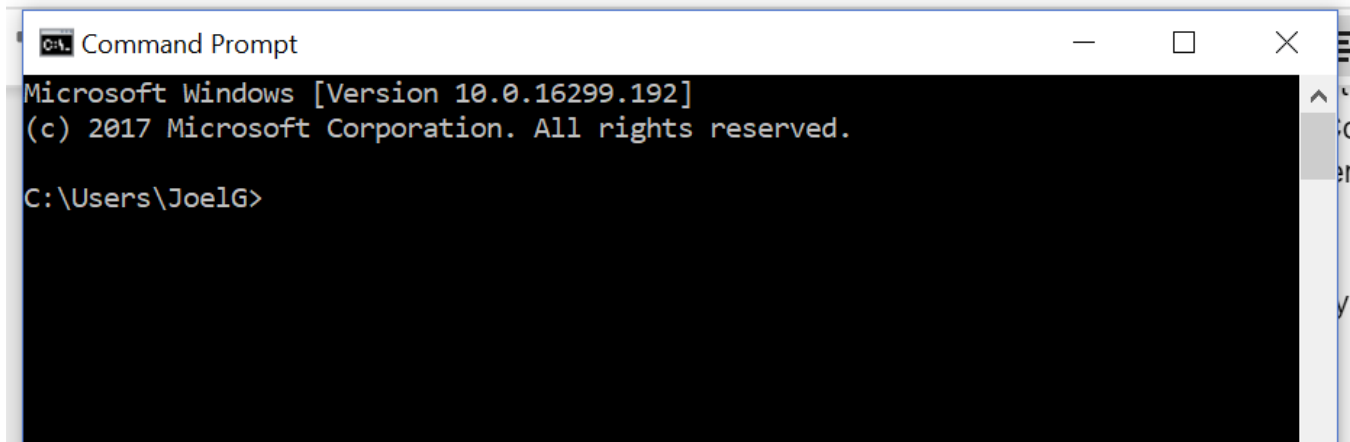
Step 3. Test the installation.

Click on the laptop’s Start button to get the full list of available programs. Scroll down to “P” to find “Python 3.6”. Click on IDLE to launch IDLE. Play with IDLE a bit to ensure that it works, and then exit from IDLE

Step 4. Install numpy, scipy and matplotlib

While most of the Python packages are installed automatically as part of the installation that you just did, these three do not; and we will need them for the course. So we will now install them.

You must first launch a Command Prompt window. On my laptop, this is under Windows System. It launches a black window with white text.



```
Command Prompt
Microsoft Windows [Version 10.0.16299.192]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\JoelG>
```

In this window, you now move to the directory where Python is installed

```
cd C:\Users\JoelG\AppData\Local\Programs\Python
```

(of course, you should replace the “JoelG” with your own username on your laptop).

If you now type

```
cd Python36-32\Scripts
```

then you will be in the right directory to install the three packages. As a double-check, type “dir”, and it should respond with something like

```
C:\> Command Prompt
01/09/2018 01:18 PM <DIR> .
01/09/2018 01:18 PM <DIR> ..
01/09/2018 01:20 PM <DIR> Python36-32
    0 File(s)          0 bytes
    3 Dir(s)  638,400,475,136 bytes free

C:\Users\JoelG\AppData\Local\Programs\Python>cd Python36-32\Scripts

C:\Users\JoelG\AppData\Local\Programs\Python\Python36-32\Scripts>dir
Volume in drive C is OS
Volume Serial Number is A85B-4450

Directory of C:\Users\JoelG\AppData\Local\Programs\Python\Python36-32\Scripts

01/09/2018 01:20 PM <DIR> .
01/09/2018 01:20 PM <DIR> ..
01/09/2018 01:20 PM          89,494 easy_install-3.6.exe
01/09/2018 01:20 PM          89,494 easy_install.exe
01/09/2018 01:20 PM          89,466 pip.exe
01/09/2018 01:20 PM          89,466 pip3.6.exe
01/09/2018 01:20 PM          89,466 pip3.exe
    5 File(s)          447,386 bytes
    2 Dir(s)  638,399,844,352 bytes free
```

The important thing is that the “pip3” program is there.

Now type

```
pip3 install numpy
```

It may take up to 5 minutes, but should come back with something like

```
C:\Users\JoelG\AppData\Local\Programs\Python\Python36-32\Scripts>pip3 install numpy
Collecting numpy
  Downloading numpy-1.14.0-cp36-none-win32.whl (9.8MB)
    100% |████████████████████████████████████████| 9.8MB 66kB/s
Installing collected packages: numpy
Successfully installed numpy-1.14.0

C:\Users\JoelG\AppData\Local\Programs\Python\Python36-32\Scripts>
```

Next, do the same thing to install scipy and matplotlib

```
pip3 install scipy
```

```
pip3 install matplotlib
```

You should get similar messages for successful installation. You’re now finished!