

[Mathematics for Sustainability \(part 2\)](#)
/ [Installing Python 3 on your own computer](#)
/ Installing Python 3 - Windows

Installing Python 3 - Windows

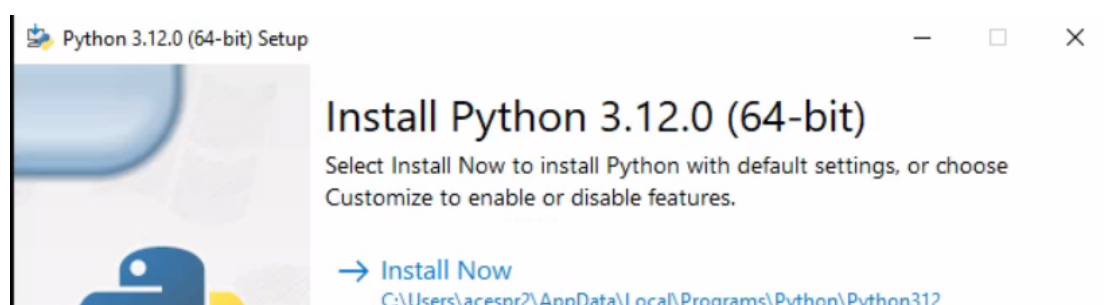
All the software you need for Python is free, so you can install it on your own machine.

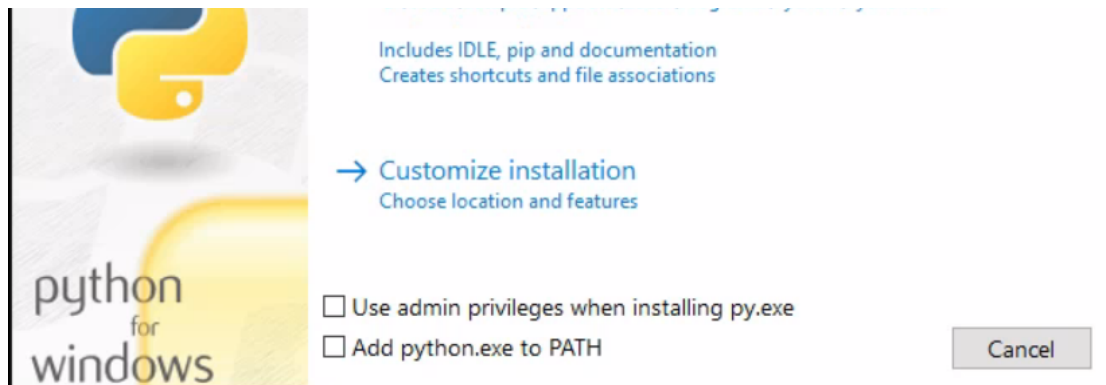
You need Python and an editor. The editor IDLE comes as part of Python. If you want to use a different editor, you will need to install Python and then the editor.

Note: I don't have a Windows machine and, though I can use one on campus, I can't install software on it. If you have trouble, please ask for help - I can probably help if I can see your screen.

Installing Python 3

If you go to the [Python Download page](#), it should offer you a button to download the latest version of Python 3 for your computer. If you download and run the file, you should see a screen like this (but with a higher version number). I can't get further than this because I don't have the rights to install software, but hopefully you do.



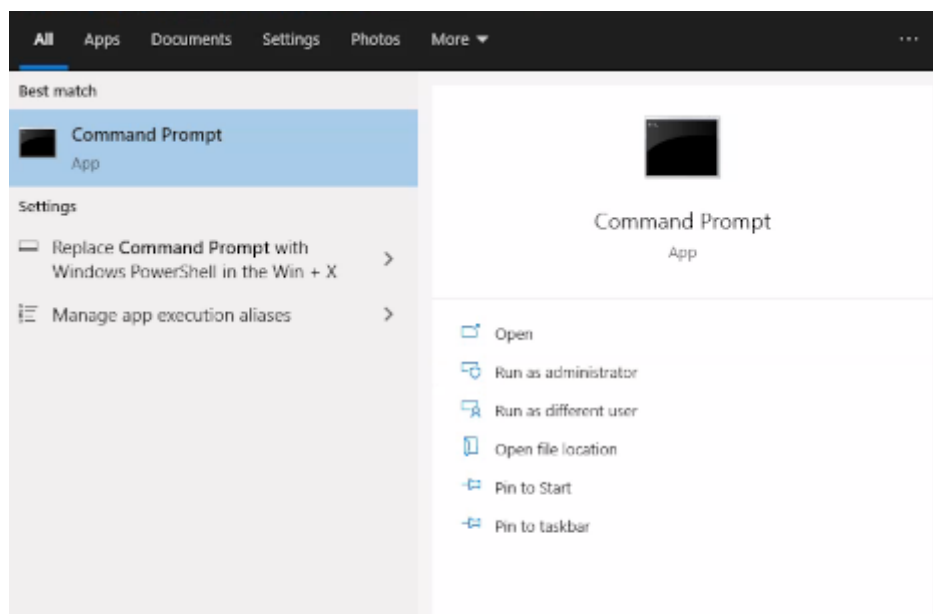


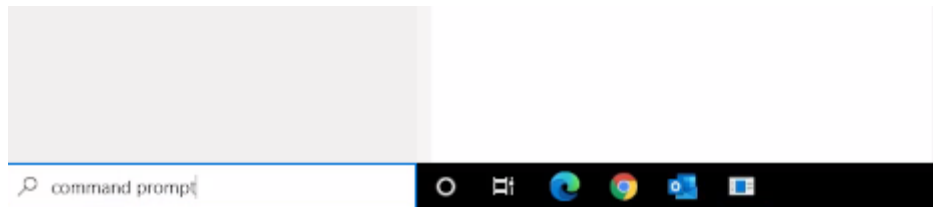
Extra packages

You now need to install extra packages using a program called pip that should come with Python.

1. Open the right program for your computer:
 - In Windows, pip runs in a Command Prompt window, so search for "Command Prompt" in your Start Menu and open it.

Here's what you should see when you search for "command prompt" on Windows:





2. Please copy this command and press enter to run it.

```
py -m pip install --user numpy scipy matplotlib sympy
```

If this doesn't work, try this.

```
python -m pip install --user numpy scipy matplotlib sympy
```

This will install a useful set of mathematical and scientific packages.

Here's what this should look like in Windows when you run the command:

```
Command Prompt - py -m pip install --user numpy scipy matplotlib sympy
Microsoft Windows [Version 10.0.19042.1288]
(c) Microsoft Corporation. All rights reserved.

C:\Users\>py --version
Python 3.9.8

C:\Users\>py -m pip install --user numpy scipy matplotlib sympy
Collecting numpy
  Downloading numpy-1.21.4-cp39-cp39-win_amd64.whl (14.0 MB)
    | 14.0 MB 6.4 MB/s
Collecting scipy
  Downloading scipy-1.7.2-cp39-cp39-win_amd64.whl (34.3 MB)
    | 34.3 MB 3.3 MB/s
Collecting matplotlib
  Downloading matplotlib-3.4.3-cp39-cp39-win_amd64.whl (7.1 MB)
    | 6.7 MB 6.8 MB/s eta 0:00:01
```

Editor

You should find that the installation puts an editor called IDLE in your Start Menu. Search "idle" and see if this comes up. It is now time to move to the

menu. Search 'idle' and see if this comes up. It is now time to move to the 'Python basics' notes.

