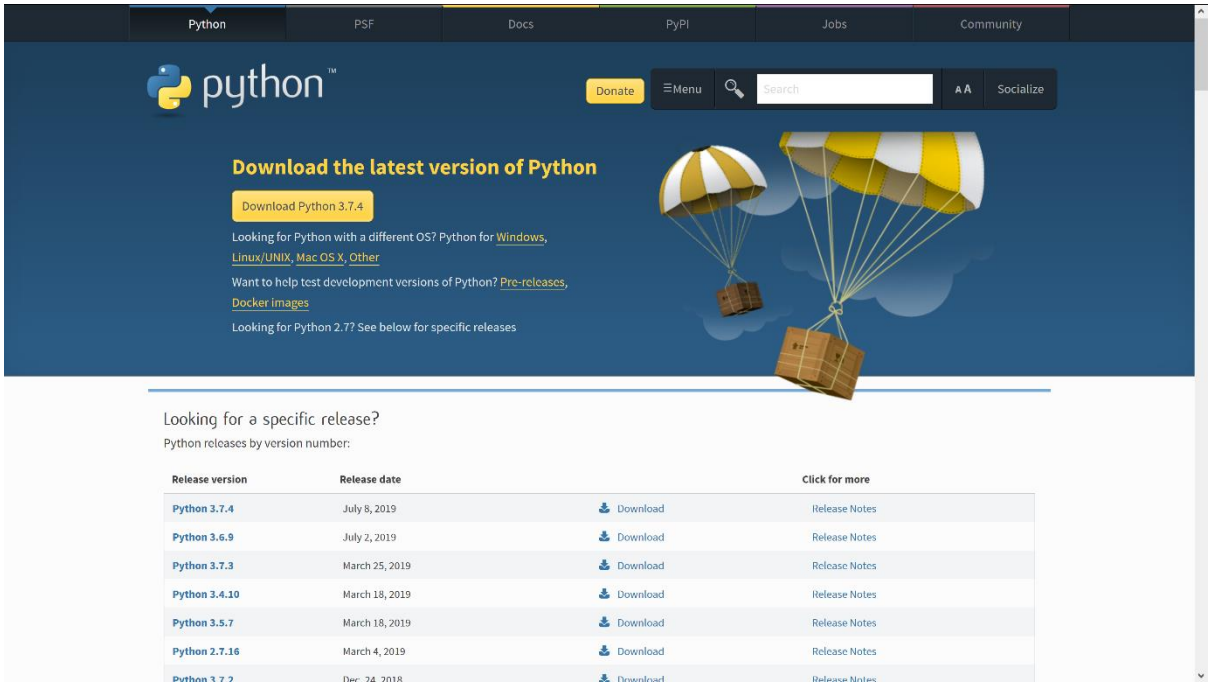
How to Download the Python Programming Language

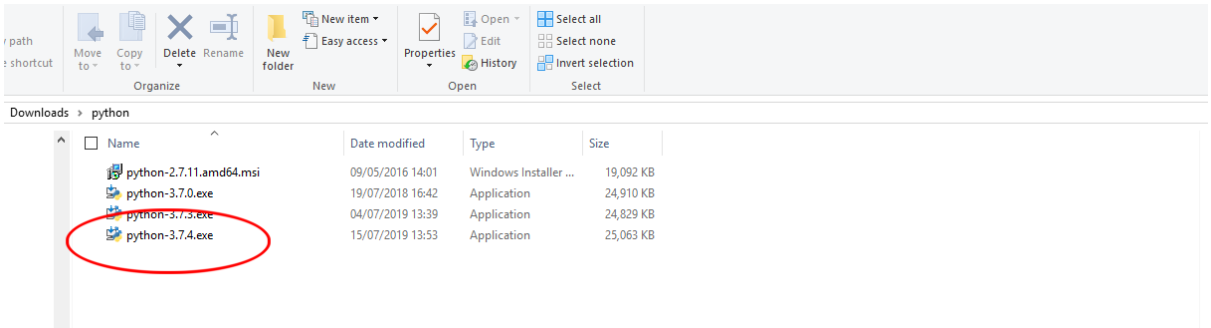
Python is a programming language. It can be used to program the Raspberry Pi (the Pi part of the name is taken from Python). It can also be used to build desktop application that will run on your computer.

Visit https://www.python.org/downloads/.

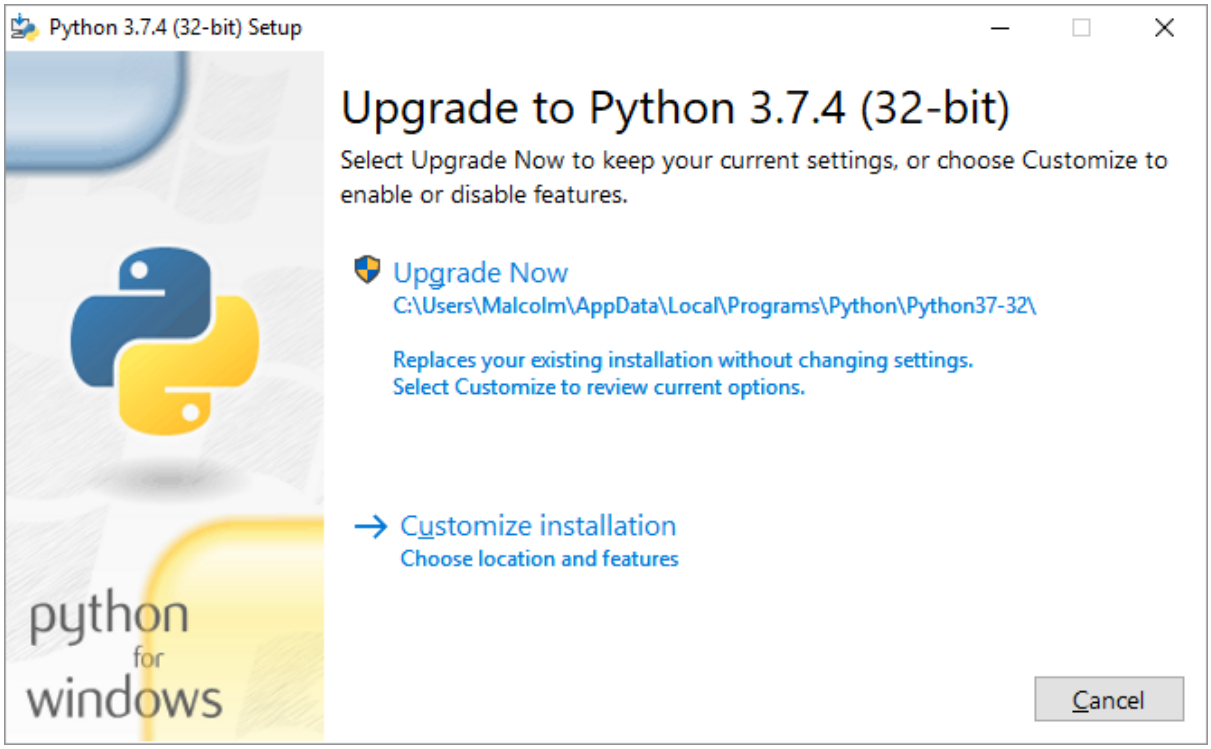


The website should automatically detect your operating system and prompt you with the latest version for your system. In this case Python 3.7.4.

Download and save the file. Run the saved .exe file by either double clicking on the file name, or running from the icon in your browser.

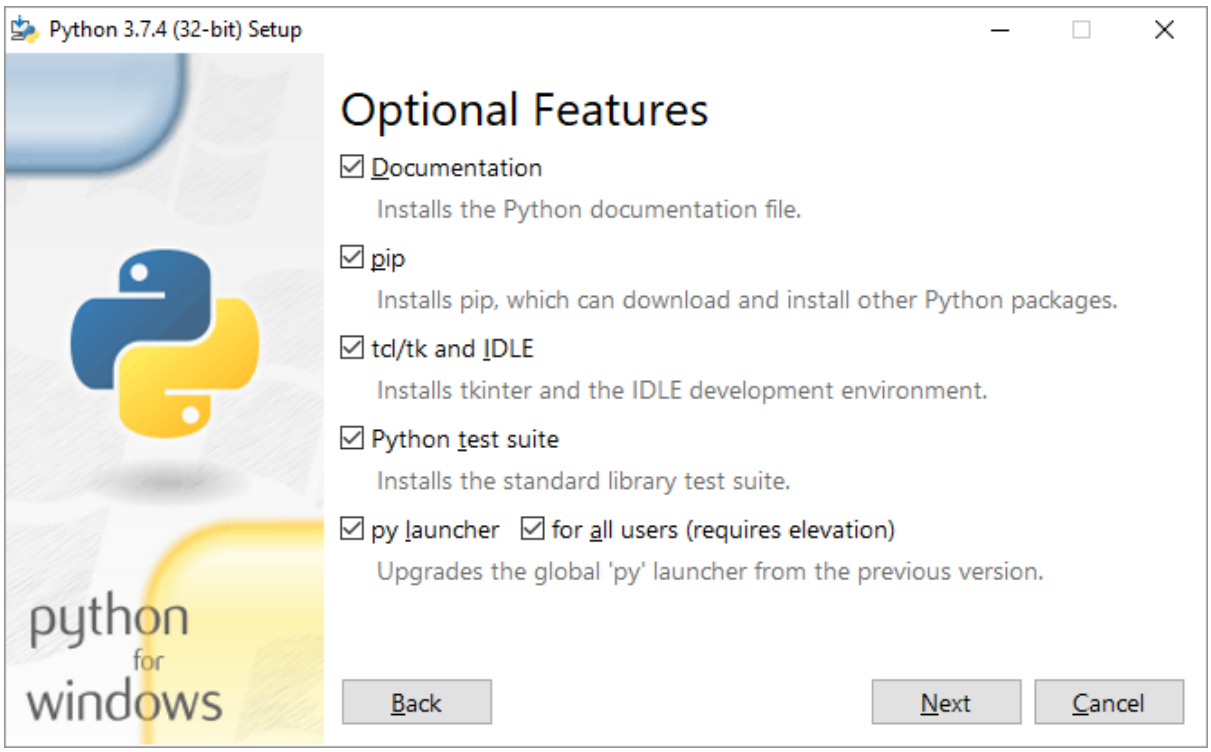


Follow the installation instructions.



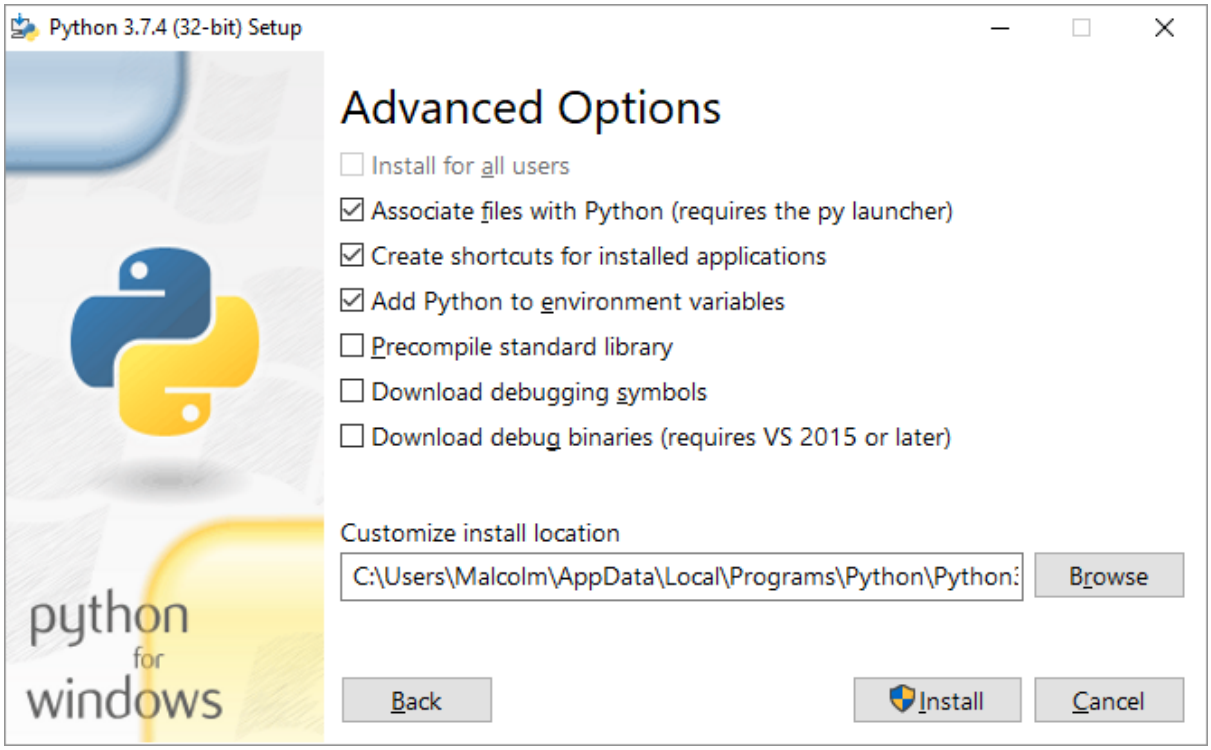
If this is a new install, your screen will say Install Python, rather than upgrade Python.

Select 'Customize installation'. This is to make sure that the environmental variables are set. If this step is missed, you can only run Python from the folder where the application is installed.



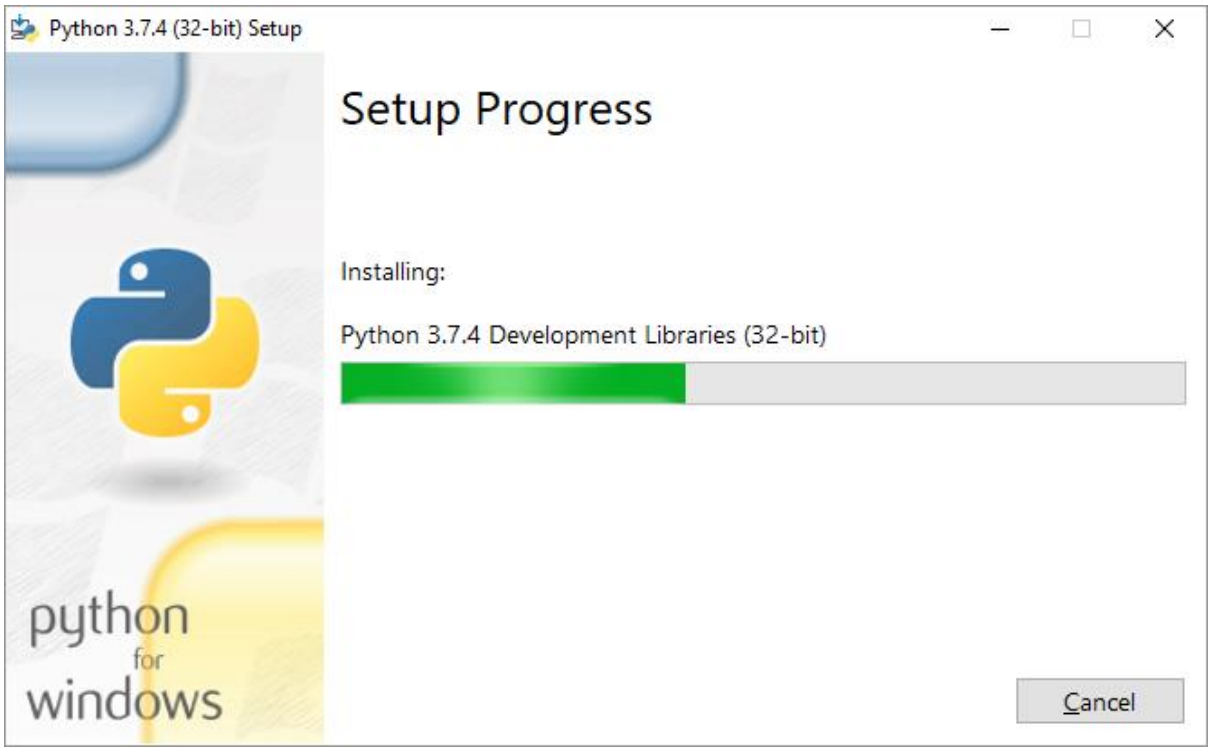
Tick all these options. You will need 'pip' to install Python extensions. IDLE is an integrated development environment (IDE). Python like its Monty Python jokes. The Python IDE is called IDLE after the Eric Idle, the Python comedian.

Click ‘Next’.

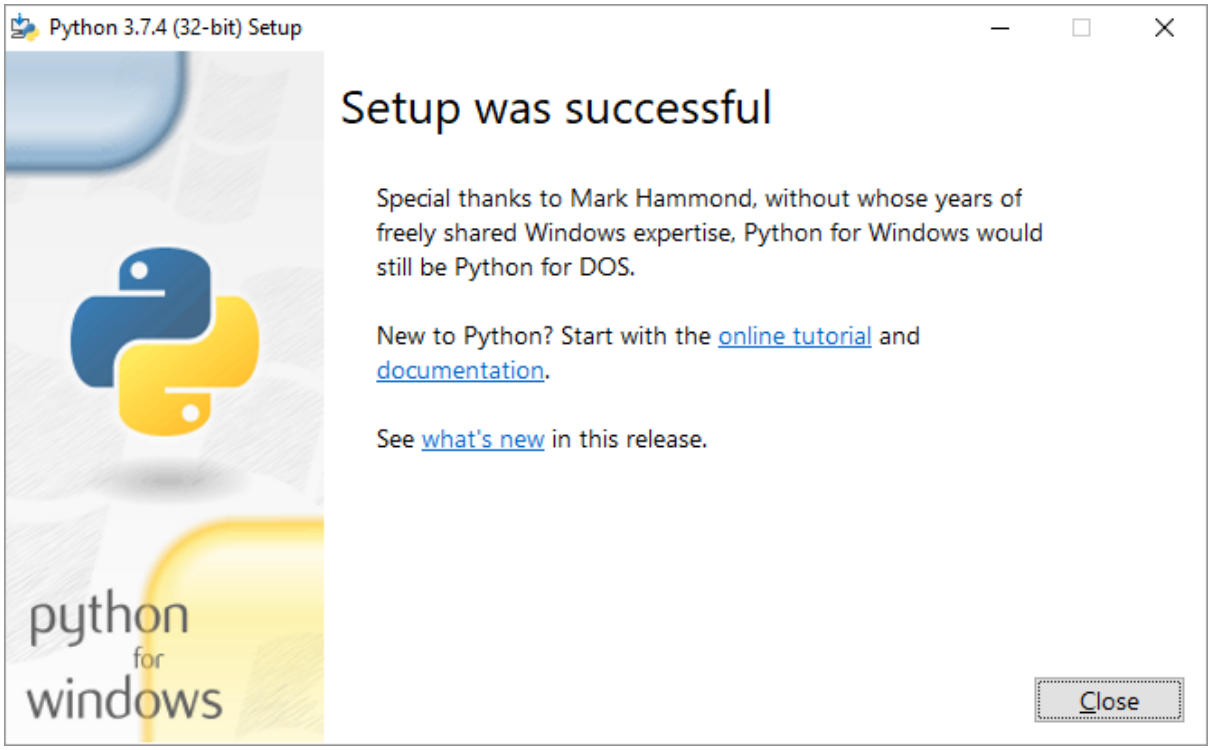


Tick ‘Associate files with Python…’, ‘Create shortcuts…’ and ‘Add Python to environment variables’. This last option is important as it will allow you to run Python programs in any folder on your computer.

Click ‘Install’.

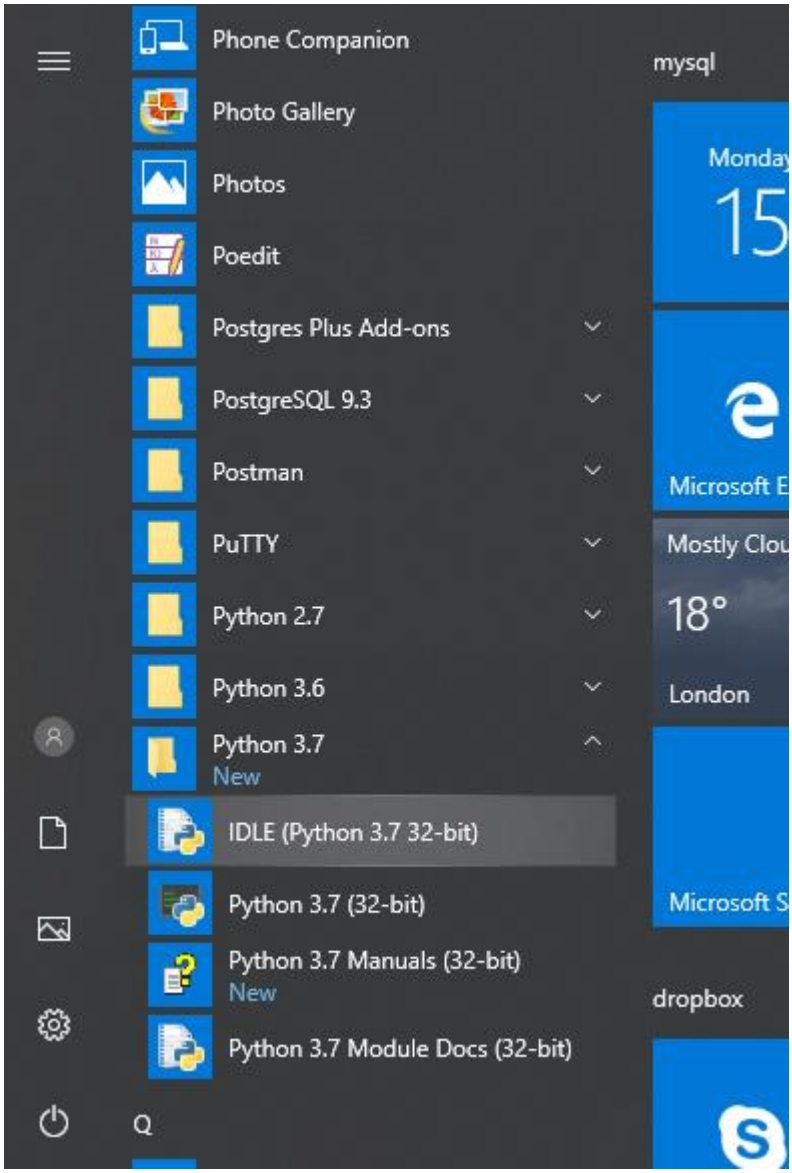


If all goes well, you should see this screen:

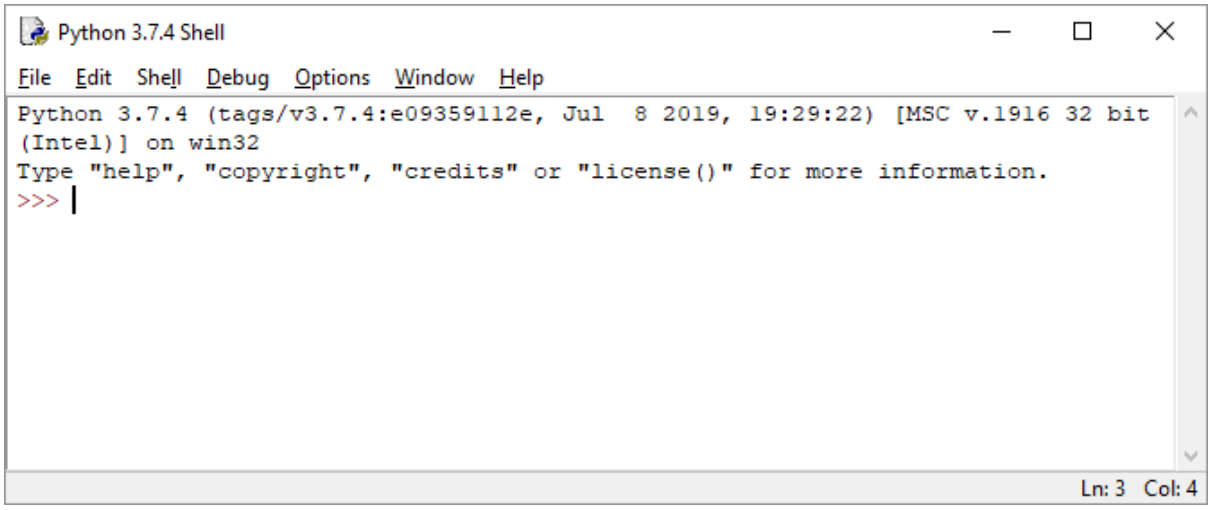


You can now run some scripts in the IDLE IDE.

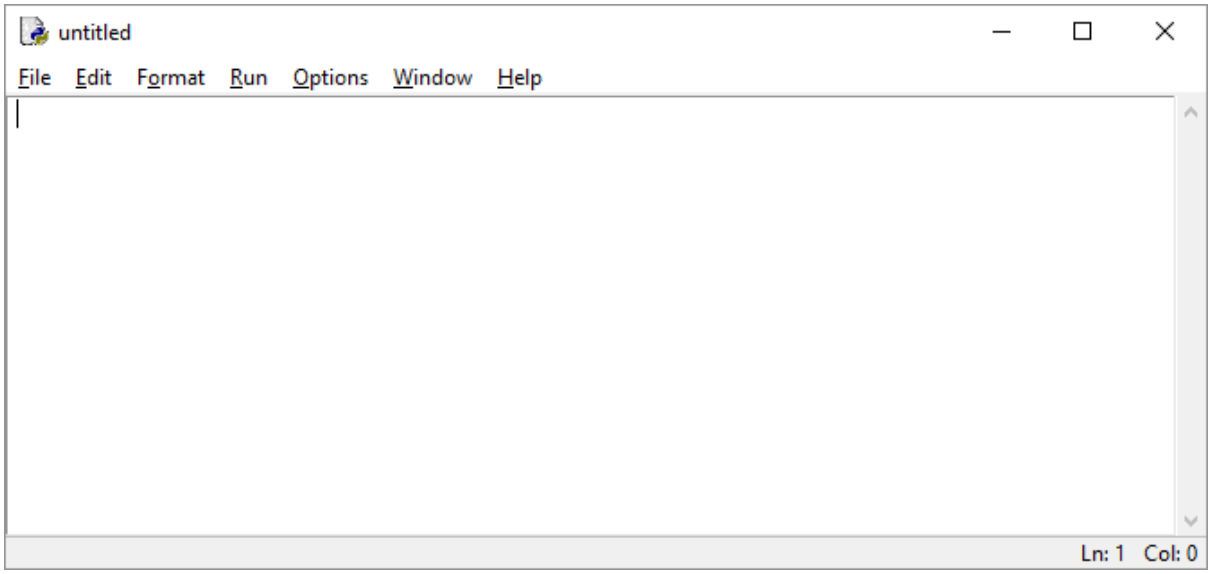
Click on the windows start icon at the bottom left of your computer screen and scroll down until you find Python.



Click on python to expand the menu, then click on IDLE to open the application.



Click ‘File’ then ‘New File’.



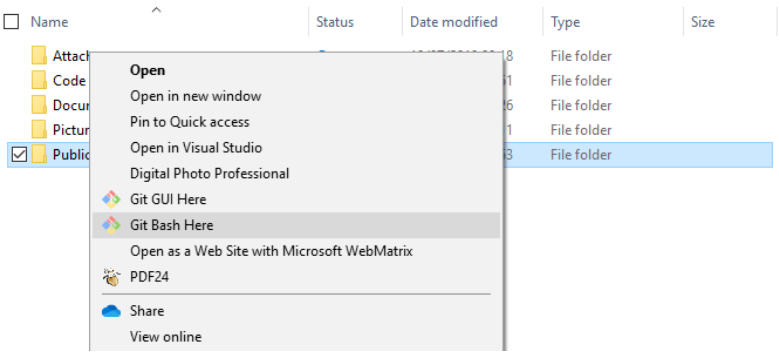
You can now begin writing Python scripts. To run them, select ‘Run’ then ‘Run Module’. The results will appear in the first IDLE window.

Happy Pythoning.

Using Git Bash

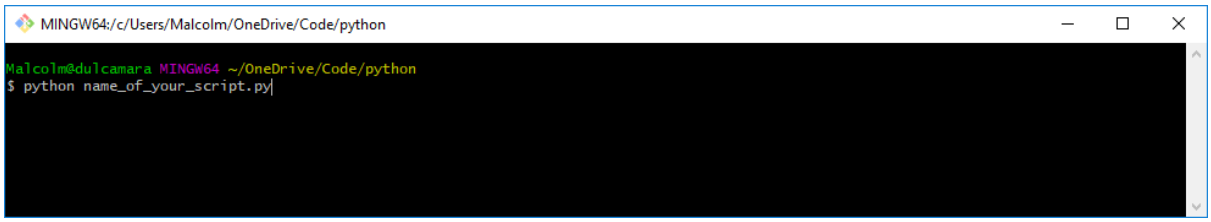
If you have Git installed, you can run python scripts from the Bash CLI (Command Line Interface)

Find the folder that contains your python script and right click it. Select ‘Git Bash Here’.



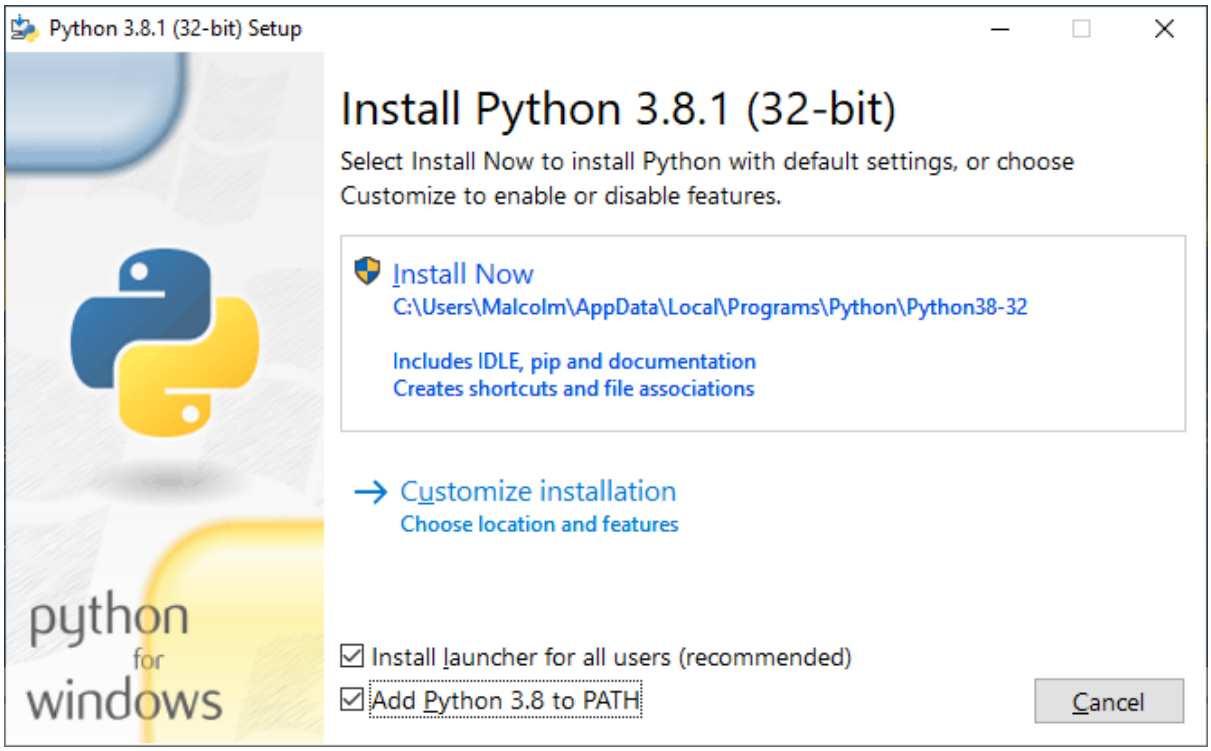
When the Bash window opens, type:

```
$ python name_of_your_script.py
```



When running the script under MS Windows, the script name is always proceeded by ‘python’ regardless of which version of python you are running (2 or 3). On a Linux machine, you would write ‘python3’ if it was a version 3 script.

Update – Python 3.8

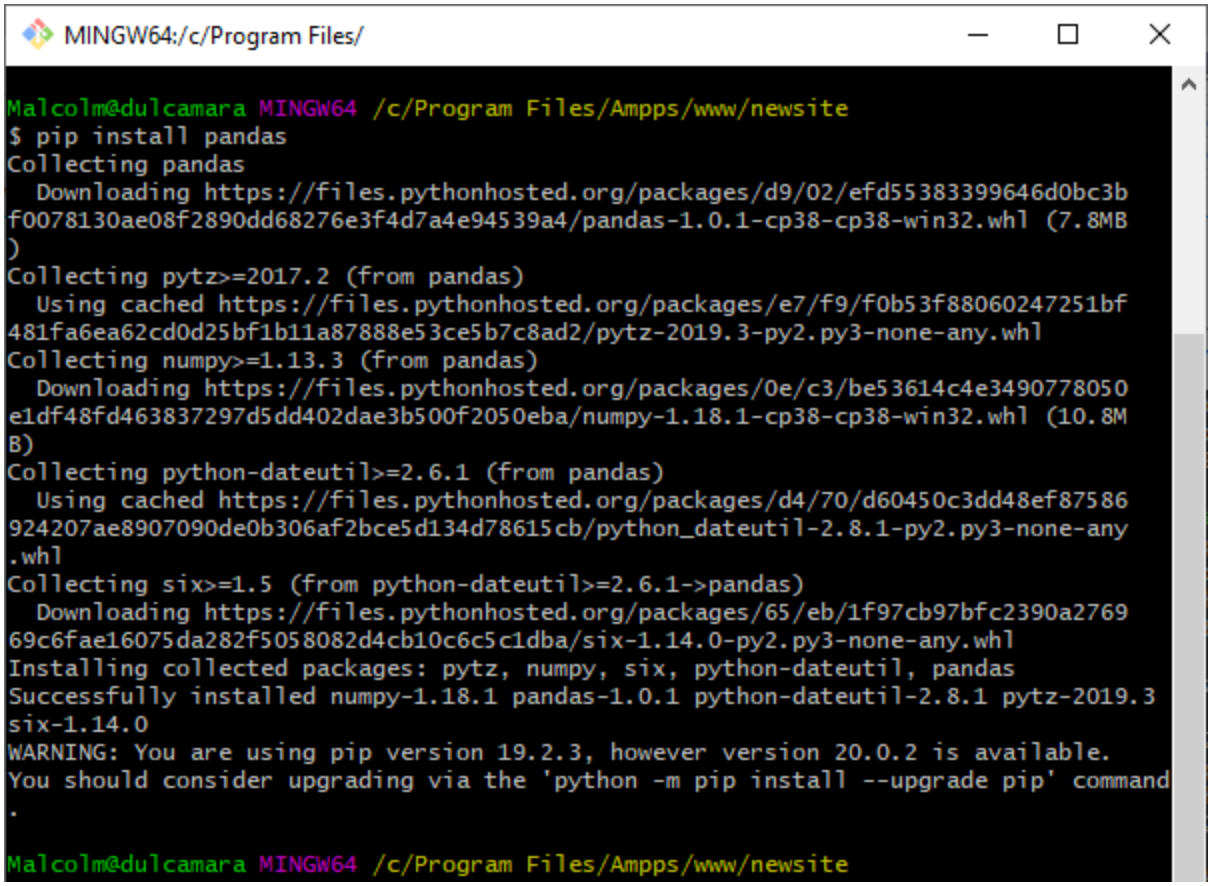


Here you have the option to tick the ‘Add Python 3.8 to path, so that you can run Python in any directory.

Installing Modules

You can use ‘pip install’ to add extra modules (libraries). Pip was installed when you installed Python. In your Bash CLI, type ‘pip install’ followed by the name of the module. So, for example, to install the ‘Pandas’ module (used for analysing .csv files), you would type:

```
$ pip install pandas
```



If you read the last line of the resulting output, it is prompting you to upgrade pip, so type:

```
$ python -m pip install --upgrade pip
```