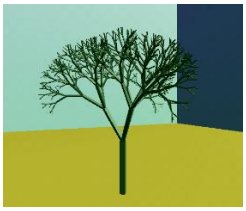

GATS Companion to Installing Python

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Version: 1.1.0 (2023-09-14)

Overview

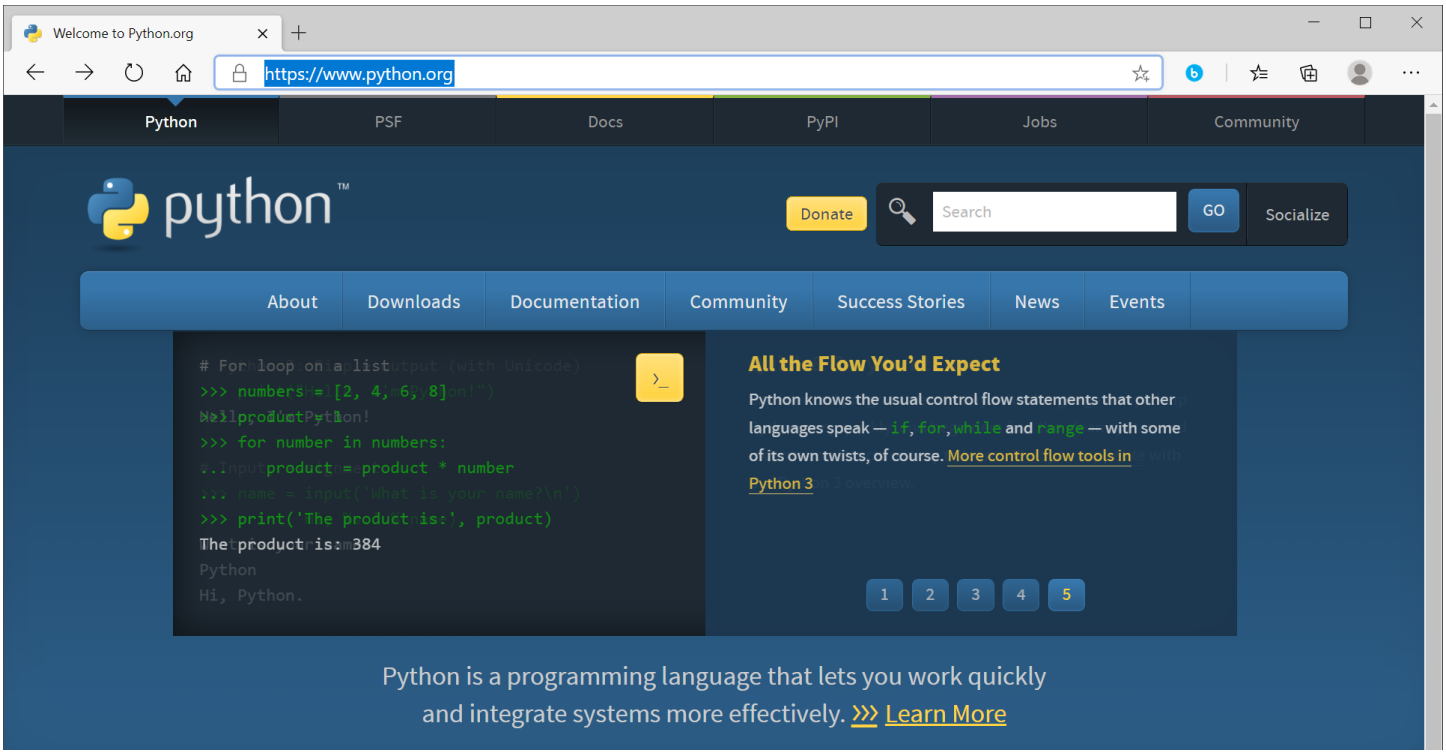
Python has been a top four language for many years, becoming a major development language. Its easy connection to C/C++ code makes it a serious development language. Its small runtime environment has made it a more popular choice than Java for embedded systems, and its simple free-form syntax great for beginning programmers.

"Python where you can; C++ where you have to!"

In this guide I will install classic Python on the Windows platform.

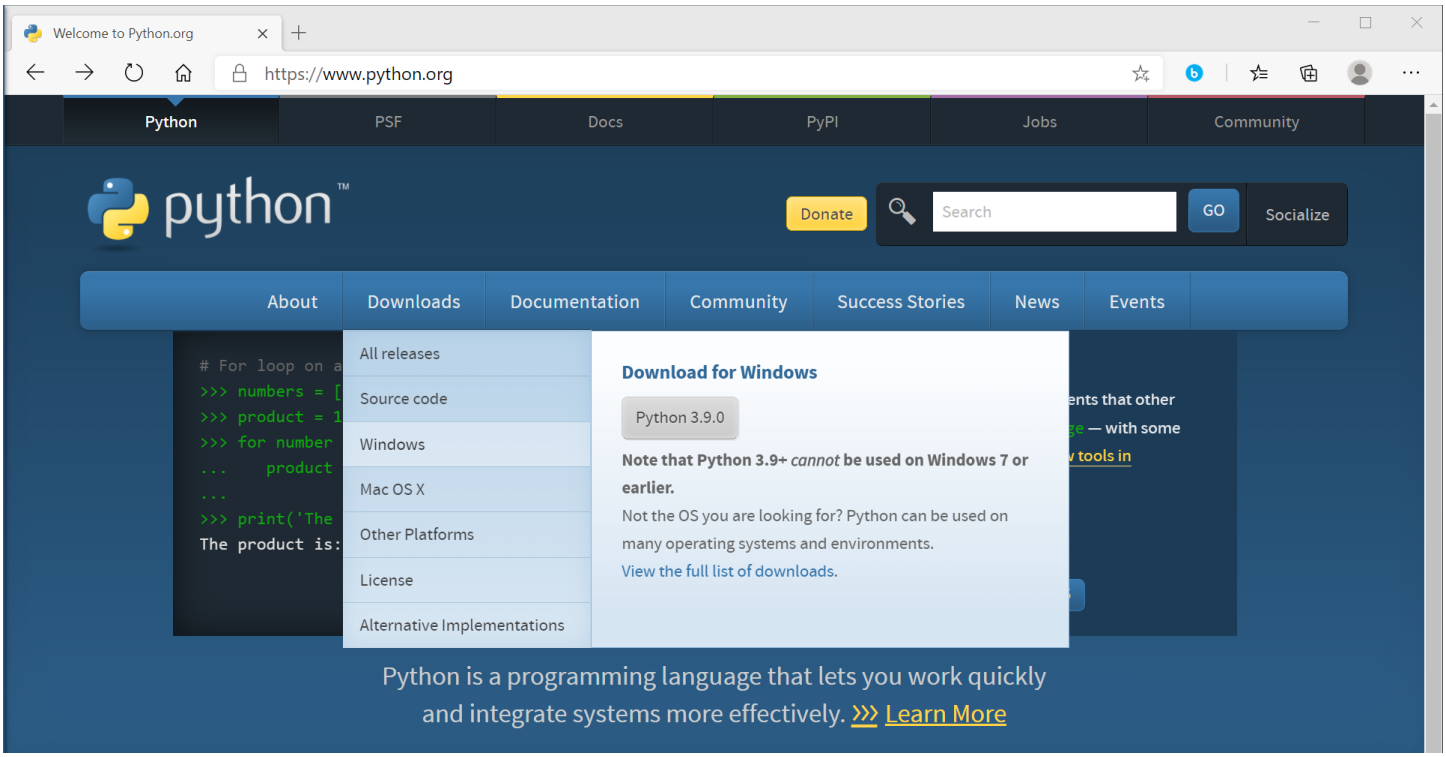
Where to find Python

"Real" Python can be found at the site: https://www.python.org/



Bookmark this site – it's the central authority on Python.

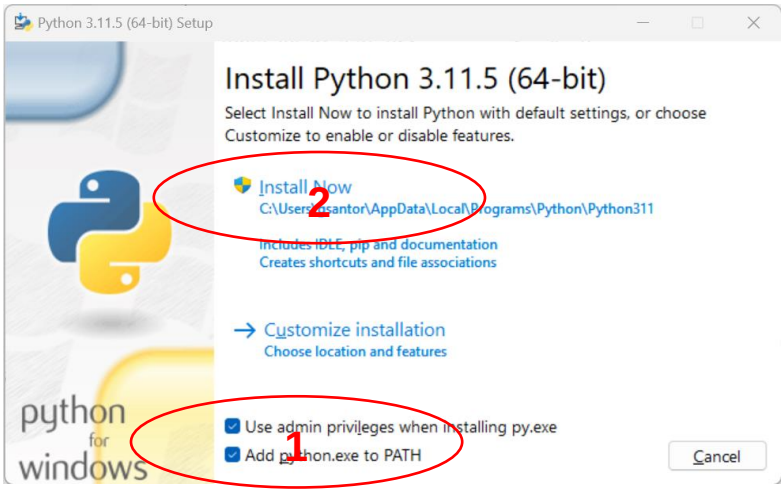
Select: Download → Windows



Click the button and save the binary to your download folder. The site should auto detect the type of Windows you are running. On a typical 64-bit Windows machine it will download "**`python-3.9.0-amd64.exe`**". Don't worry about the "amd64" if you have an Intel CPU; it is compatible.[1]

Run the Installer

Locate and double-click the installer program.



Select "**`Add Python 3.9 to PATH`**" (this allows python to be run at the command line from anywhere on your system).

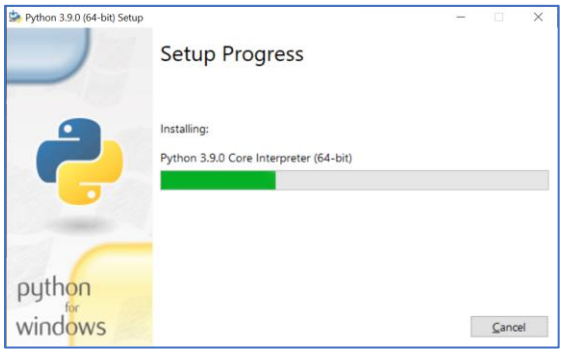
Leave the option "**`Use admin privileges when installing py.exe`**" checked.

Click "**`Install Now`**."

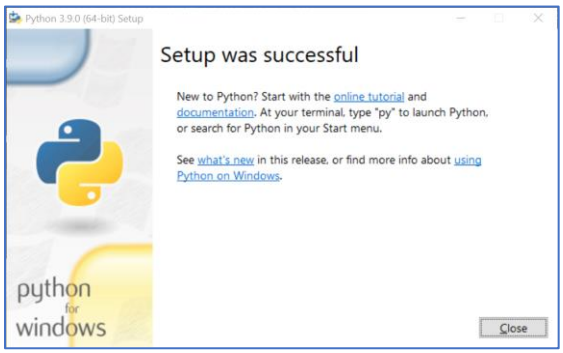
[1] The version number changes over time, but the process is the same. At the time of writing, the current version is 3.11.5.

Installing

After giving the OS permission to proceed, you should see:



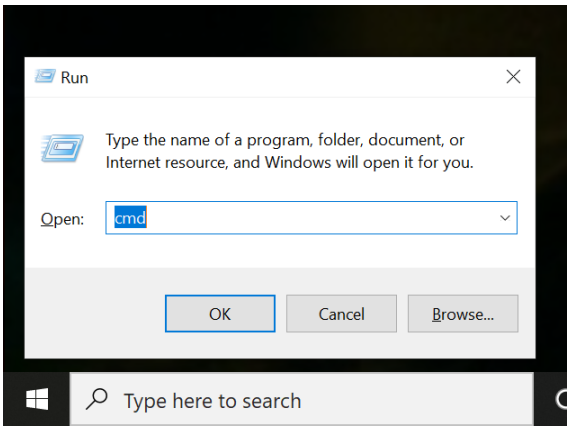
Upon completion you should see:



You can now close the installer and test python.

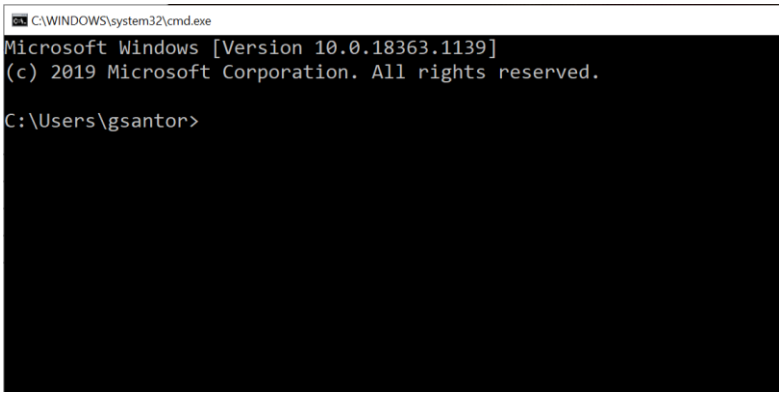
Run from Command Prompt

Launch a command prompt: ⊞+R

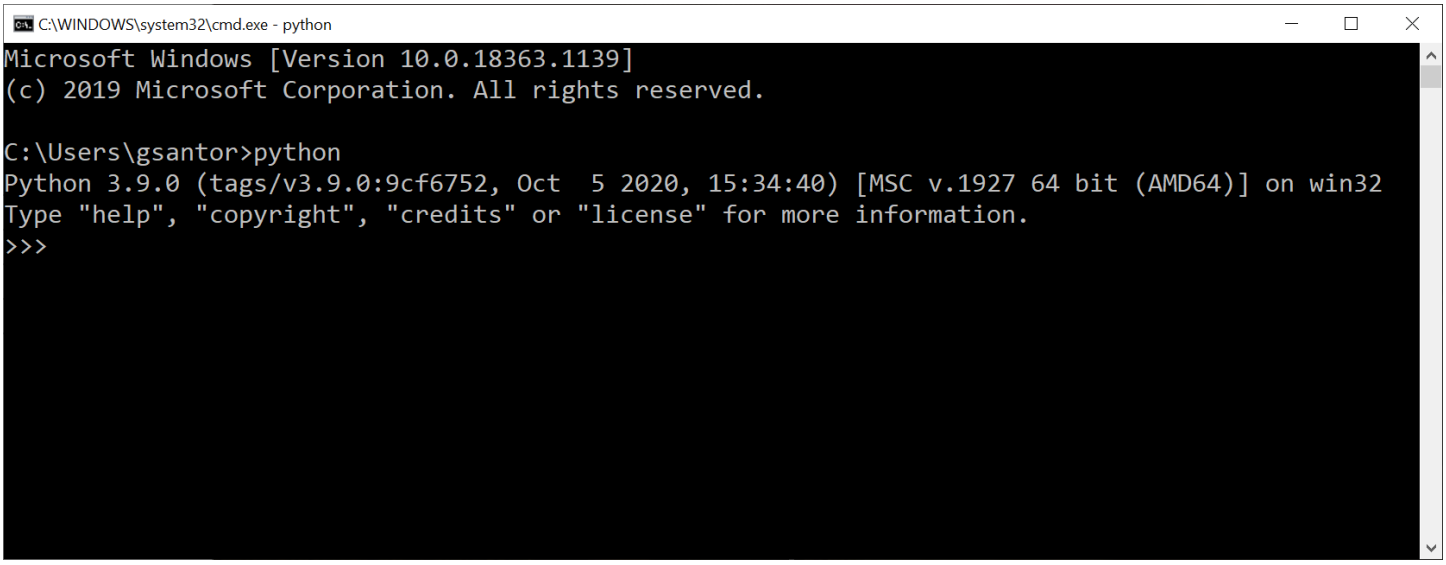


Click OK.

You should see:

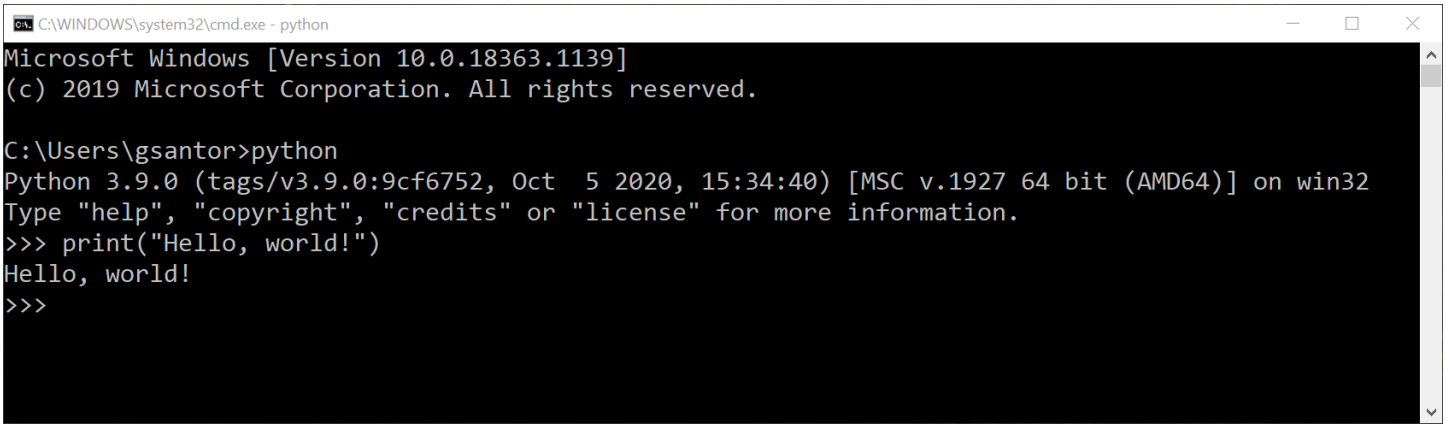


Type: `python↵`



Hello, world!

Type: `print("Hello, world!")`



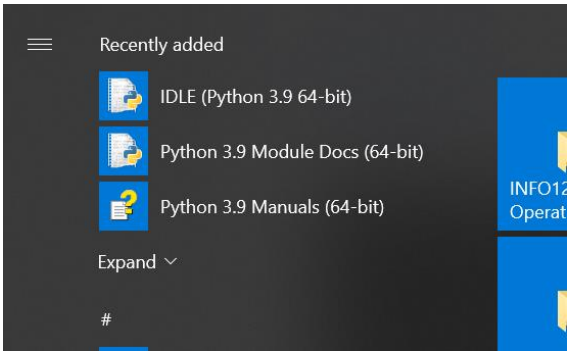
Exit python

Type: `exit()`

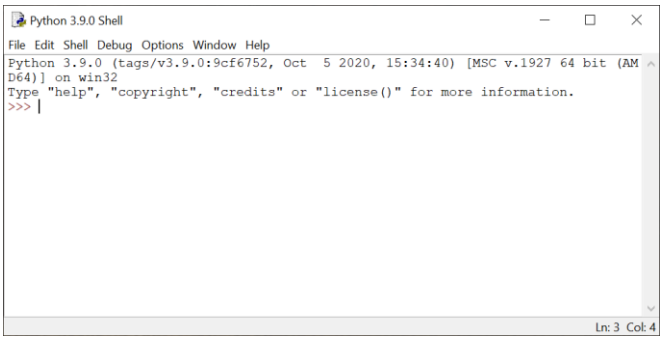
```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.18363.1139]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\gsantor>python
Python 3.9.0 (tags/v3.9.0:9cf6752, Oct  5 2020, 15:34:40) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> print("Hello, world!")
Hello, world!
>>> exit()

C:\Users\gsantor>
```

Run in the GUI – IDLE

From the start menu, select "IDLE (Python 3.9 64-bit)"



You should see:



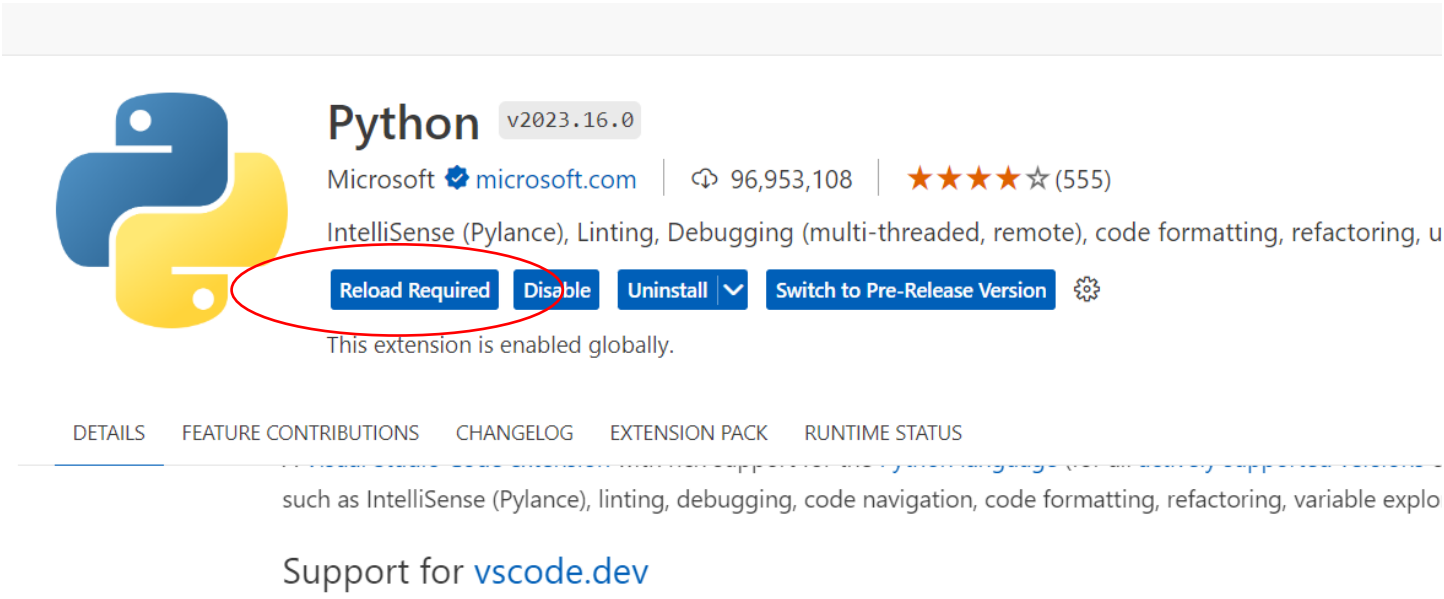
Try the same code as before…

Install into Visual Studio Code

Visual Studio Code (different from Visual Studio) is a multi-language, multi-platform source-code editor with a rich extension catalog that provides support for debugging, syntax highlighting, code completion, among other things. It also has a huge extension catalogue.

I'll assume that you have already installed Visual Studio Code from Microsoft. If not, you can download it from here.

We'll first need to add the *Python extension for Visual Studio Code* found here. It will ask permission to open VS Code – grant it. A restart of VS Code is likely needed, so do so.



I would recommend following Microsoft's tutorial for Getting Started with Python in VS Code.

Testing VS Code/Python

1. Run VS Code.
2. Select File → New File …
3. Type Hello.py
4. Select a folder to hold the file.
5. Enter the following code:

```
print("Hello, world")
```

6. Save
7. Select from the menu bar: Run → Run without Debugging, or press <Ctrl>-F5.

8. A window should “pop up” at the bottom of the application showing:

9. All is good! You may exit VS Code.

Document History

Version	Date	Activity
1.0.0	2020-10-29	Document created.
1.1.0	2023-09-14	Added installation instructions for VS Code