How to Install Python

Tutorial For All

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Introduction

This guide will show you how to install Python on a Windows 10 computer. Once Python has been installed, there will be a quick tutorial on how to make a small Python program and run it in the command prompt. This tutorial does not require exclusive knowledge and anyone who can turn on a computer should be able finish this tutorial.

What is Python?

Python is a high-level and general-purpose programming language first created in 1991. It can be used to create games, automate computer processes, develop websites, and has many other applications. It's a great language for anyone to start as it's easy to understand.

Minimum System Requirements

Below are the minimum system requirements for installing and programming in Python. There are instructions below the list of system requirements on how to check your own system's information.

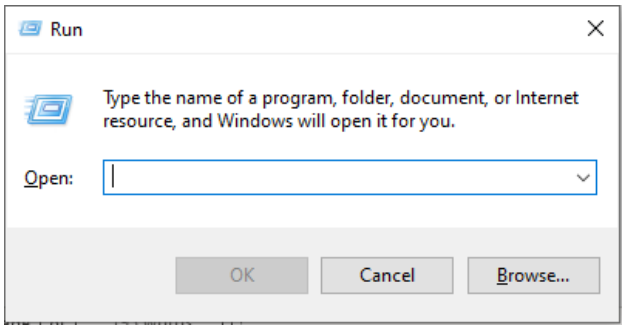
Minimum System requirements for installing Python on Windows:

- **Operating System**: Any version of Windows 10
- **RAM:** 1GB (gigabyte) or more memory
- **Storage** (Hard drive or solid-state drive): 2GBs of space

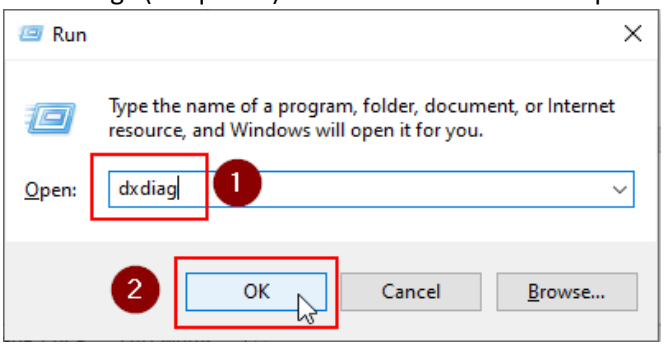
How to Check Your Systems Information

If you would like to check your system requirements (otherwise you can skip this section):

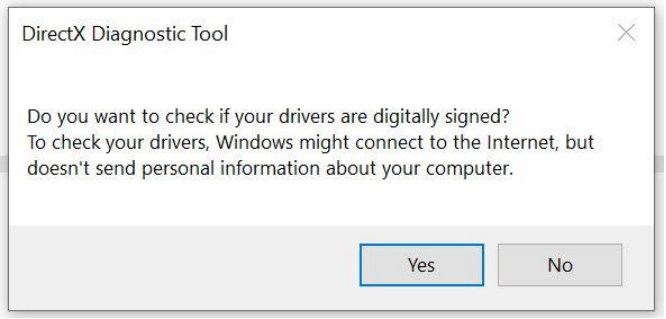
1. Begin by pressing the "Windows" key and the "R" key (Windows + R) at the same time on your keyboard. A small Run window should appear around the bottom left corner of your screen.



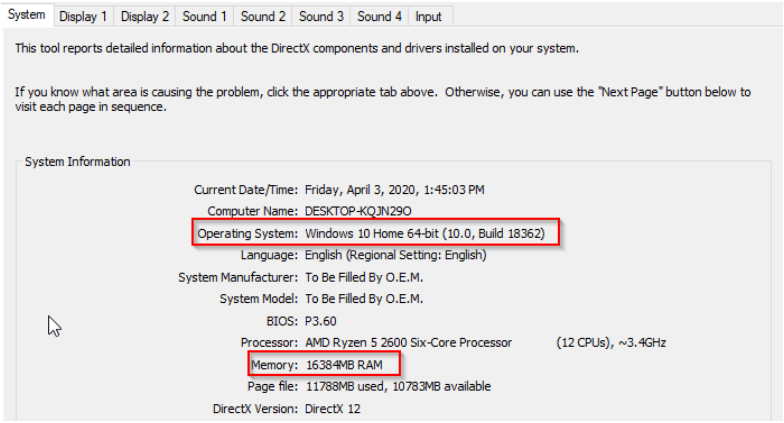
2. Once its open, enter in "dxdiag" (no quotes) into the Run window and press "OK".



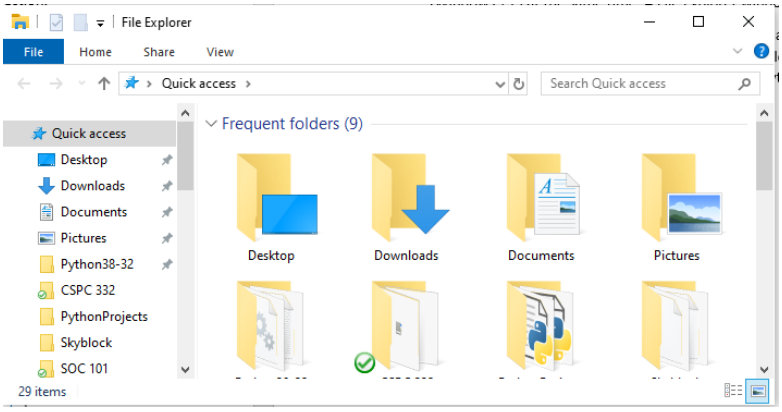
3. If this window shows up, you can click “No” and go to the next step.



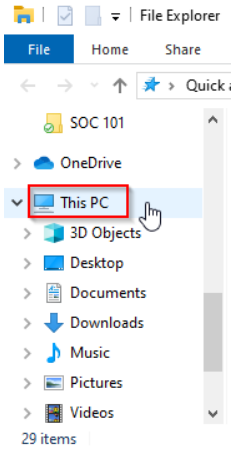
4. Here, you can see your Operating System and your RAM/Memory. If they are greater than or equal to the minimum requirements above, then you’re in good shape.



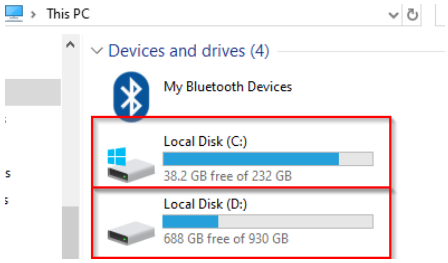
5. The last thing is to check the storage. To do this, press the “Windows” key and the “E” key (Windows + E) at the same time. A File Explorer window will show up.



6. Once there, scroll down until you see “This PC” on the left side. Click on it and it will now show you a “Folders” section and a “Devices and Drives” section.



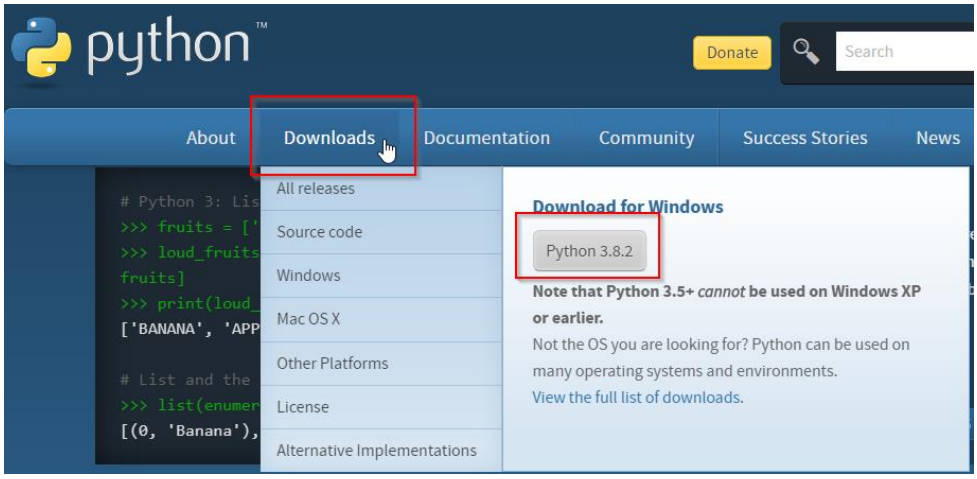
7. Depending on your hardware, you may have more than one drive. If you have more than 1GB free on your hard drive(s) then you are good to go.



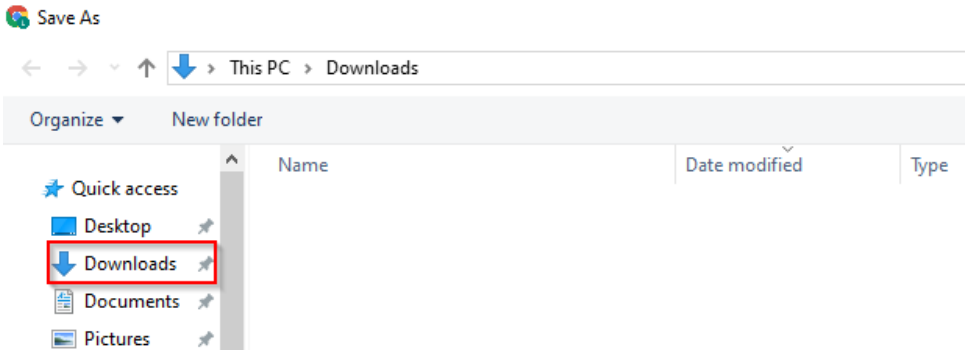
Installation Steps

Now that you've confirmed you have the required system requirements; you can now install Python onto your computer.

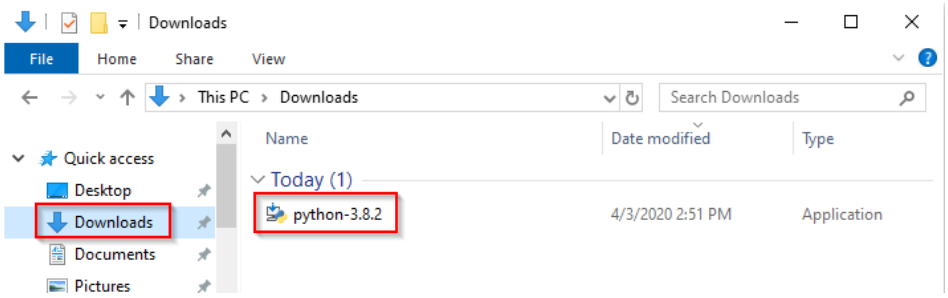
1. First, open your preferred web browser (Chrome, Microsoft Edge, Mozilla Firefox, etc.) and head to https://www.python.org/.
2. Once there, mouse over the "Downloads" header on the website and click on the "Python 3.8.2" (or whichever version shows up there) button under the "Download for Windows" text.



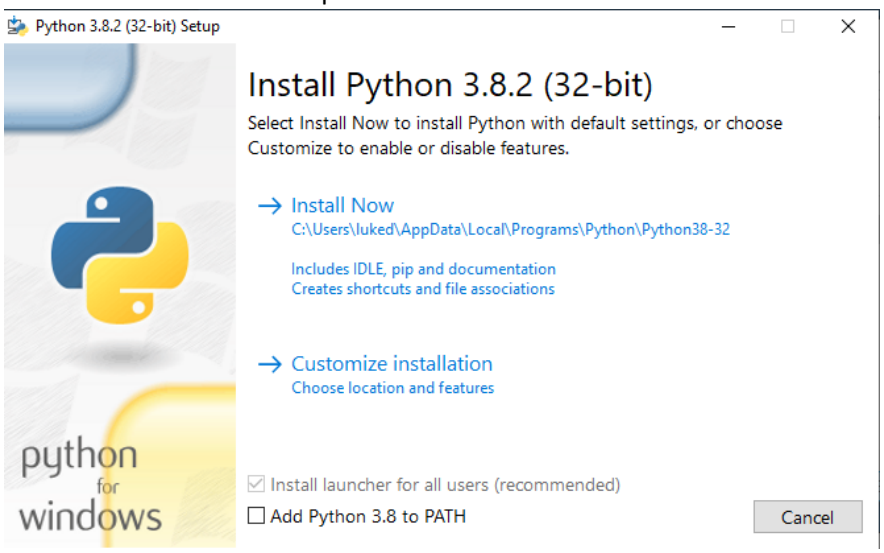
3. Once clicked on, the "python-3.8.2.exe" will be downloaded onto your computer and a File Explorer window will open. Choose a location inside the File Explorer window to save the "python-3.8.2.exe" file. It's recommended to select your "Downloads" folder. After choosing the folder where it will be downloaded, click the "Save" button in the bottom right corner.



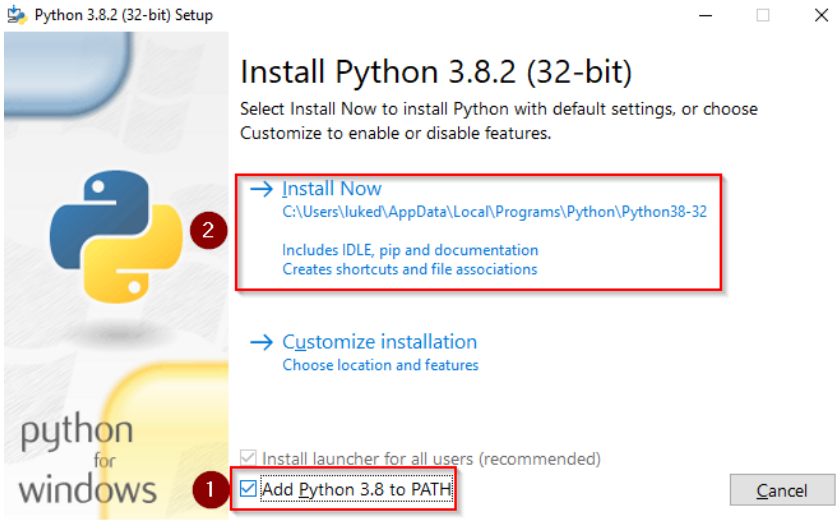
4. Now open File Explorer by pressing the “Windows” key and the “E” key (Windows + E). Then, navigate to where you saved the “python-3.8.2” file. Since the one in the example was saved in “Downloads”, all it took was a simple navigation to downloads via the left side bar.



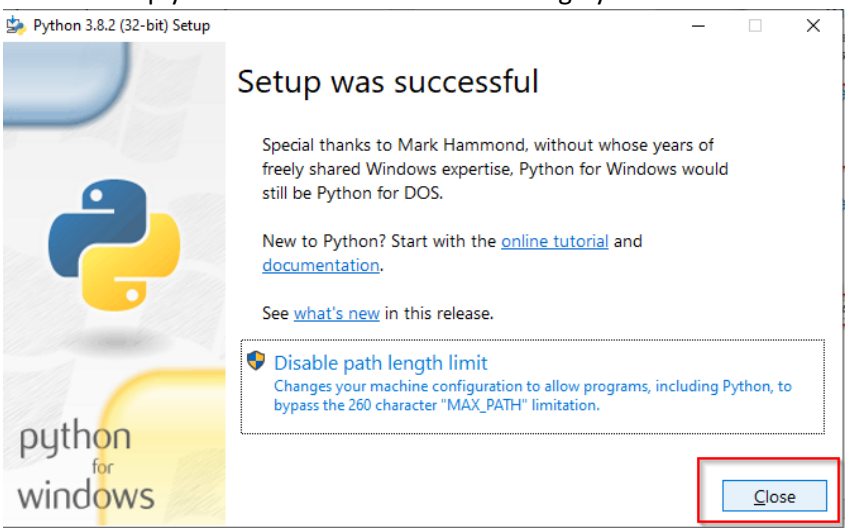
5. Double click on the file and it should open an installer window.



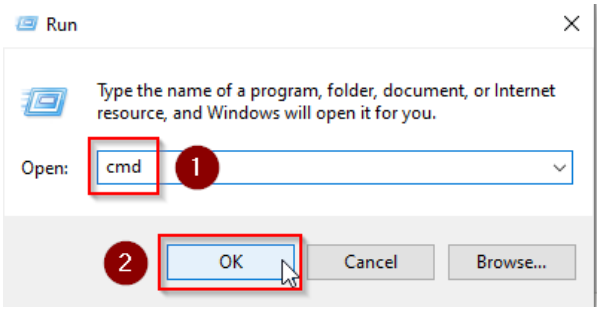
6. Check the “Add Python 3.8 to PATH” box (This allows you to directly run Python through the command prompt which will be shown later) and then “Install Now”.



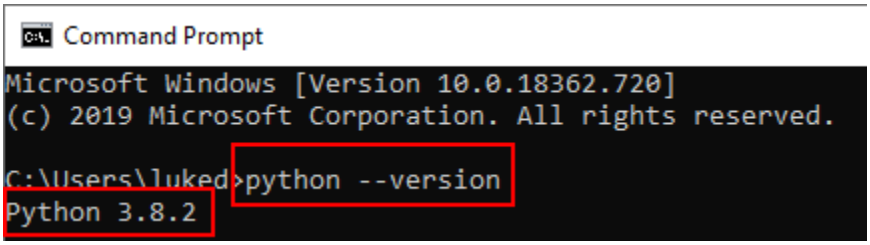
7. Let it install and then simply click close. That's it for installing Python.



8. It's recommended to check Python is installed on your computer. Begin with opening the CMD (Command Prompt) by pressing the "Windows" key and the "R" key (Windows + R) and then type "cmd" into the Run box". Press "OK" once "cmd" has been input.



9. Input "python --version" into the CMD and press enter. If Python installed, you will see the version you just downloaded from their website show up.



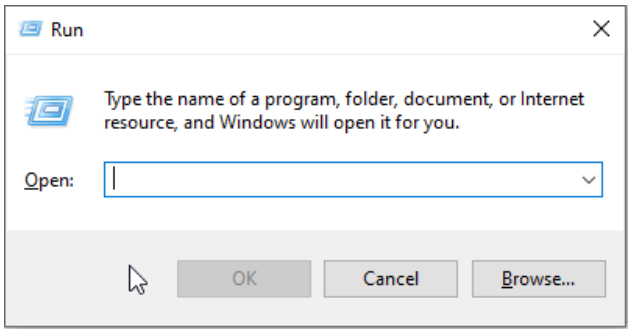
Making Your First Program

Now that Python is installed, you can now start to program in the Python. Let's start off by making a simple program.

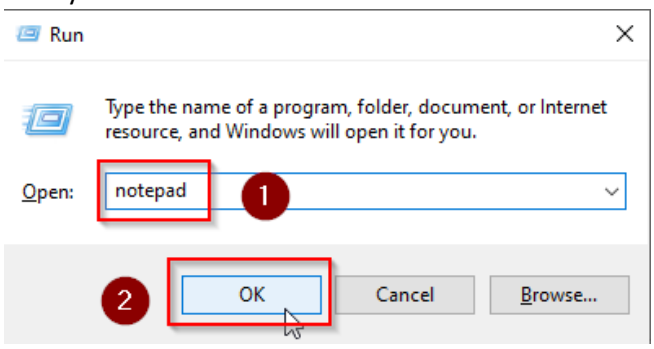
Creating a Program

There are several ways to write and run code in Python. The main way that will be shown is through Notepad and CMD.

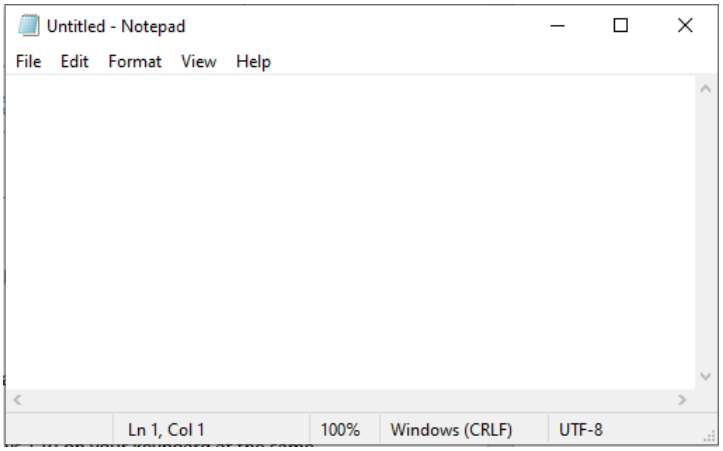
1. First press the "Windows" key and the "R" key (Windows + R) on your keyboard at the same time and a Run window will show up around the bottom left corner of your screen.



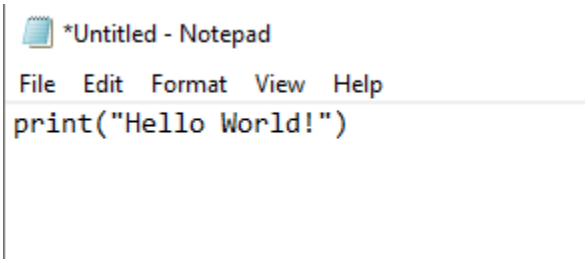
2. Now, type "notepad" into your Run window and click "OK".



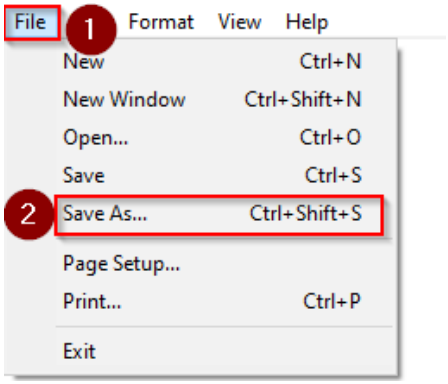
3. A Notepad window will now show up. Here is where you can write your Python code.



4. As with all programming tutorials, you will enter in test code to display the phrase “Hello World!”. Type “print(“Hello World!”)” (no double quotes on the outside of the text). Into your Notepad file.

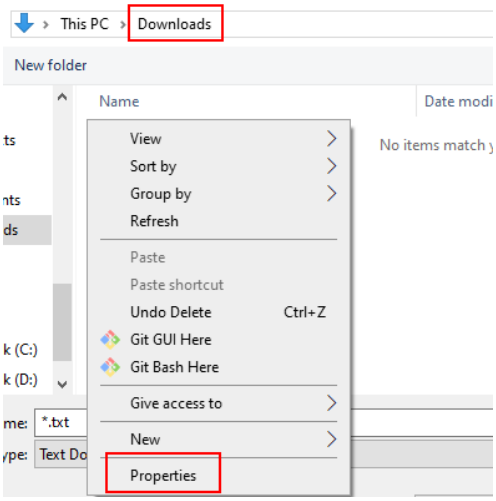


5. Then, click on “File” in the top left corner and “Save As…”.

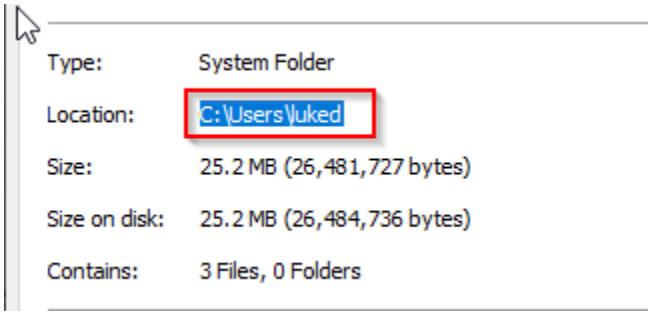


6. Now a File Explorer window will appear to choose a place to save the program. Navigate to where you want to save the file (I recommend “Downloads” or “Desktop”).

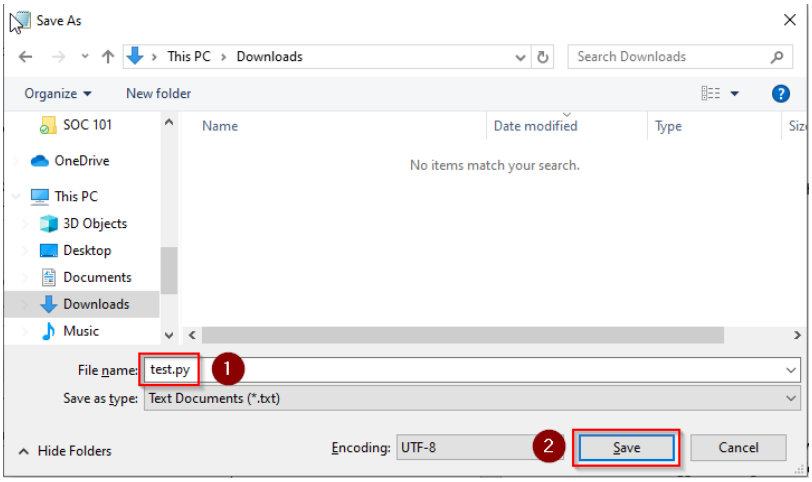
7. The red box at the top highlights the folder the file will be saved in, yours may be different depending on the folder you choose but make sure to remember it. Right click inside the File Explorer window and click properties.



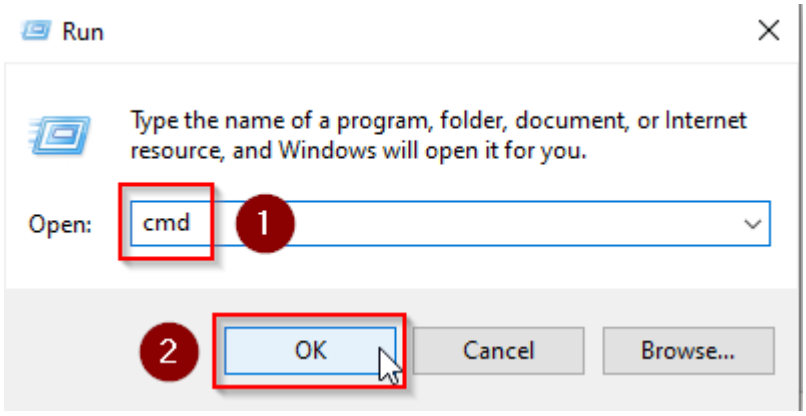
8. A window will show up with information about the folder. In the “General” tab, Select the text to the right of “Location:” and copy it (“Ctrl” key and the “C” key). Just remember which folder is the end destination of this path where the program is being saved (mine is Downloads as seen in the previous screenshot).



9. Now you will give the Notepad file a name and add the “.py” extension to the end of it so the computer knows it’s a Python program. Simply name the file “test.py” and click “Save”.

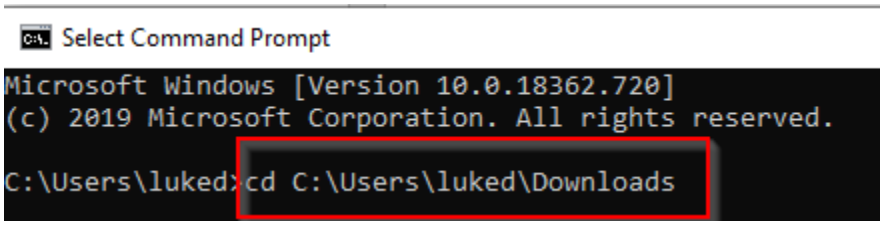


10. Press the “Windows” key and the “R” key (Windows + R) at the same time again, then type “cmd” into the Run window and click “OK”.

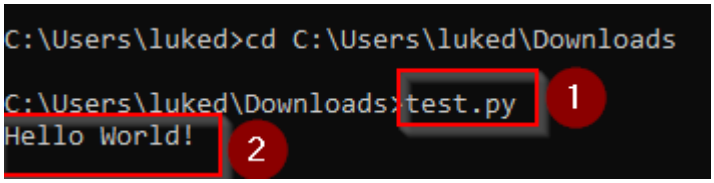


11. A black Command Prompt (CMD) window will show up. In these next steps I'll show how to navigate to the folder where you saved the "test.py" file. If you don't remember where you saved it, you can redo steps 1-9 and save the file location again.

12. Now in CMD type "cd" (with a space after it) and paste ("Ctrl" key and the "V" key) the "Location:" property you copied earlier. Then, after the "Location:" text you just pasted, type in a "\" and then the name of the folder where you saved the Python program and press enter. In the example it was saved into the "Downloads" folder.



13. Then, simply type in the name of the program which is "test.py" and press enter.



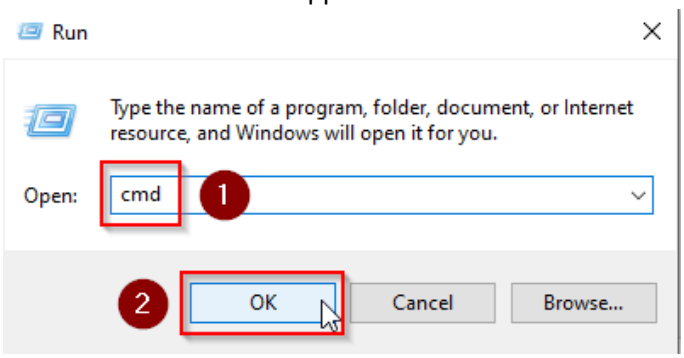
14. When you pressed enter after inputting the Python program name, you ran it in *c*! As you can see below the "test.py" text, another set of text "Hello World!" was printed under that. Now you can run Python programs on your computer by first writing the code in a Notepad document, and then access it in CMD.

Another Way to Run Code

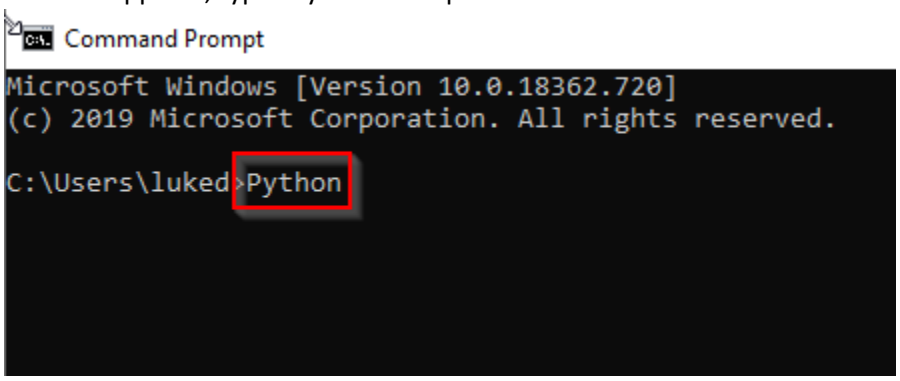
This is a short section on how to write Python code but directly through CMD. As you go through this section you will ask "Why did I

even do it through Notepad and do all that CMD stuff earlier?". Writing programs in Notepad keeps them a lot more organized and easier to read.

1. Open the CMD by pressing the "Windows" key and the "R" key (Windows + R) at the same time. Then, type "cmd" into the Run window that appears and click "OK".



2. Once CMD window appears, type “Python” and press enter.



3. Now you are doing Python straight through CMD! It’s very convenient for short and quick Python programs but for longer programs it could get messy and very unorganized. To print “Hello World!” again, simply type “print(“Hello World!”)” into CMD and press enter. You will have the same results as with the way that was done through the Notepad file that you created.