Instructions for using compress drive script:

Purpose:

This Instruction manual is provided as a companion piece to the included README file in the repository. The purpose is to allow the reader to use the compress drive script for its intended purposes.
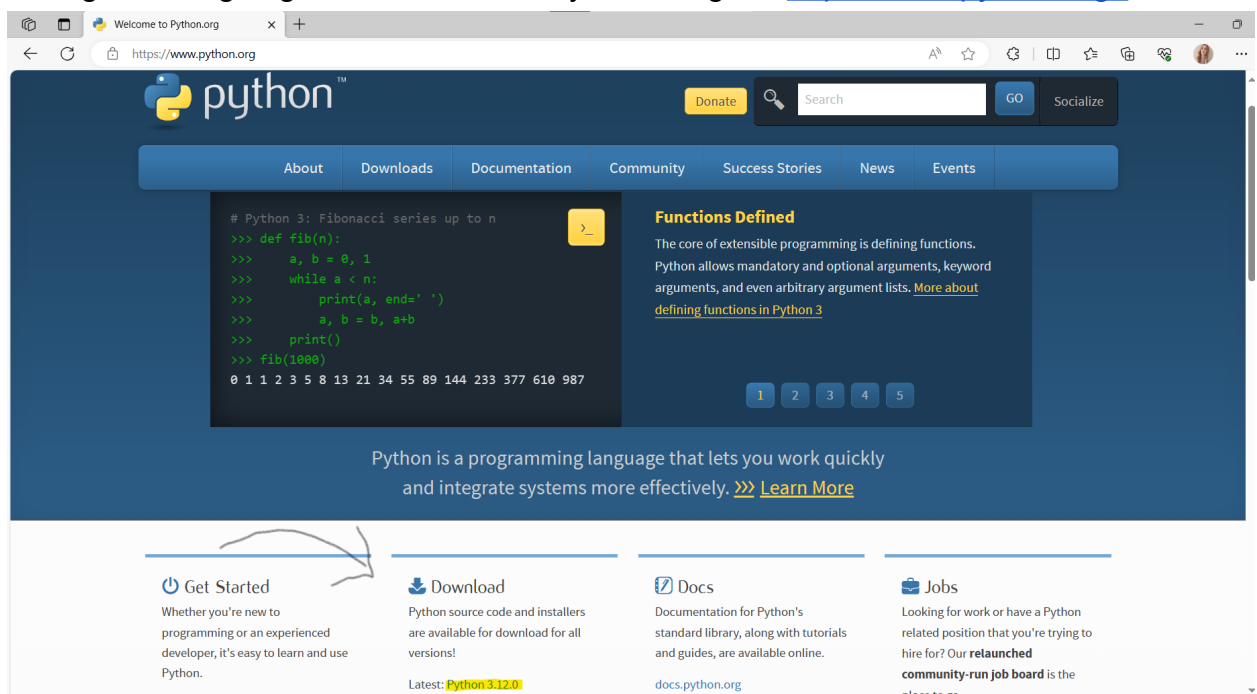
Required software:
- Python
- Winrar
- 7zip
- Compress Script

Required Hardware: Windows computer with Windows 7 or greater

Python installation:

1.) To begin we're going to need to install Python, so go to https://www.python.org/.

2.) Select hyperlink highlighted in yellow to go to the download page for the most recent release, on release download page scroll down to files.

Refugees, by Brian Bilston.

Files

Version	Operating System	Description	MD5 Sum	File Size	GPG	Sigstore
Gzipped source tarball	Source release		d6eda3e1399cef5dfde7c4f319b0596c	27195214	SIG	.sigstore
XZ compressed source tarball	Source release		f6f4616584b23254d165f4db90c247d6	20575020	SIG	.sigstore
macOS 64-bit universal2 installer	macOS	for macOS 10.9 and later	eddf6f35a3cbab94f2f83b2875c5fc27	45371285	SIG	.sigstore
Windows embeddable package (32-bit)	Windows		c2047dc270c4936f9c64619bb193b721	9824586	SIG	.sigstore
Windows embeddable package (64-bit)	Windows		8e24d2b26a8dbf1da0694b9da1a08b2c	11030264	SIG	.sigstore
Windows embeddable package (ARM64)	Windows		3da91ef1a86a8a210a32ea99c709dd93	10277538	SIG	.sigstore
Windows installer (32 -bit)	Windows		de59862985bf7afa639f2e4f9e2a722c	25173976	SIG	.sigstore
Windows installer (64-bit)	Windows	Recommended	32ab6a1058dfbde76951b7aa7c2335a6	26507904	SIG	.sigstore
Windows installer (ARM64)	Windows	Experimental	230c703e3b8b3d92765d118afa7b2f78	25742528	SIG	.sigstore

If you're uncertain which version to get, you can take the "windows installer (32-bit)" option.

3.) Find the downloaded installation file in your downloads folder and run it. Follow the prompts on the installer
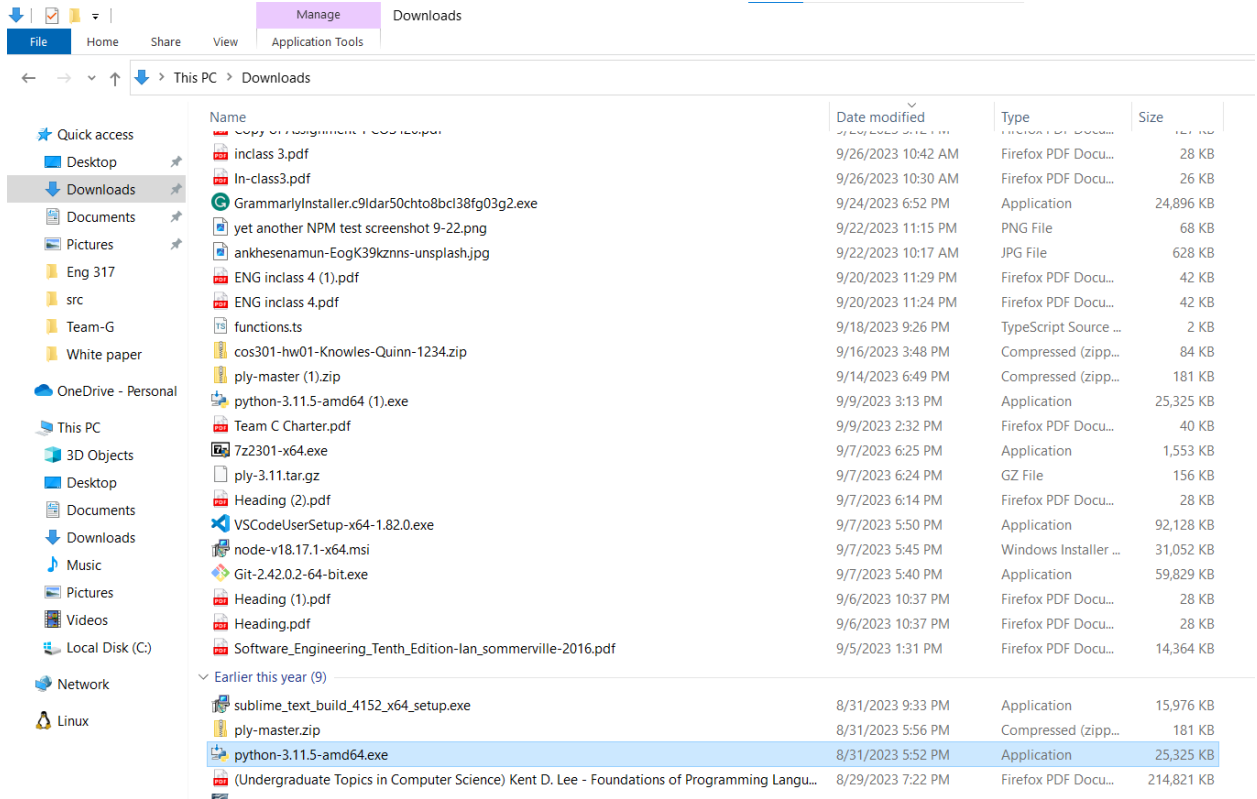
4.) Now we will check the installation. Open a terminal (type cmd in the search bar on windows). Type "python" and hit enter.
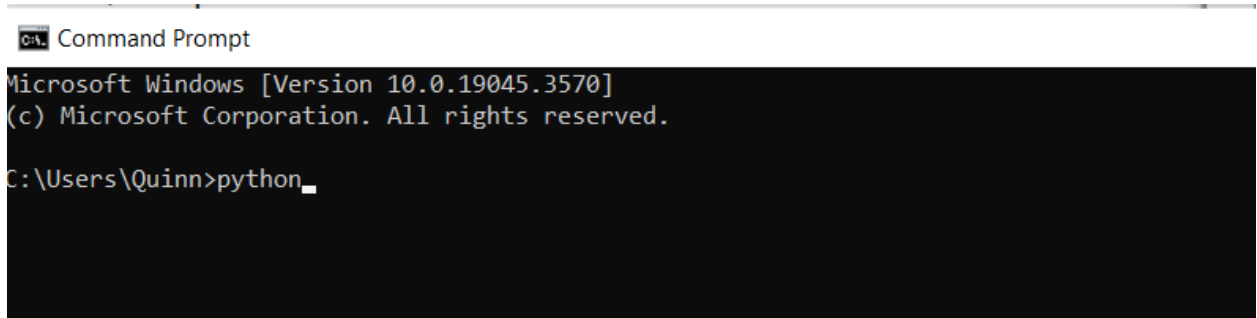

5.) If the installation has been done properly you'll see some version information about your Python install.
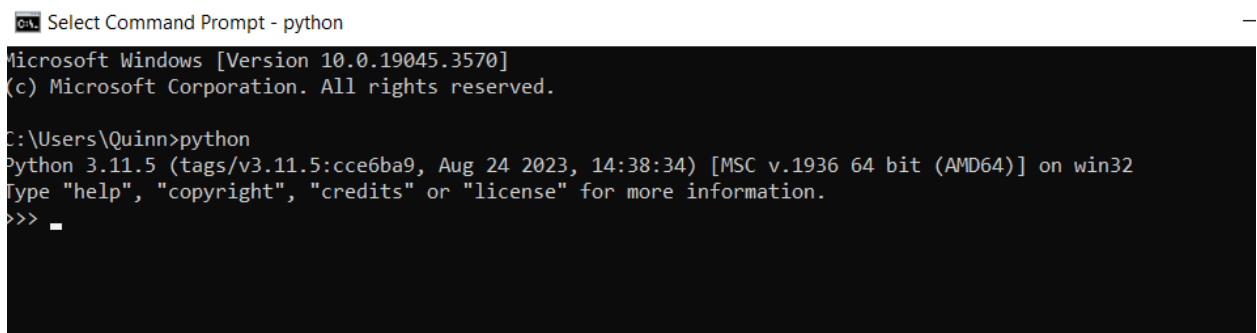
If python isn't working at this point, don't worry, we'll need to set up environmental variables which will be covered later in this manual.

Winrar installation:

1.) Next we're going to install winRAR so go to
https://www.rarlab.com/download.htm and select the installer
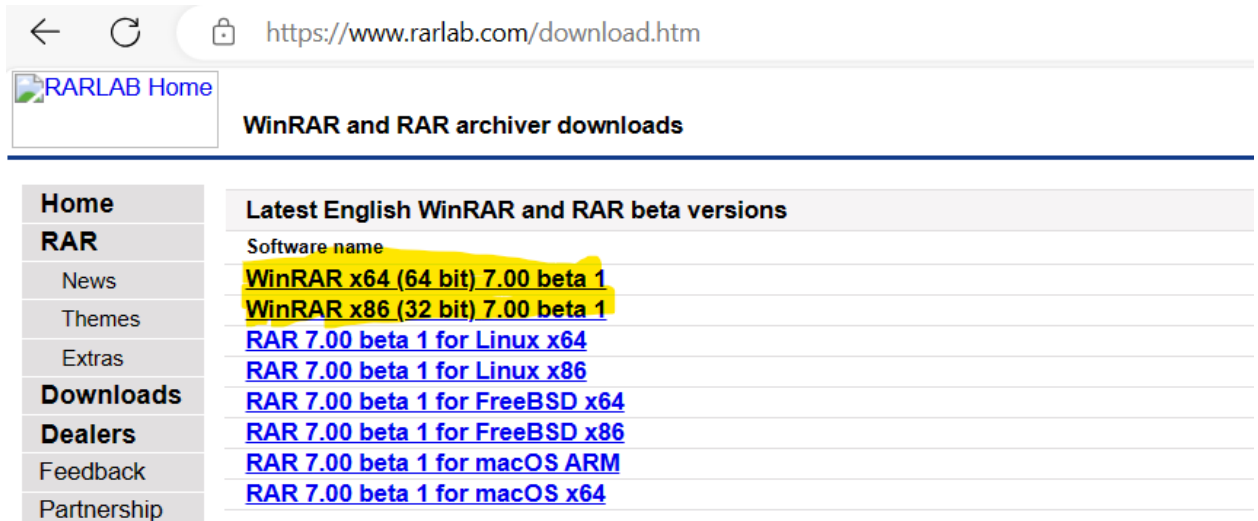
2.) Find the installer in your downloads folder and run the installer by following the onscreen instructions.

7zip installation:

1.) 7zip is required for 60% or the scripts actions so we'll need to install that too. Go to
https://www.7-zip.org/download.html and select an installer to download.
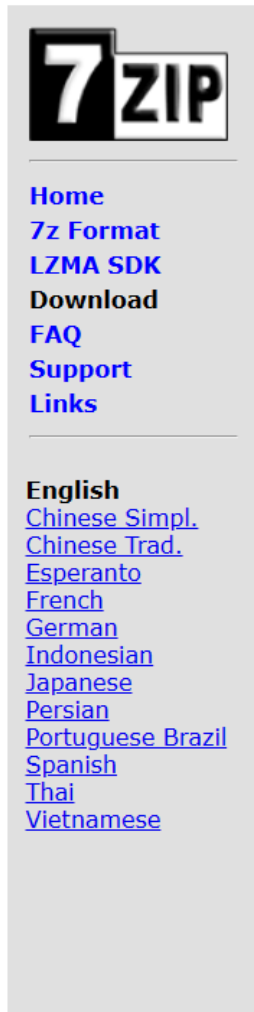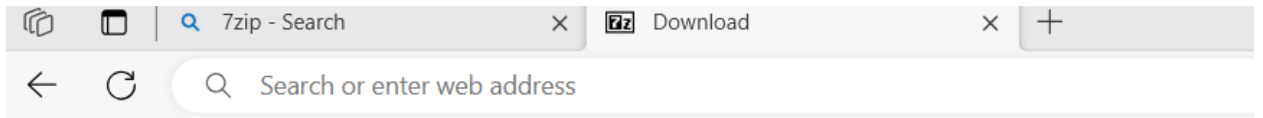
Download 7-Zip 23.01 (2023-06-20):

| Link	Type	System	
Download	.exe	64-bit Windows x64	
Download	.exe	32-bit Windows x86	7-Zip for Windows
Download	.exe	64-bit Windows arm64	
Download	.msi	64-bit Windows x64	(alternative MSI installer) 7-Z
Download	.msi	32-bit Windows x86	(alternative MSI installer) 7-Z
Download	.7z	Windows x86 / x64	7-Zip Extra: standalone consc
Download	.tar.xz	64-bit Linux x86-64	
Download	.tar.xz	32-bit Linux x86	
Download	.tar.xz	64-bit Linux arm64	7-Zip for Linux: console versic
Download	.tar.xz	32-bit Linux arm	
Download	.tar.xz	macOS (arm64 / x86-64)	7-Zip for MacOS: console vers
Download	.7z	any / Windows	7-Zip Source code
Download	.tar.xz	any / Windows	7-Zip Source code
Download	.7z	any / Windows	LZMA SDK: (C, C++, C#, Jav
Download	.exe	Windows	7zr.exe (x86) : 7-Zip console

2.) Find the installer in your downloads folder and run the installer by following the onscreen instructions.

Setting up environmental variables:

This part is going to be a little more complicated. Environmental variables are essential for the workings of the compression script. To start with you'll need to be able to find the

locations of installation files for WinRAR and 7zip, but if you installed them in the default locations you can copy the state of my variables below.

1.) Type "environment" into the task bar and select "Edit system environment variables"
2.) Select "environment variables..." at the bottom of the window.
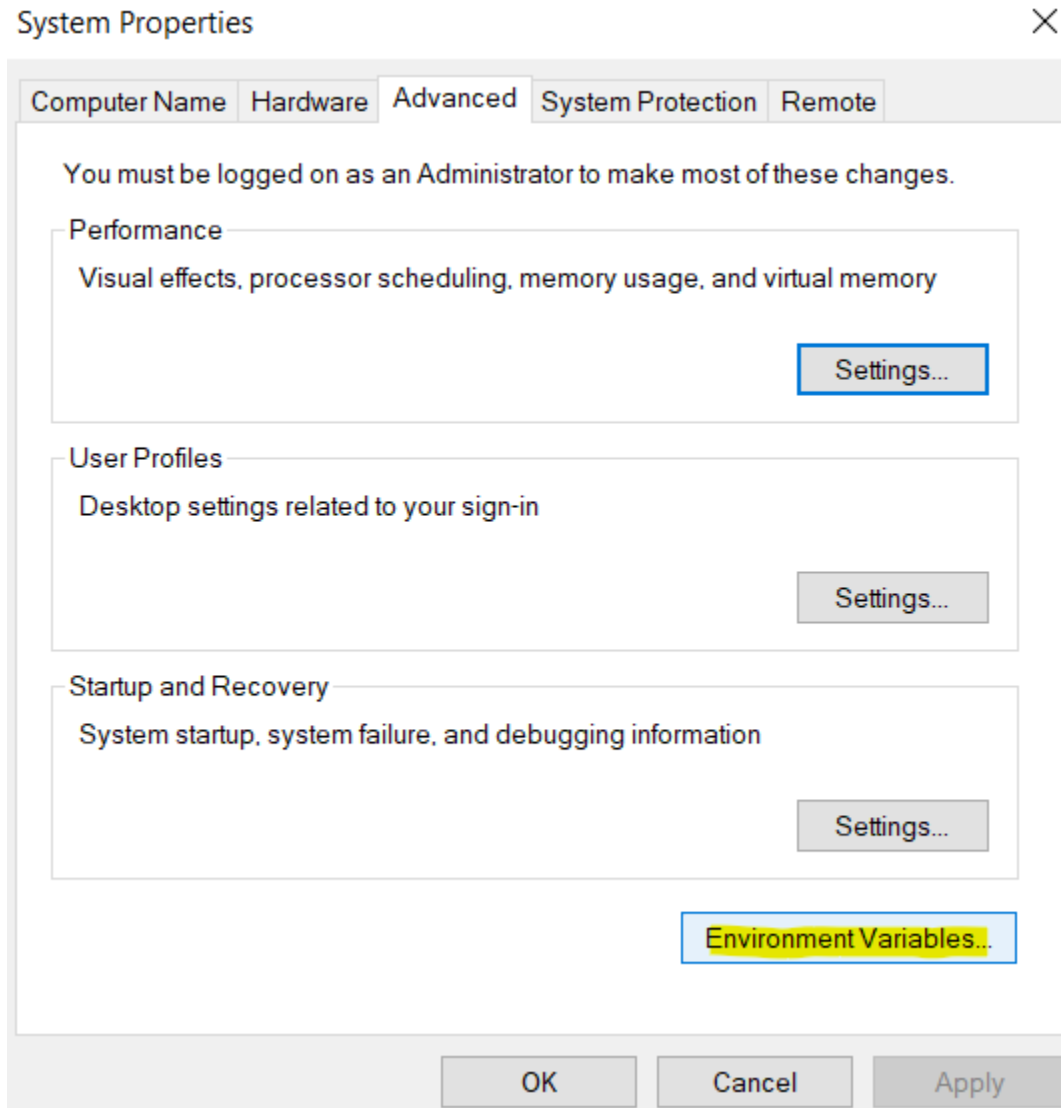
3.) In the new window select "Path" on the top part of the window. With it highlighted, click "Edit..."

Environment Variables   ✕

User variables for Quinn

Variable	Value
ChocolateyLastPathUpdate	133385968646455031
coco	C:\Bin\jcoco\coco
OneDrive	C:\Users\Quinn\OneDrive
OneDriveConsumer	C:\Users\Quinn\OneDrive
Path	C:\Users\Quinn\AppData\Local\Programs\Python\Python311\...
TEMP	C:\Users\Quinn\AppData\Local\Temp
TMP	C:\Users\Quinn\AppData\Local\Temp

New...   Edit...   Delete

System variables

| Variable	Value
7zip	C:\Program Files\7-Zip
bin	C:\Bin
ChocolateyInstall	C:\ProgramData\chocolatey
coco	C:\Bin\jcoco\coco
ComSpec	C:\Windows\system32\cmd.exe
DriverData	C:\Windows\System32\Drivers\DriverData
NUMBER_OF_PROCESSORS	8

New...   Edit...   Delete

OK   Cancel

4.) The bottom two elements listed below are the default install locations of 7-zip and WinRAR. A couple lines up is the Python path variable, in case the Python installer didn't add it automatically you can add it now. Make sure that your PATHs are pointing to the right folders in your filesystem. If something isn't working later on, you can bet that the issue is here.
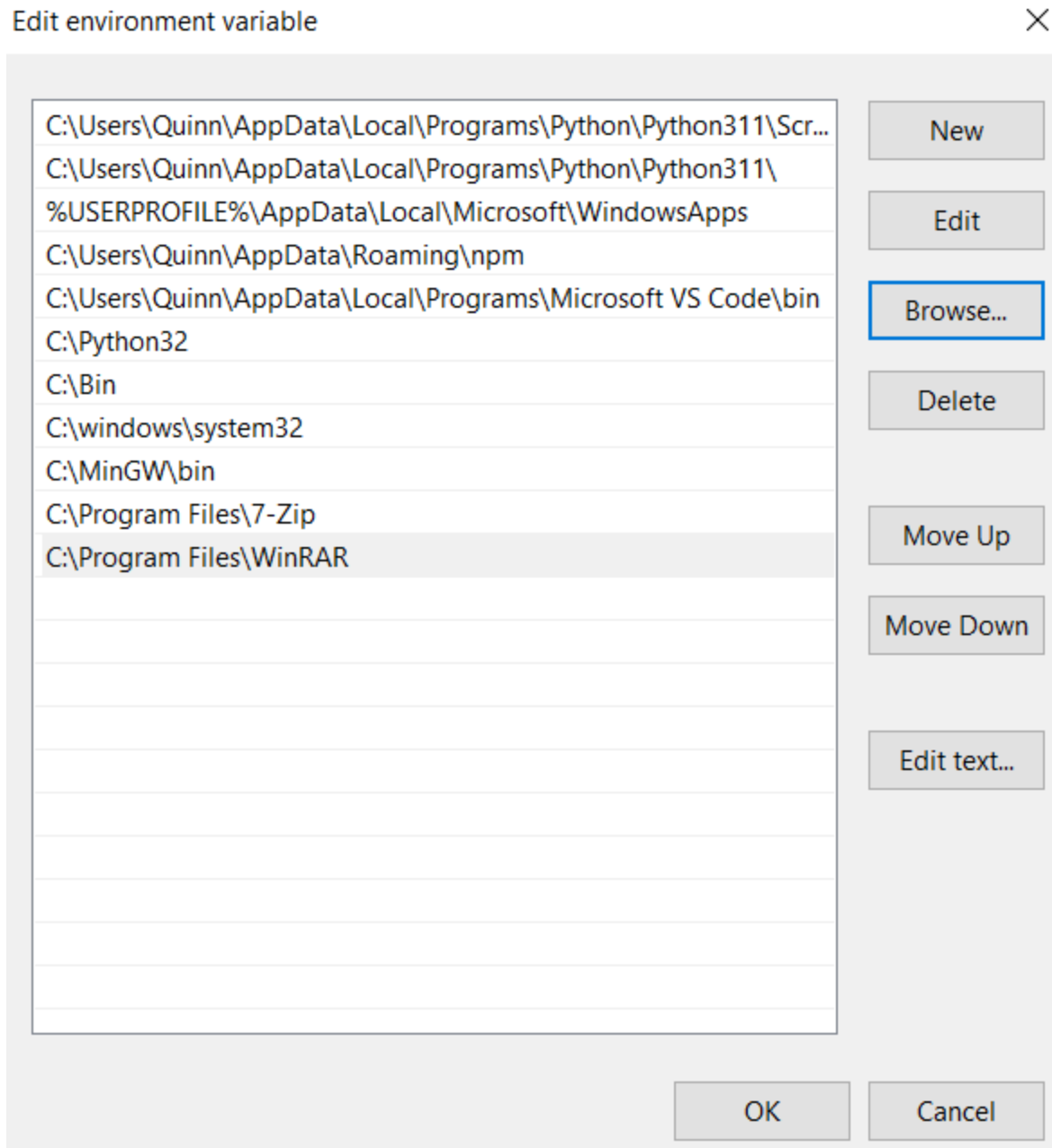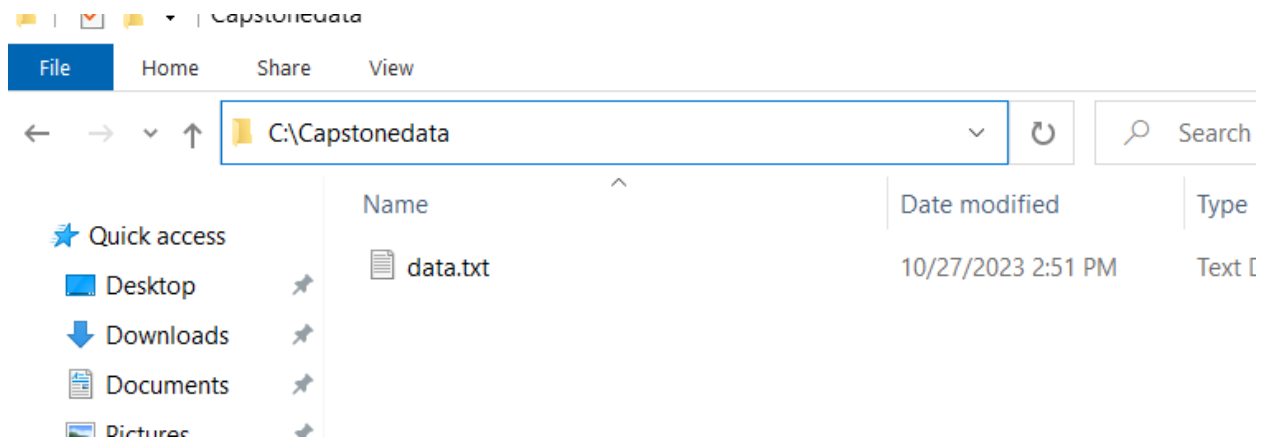
Click "OK" on Edit environment variable tab.

Click "OK" on Environment Variables tab.

Click "OK" on System Properties tab.

Setup output file:

Currently the script outputs the collected data into a text file located at
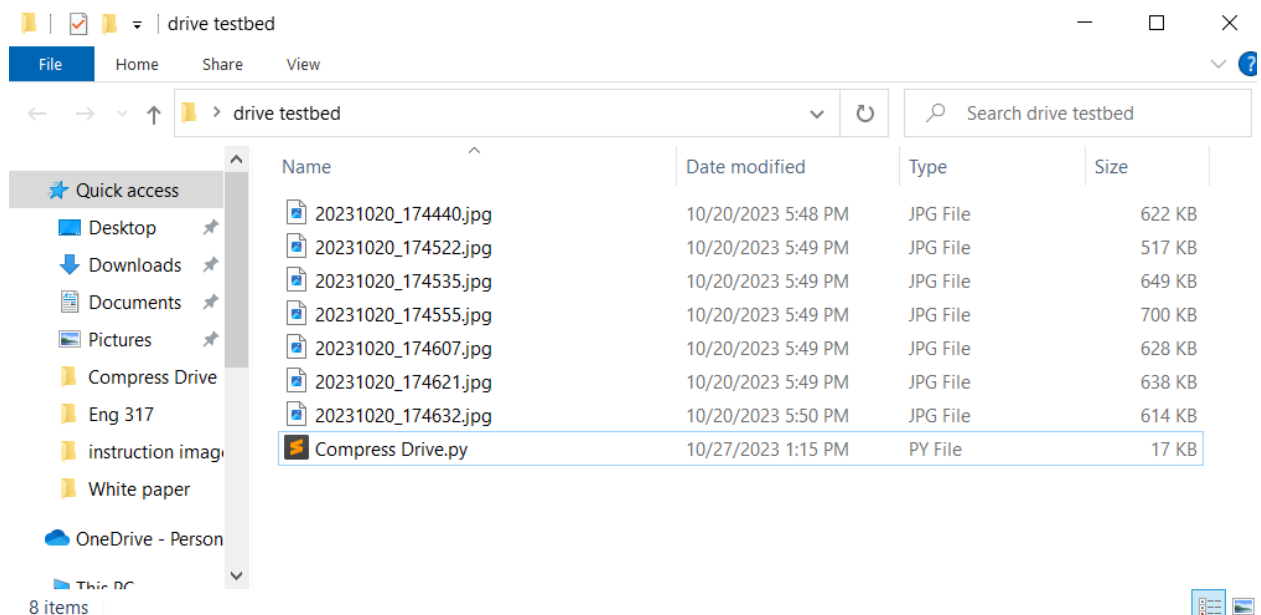"C:\Capstonedata\data.txt"
The current version of the script will not create this file if it doesn't exist, and so the user will need to create this file manual at this time.
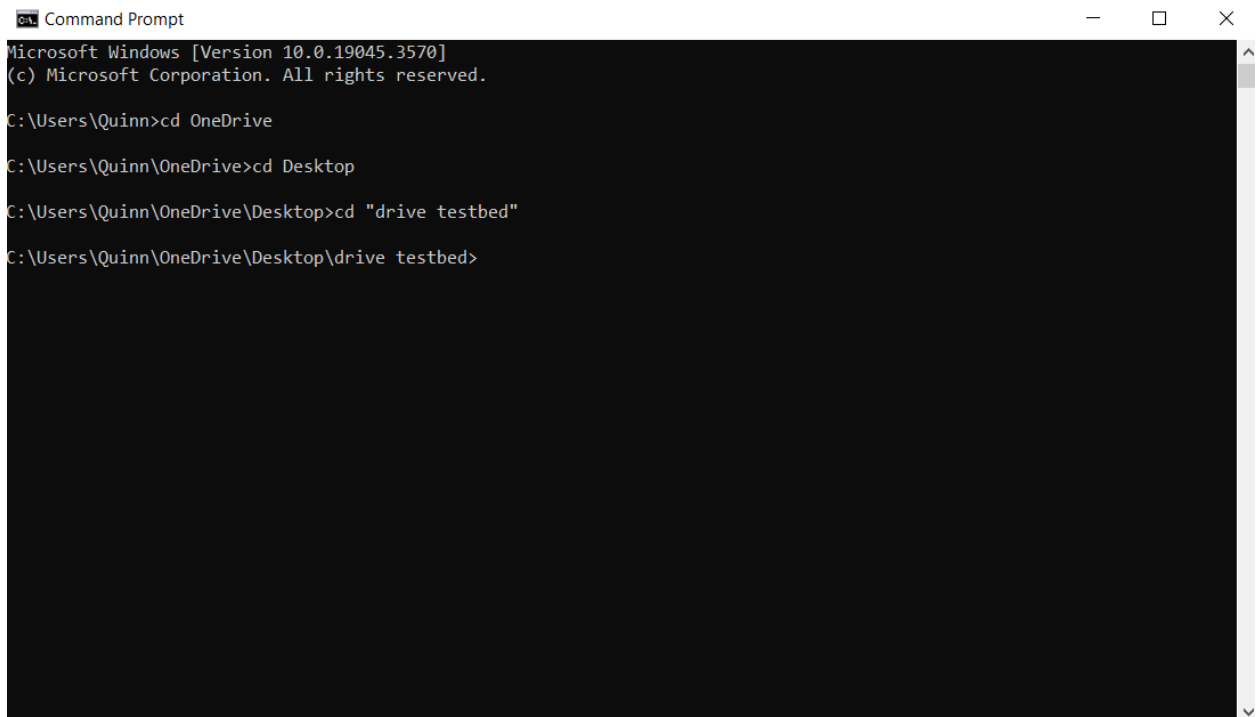

Running the program:

With that lengthy setup out of the way we can get to running the actual program.

1. Place the script file into a folder with files you want to test or compress.

2. Open the command prompt as before, and navigate to the folder where you have placed the script.
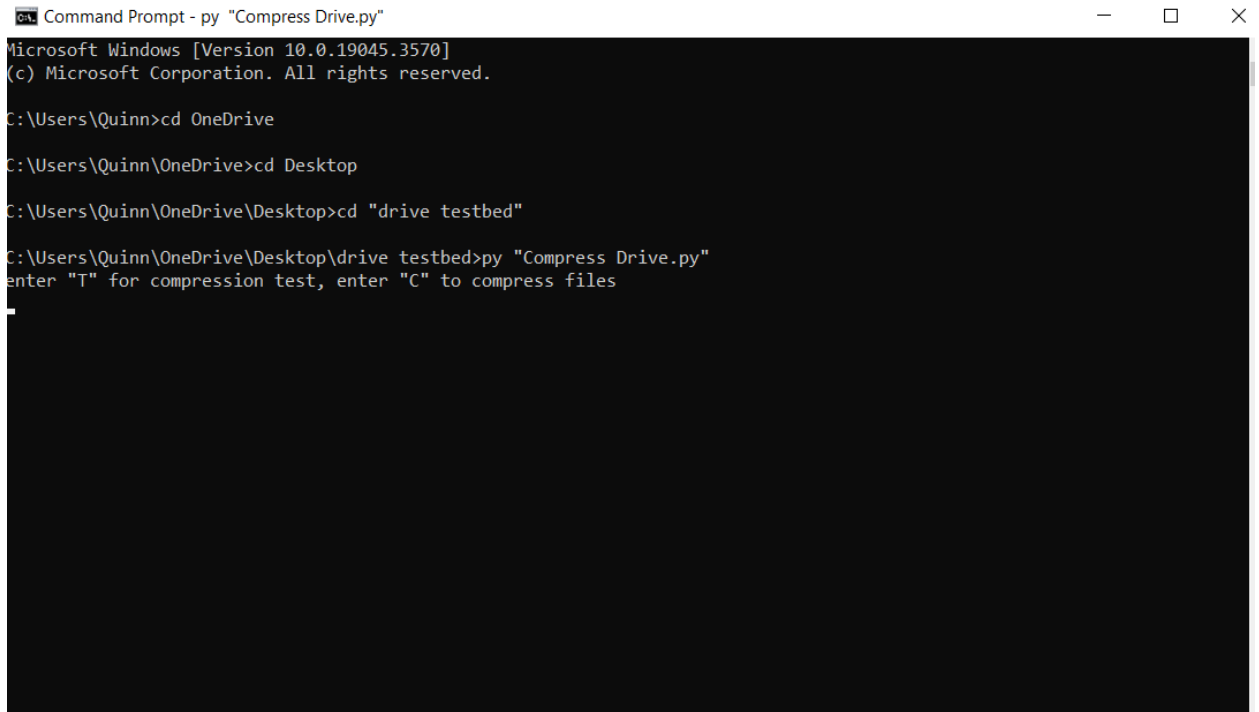
3. Type ' py "Compress Drive.py ' into the command line and press enter

4. Here you'll be given a choice between running the script in a data collection mode, or in a more usable compression mode.

4.1 Pressing "T" and hitting enter will run the files through all compression options in the script and then delete the results leaving the folder in its original state. The output associated with this test will be in the data.txt file we set up earlier.

4.2 Pressing "C" to compress files in a more utility sense, This option leaves the best possible compression in the folder instead of the original files.

The script should now be working.