**Converting a Python Script (.py) to an Executable (.exe)**

To convert a Python script into a Windows executable, follow these steps:

**1. Install PyInstaller**

Ensure that PyInstaller is installed in your Python environment. Use the following command:

pip install pyinstaller

**2. Navigate to Your Script’s Directory**

Open a terminal or command prompt and navigate to the folder where your .py file is located:

cd path/to/your/script

**3. Run PyInstaller**

Convert the script into an executable by running the following command:

pyinstaller --onefile your\_script.py

* **--onefile**: Bundles everything into a single .exe file.
* Replace your\_script.py with the actual name of your Python script.

**4. Locate the Executable**

After running PyInstaller, a dist folder will be created in the same directory as your script. Inside this folder, you will find the your\_script.exe file.

**5. Test the Executable**

Run the generated .exe file by double-clicking it or executing it from the command line.

**Additional Options**

* **--noconsole**: Use this option to suppress the console window when running a GUI application:

pyinstaller --onefile --noconsole your\_script.py

* **--icon=icon.ico**: Add a custom icon to your executable:

pyinstaller --onefile --icon=icon.ico your\_script.py

**Notes**

1. **Pre-check:** Ensure your Python script runs correctly before converting it.
2. **Size of Executable:** The .exe file may be large as it includes all dependencies.
3. **Advanced Configurations:** PyInstaller generates a .spec file, which you can edit for more advanced options.
4. **Compatibility:** Ensure the target system has the required permissions to execute the .exe file.

By following these steps, you can easily convert your Python scripts into standalone Windows executables!