Spyder – Set-up Notes

Last Updated: January 22, 2021

Overview

The following is a summary of the set-up I use for Spyder. Using this set-up will ensure a consistent experience for the workshop.

If you have any comments, questions or corrections, please e-mail them to boschen@loglin.com.

Spyder and the Anaconda prompt can be opened from the windows start menu under programs – Anaconda3 - … Spyder can also be opened by typing Spyder in the Anaconda Prompt console.

Open Spyder. If a “Spyder updates” pop-up appears, uncheck “Check for updates upon startup” and press OK (Updates should be managed through conda as described in the Appendix) and follow along with the details below to configure Spyder. There is no importance to the order of operations given.

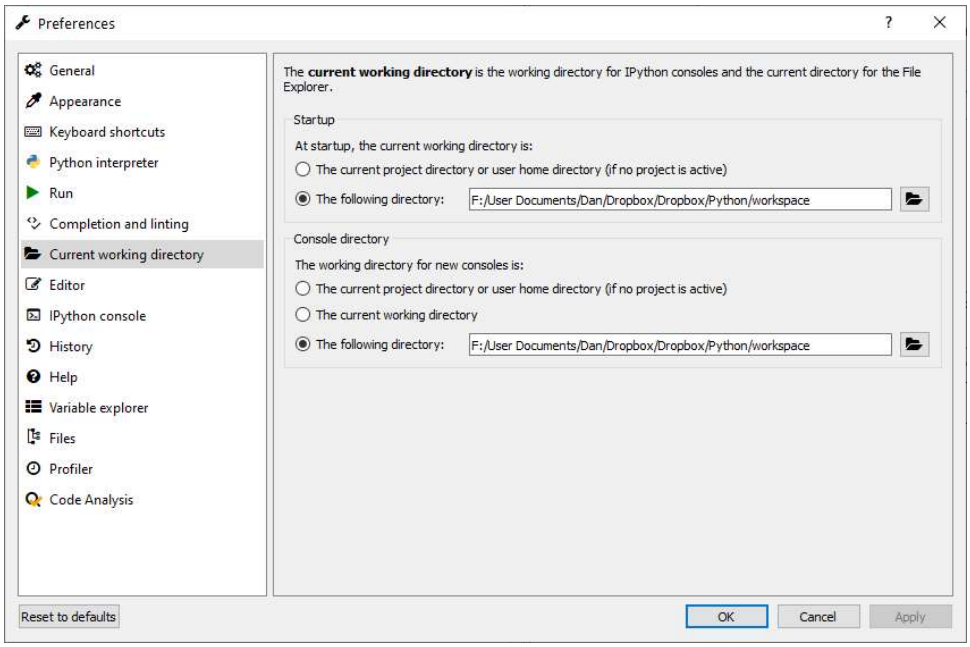
Note that the “Preferences” menu location referenced below is different on a Windows and MAC platform. On windows it is located under “Tools”, on a Mac, it is under “Spyder”:

Windows:	Tools – Preferences (Cntrl-Alt-Shift-P)
Mac:	Spyder - Preferences

The settings indicated below are in addition to the default selections already made after installation.

Set Working Directory: Preferences – Current Working Directory

Select and enter default working directory (top level workspace) by selecting “the following directory:” and navigating to where you created the “workspace” directory (as detailed in the “Installing Anaconda” handout.



Select Real Time Code Analysis: Preferences – Completion and linting– Code Style

Select "Enable code style linting”

Auto-remove trailing white-space: Preferences – Editor – Source code

Select "Automatically remove trailing white space when saving files”

Plotting options: Preferences – Ipython Console – Graphics – Graphics backend

Change Backend to “Automatic” (provides interactive separate window)

Setting this as “Inline” is useful when saving a record of the console (control- S)

Note: Can toggle between the two options quickly in the console using the following but

settings won't be saved unless set in the preferences:

%matplotlib inline

%matplotlib auto

Start-up Commands: Preferences – Ipython Console – Startup tab

create a PYTHONSTARTUP.py (can be any name) file and set in the "Run a file" section.

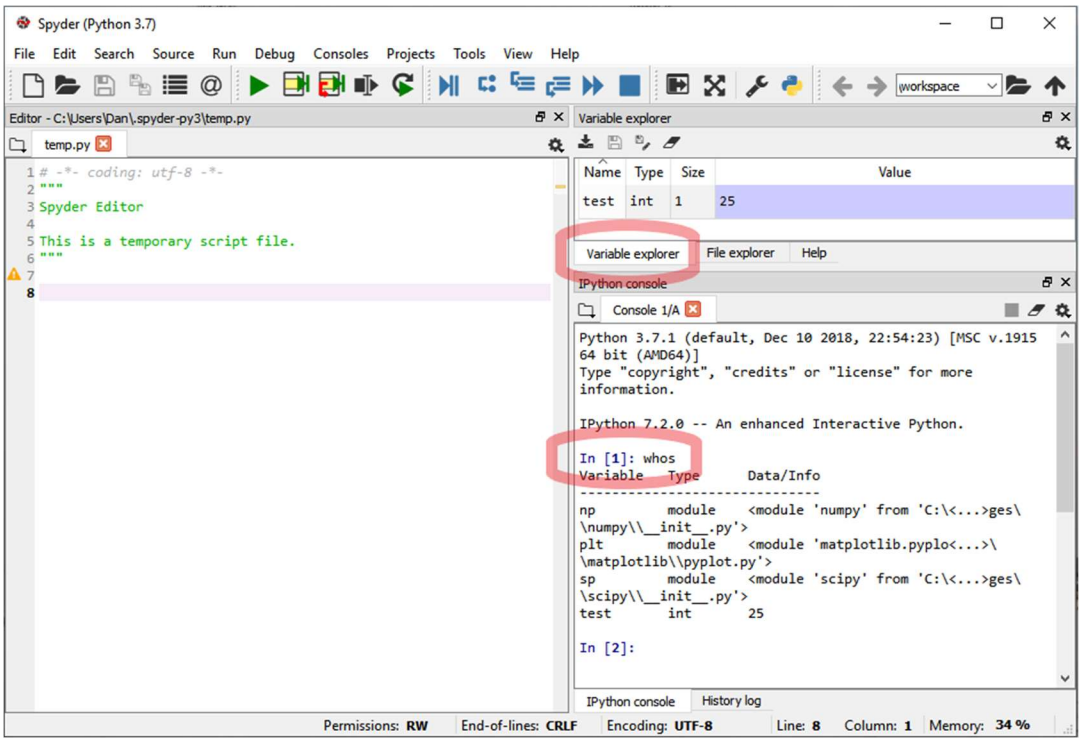
There is an example file that should have been copied over from the shared directory for the course. Link the copy in your own directory by entering the following in the "Run a file" area:

```
[YOUR COMPLETE DIRECTORY]/workspace/PYTHONSTARTUP.py
```

Alternatively, a start-up script can be entered in lines with code separated by semicolons and a space. This code will execute when console is started, for example:

```
import numpy as np; import scipy.signal as sig; import
matplotlib.pyplot as plt
```

Note: The startup file will silently not execute if the file is not found. Confirm that the start-up file if used has loaded properly loaded by either selecting the "Variable explorer" tab to see if a test variable if used from the start-up script exists in the namespace, or simply typing "whos" from the console to confirm that the packages from the script have loaded.



Additionally, the following items are listed for future reference:

Create a template for new files: Preferences – Editor – Advanced settings

[Reference if a using a template is desired in the future: Click on Edit template…]

Change background color: Preferences – Appearance

[Reference if a it is desired to change the background color]

Appendix A: Updating Spyder

Note: This process can be time consuming and is not required if you just installed the latest version of Anaconda.

To update Spyder to the latest version open the Anaconda Prompt and type:

```
conda update spyder
```

Be patient, the console may take a minute or two before it indicates it is doing anything. **If** you receive a message “The environment is inconsistent…” enter n when prompted to not proceed and type the following and then repeat the update command above. Otherwise press y to proceed.

Do not type the following unless you received a message about an inconsistent environment as detailed above:

```
conda update anaconda
```