



Introduction to Python: Workshop 3

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This workshop will let you get started with mapping data in Python and introduce you to downloading data from github and running a Jupyter Notebook from the Anaconda prompt.

We will cover:

- Downloading data from Github
- Installing packages from the Anaconda prompt
- Opening Jupyter notebook from the Anaconda prompt
- Reading in spatial data
- Understanding the geometry column
- Coordinate reference systems
- Plotting maps (choropleth, point data, categorical data & multiple map layers)
- Subplots
- Subsetting and aggregating spatial data
- Spatial and non-spatially joining data

Feel free to use your own laptops today if you have them with you

Part 1: Downloading data from Github

Either access the data through github via the [website link](http://francescapontin.com/teaching_materials.html) (http://francescapontin.com/teaching_materials.html) or directly via [Github](https://github.com/FrancescaPontin/Intro_to_Python_3) (https://github.com/FrancescaPontin/Intro_to_Python_3). You should see something similar to this:

No description, website, or topics provided.










Edit

[Manage topics](#)

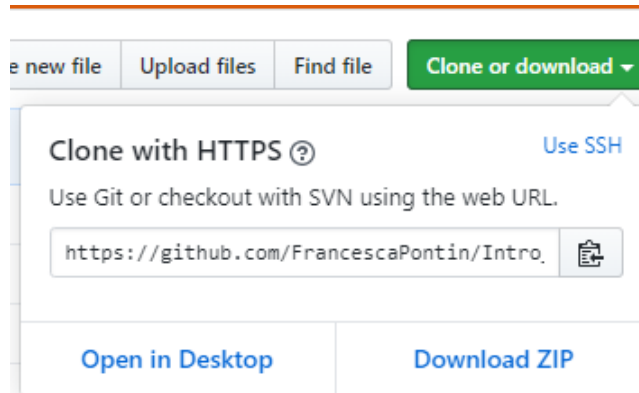
13 commits 1 branch 0 packages 0 releases 1 contributor MIT

Branch: master New pull request

Create new file Upload files Find file Clone or download

 FrancescaPontin	Merge branch 'master' of https://github.com/FrancescaPontin/Intro_to_Python_3	Latest commit 822b9e8 11 minutes ago
 .ipynb_checkpoints	Intro to python workshop 3	22 hours ago
 .gitattributes	Initial commit	22 hours ago
 DSS_logo2.png	Intro to python workshop 3	22 hours ago
 LICENSE	Initial commit	22 hours ago
 README.md	Initial commit	22 hours ago
 Workshop_3.ipynb	Update Workshop_3.ipynb	12 minutes ago
 country_forest.csv	Intro to python workshop 3	22 hours ago
 requirements.txt	Update requirements.txt	18 hours ago

Click "Clone or download" > "Download ZIP".



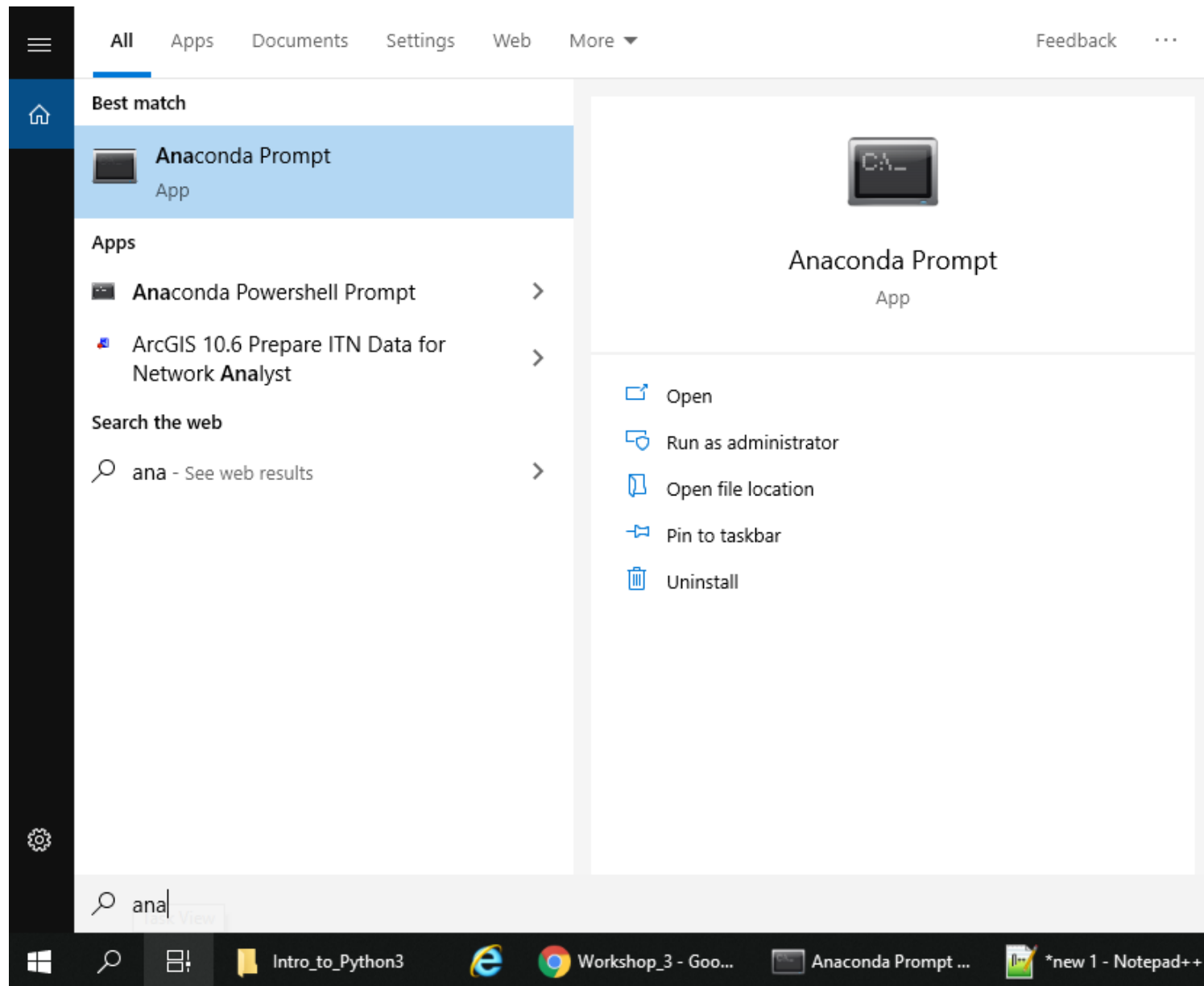
Saving the files

Save the zip file in your documents and then right click and extract files. Save your files in your M drive (the one with your user name) or you may not be able to access them again once you change computer.

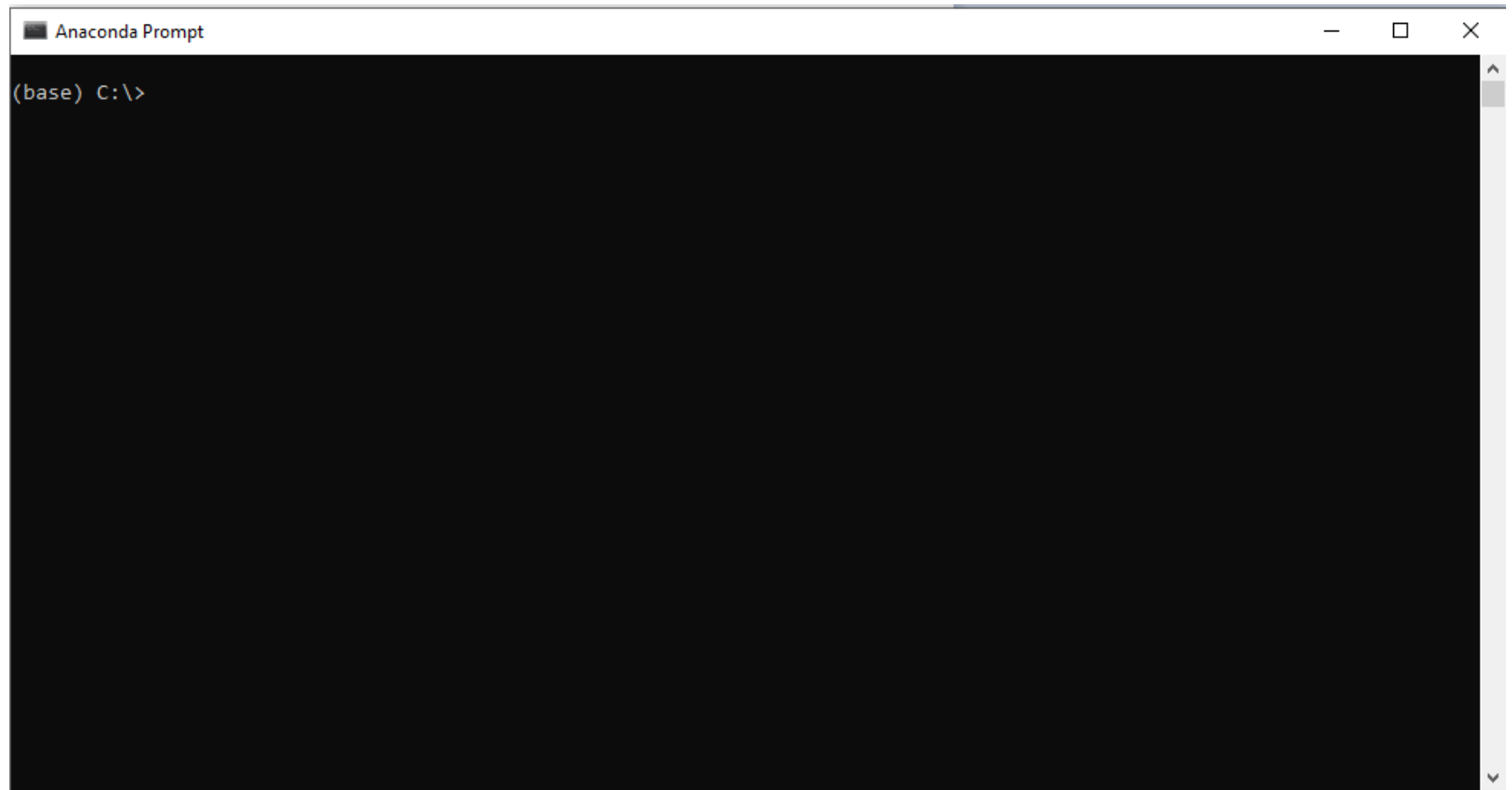
Part 2: Running a Jupyter Notebook

Previously we have been accessing the practicals via a website version of a Jupyter Notebook (it looks and behaves the same). Today we will be running the Jupyter Notebook from the Anaconda Prompt.

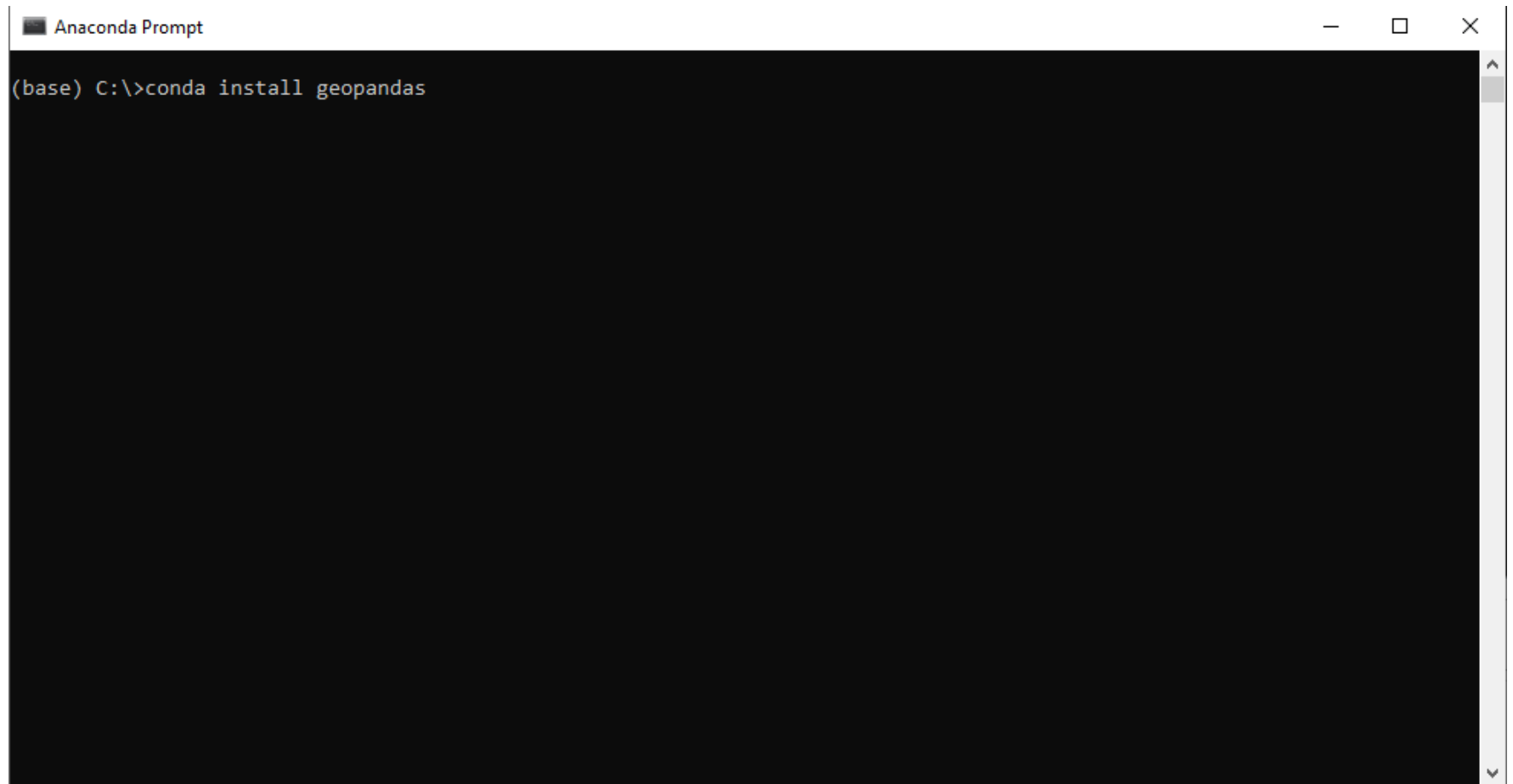
First open the anaconda prompt by searching for it in your programs.



It should open and look like this:

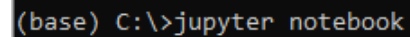


Now type `conda install geopandas` be careful with spelling and letter case

A screenshot of an Anaconda Prompt window. The title bar at the top reads "Anaconda Prompt" and includes standard window control buttons (minimize, maximize, close). The main area of the window is black with white text. The prompt shows "(base) C:\>conda install geopandas". The text is in a monospaced font, and the command is split across two lines: "(base) C:\>conda" on the first line and "install geopandas" on the second line. There is a small upward arrow icon on the right side of the window, indicating a scroll bar.

It may then ask you if you want to install other packages, just type `y` for yes. The package may take some time to load.

Once it has loaded the `(base) C:>` will appear. You have installed your first package!! Type `jupyter notebook` and the jupyter notebook should appear in your internet browser.

A small rectangular screenshot of the Anaconda Prompt window. It shows the prompt "(base) C:\>jupyter notebook" in white text on a black background. The text is in a monospaced font.

(Note the internet is not required to run the notebook).

It should look familiar to you from the previous workshops. Navigate to your downloaded files and open "Workshop_3.ipynb".