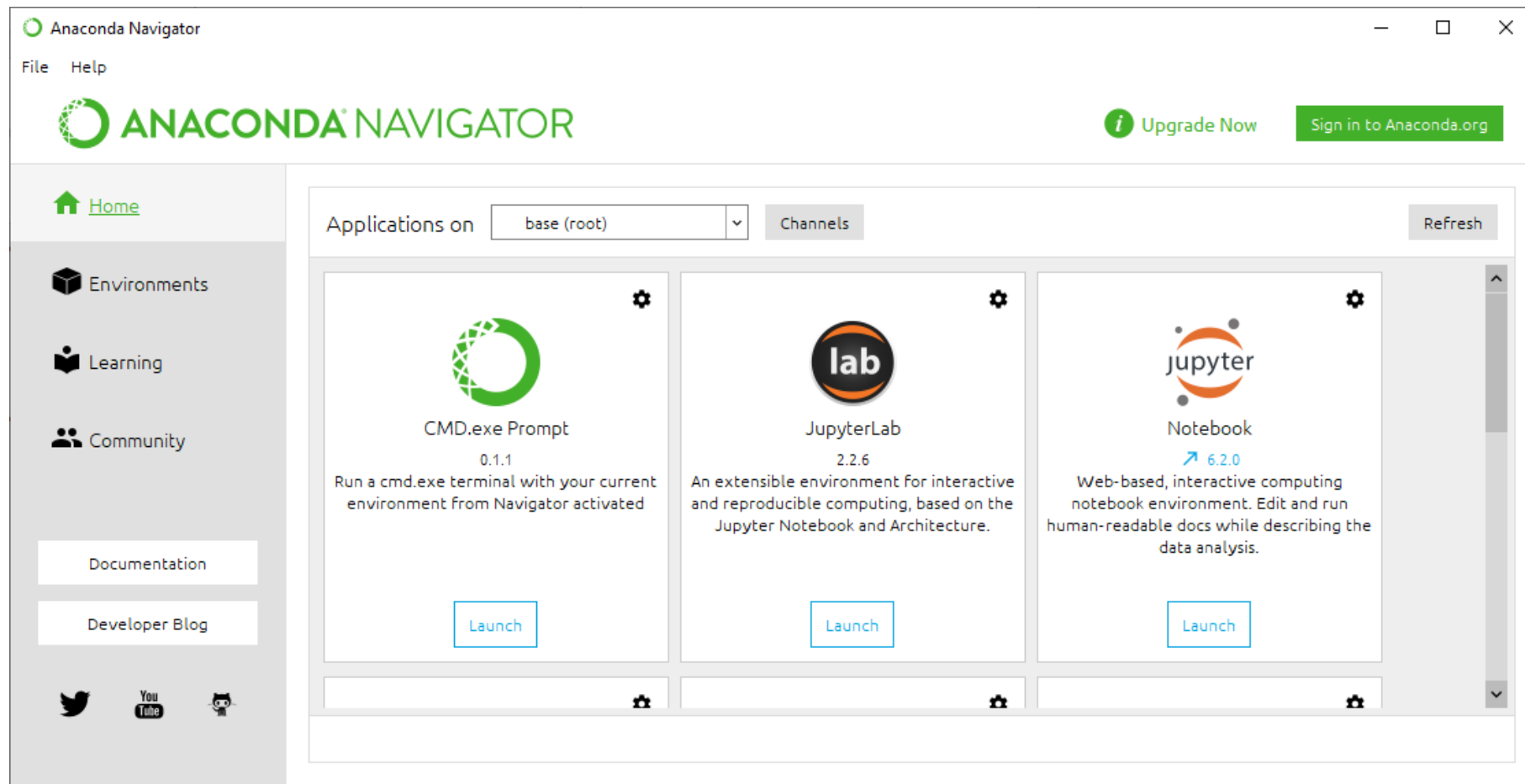


Lecture 2: Setup and GitHub

Everything you need to know to get started in this class!

Anaconda Python



Anaconda Python

```
C:\Users\Jeff Levy>conda update pandas
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\ProgramData\Anaconda3

  added / updated specs:
    - pandas

The following packages will be downloaded:
```

package	build	
jupyterlab_server-2.4.0	pyhd3eb1b0_0	36 KB
pylint-2.7.4	py37haa95532_1	505 KB
sqlite-3.35.3	h2bbff1b_0	1.2 MB
terminado-0.9.4	py37haa95532_0	25 KB
Total:		1.7 MB

```
The following packages will be UPDATED:

jupyterlab_server 2.3.0-pyhd3eb1b0_0 --> 2.4.0-pyhd3eb1b0_0
pylint             2.7.2-py37haa95532_1 --> 2.7.4-py37haa95532_1
sqlite            3.35.2-h2bbff1b_0 --> 3.35.3-h2bbff1b_0
terminado         0.9.3-py37haa95532_0 --> 0.9.4-py37haa95532_0

Proceed ([y]/n)? y
```

Anaconda Python

```
C:\Users\Jeff Levy>conda update pandas
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\ProgramData\Anaconda3

  added / updated specs:
    - pandas

The following packages will be downloaded:



| package                 | build          |        |
|-------------------------|----------------|--------|
| jupyterlab_server-2.4.0 | pyhd3eb1b0_0   | 36 KB  |
| pylint-2.7.4            | py37haa95532_1 | 505 KB |
| sqlite-3.35.3           | h2bbff1b_0     | 1.2 MB |
| terminado-0.9.4         | py37haa95532_0 | 25 KB  |
| Total:                  |                | 1.7 MB |



The following packages will be UPDATED:

jupyterlab_server 2.3.0-pyhd3eb1b0_0 --> 2.4.0-pyhd3eb1b0_0
pylint             2.7.2-py37haa95532_1 --> 2.7.4-py37haa95532_1
sqlite            3.35.2-h2bbff1b_0 --> 3.35.3-h2bbff1b_0
terminado         0.9.3-py37haa95532_0 --> 0.9.4-py37haa95532_0

Proceed ([y]/n)? y
```

Not using Anaconda (or
alternative within):

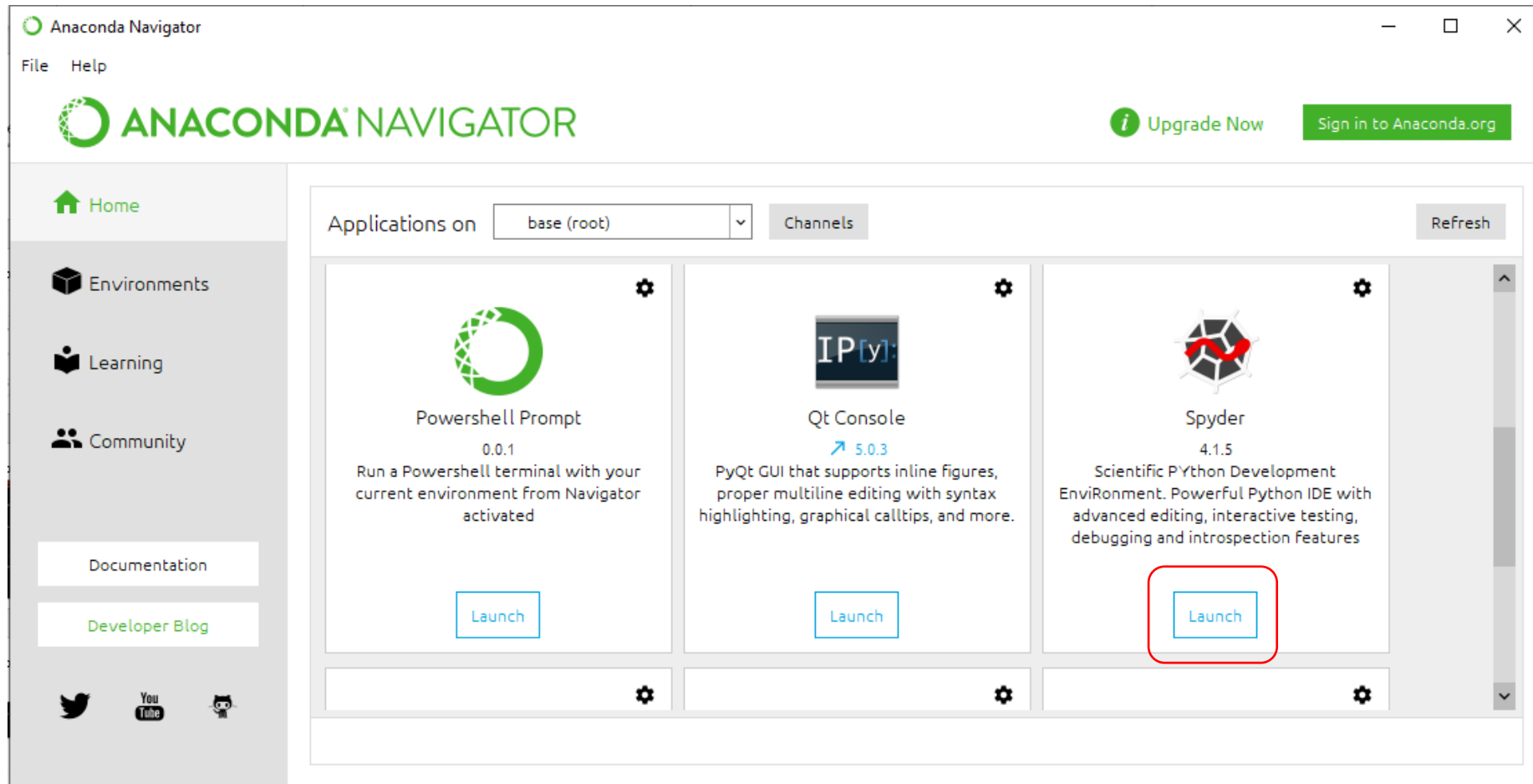
`pip install --upgrade pandas`

Anaconda Python

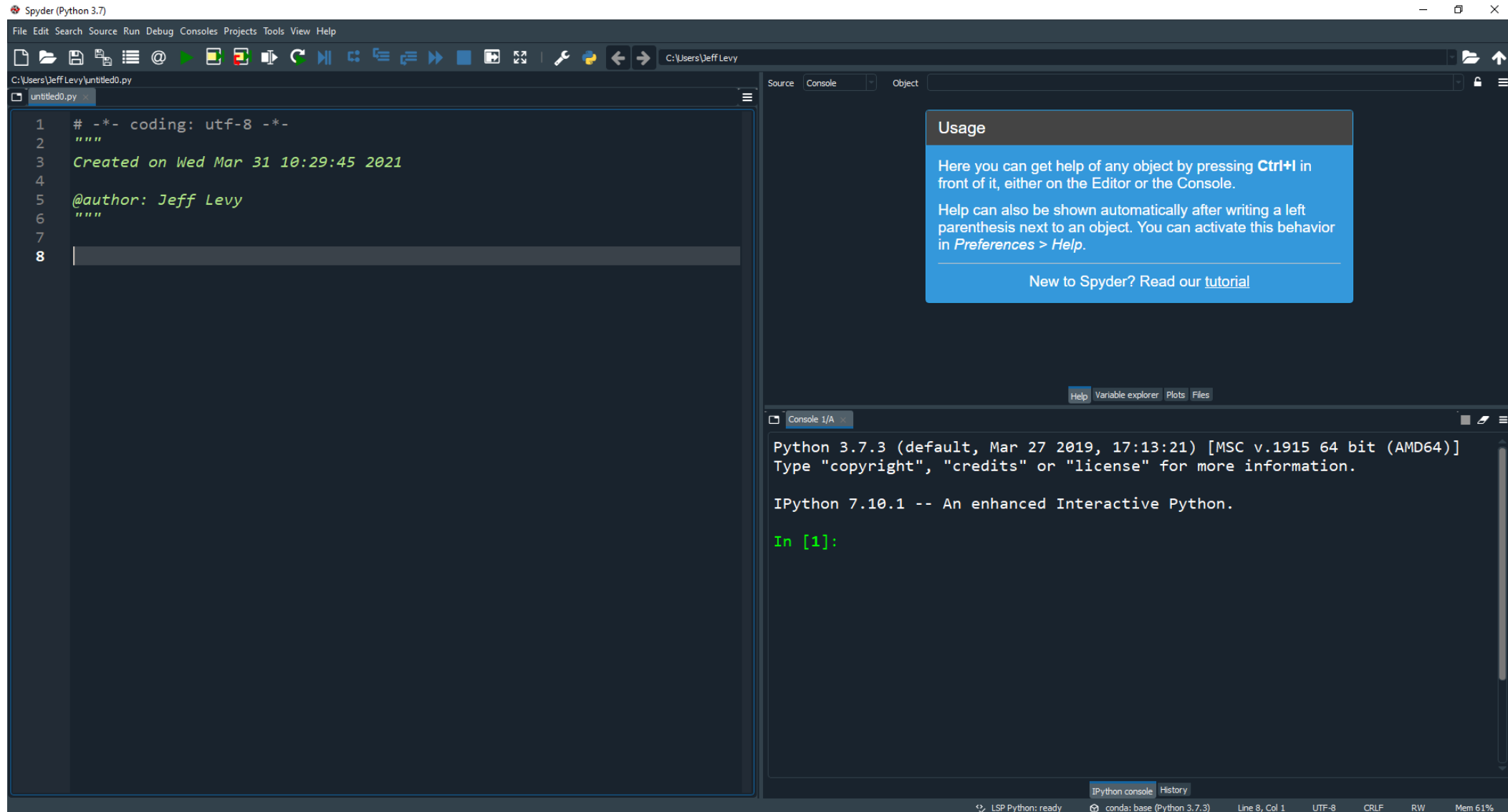
```
C:\Users\Jeff Levy>ipython
Python 3.7.3 (default, Mar 27 2019, 17:13:21) [MSC v.1915 64 bit (AMD64)]
Type 'copyright', 'credits' or 'license' for more information
IPython 7.10.1 -- An enhanced Interactive Python. Type '?' for help.

In [1]: print('Hello world!')
Hello world!
```

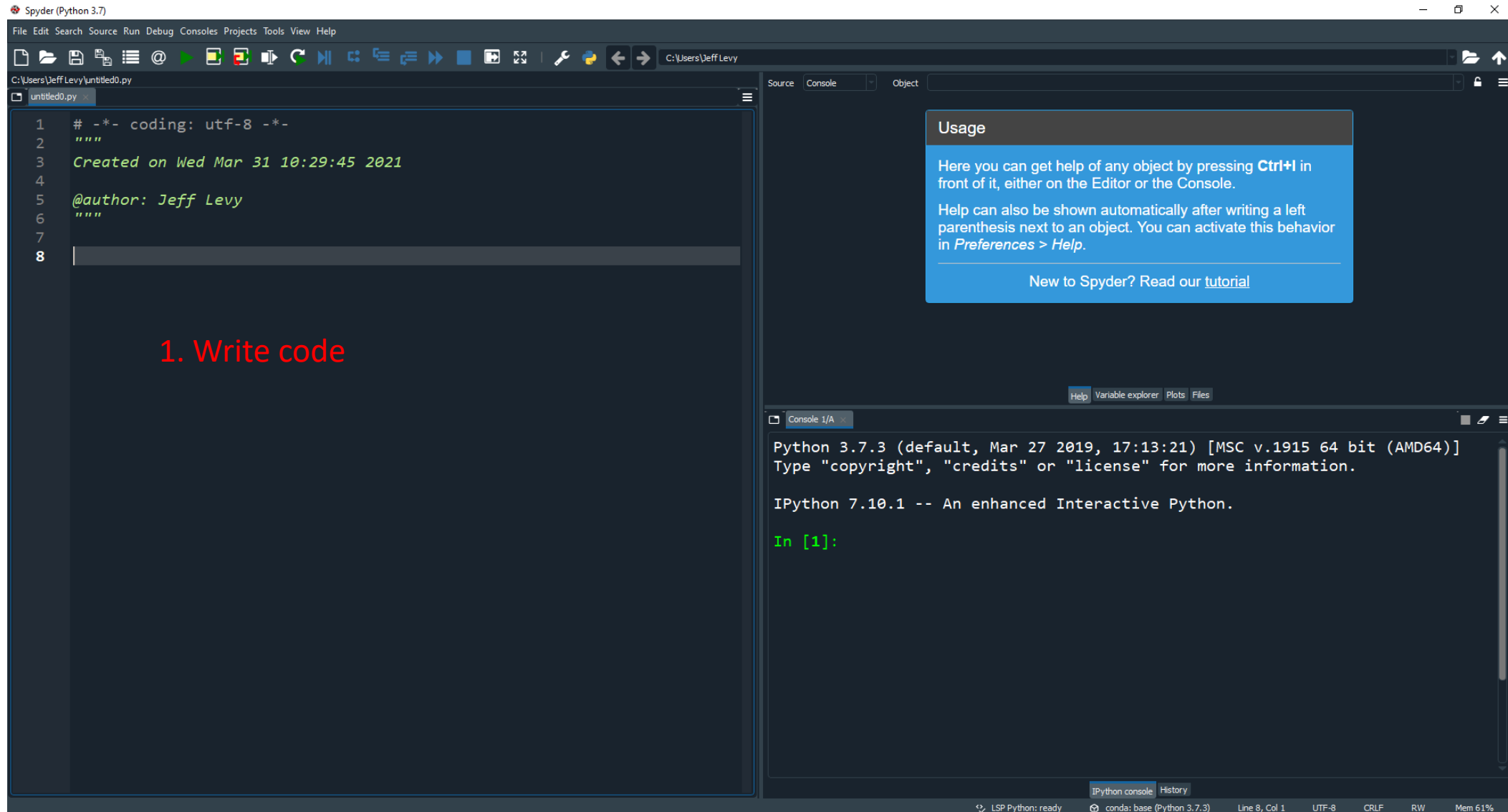
Anaconda Python



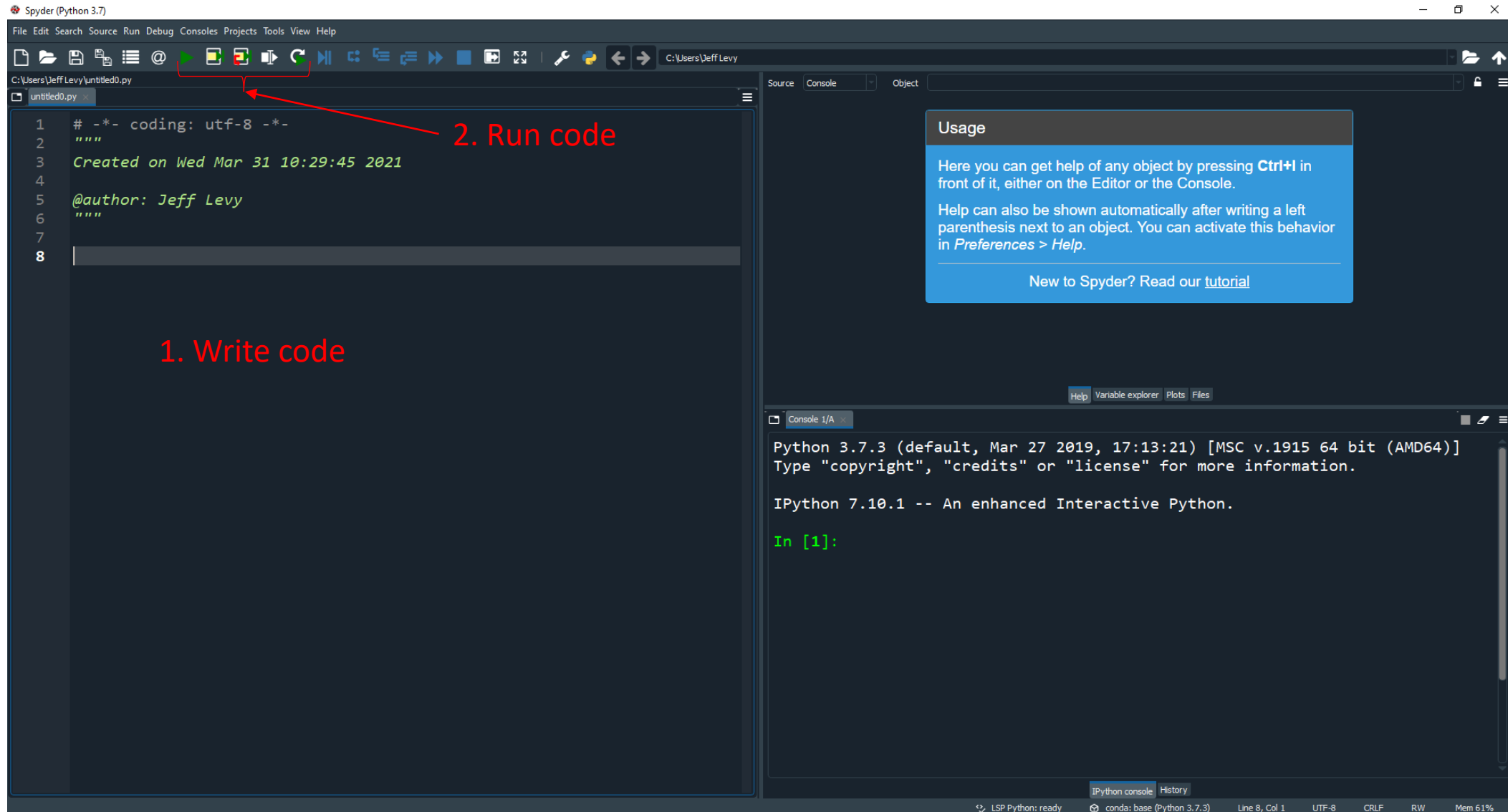
Spyder



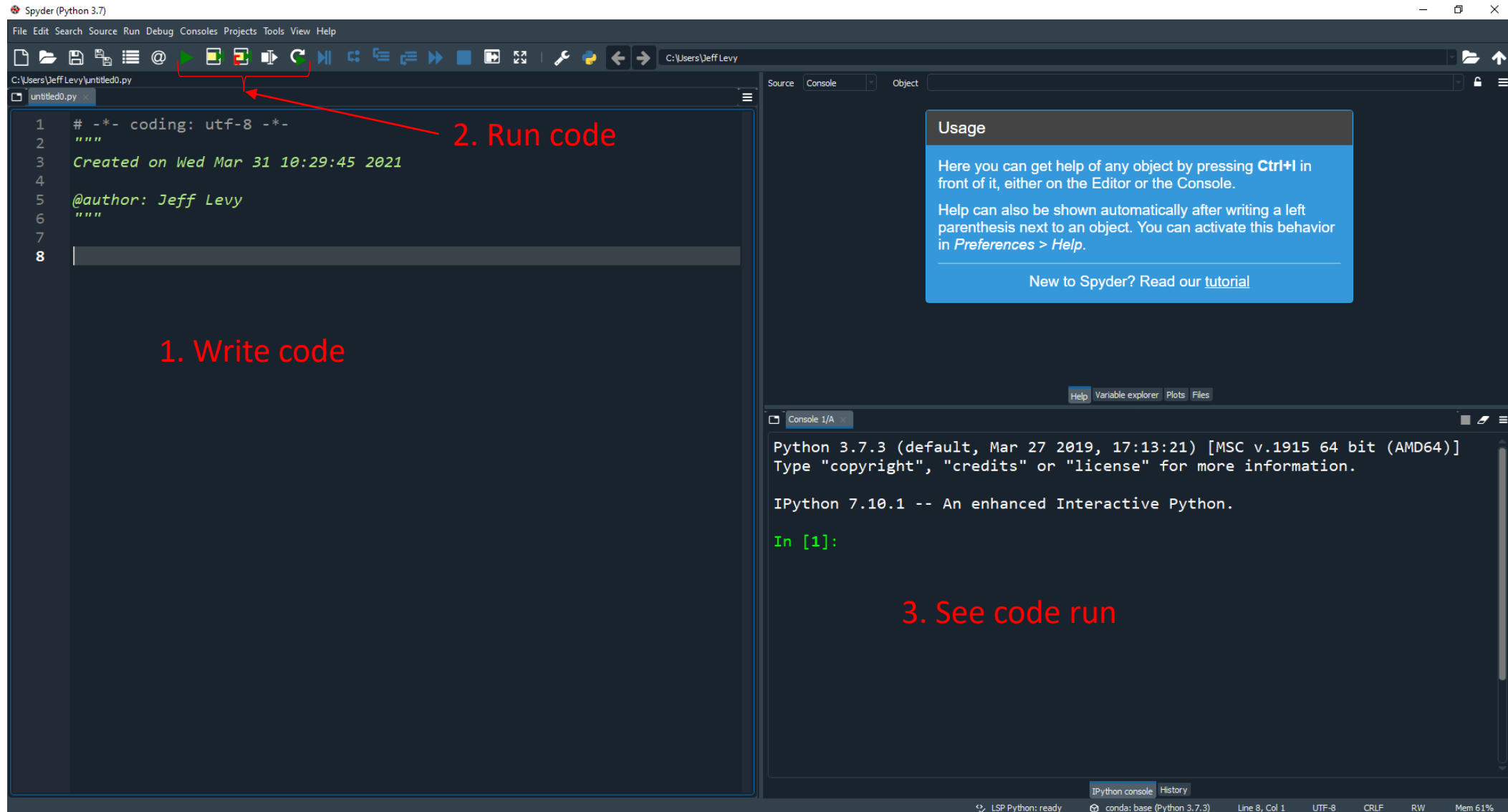
Spyder



Spyder



Spyder



Spyder

The image shows the Spyder Python IDE interface. The main editor window on the left contains a Python script with a docstring. A red arrow points from the text '2. Run code' to the Run button (a green play icon) in the toolbar. The text '1. Write code' is placed in the editor area. On the right, the 'Console' tab is active, showing the IPython prompt and output. The text '3. See code run' is placed in the console area. Above the console, the 'Variable explorer' and 'Plots' tabs are visible, with the text '4. View created variables or plots' placed above them. A 'Usage' help box is also visible in the top right of the console area.

1. Write code

2. Run code

3. See code run

4. View created variables or plots

```
# -*- coding: utf-8 -*-
"""
Created on Wed Mar 31 10:29:45 2021

@author: Jeff Levy
"""
```

Usage

Here you can get help of any object by pressing **Ctrl+I** in front of it, either on the Editor or the Console.

Help can also be shown automatically after writing a left parenthesis next to an object. You can activate this behavior in *Preferences > Help*.

New to Spyder? Read our [tutorial](#)

Console 1/A

Python 3.7.3 (default, Mar 27 2019, 17:13:21) [MSC v.1915 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 7.10.1 -- An enhanced Interactive Python.


In [1]:





IPython console History

LSP Python: ready conda: base (Python 3.7.3) Line 8, Col 1 UTF-8 CRLF RW Mem 61%

GitHub


← → ↻ github.com/levyjeff/class_testing 🔍 ☆

 Search or jump to... / Pull requests Issues Marketplace Explore

 levyjeff / [class testing](#)  Unwatch ▾ 1  Star 0 

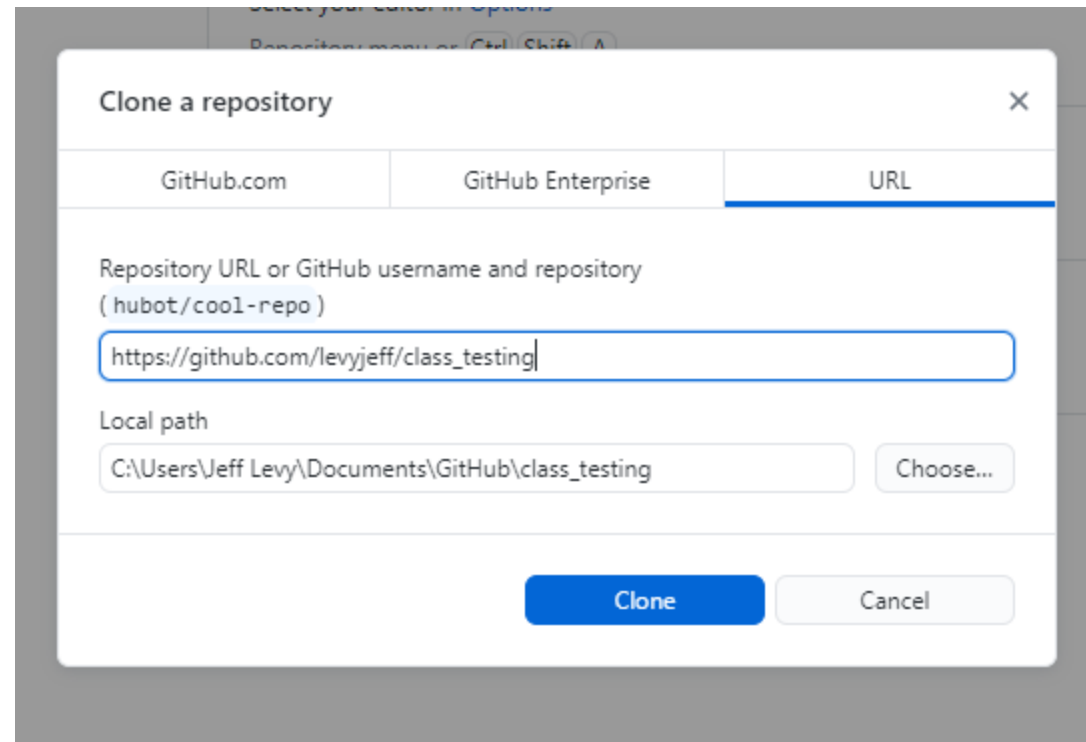
<> Code ! Issues 🔗 Pull requests ⏮ Actions 📁 Projects 📖 Wiki 🛡 Security 📈 Insights ⚙ Settings

Quick setup — if you've done this kind of thing before

 Set up in Desktop or HTTPS SSH `https://github.com/levyjeff/class_testing.git`

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

GitHub



The image shows a 'Clone a repository' dialog box with three tabs: 'GitHub.com', 'GitHub Enterprise', and 'URL'. The 'URL' tab is selected. Below the tabs, there is a text input field for the 'Repository URL or GitHub username and repository' containing the text 'https://github.com/levyjeff/class_testing'. Below this, there is a 'Local path' section with a text input field containing 'C:\Users\Jeff Levy\Documents\GitHub\class_testing' and a 'Choose...' button. At the bottom right, there are 'Clone' and 'Cancel' buttons.

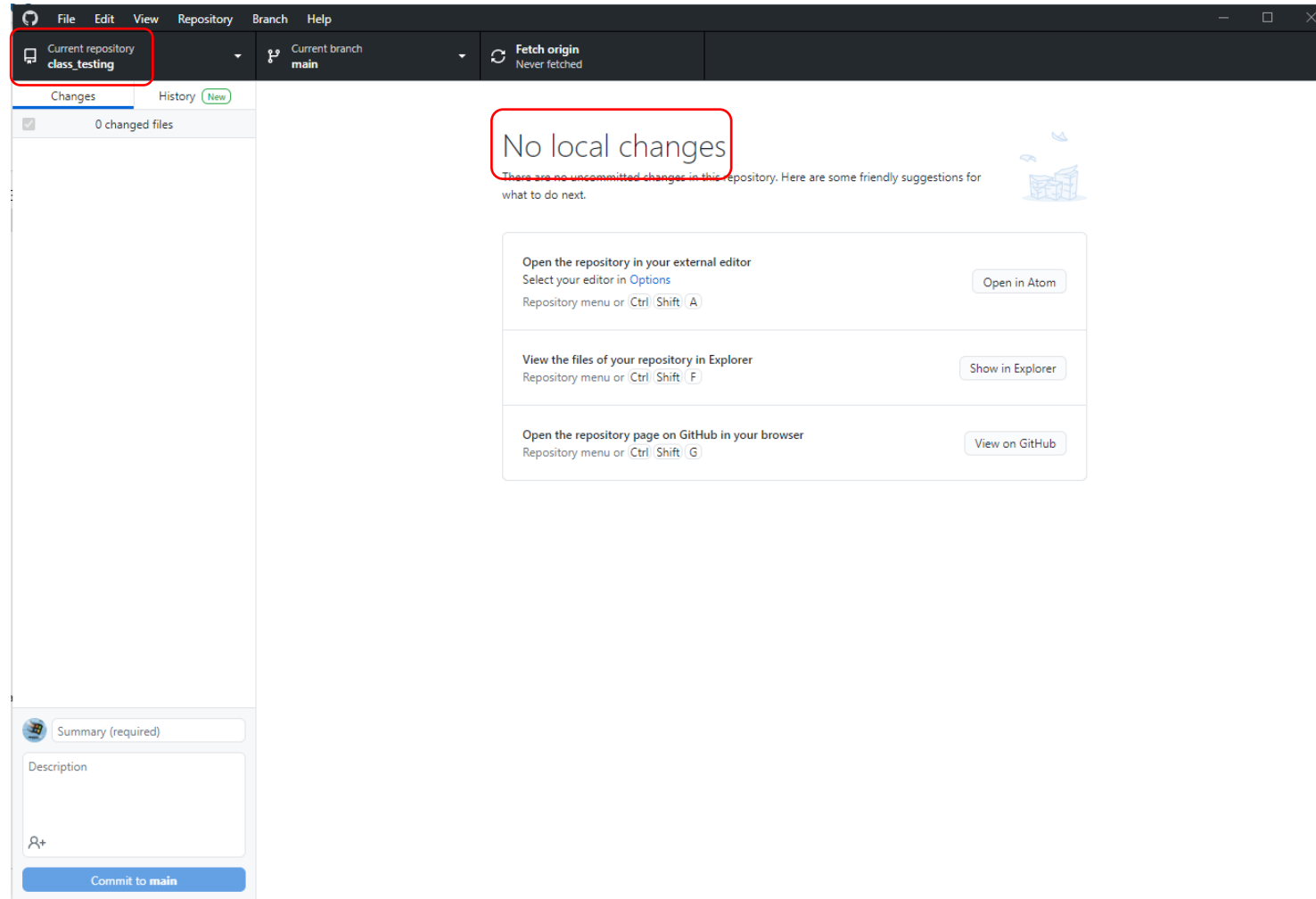
Clone a repository

GitHub.com GitHub Enterprise **URL**

Repository URL or GitHub username and repository
(hubot/cool-repo)

Local path

GitHub




GitHub

📁 > This PC > Documents > GitHub > class_testing				
s s ts s s	^	Name	Date modified	Type
		📁 .git	3/31/2021 10:49 AM	File folder
		📄 README.md	3/31/2021 10:49 AM	MD File
				Size
				1 KB

GitHub

github.com/levyjeff/class_testing



Search or jump to...

/

Pull requests

Issues

Marketplace

Explore

levyjeff / [class_testing](#)

Unwatch

<> Code

! Issues

🔗 Pull requests

🎬 Actions

📁 Projects

📖 Wiki

🛡 Security

📈 Insights

⚙ Settings

🔗 main ▾


🔗 1 branch

🏷 0 tags

Go to file

Add file ▾

📄 Code ▾

 levyjeff Initial commit


659d1fc 4 minutes ago ⌚ 1 commit

📄 README.md

Initial commit

4 minutes ago

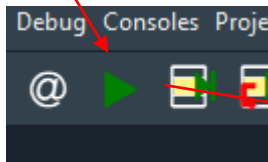
README.md



class_testing

Creating a .py file

```
1 # -*- coding: utf-8 -*-
2 """
3 Created on Wed Mar 31 10:29:45 2021
4
5 @author: Jeff Levy
6 """
7
8 print('Hello world!')
9
10 x = 10
11
12 print(x*2)
```



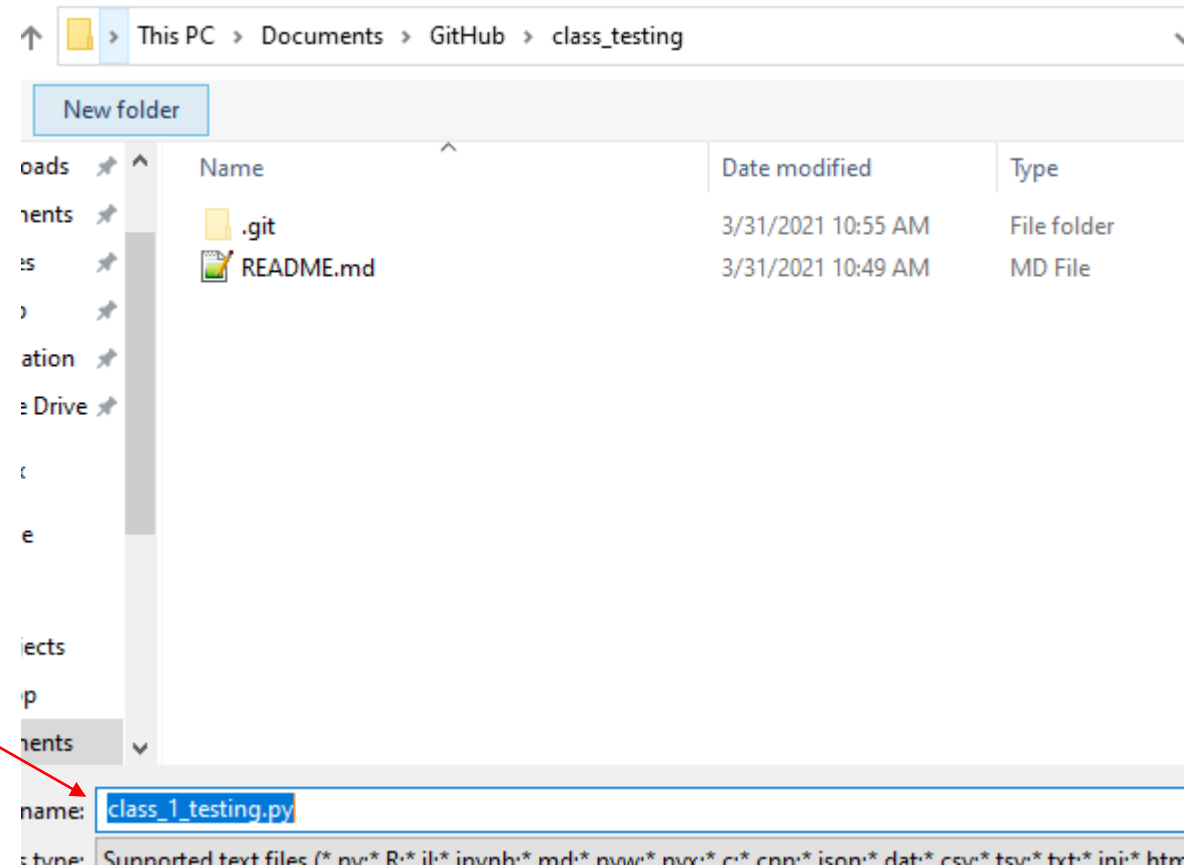
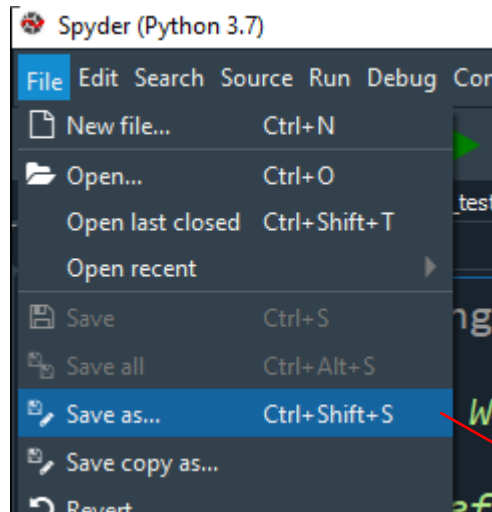
```
Console 1/A x
Python 3.7.3 (default, Mar 27 2019, 17:13:21) [MSC v.1915 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 7.10.1 -- An enhanced Interactive Python.

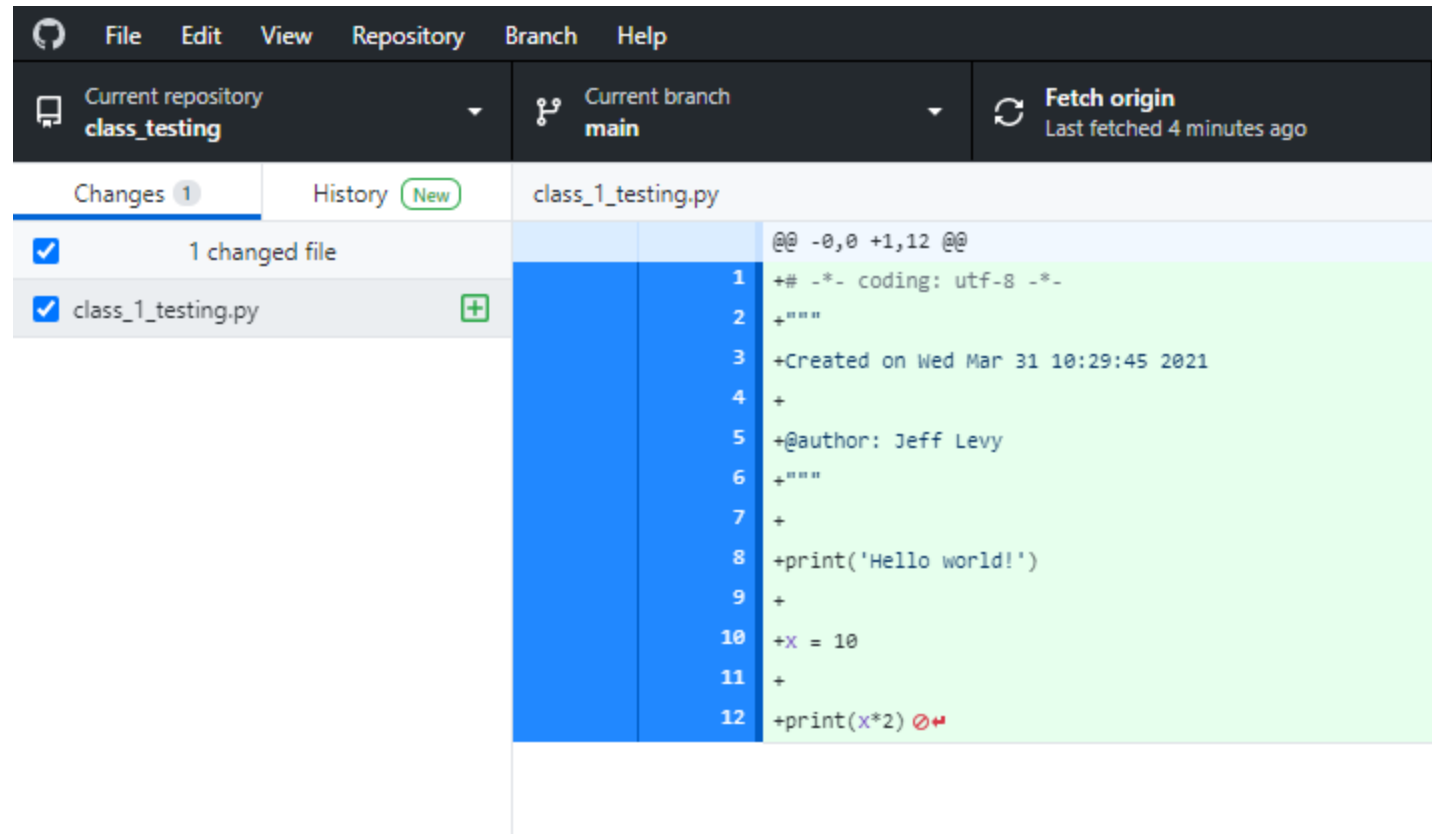
In [1]: runfile('C:/Users/Jeff Levy/untitled0.py', wdir='C:/Users/Jeff
Levy')
Hello world!
20

In [2]: |
```

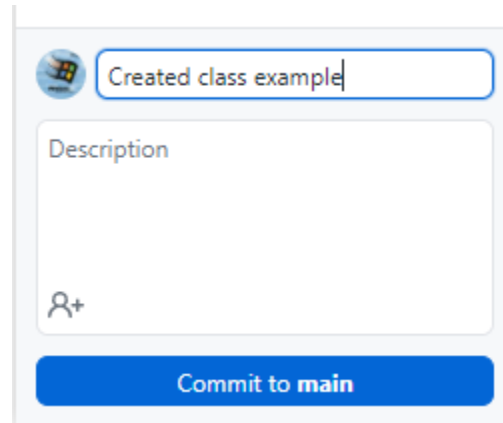
Creating a .py file



GitHub Desktop Changes



GitHub Desktop Changes



A screenshot of the GitHub Desktop commit dialog. At the top left is a circular icon with a blue background and a white 'X'. To its right is a text input field containing the text 'Created class example'. Below this is a larger text area labeled 'Description'. At the bottom left of the description area is a person icon followed by a plus sign. At the bottom center is a blue button with the text 'Commit to main'.

Created class example

Description

Person icon +

Commit to main

GitHub Commit Messages

commitlogsfromlastnight.com

Commit Logs From Last Night

b e c a u s e r e a l h a c k e r s p i v o t t w o h o u r s b e f o r e t h e i r d e m o



MartinGarenfeld
04/02/18 10:24 AM

some lda shit



coltonon
04/02/18 10:06 AM

Added full project, code is still shit though



blunt1337
04/02/18 9:05 AM

Removed this mini css shit



SpicySnail
04/02/18 8:56 AM

fuck me



Poojawa
04/02/18 8:46 AM

wew lad. fuck off with this already



Ceekyew
04/02/18 8:45 AM

Great googly moogly it's all gone to shit



bcarb0rg
04/02/18 8:44 AM

recursive insertion sort working, hell fucking yeah



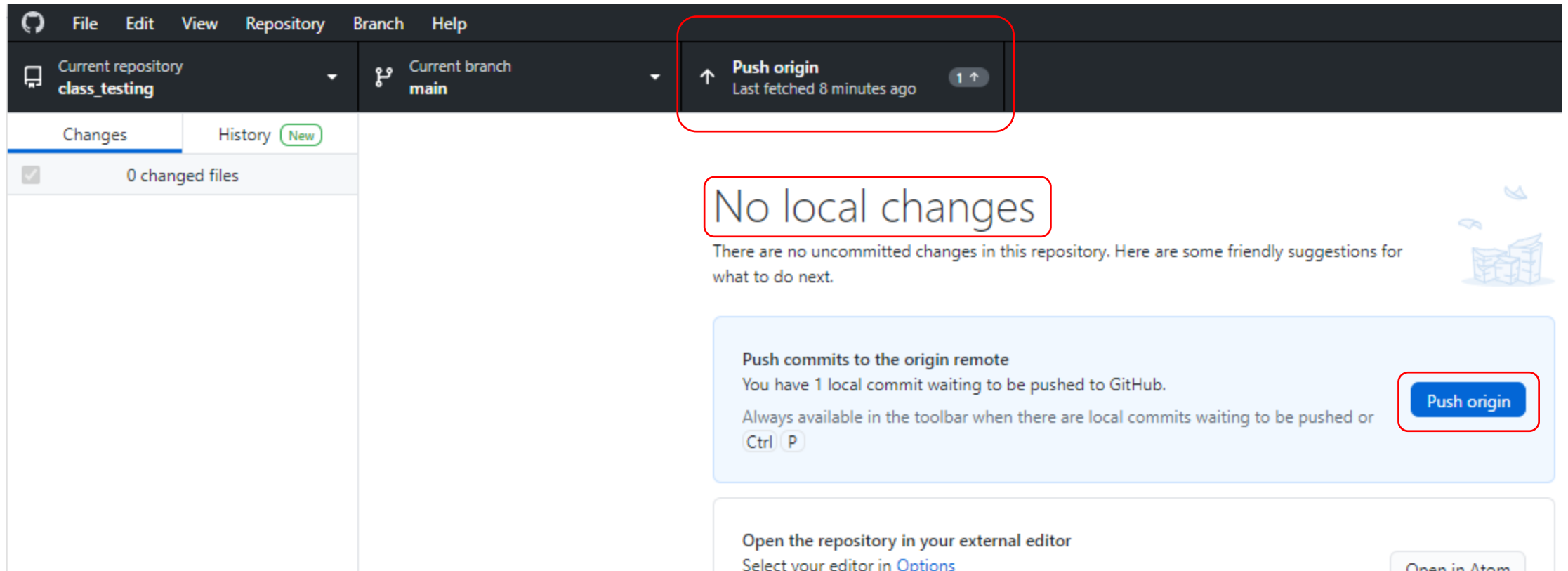
nmonserrato
04/02/18 8:06 AM

formatting shit




russellschmidt


GitHub Desktop Changes





GitHub Desktop Changes

 [levyjeff / class_testing](#) Unwatch

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)


 **main** ▾


 **1 branch**



 **0 tags**

[Go to file](#)

[Add file ▾](#)

 **Code ▾**

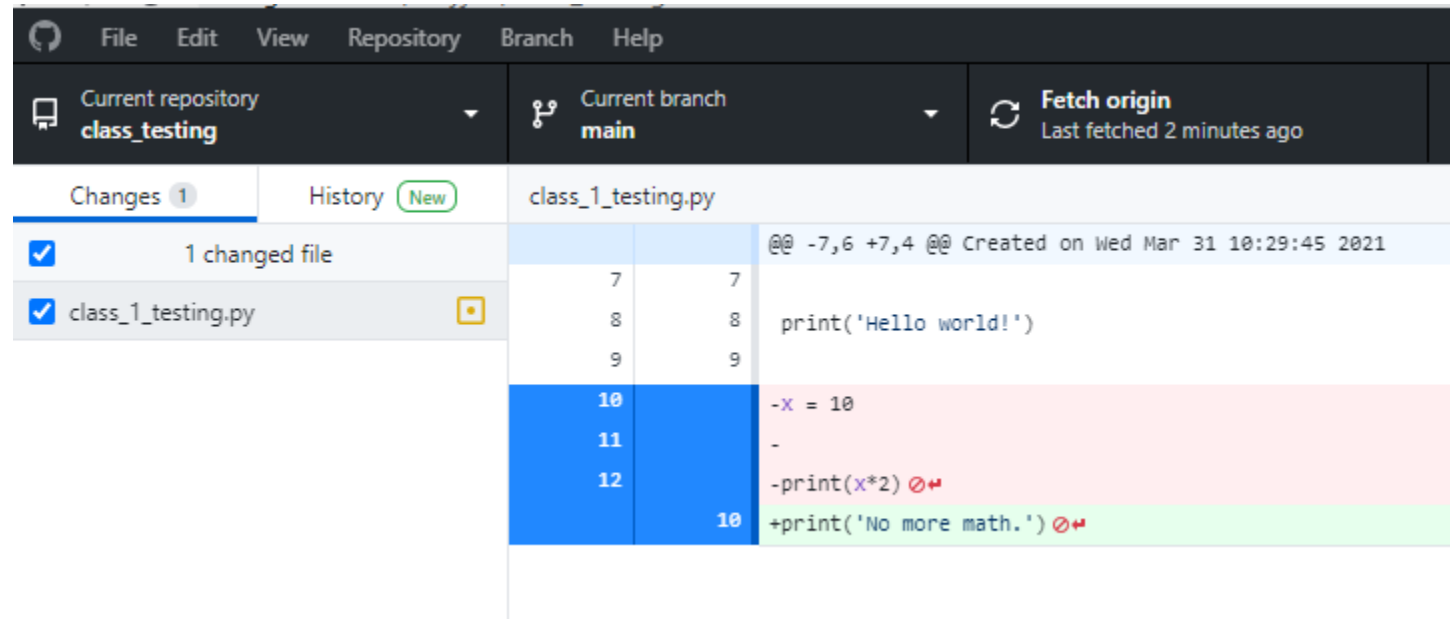
 **levyjeff** Created class example 8d714b6 1 minute ago 🕒 2 commits

 README.md	Initial commit	17 minutes ago
 class_1_testing.py	Created class example	1 minute ago

GitHub Desktop Changes

```
1  # -*- coding: utf-8 -*-  
2  """  
3  Created on Wed Mar 31 10:29:45 2021  
4  
5  @author: Jeff Levy  
6  """  
7  
8  print('Hello world!')  
9  
10 print('No more math.')
```


GitHub Desktop Changes



Current repository: **class_testing**

Current branch: **main**

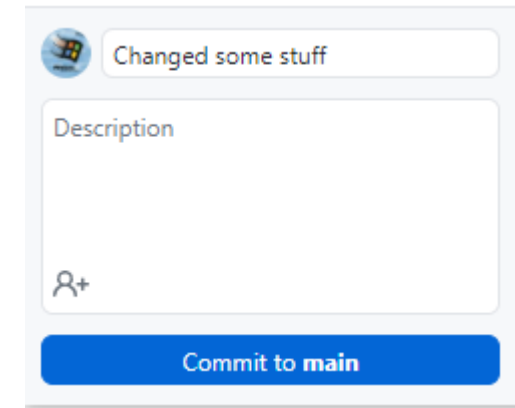
Fetch origin
Last fetched 2 minutes ago

Changes **1** | History **New**

1 changed file

class_1_testing.py

Line	Original	Current
7	7	
8	8	print('Hello world!')
9	9	
10		-x = 10
11		-
12		-print(x*2) ❌
	10	+print('No more math.') ❌




Changed some stuff


Description


Commit to main


GitHub Desktop Changes

 [levyjeff / class_testing](#) Unwatch

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

 **main** ▾



 **1 branch**



 **0 tags**

[Go to file](#)


[Add file ▾](#)

[Code ▾](#)

 **levyjeff** Changed some stuff 7d026d7 30 seconds ago  **3 commits**

 README.md	Initial commit	20 minutes ago
 class_1_testing.py	Changed some stuff	30 seconds ago

GitHub Desktop Changes

 **levyjeff / class_testing**

Unwatch 1

Star 0

Fork 0

<> Code

Issues

Pull requests

Actions

Projects

Wiki

Security


Insights

Settings


main

Commits on Mar 31, 2021


Changed some stuff

 levyjeff committed 1 minute ago


Created class example


 levyjeff committed 5 minutes ago


Initial commit

 levyjeff committed 21 minutes ago

Verified

 7d026d7 <>

 8d714b6 <>

 659d1fc <>

GitHub Desktop Changes

Changed some stuff

main

levyjeff committed 2 minutes ago

Showing 1 changed file with 1 addition and 3 deletions.

4 class_1_testing.py

↑

@@ -7,6 +7,4 @@

7

7

8

8

print('Hello world!')

9

9

10

- x = 10

11

-

12

- print(x*2) ⊖

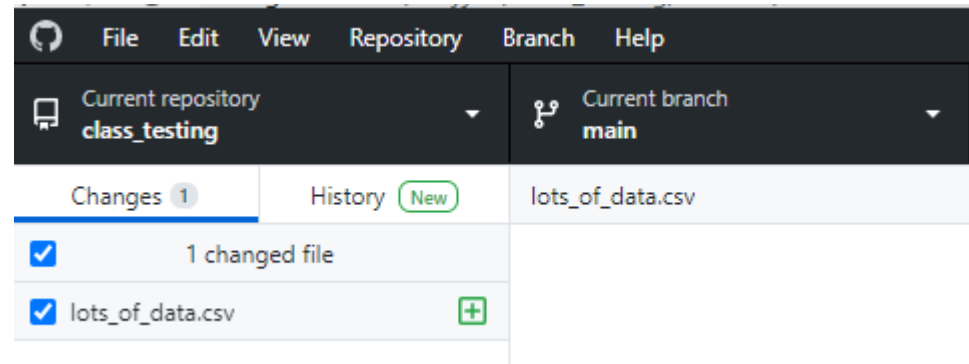
10

+ print('No more math.') ⊖

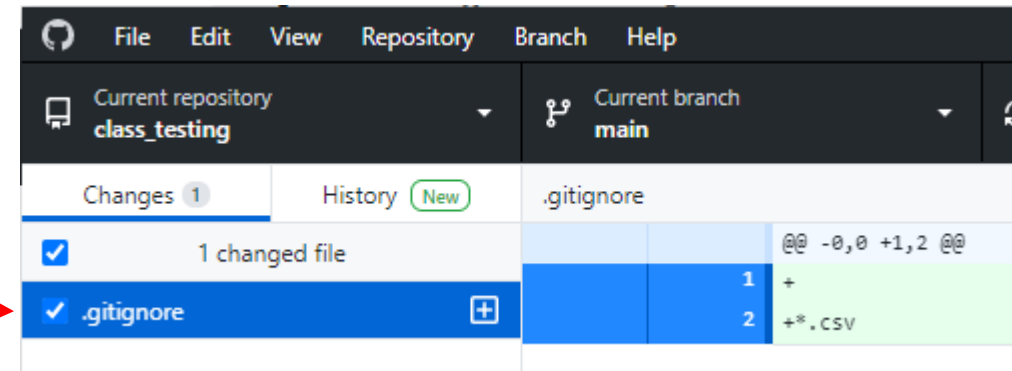
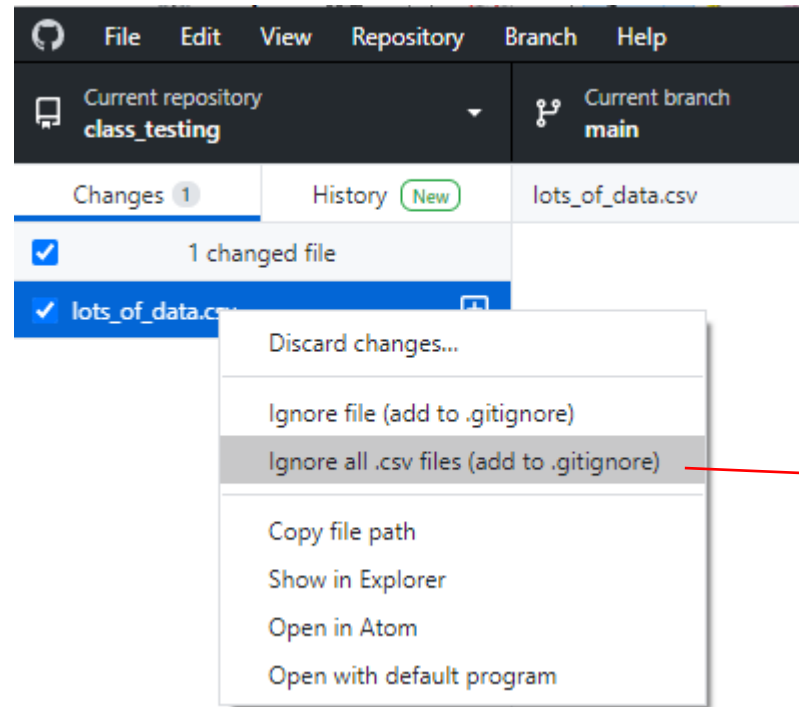
Using .gitignore

This PC > Documents > GitHub > class_testing


Name	Date modified	Type	Size
.git	3/31/2021 11:07 AM	File folder	
class_1_testing.py	3/31/2021 11:06 AM	PY File	1 KB
lots_of_data.csv	3/31/2021 11:10 AM	Microsoft Excel C...	0 KB
README.md	3/31/2021 10:49 AM	MD File	1 KB





Using .gitignore





Adding a license

 **levyjeff / class_testing** Unwatch


[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)



 **main** 



 **1 branch**




 **0 tags**

[Go to file](#)

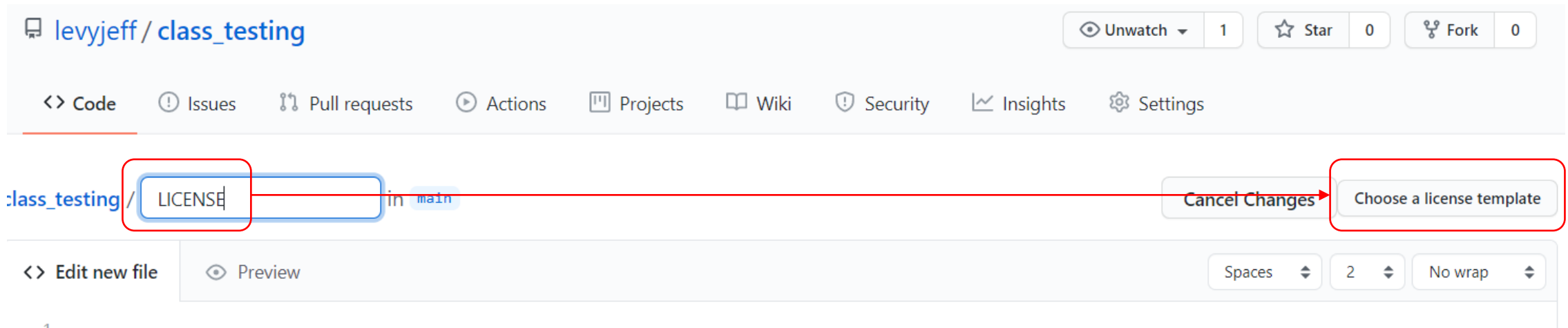
[Add file](#) 

 **Code** 

 **levyjeff** Create .gitignore 9633596 1 minute ago  **4 commits**

 .gitignore	Create .gitignore	1 minute ago
 README.md	Initial commit	27 minutes ago
 class_1_testing.py	Changed some stuff	7 minutes ago

Adding a license



Adding a license

Add a license to your project

Apache License 2.0	<p>A short and simple permissive license with conditions only requiring preservation of copyright and license notices. Licensed works, modifications, and larger works may be distributed under different terms and without source code.</p>		
GNU General Public License v3.0			
MIT License	Permissions	Limitations	Conditions
BSD 2-Clause "Simplified" License	<ul style="list-style-type: none">✓ Commercial use✓ Modification✓ Distribution✓ Private use	<ul style="list-style-type: none">✗ Liability✗ Warranty	<ul style="list-style-type: none">ℹ License and copyright notice
BSD 3-Clause "New" or "Revised" License	<p>This is not legal advice. Learn more about repository licenses.</p>		
Boost Software License 1.0			

GitHub Workflow

Clone a repo from the web to your local computer

1. Save a change locally
 - New file
 - Changes within an existing file
 - Delete a file
2. Commit changes to GitHub locally
 - Commit often and logically
 - Good commit message
 - Remember it is only local
3. Push changes to GitHub on the web

GitHub Workflow

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GitHub Workflow

Clone a repo from the web to your local computer

1. Save a change locally
 - New file
 - Changes within an existing file
 - Delete a file
2. Commit changes to GitHub locally
 - Commit often and logically
 - Good commit message
 - Remember it is only local
3. Push changes to GitHub on the web

Summary

- Normal contents of a repo:
 - Code
 - README.md
 - LICENSE
 - .gitignore
 - Sub-folders
 - Other content
 - Images, data, Office files, PDFs, etc.
- GitHub Commits:
 - Should be done frequently, after the completion of logical steps or subsets in your code
 - Should have short but descriptive messages attached to them
 - Are only stored locally!
 - Are not pushed to the internet!
 - Because they are only stored locally!
- GitHub Push/Synch:
 - May sometimes be done less frequently than commits
 - Push all of your stored commits onto the internet