

# Discarding changes and reverting commits

# Getting rid of unwanted changes

Case 1: Change **has not been** committed yet: “**discard change**”

- Go back to last committed version

Case 2: Change **has been** committed: “**revert commit**”

- Add a commit undoing the unwanted commit

# Case 1: Discarding uncommitted changes

- Done file by file

# Example: experimental change in demo.py

The screenshot shows the Spyder Python IDE interface. The left pane displays the code for `demo.py`, which includes comments and code for opening a file, writing to it, and printing. The right pane shows a diff view of `demo.py` with changes highlighted in blue and green. A red arrow points to the `demo.py` file in the 'Changes' list. The bottom pane shows the commit dialog with a 'Commit to master' button.

Current repository: g02-hello-pjw-demo  
Current branch: master  
Fetch origin: Last fetched 16 minutes ago

Changes: 2 changed files  
demo.py  
demo.txt

demo.py

```
@@ -47,8 +47,8 @@ fh = open(filename,"w")
# it's given. As a result we need to add a return
# character, \n, at the end of each line.
- fh.write("where was this file was written?\n")
- fh.write(name+"!\n")
+ print("where was this file was written?\n")
+ print(name+"!\n")
# Use the print() function to write two different lines.
```

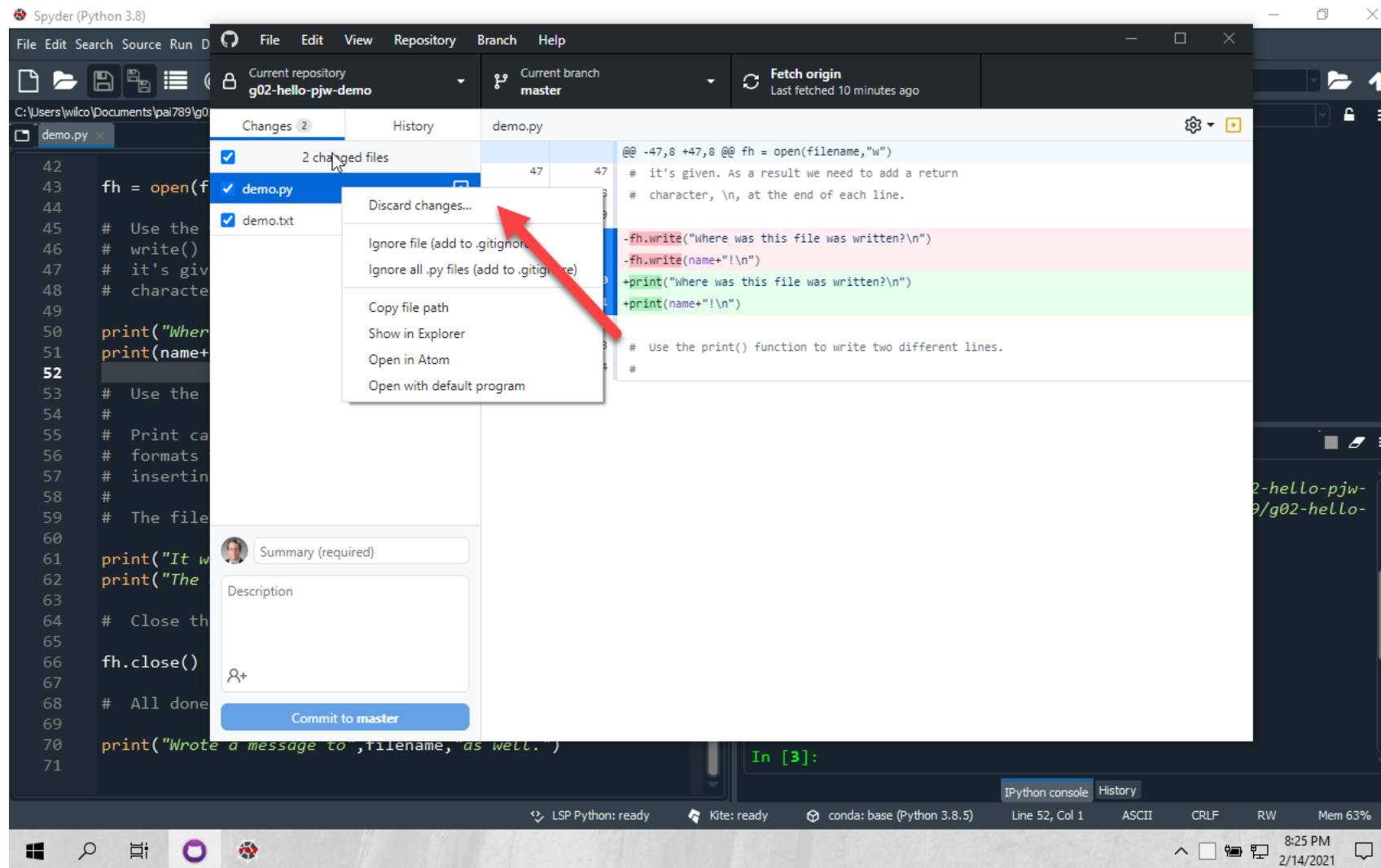
Summary (required)  
Description  
Commit to master

# Unintended differences in demo.txt

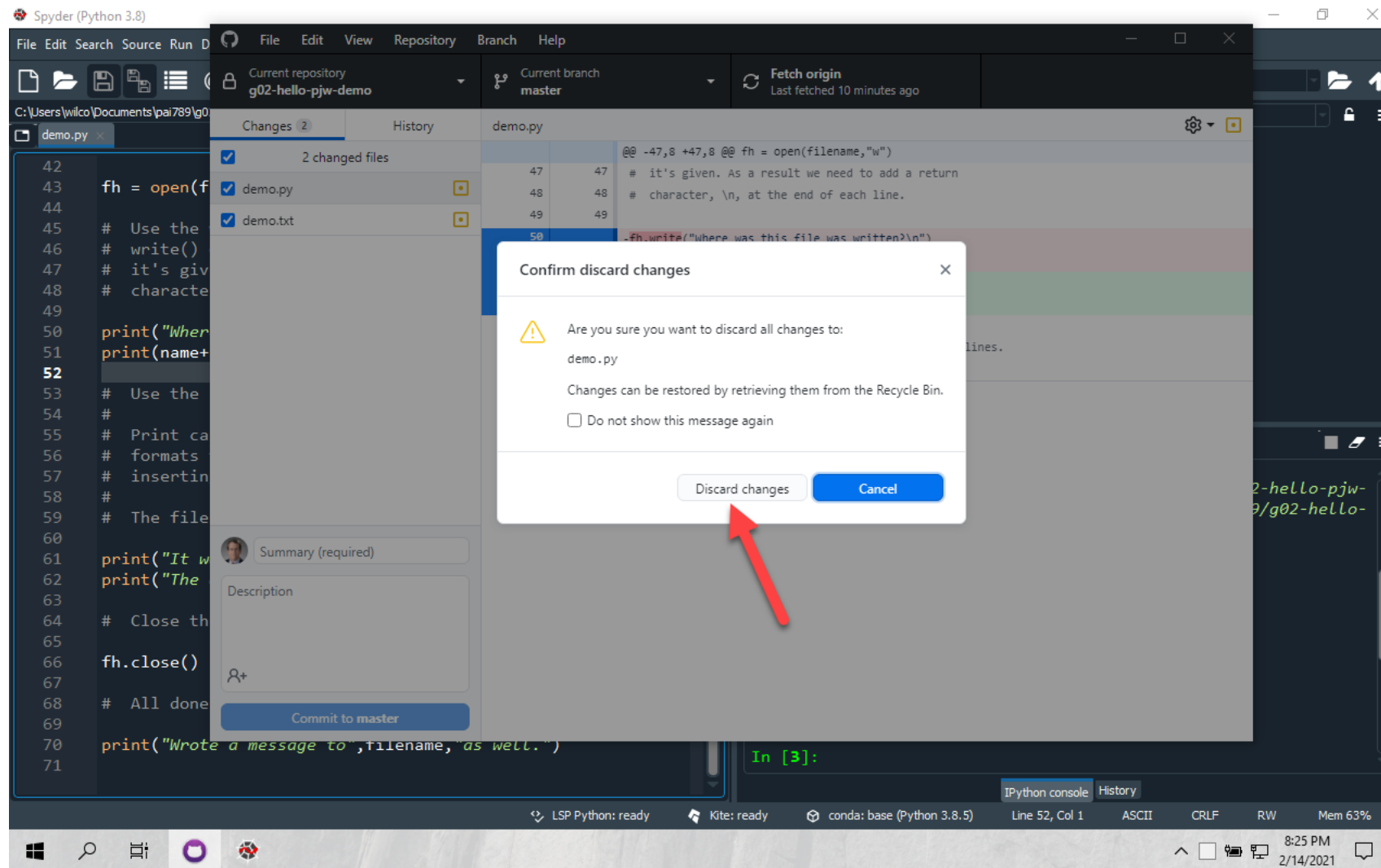
The screenshot shows the Spyder Python IDE interface. On the left, a code editor displays a Python script with comments and print statements. In the center, a Git commit dialog is open for the file 'demo.txt'. The 'Changes' tab shows two changes: a new line 1 and a modified line 2. A red arrow points to the 'demo.txt' file in the list. The commit message field is empty, and the 'Commit to master' button is visible at the bottom. The right pane shows a diff view of the changes.

File	Line	Change
demo.txt	1	@@ -1,4 +1,2 @@
demo.txt	2	-Where was this file was written?
demo.txt	3	-The Maxwell School!
demo.txt	4	1 It was written during 2021
demo.txt	2	2 The answer is 42

# Right click to discard changes to demo.py



# Confirmation dialog



# Remaining difference in demo.txt

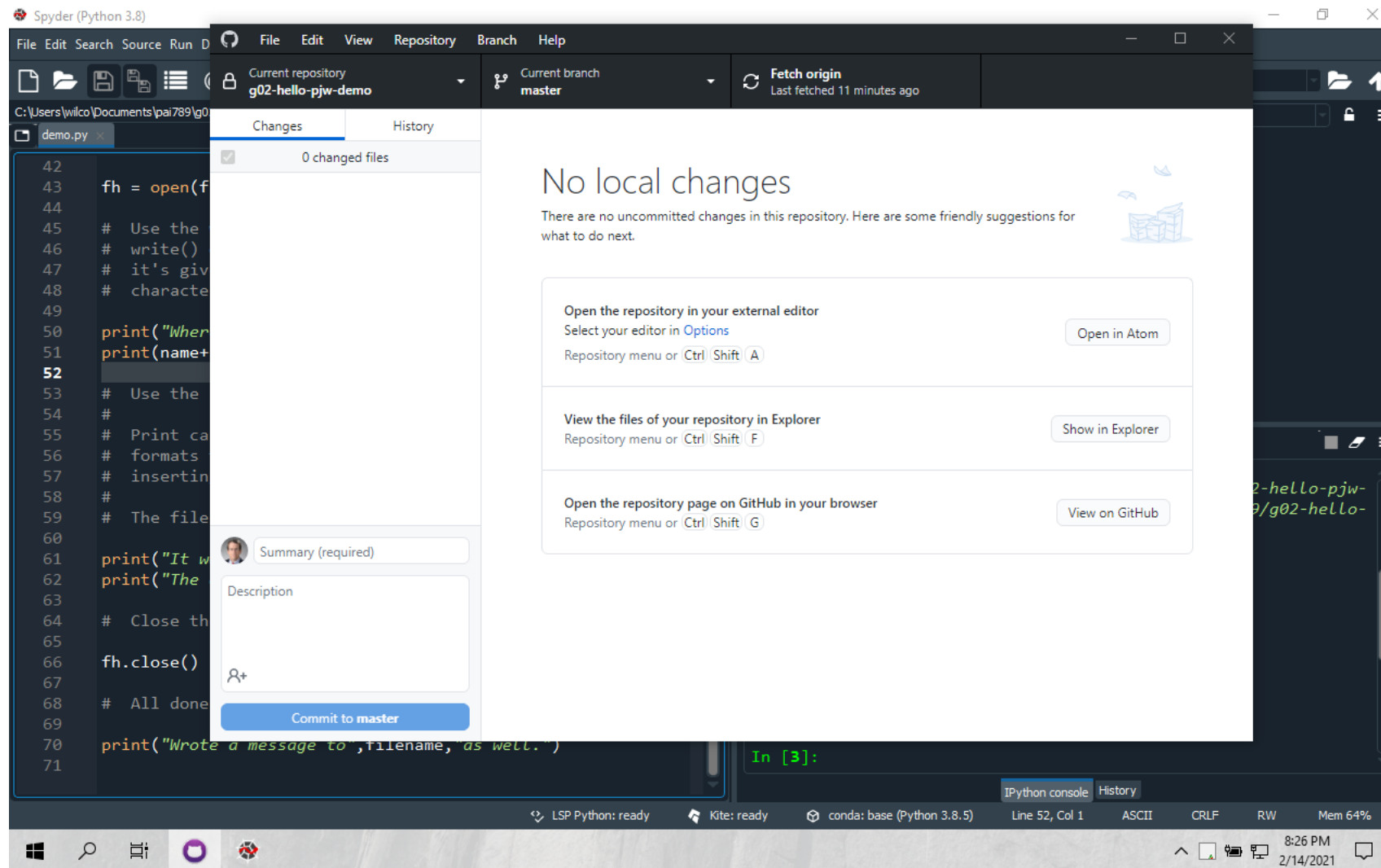
The screenshot shows the Spyder Python IDE interface. The left pane displays the code editor with a Python script. The right pane shows the Git repository browser. The 'Changes' tab is active, showing a list of changes to the file 'demo.txt'. Two red arrows point from the 'demo.txt' entry in the list to the commit dialog box. The commit dialog box has a 'Commit to master' button and a 'Description' field. The diff view shows the following changes:

Line	Original	Modified
1		-Where was this file was written?
2		-The Maxwell School!
3	1	It was written during 2021
4	2	The answer is 42

The commit dialog box also includes a 'Description' field and a 'Commit to master' button. The status bar at the bottom indicates the current branch is 'master' and the file is 'demo.txt'.



# After discarding changes demo.txt changes

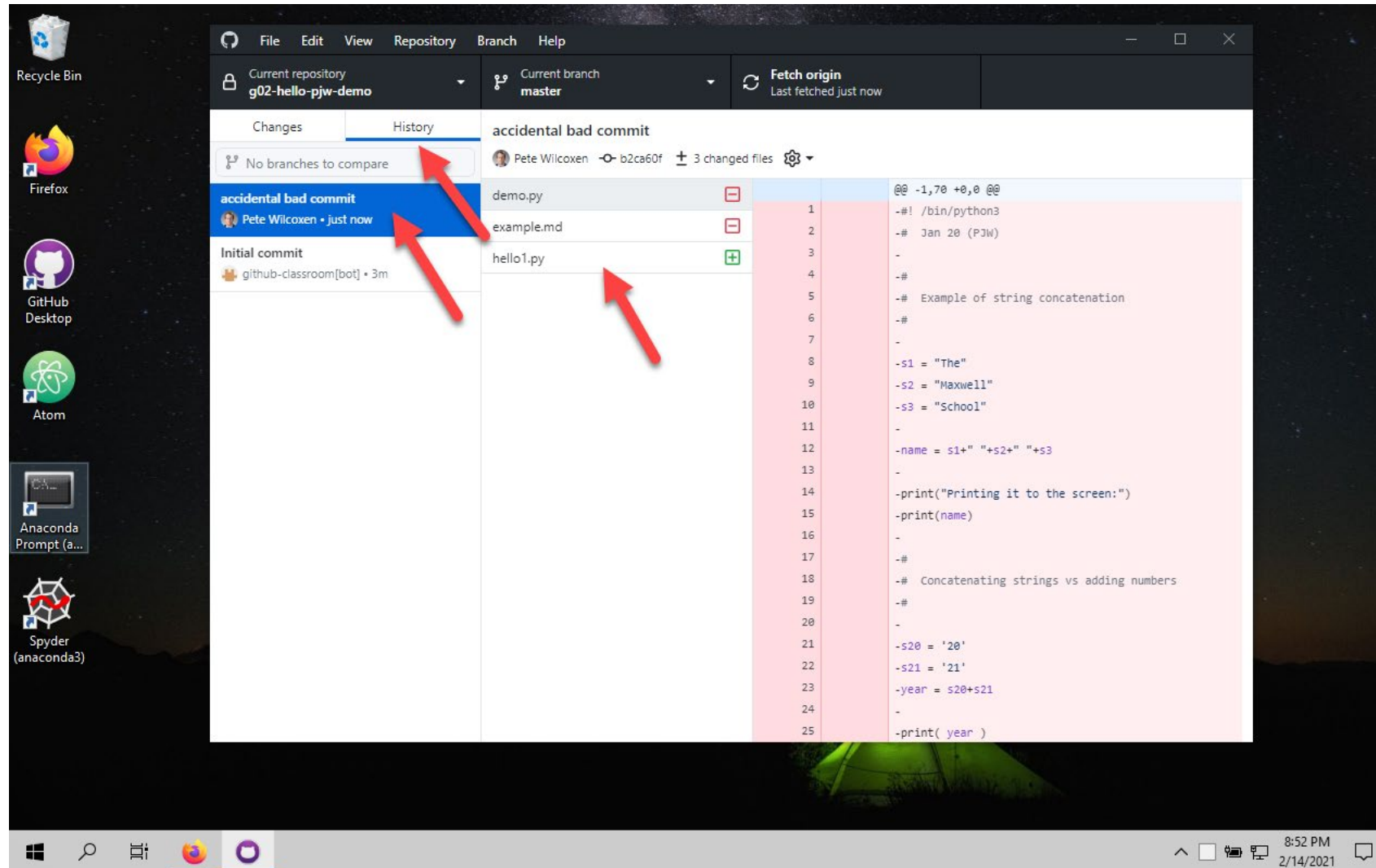


## Case 2: Reverting a commit

- Operates on all files in the commit at once

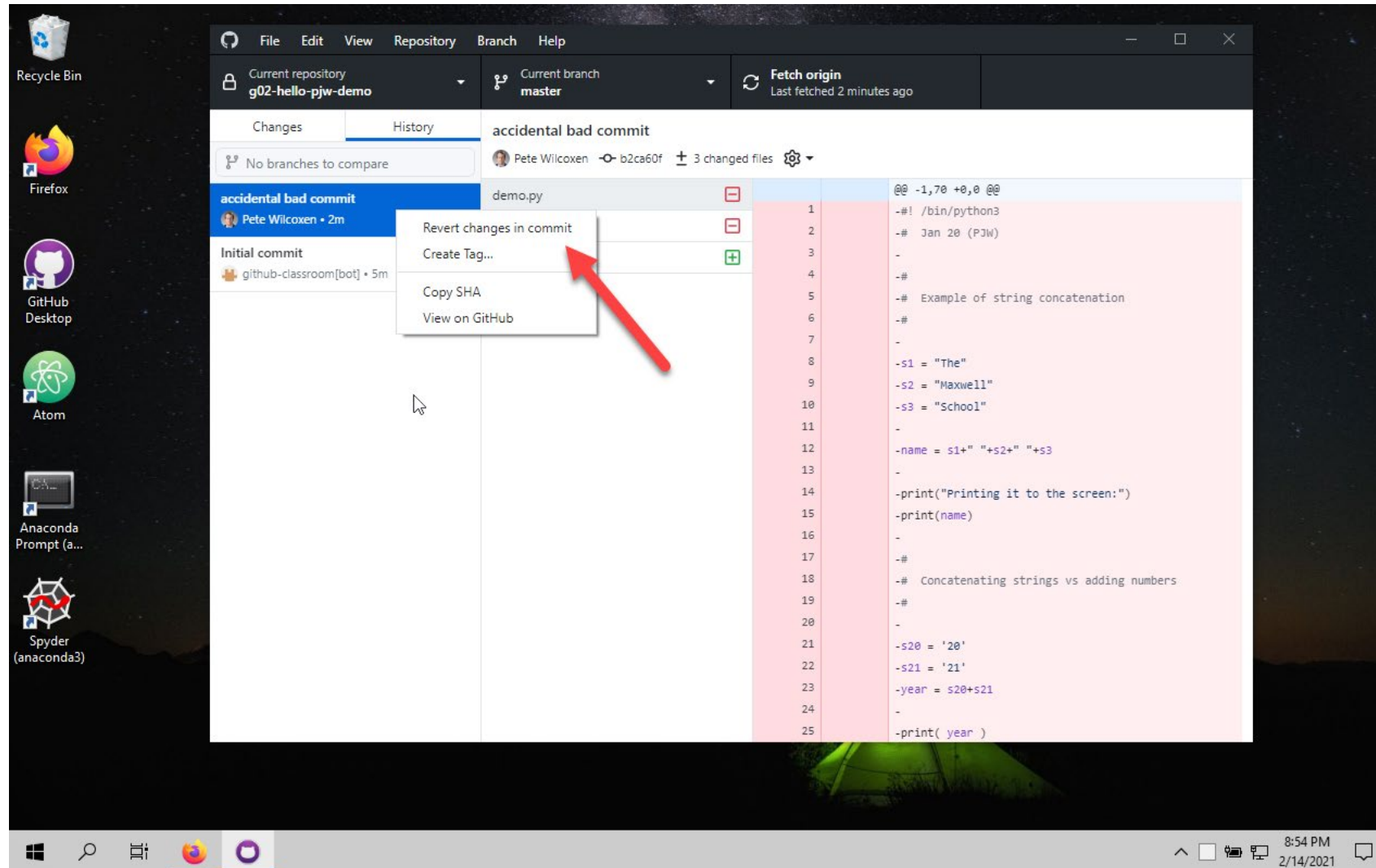
## Example: accidental destructive commit

Created hello1.py but deleted  
Demo.py and example.md

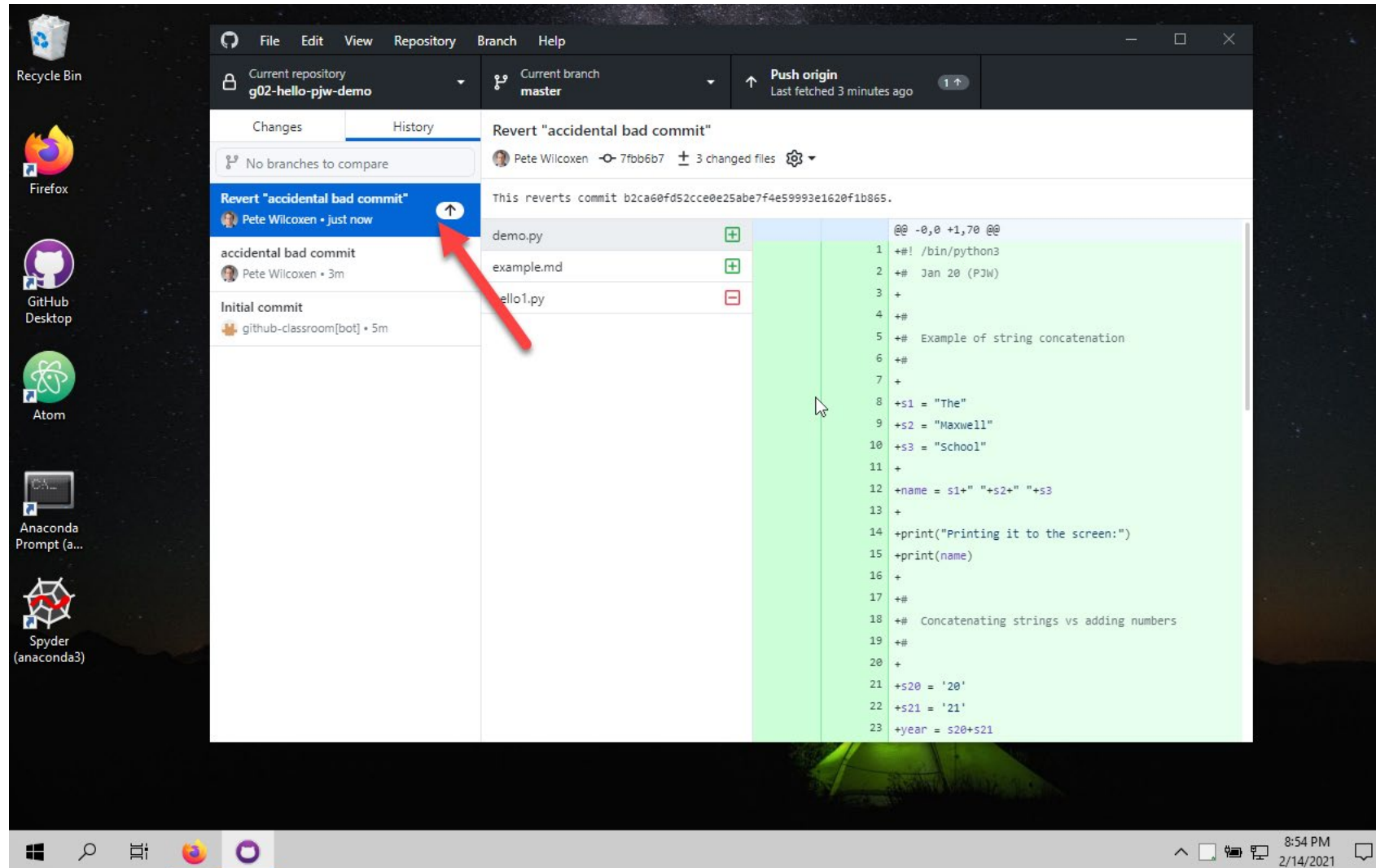


# Right click to revert commit

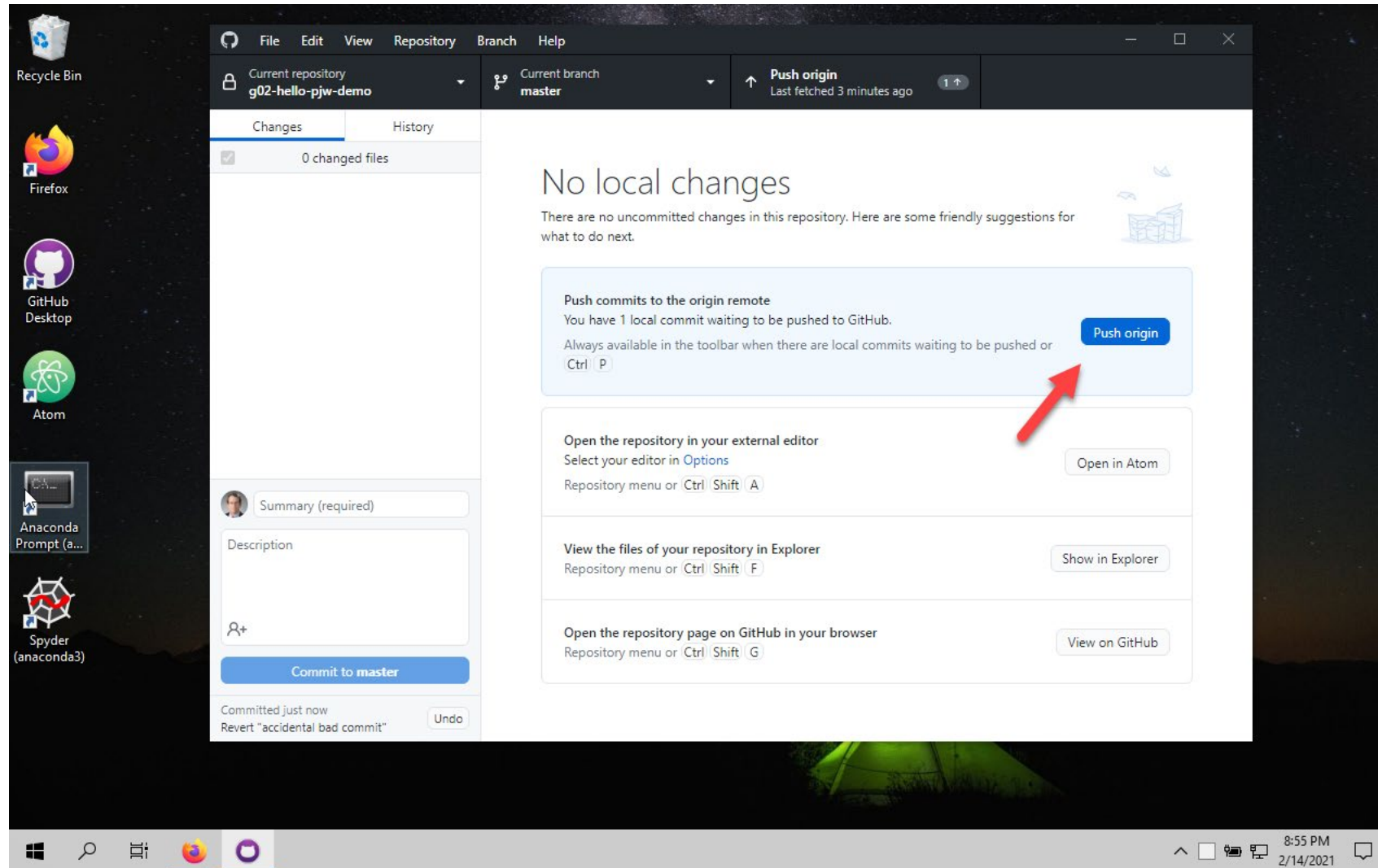
If the commit hasn't been pushed there will also be an "undo commit" option.



# New commit reverses the previous one



# Push the new commit





# Files are restored and hello1.py has been removed

