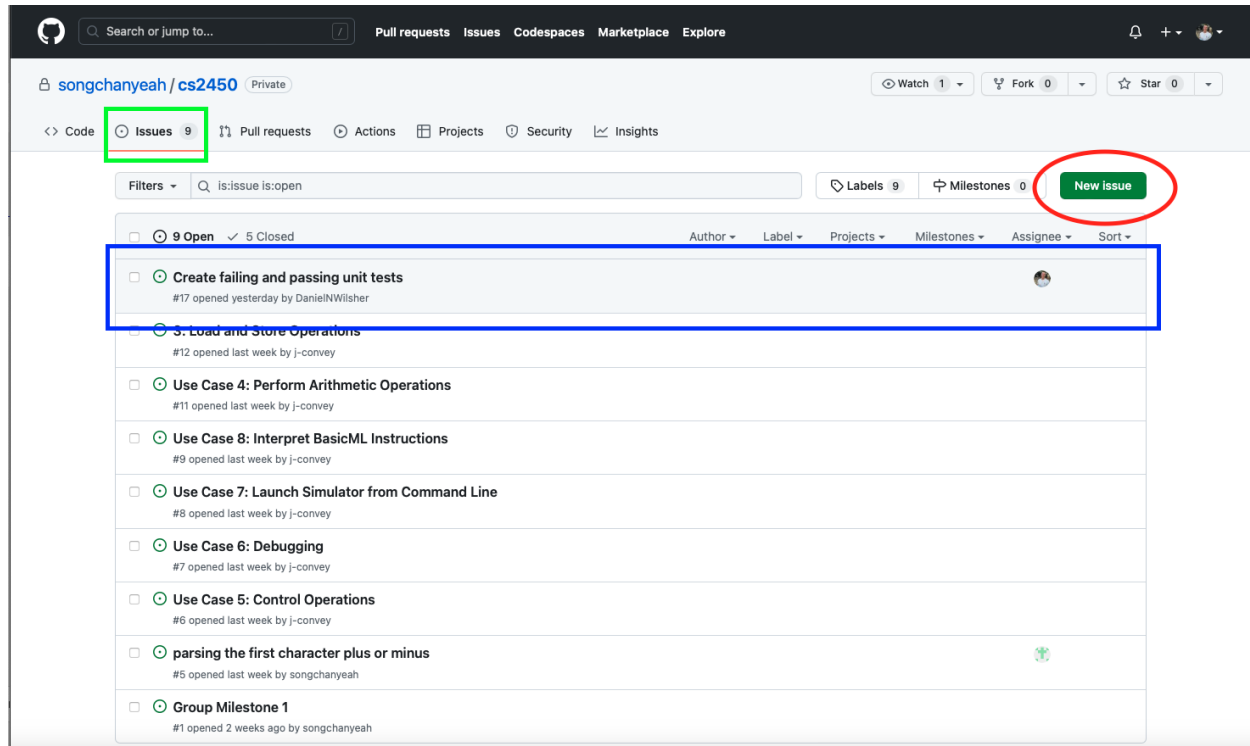
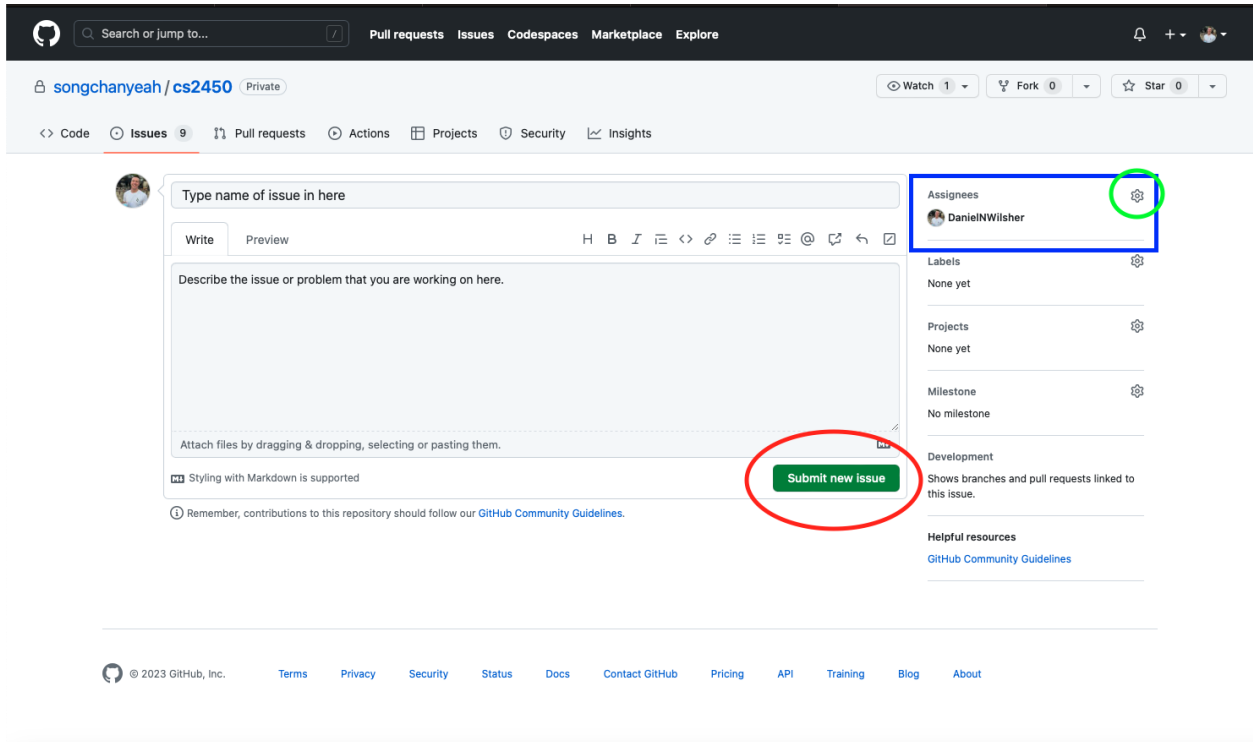


Opening a new branch on Github

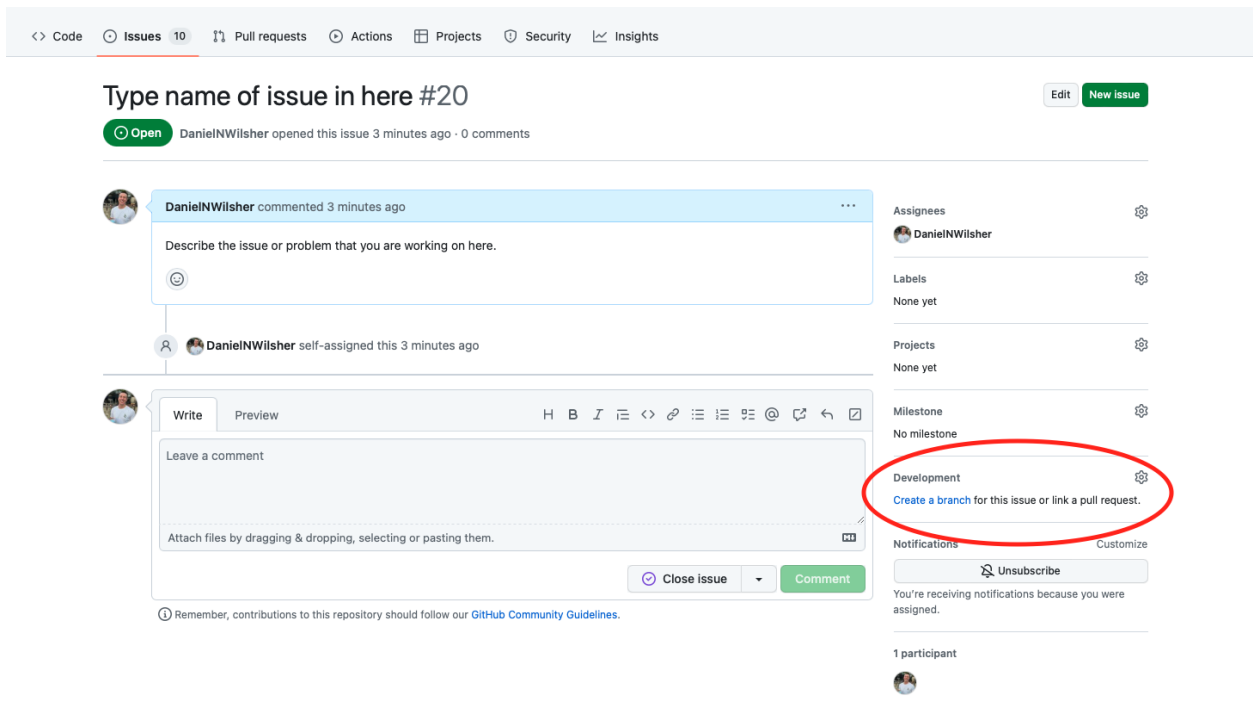
1. Create an issue, Go to the issues tab (green box) in the repository you are working in. (For this project it will be <https://github.com/songchanyeah/cs2450/issues>)



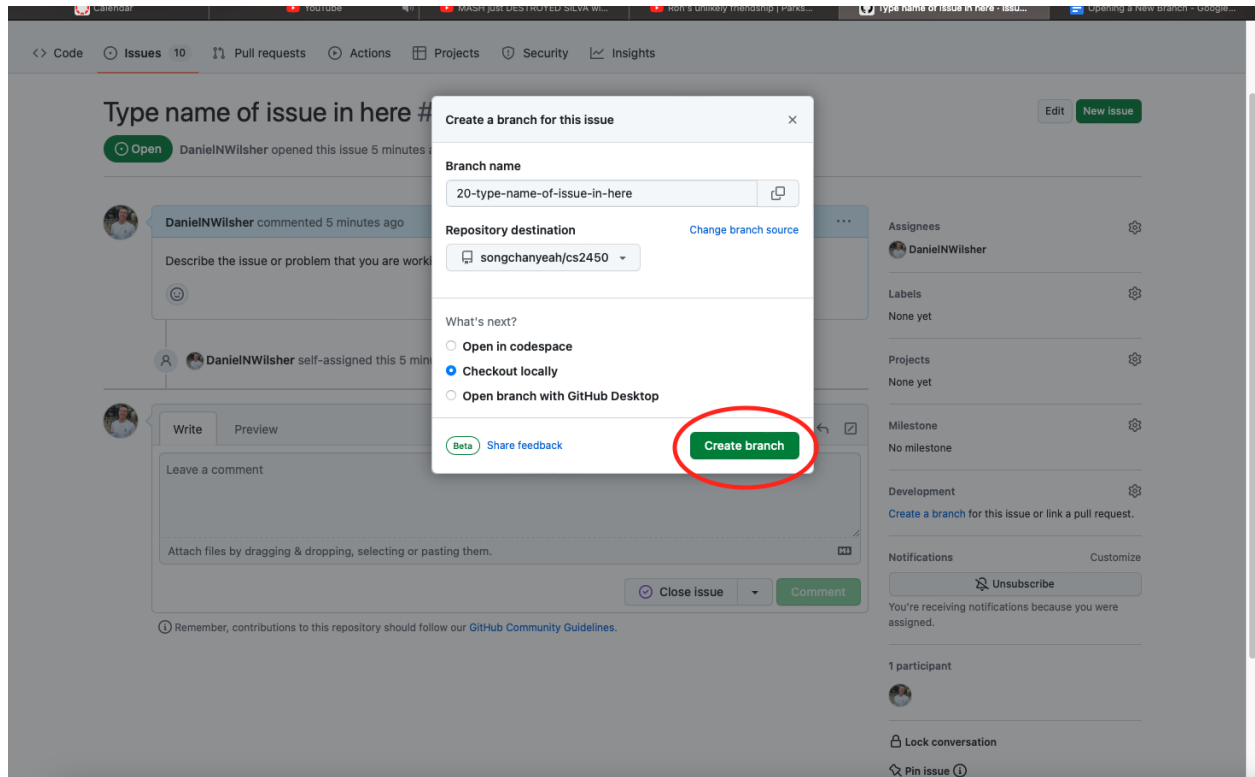
2. Select either an issue assigned to you like the one in the blue box or create a new issue clicking the button in the red circle. ↑↑↑
3. Fill out all the information and make sure to assign the issue to someone as shown in the blue box and to assign just click on the cog in the green circle, assign especially yourself if you are working on it so that you can get credit for your work. Click the button in the red circle to create the issue.



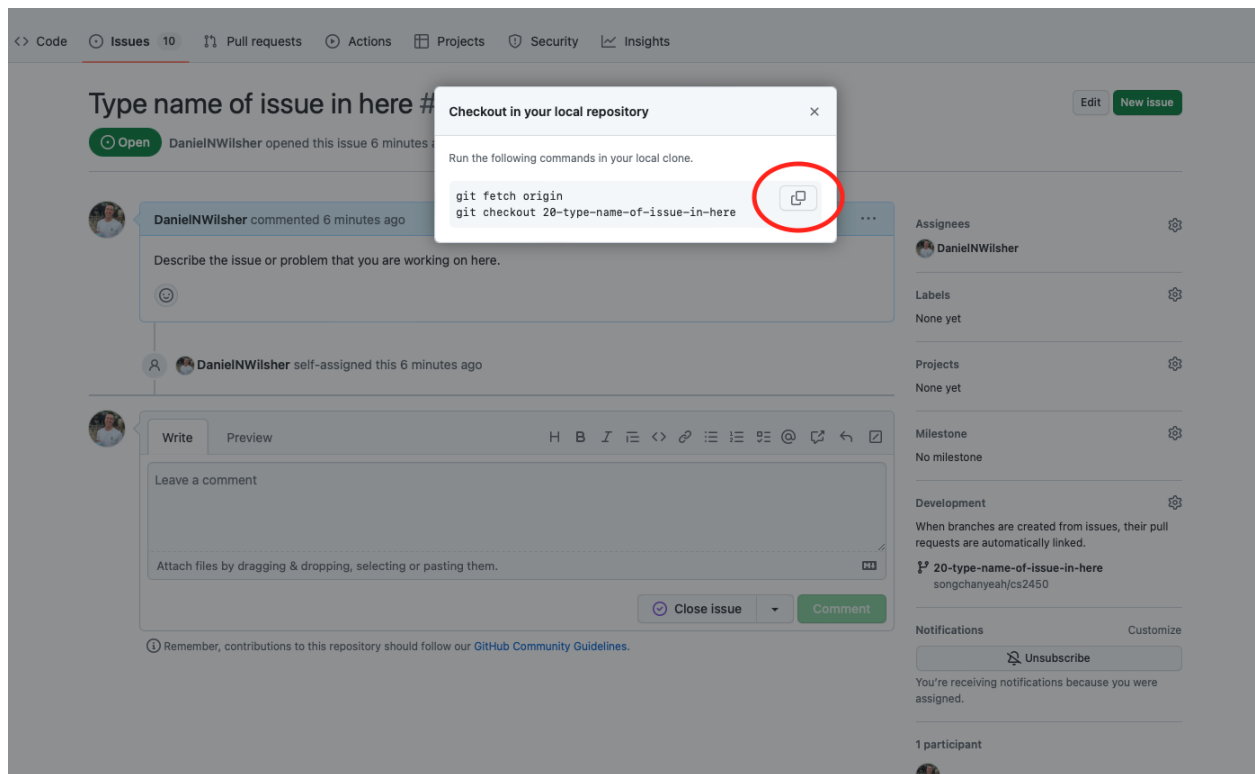
- After creating the new issue, go ahead and click on the development link in the red circle that says “create a new branch”.



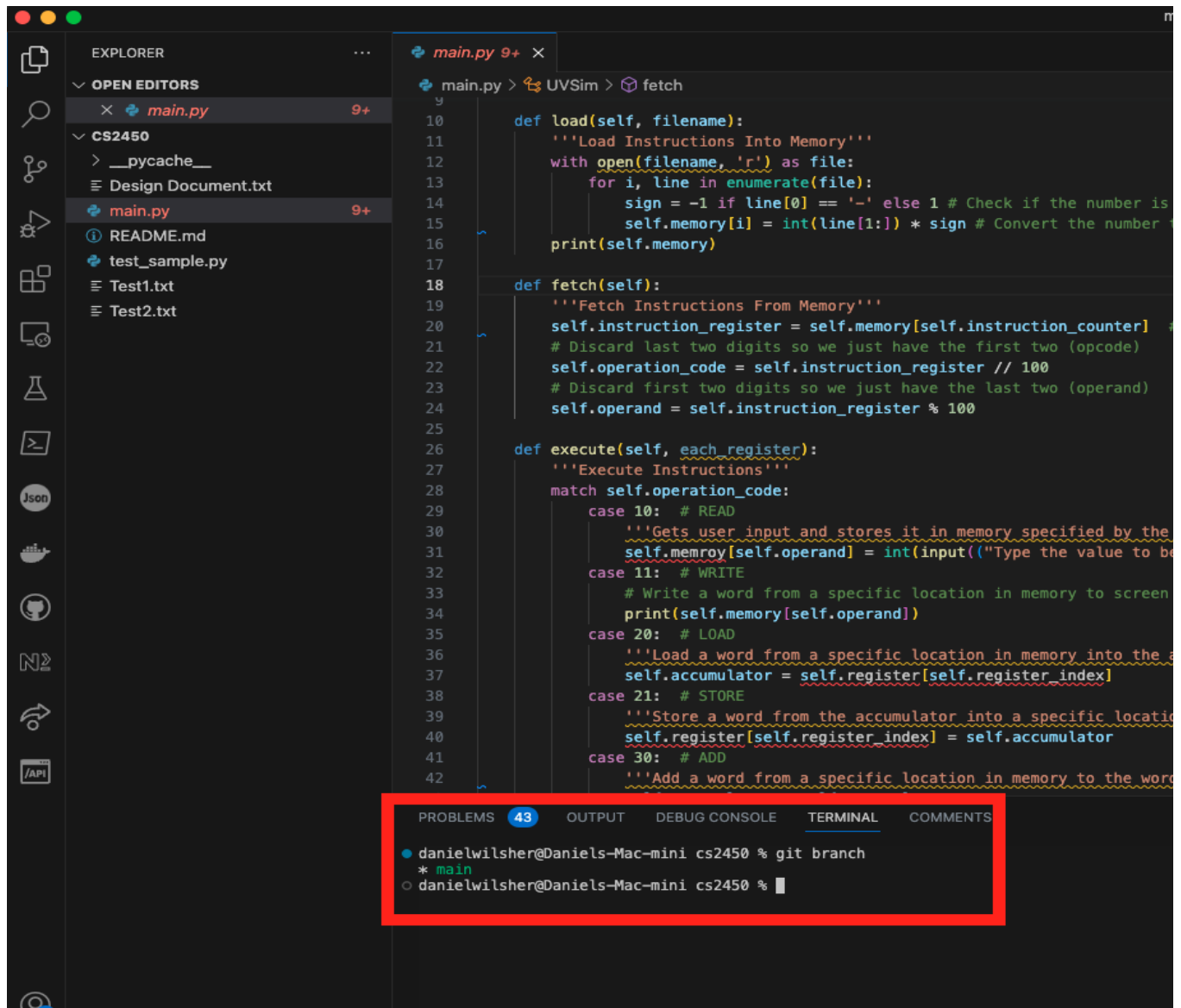
- After clicking on it, a modal will pop up that looks like the picture below and you will click the button in the red circle to create a branch.



6. Then a pair of git commands in another modal will pop open and you will press the copy button in the red circle to copy those commands.



- Next open VS code and the local repository of the project that you have. Then open a terminal in VS Code and run “ git branch “ and make sure you are on the main branch and it should look like this.

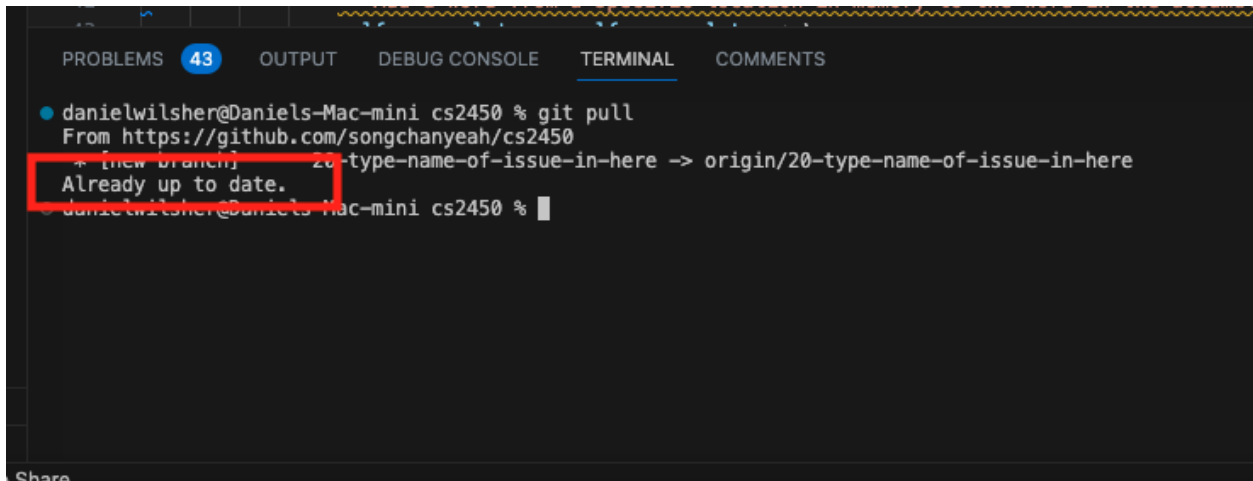


The screenshot shows the Visual Studio Code interface. On the left, the Explorer sidebar shows a project named 'CS2450' with files like 'main.py', 'README.md', 'test_sample.py', 'Test1.txt', and 'Test2.txt'. The main editor area displays the 'main.py' file, which contains Python code for a memory-based instruction processor. The code includes methods for loading instructions from a file, fetching instructions from memory, and executing them based on their operation codes (READ, WRITE, LOAD, STORE, ADD). At the bottom, the TERMINAL panel is open, showing the output of the 'git branch' command. The output indicates that the current branch is 'main'.

```
def load(self, filename):  
    '''Load Instructions Into Memory'''  
    with open(filename, 'r') as file:  
        for i, line in enumerate(file):  
            sign = -1 if line[0] == '-' else 1 # Check if the number is  
            self.memory[i] = int(line[1:]) * sign # Convert the number  
    print(self.memory)  
  
def fetch(self):  
    '''Fetch Instructions From Memory'''  
    self.instruction_register = self.memory[self.instruction_counter]  
    # Discard last two digits so we just have the first two (opcode)  
    self.operation_code = self.instruction_register // 100  
    # Discard first two digits so we just have the last two (operand)  
    self.operand = self.instruction_register % 100  
  
def execute(self, each_register):  
    '''Execute Instructions'''  
    match self.operation_code:  
        case 10: # READ  
            '''Gets user input and stores it in memory specified by the  
            self.memroy[self.operand] = int(input(("Type the value to be  
        case 11: # WRITE  
            # Write a word from a specific location in memory to screen  
            print(self.memory[self.operand])  
        case 20: # LOAD  
            '''Load a word from a specific location in memory into the  
            self.accumulator = self.register[self.register_index]  
        case 21: # STORE  
            '''Store a word from the accumulator into a specific locati  
            self.register[self.register_index] = self.accumulator  
        case 30: # ADD  
            '''Add a word from a specific location in memory to the word
```

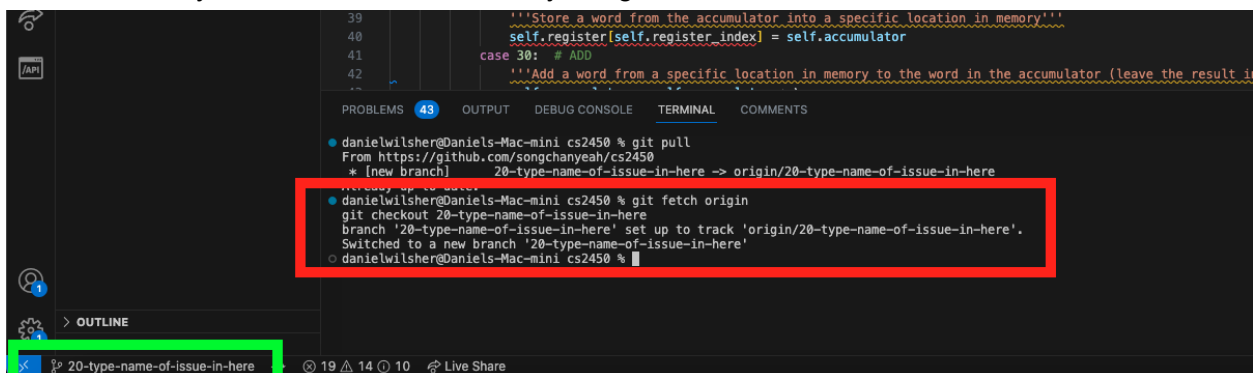
```
PROBLEMS 43 OUTPUT DEBUG CONSOLE TERMINAL COMMENTS  
● danielwilsher@Daniels-Mac-mini cs2450 % git branch  
* main  
○ danielwilsher@Daniels-Mac-mini cs2450 %
```

- If another branch is listed and is green with the star next to it run the command “ git checkout main “ and run “ git branch “ again to check you are on main.
- Once you are on main, run “ git pull “ to get the latest commits and updates to the main branch. If there's any changes it will update the files or if its already up to date it will tell you.



```
PROBLEMS 43 OUTPUT DEBUG CONSOLE TERMINAL COMMENTS
• danielwilsher@Daniels-Mac-mini cs2450 % git pull
From https://github.com/songchanyeah/cs2450
+ [new branch] 20-type-name-of-issue-in-here -> origin/20-type-name-of-issue-in-here
Already up to date.
• danielwilsher@Daniels-Mac-mini cs2450 %
```

10. Now the git commands from earlier that you copied go ahead and paste those into the terminal and run them. This will create a local copy of the new branch and also tell you it switched to the new branch as seen in the red box and VS code will let you know what branch you are on as referenced by the green box in the bottom left corner.



```
39      '''Store a word from the accumulator into a specific location in memory'''
40      self.register[self.register_index] = self.accumulator
41      case 30: # ADD
42          '''Add a word from a specific location in memory to the word in the accumulator (leave the result in
...
PROBLEMS 43 OUTPUT DEBUG CONSOLE TERMINAL COMMENTS
• danielwilsher@Daniels-Mac-mini cs2450 % git pull
From https://github.com/songchanyeah/cs2450
* [new branch] 20-type-name-of-issue-in-here -> origin/20-type-name-of-issue-in-here
Already up to date.
• danielwilsher@Daniels-Mac-mini cs2450 % git fetch origin
git checkout 20-type-name-of-issue-in-here
branch '20-type-name-of-issue-in-here' set up to track 'origin/20-type-name-of-issue-in-here'.
Switched to a new branch '20-type-name-of-issue-in-here'
• danielwilsher@Daniels-Mac-mini cs2450 %
```

20-type-name-of-issue-in-here

Congrats you have now opened a new branch.

Reminder to always run these commands before you start working:

to check the branch you are currently on.

Git branch

to switch branches if needed, quotations are not needed just there for placeholders.

Git checkout "nameOfBranch"

#to pull latest version of branch

Git pull