

EXERCISE 2 - COLLABORATING ON A PROJECT THROUGH GITHUB

So I will need four volunteers for this exercise. Other can also participate. Just be sure to copy the `ADDITION` Operation Template into the bottom of the file. And add a new function and feature name.

Prerequisites:

- Git Installation
- Exercise 1

Option A - Visual Tool

1. Identify your feature: [your feature] (e.g. subtraction).
2. Point your web browser to: `https://github.com/CorbanSwain/Cool-Calculator`
3. In the top right of the project page press 'Fork'. When the forking process is finished, Copy the URL in your browser bar.
4. In the GitHub Desktop application top-bar press `File > Clone Repository ...`
 - Press the 'URL' tab.
 - URL: *the URL you copied* (e.g. <https://github.com/YourName/Cool-Calculator>)
5. Then Press 'Clone'.
6. When cloning is complete, press `Branch > New Branch`
 - Name: [your feature] (e.g. `subtraction`)
7. Navigate to the cloned repo (e.g. `Documents/GitHub/Cool-Calculator`) And open `operations.py` in any plain text editor.
8. Following the template of the `ADDITION` Operation Entry add:
 - i. Comments indicating the desired functionality.
 - ii. The proper implementation of your feature in the return block.
 - iii. A tuple of your feature's function name and your name after `sym_dict[...] =`
 - **Be sure to only modify your feature!**

- **Example implementation for the subtraction feature:**

```
# SUBTRACTION Operation Entry #####  
  
# Desired Functionality:  $(- a b) = a - b$   
  
def subtract(a, b):  
    return a - b  
  
sym_dict['-'] = ('subtract', 'Mr. Swain')  
#####
```

9. After you have implemented your feature, double check spelling and save `operations.py` .
You can even try to test it out by editing the `test_str` variable in `calculator.py` .
10. Back in GitHub Desktop, in the 'Summary' Box type `Added [your feature] implementation` . Then press 'Commit to [your feature]'
11. Press 'Publish branch'.
12. Back in your browser window refresh the web page with your forked repository.
13. Click the Green 'Compare & pull request' button. Then press 'Create Pull Request'
Congrats your just collaborated on an open source project!

Option B - Command Line

1. Identify your feature: *[your feature]* (e.g. subtraction).
2. Point your web browser to: `https://github.com/CorbanSwain/Cool-Calculator`
3. In the top right of the project page press 'Fork'. When the forking process is finished, Copy the URL in your browser bar.
4. In your Terminal application type:

```
git clone "your copied URL"  
cd Cool-Calculator
```

5. Then create and checkout your feature branch:

```
git branch "your feature"
git checkout "your feature"
```

6. Navigate to the cloned repo and open `operations.py` in any plain text editor.

7. In your text editor, following the template of the `ADDITION Operation Entry` add:

- i. Comments indicating the desired functionality.
- ii. The proper implementation of your feature in the return block.
- iii. A tuple of your feature's function name and your name after `sym_dict[...] =`
 - o **Be sure to only modify your feature!**
 - o **Example implementation for the subtraction feature:**

```
# SUBTRACTION Operation Entry #####

# Desired Functionality: (- a b) = a - b

def subtract(a, b):
    return a - b

sym_dict['-'] = ('subtract', 'Mr. Swain')
#####
```

8. After you have implemented your feature, double check spelling and save `operations.py`. You can even try to test it out by editing the `test_str` variable in `calculator.py`.

9. Back in the Terminal navigate (`cd`) back to the repository (if you left it) and type:

```
git add -A
git commit -m "added [your feature] implementation"
git push -u origin "your feature"
```

10. Back in your browser window refresh the web page with your forked repository.

11. Click the Green 'Compare & pull request' button. Then press 'Create Pull Request'.
Congrats you just collaborated on an open source project!

