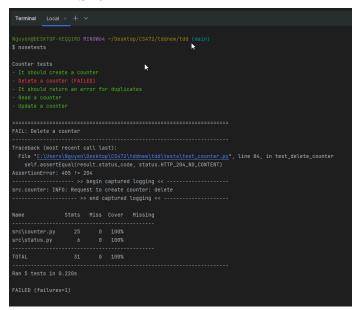
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Workflow Lab Report

Task 1 & 2 Executive Summary:

- Created a GitHub Actions workflow by adding a .github/workflows directory.
- Inside that directory, created a YAML file named main.yml.
- The workflow is named CI workflow.
- Triggered by pushes to the main branch and pull requests targeting the main branch.
- The workflow runs on an Ubuntu environment.
- Uses the Python 3.9-slim container image.
- Used nosetests to report on coverage
- The workflow consists of the following steps:
 - <u>Checkout</u>: Fetches the code from the repository.
 - <u>Install dependencies:</u> Upgrades pip and installs dependencies from requirements.txt.
 - Lint with flake8: Runs flake8 with specific options for code linting.
 - Run unit tests with nose: Executes unit tests using the nose testing framework.

RED PHASE:



```
def test_delete_counter(self):
    """Delete a counter"""
    # creating a counter
    result = self.client.post('/counters/delete')
    # ensure returned successful return code
    self.assertEqual(result.status_code, status.HTTP_201_CREATED)

# read counter
    result = self.client.delete('/counters/delete')
    self.assertEqual(result.status_code, status.HTTP_204_NO_CONTENT)
    # counterValue = result.get_json()['read']
    # self.assertEqual(baselineValue + 1,updateValue)
    result = self.client.delete('/counters/empty')
    self.assertEqual(result.status_code, status.HTTP_404_NOT_FOUND)
```

Test Case Name: test delete counter

Description: This test case verifies the functionality of deleting a counter using the DELETE request.

- Steps:
 - Step 1: Create a counter by sending a POST request to /counters/delete.
 - Expected outcome: The response status code should be 201 CREATED.
 - **Step 2:** Delete the counter by sending a DELETE request to /counters/delete.
 - Expected outcome: The response status code should be 204 NO CONTENT.
 - **Step 3:** Attempt to delete a non-existent counter by sending a DELETE request to /counters/empty.
 - Expected outcome: The response status code should be 404 NOT FOUND.

GREEN PHASE:

```
@app.route('/counters/<name>', methods=['DELETE'])

def delete_counter(name):
    """Delete a counter"""
    app.logger.info(f"Request to delete counter: {name}")
    global COUNTERS

if name not in COUNTERS:
    return {"Message": f"Counter {name} not found"}, status.HTTP_404_NOT_FOUND

COUNTERS[name] += 1
    return {name: COUNTERS[name]}, status.HTTP_204_NO_CONTENT
```

Route: /counters/<name> HTTP Method: DELETE

• Functionality: Deletes a counter with the specified name.

- o Behavior:
 - If the counter exists (i.e., name is in COUNTERS), it increments the counter value by 1.
 - Returns a response with the updated counter value and a status code of 204 NO CONTENT.
 - If the counter does not exist, returns a message indicating that the counter was not found with a status code of 404 NOT FOUND.

REFACTOR PHASE:

• Coverage is already 100%

```
Name Stmts Miss Cover Missing
snc\colinter.py 32 0 100%
snc\status.py 6 0 100%
TOTAL 38 0 100%
Ran 5 tests in 0.215s
```