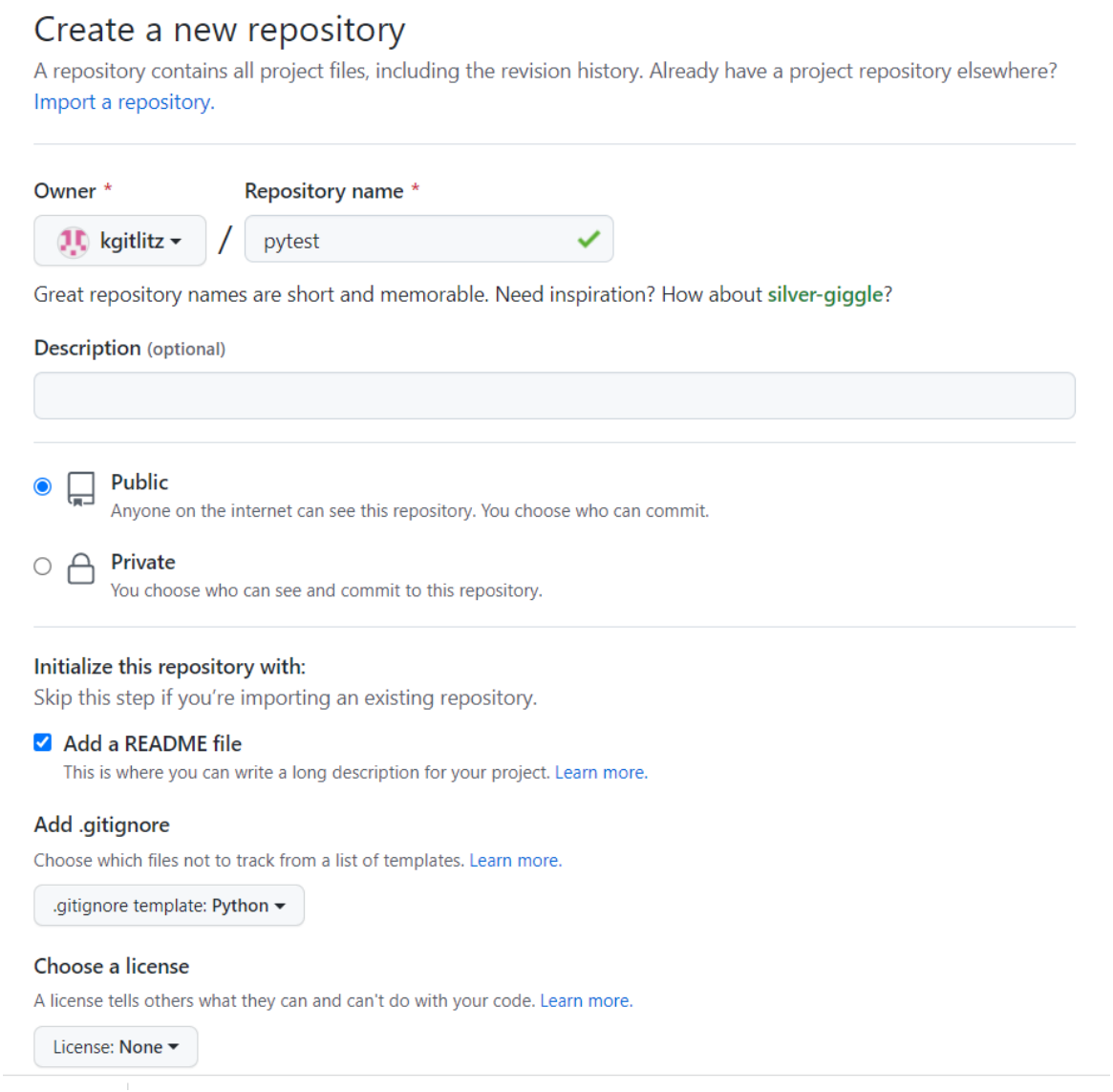
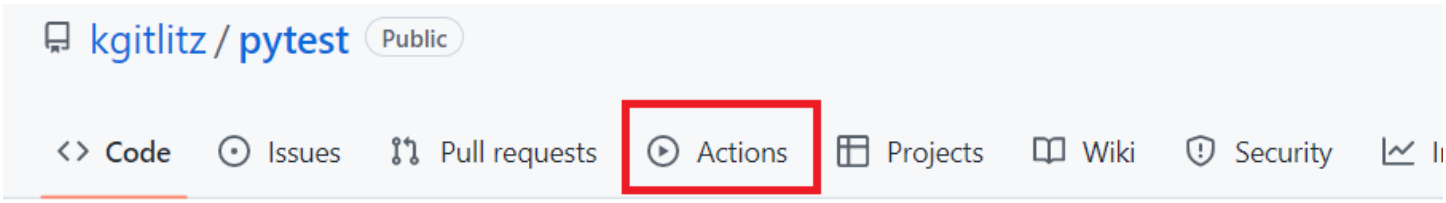
Using GitHub Continuous Integration:

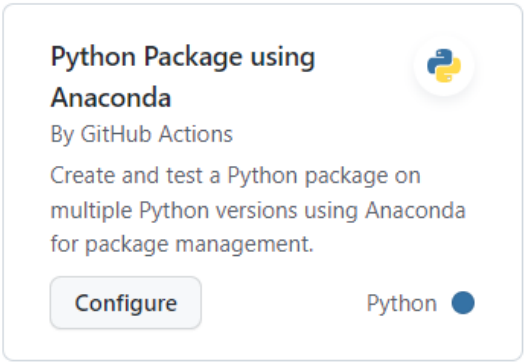
1. Setup a repository on GitHub:



2. In your repository, select Actions:



3. For continuous integration, add the following:



If you do not see this package, scroll to the bottom of the page and select **Browse All Categories** and select **Continuous integration**.

Change the Python version in the .yml script created for you. Be sure to commit the .yml script.

```yaml
steps:
- uses: actions/checkout@v3
- name: Set up Python 3.7
  uses: actions/setup-python@v3
  with:
    python-version: 3.7
- name: Add conda to system path
```

The script includes an update to the base Conda environment:

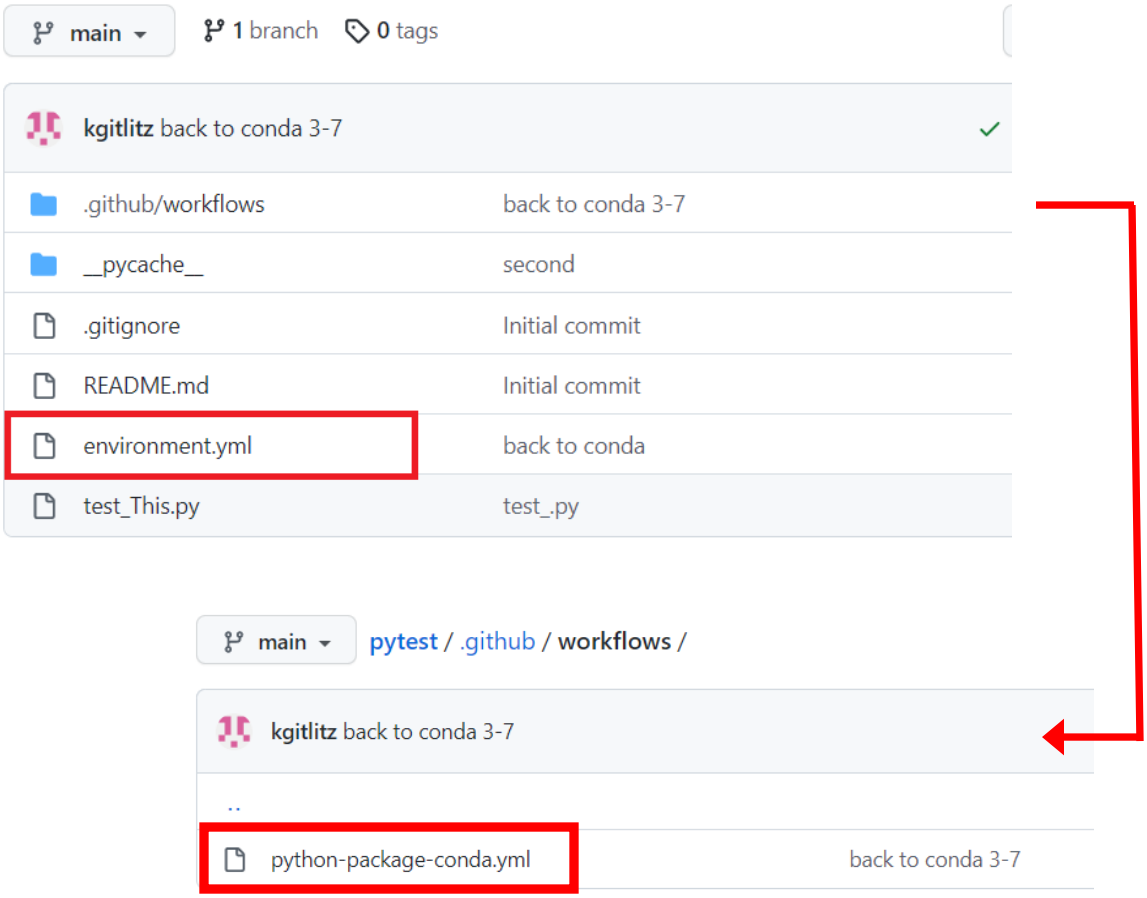
```yaml
- name: Install dependencies
  run: |
    conda env update --file environment.yml --name base
```

Here are the contents of the environments.yml file. I made some changes in the file supplied by ProfTim:

environment.yml

```yaml
name: anyNameForThis
channels:
  - conda-forge
  - defaults
dependencies:
  - moto
  - boto
  - pytest
```

The environment.yml file is stored at the root of the project and the .yml script to run is stored in the workflows directory:



If you place the environment.yml file in the workflow directory, GitHub will attempt to run it and your workflow will fail.

To run pytest on all test files in your repository:

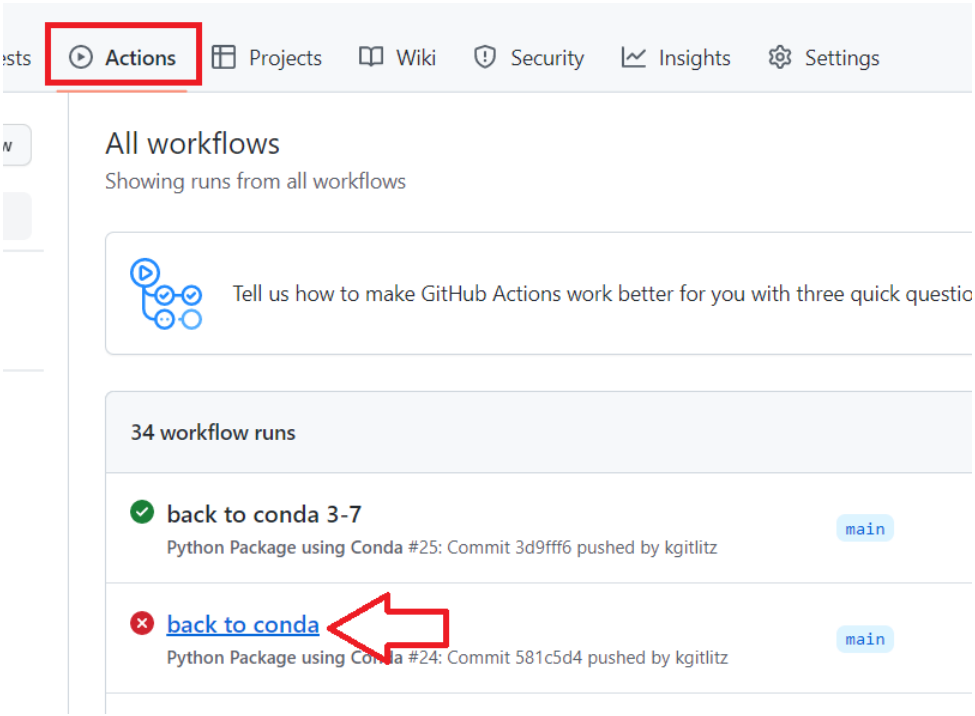
Python test files must contain functions that begin with test_
Python files must begin with test_

For example:

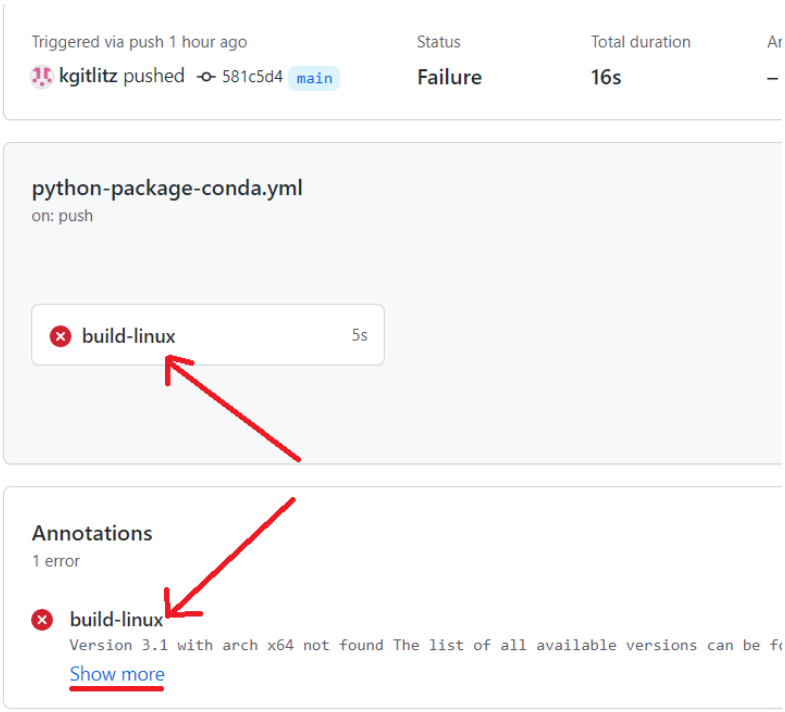
If you have no files to test, your workflow will fail.

Navigating to results:

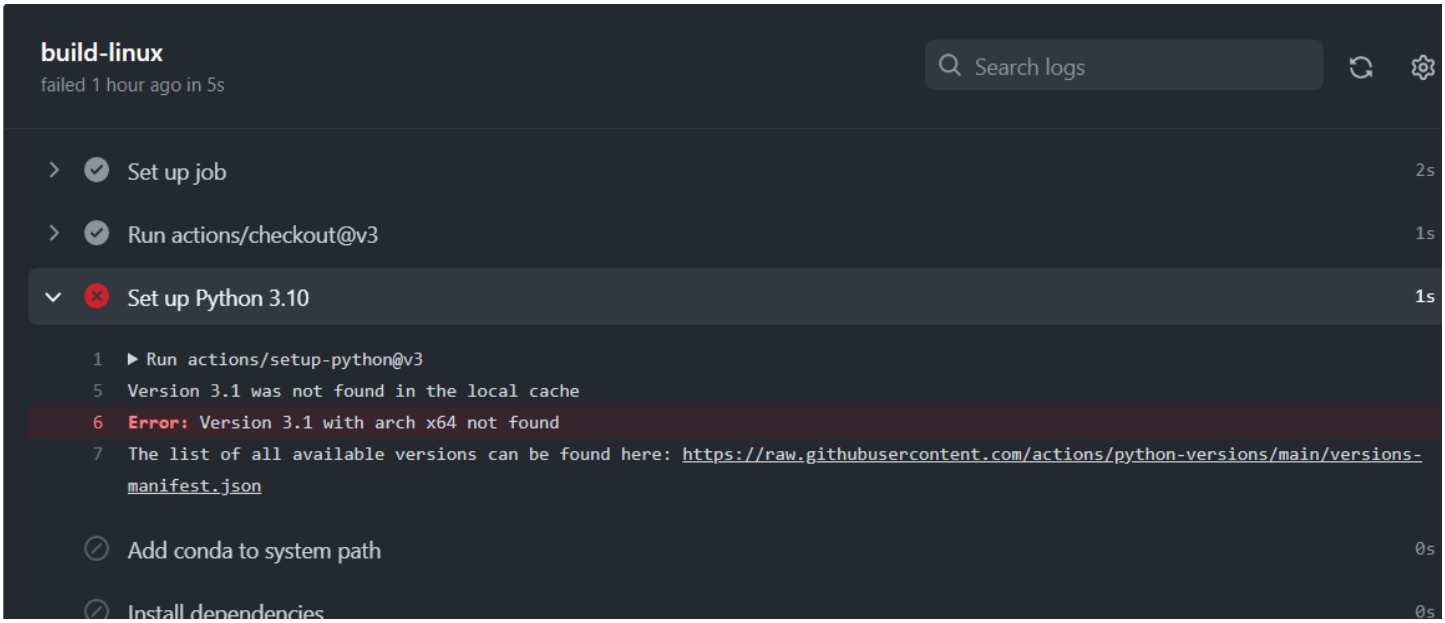
The workflow runs are listed under Actions. The working commit “back to conda 3-7” uses the file files described above. The “back to conda” fail used Python 3.10.



For more information on the following, click on **Show more**. For a list of what transpired, click on one of the **build-linux** links:

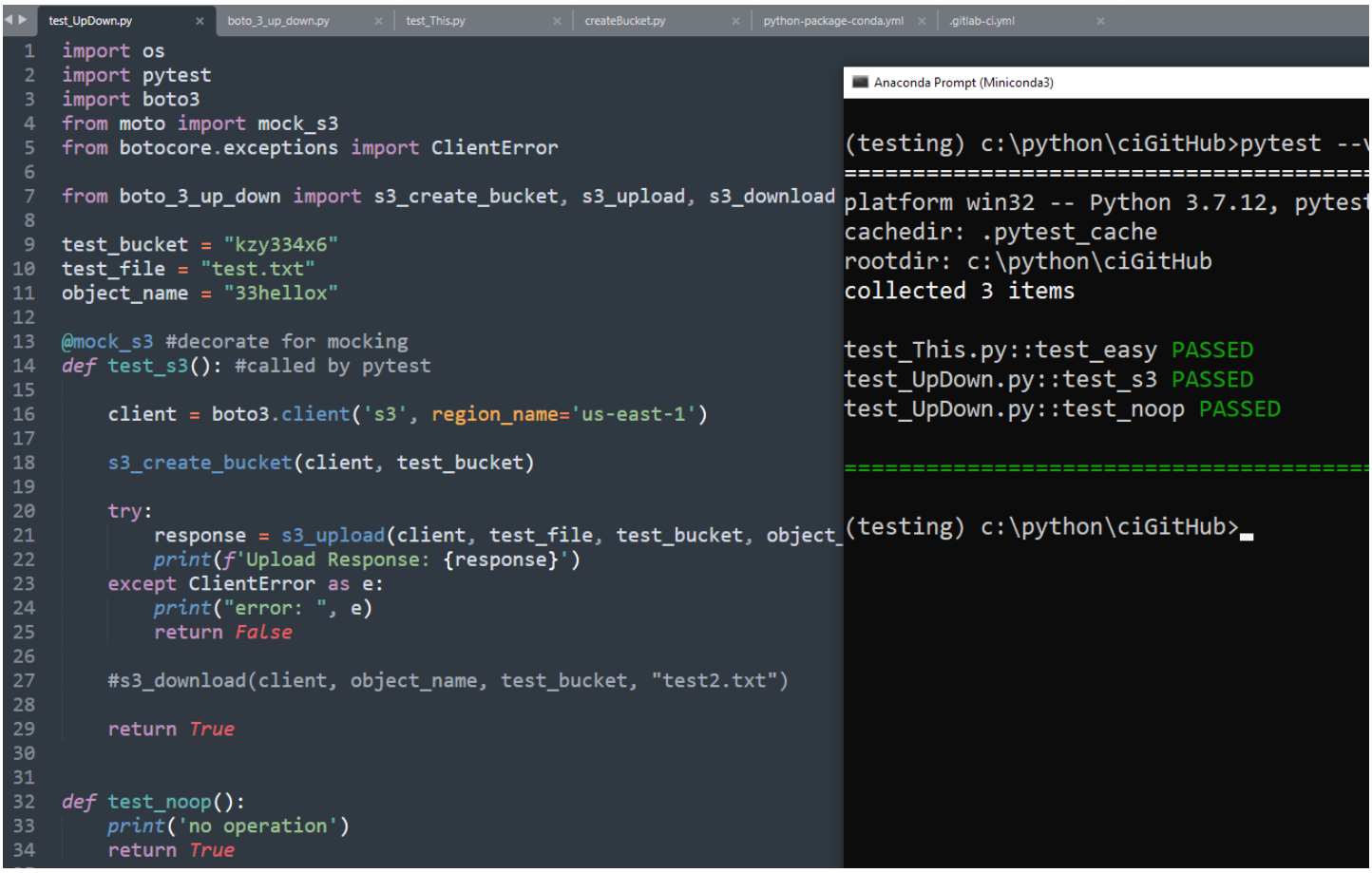


Here is the list from the failed build-linux link:

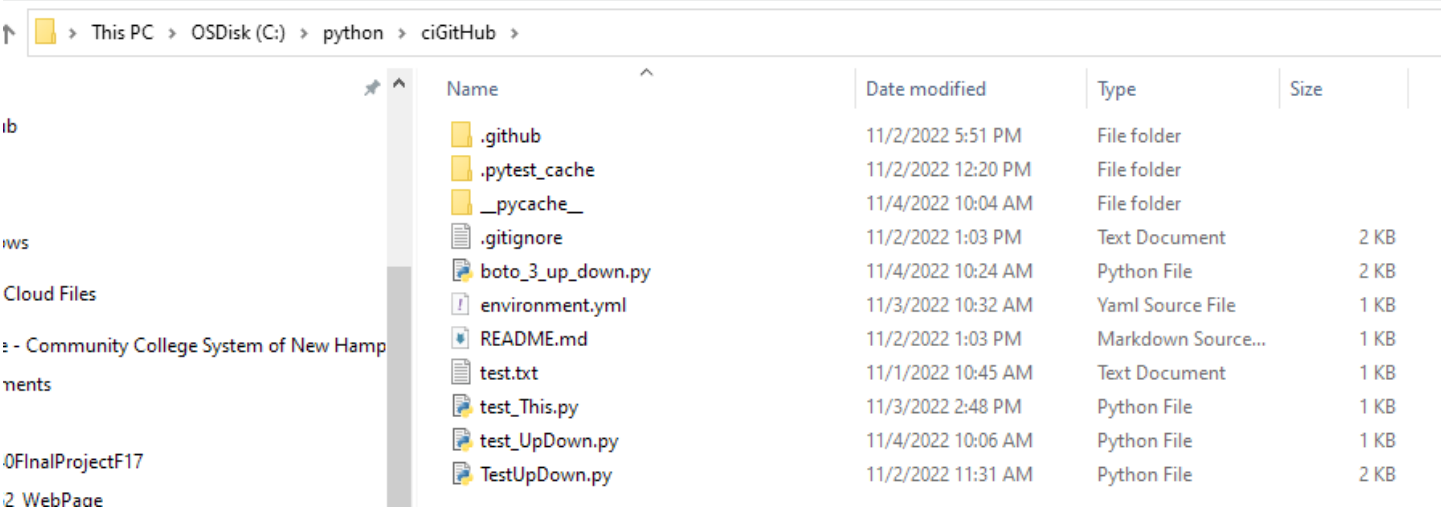


Boto / Moto Local Testing of Python:

In the following illustration, I am testing my boto_3_up_down.py file I created **for AWS Boto3 and Mocking S3** assignment.



Here are the directory contents:



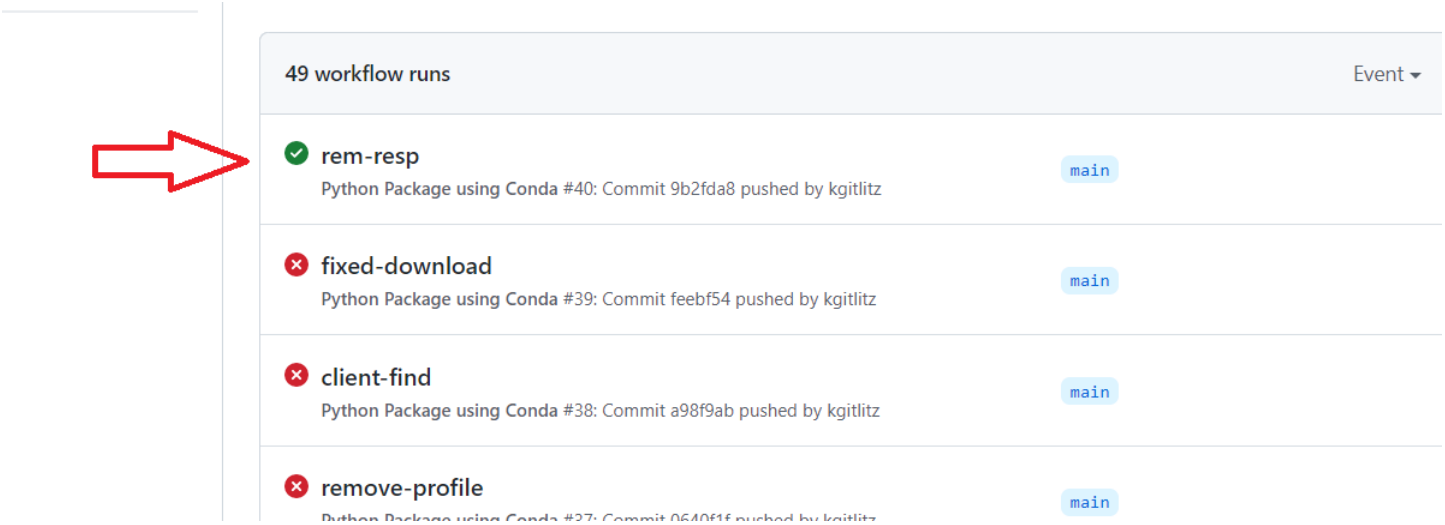
Here is the Git push:

```
SYSTEM+kgitlitz@L218-PF23AJ97 MINGW64 /c/python/ciGitHub (main)
$ git add .

SYSTEM+kgitlitz@L218-PF23AJ97 MINGW64 /c/python/ciGitHub (main)
$ git commit -m rem-resp
[main 9b2fda8] rem-resp
 1 file changed, 1 deletion(-)

SYSTEM+kgitlitz@L218-PF23AJ97 MINGW64 /c/python/ciGitHub (main)
$ git push origin main
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 12 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (9/9), 731 bytes | 731.00 KiB/s, done.
Total 9 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 4 local objects.
To https://github.com/kgitlitz/pytest.git
   feebf54..9b2fda8  main -> main
```

Boto / Moto finally working on GitHub:



Help:

Forcing merge:

https://stackoverflow.com/questions/37937984/git-refusing-to-merge-unrelated-histories-on-rebase

Unprotecting branches:

https://stackoverflow.com/questions/32246503/fix-gitlab-error-you-are-not-allowed-to-push-code-to-protected-branches-on-thi