

# Assignment 6: Workflows

## Software Engineering for Scientists

**Objectives:** Become familiar with encoding scientific workflows into a workflow language.

This assignment will build off of the work done in Assignment 5, so use the same repository.

**Tasks:**

1. Develop a small scientific presentation about the data from `Agrofood_co2_emission.csv`. This will include a few sentence in your README covering:
  - a. Introduction: What are you looking at?
  - b. Results: What did you find? At least 3 figures.
    - i. Feel free to base your visualization on this example file.  
<https://github.com/swe4s/lectures/blob/master/src/workflow/snakemake/fire/hist.py>
    - ii. NOTE: This file does not use our best practices. All files you submit must use best practices.
  - c. Methods: What steps did you take to get your results?
2. Develop a Snakemake pipeline that reproduces all of the statistics and figures used in your results.
3. New code must be properly test. To test if a file is created in `ssshstest` use the following assert  

```
assert_equal $file_name $( ls $file_name )
```
4. All unit and functional tests must be run and passing with github actions
5. Create a release from master tagged as 5.0