

Effective Programming Practices for Economists

Basic Python

Running Python code via pytest

Janoś Gabler, Hans-Martin von Gaudecker, and Tim Mensinger

Preparation

We assume you have:

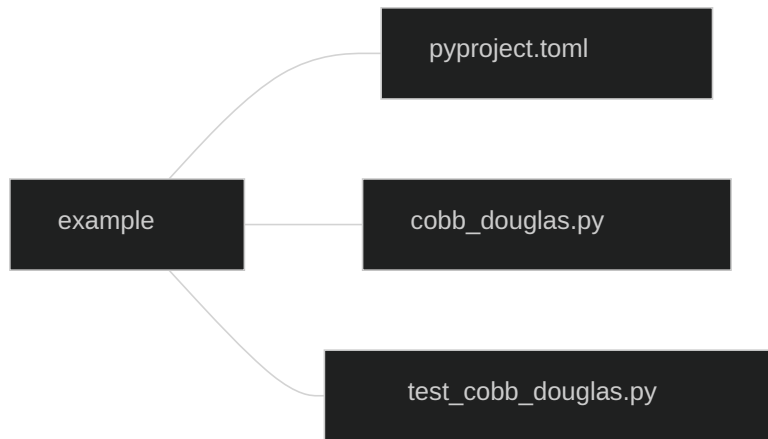
- Installed pixi
- Navigated to the root directory of your project in a shell
- The root directory of your contains a `pyproject.toml` file that includes pytest and at least one file expected by pytest

How does pytest execute code?

- Executing .py files: Run the entire file
- Executing notebooks: Run individual cells
- Pytest: Run individual functions in multiple .py files

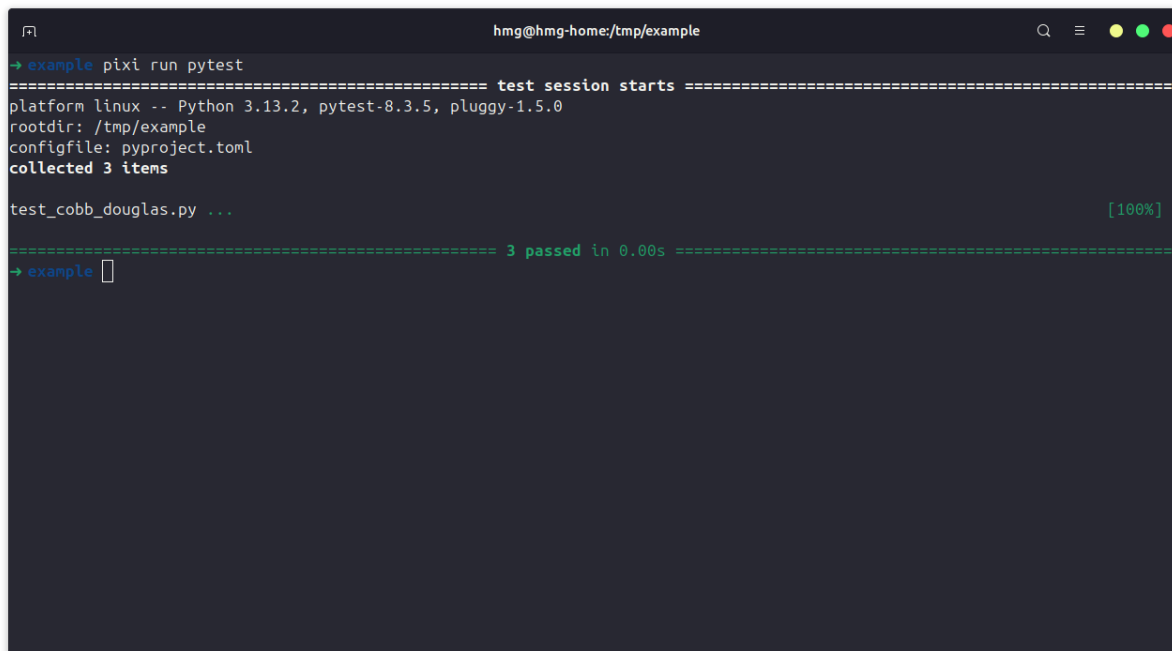
Very useful for automating test execution across an entire project

Example Project Structure



- Our shell is in the `example` directory
- We want to run all functions that start with `test_` in `test_cobb_douglas.py`
- Could be spread across multiple test files, across different subdirectories
- Command is `pytest`

Execute



```
hmg@hmg-home:/tmp/example
→ example pixi run pytest
===== test session starts =====
platform linux -- Python 3.13.2, pytest-8.3.5, pluggy-1.5.0
rootdir: /tmp/example
configfile: pyproject.toml
collected 3 items

test_cobb_douglas.py ... [100%]

===== 3 passed in 0.00s =====
→ example
```