

Effective Programming Practices for Economists

Basic Python

Running Python code via pytask

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Preparation

- We assume you have installed anaconda and created the course environment
- Open a shell in the root directory of your project
 - On Windows, use the anaconda prompt or the powershell
 - If conda is not recognized in the powershell, check out this [stackoverflow post](#)
- Activate the environment using ``conda activate epp``
- Confirm the activation worked using ``conda info``

0: Activate and Info

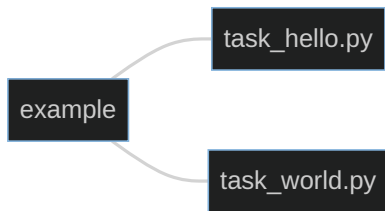


How does pytask execute code?

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

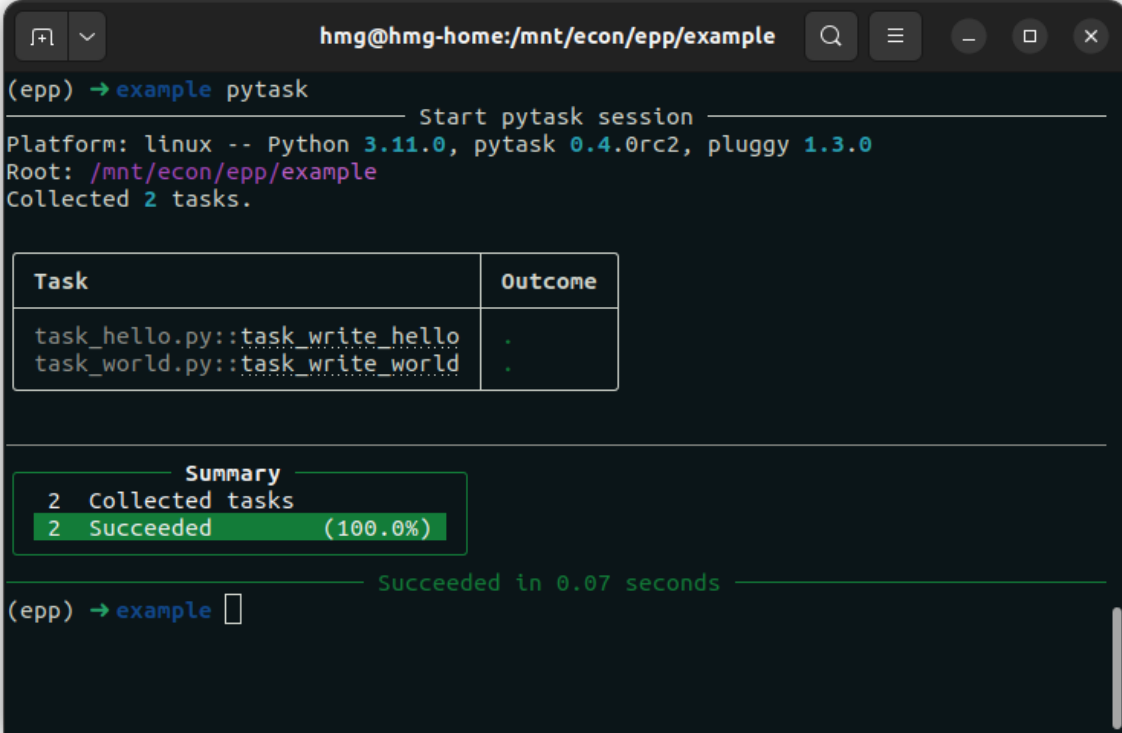
Very useful for automating research pipelines

Example Project Structure



- Our shell is in the `example` directory
- We want to run all functions that start with `task_` in both `.py` files
- Command is `pytask`

1: Execute



```
hmg@hmg-home:/mnt/econ/epp/example
(epp) → example pytask
----- Start pytask session -----
Platform: linux -- Python 3.11.0, pytask 0.4.0rc2, pluggy 1.3.0
Root: /mnt/econ/epp/example
Collected 2 tasks.



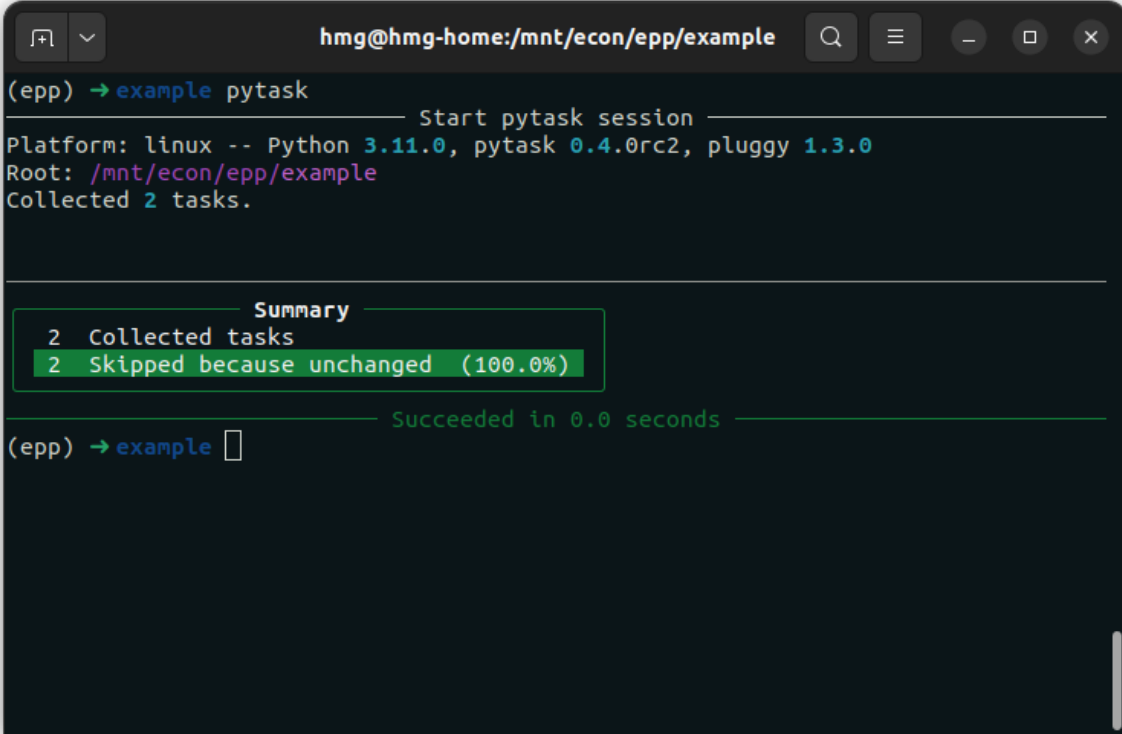
| Task                            | Outcome |
|---------------------------------|---------|
| task_hello.py::task_write_hello | .       |
| task_world.py::task_write_world | .       |



----- Summary -----
2 Collected tasks
2 Succeeded (100.0%)

----- Succeeded in 0.07 seconds -----
(epp) → example
```

1: Execute again



```
hmg@hmg-home:/mnt/econ/epp/example
(epp) → example pytask
----- Start pytask session -----
Platform: linux -- Python 3.11.0, pytask 0.4.0rc2, pluggy 1.3.0
Root: /mnt/econ/epp/example
Collected 2 tasks.

----- Summary -----
2 Collected tasks
2 Skipped because unchanged (100.0%)

----- Succeeded in 0.0 seconds -----
(epp) → example
```