Effective Programming Practices for Economists

Basic Python

Running Python code via pytask

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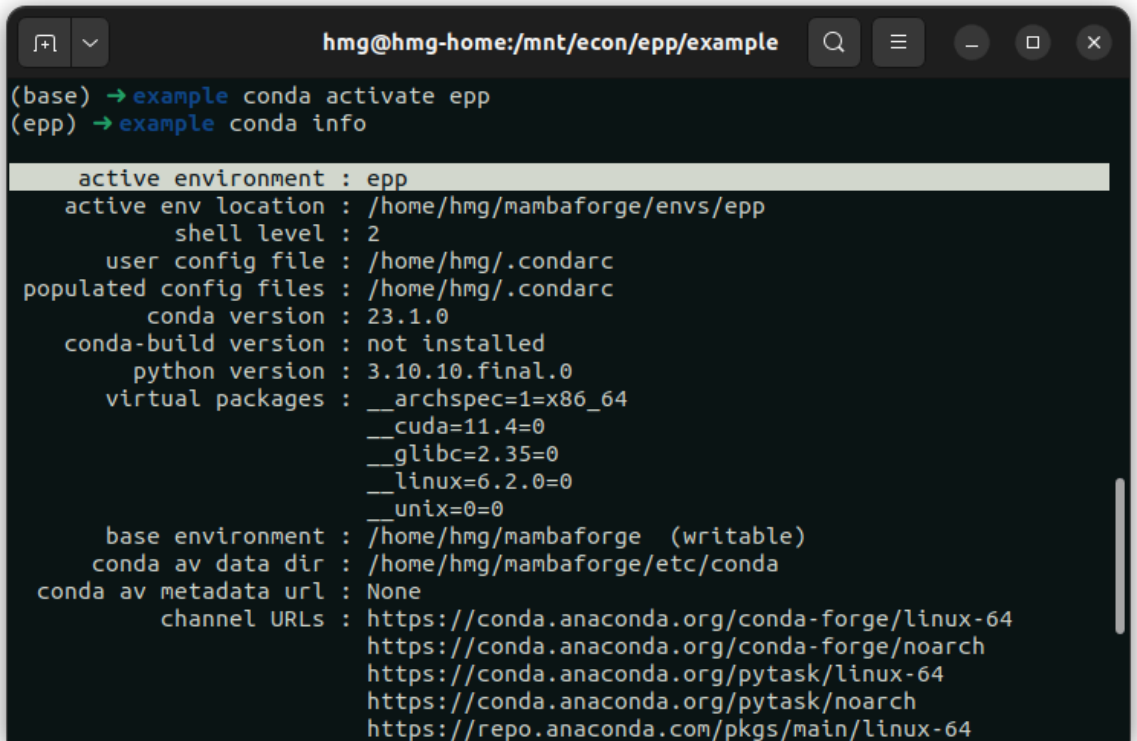
Preparation

- 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

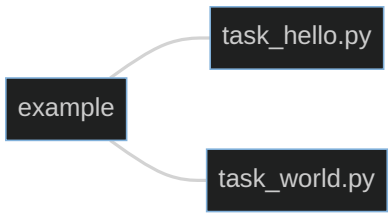


How does pytask execute code?

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

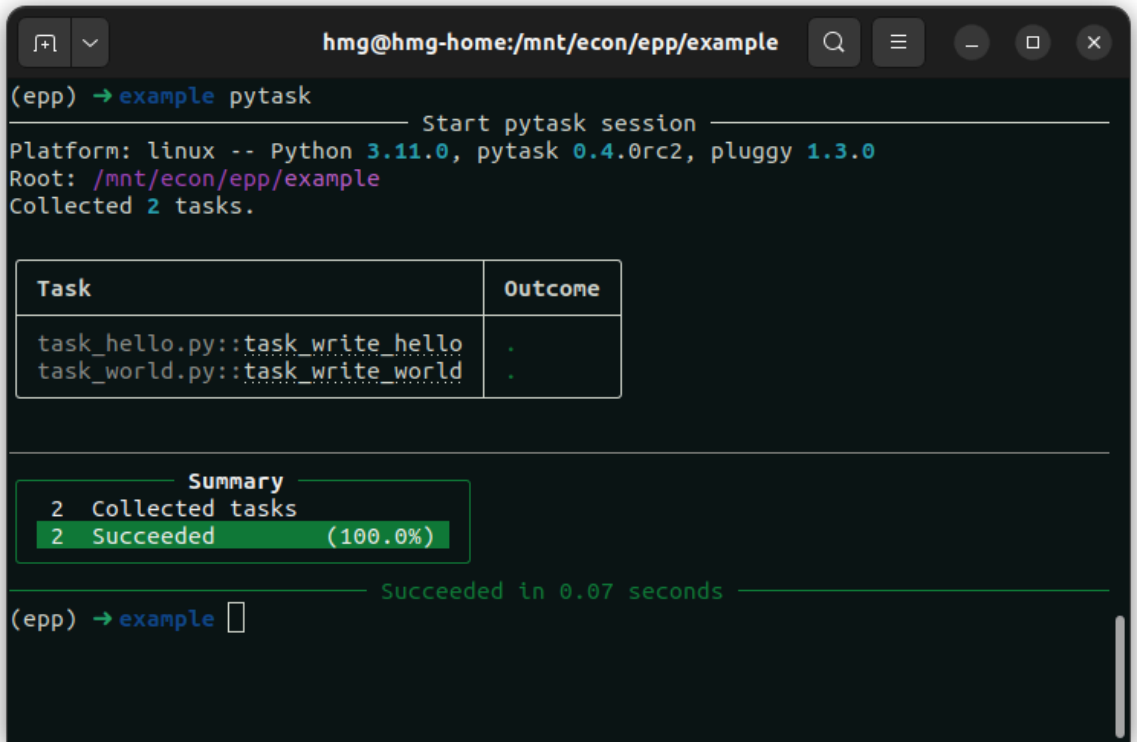
Very useful for automating research pipelines

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