Effective Programming Practices for Economists

Basic Python

Running Python code via pytest

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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

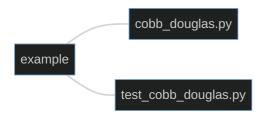
```
hmg@hmg-home:~/econ/example
(base) \rightarrow example conda activate epp
(epp) \rightarrow example conda info
     active environment : epp
    active env location : /home/hmg/miniforge/envs/epp
            shell level : 2
       user config file : /home/hmg/.condarc
populated config files : /home/hmg/miniforge/.condarc
                           /home/hmg/.condarc
          conda version : 23.3.1
   conda-build version : not installed
         python version: 3.10.12.final.0
       virtual packages : __archspec=1=x86_64
                          cuda=11.4=0
                             alibc=2.35=0
```

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`

1: Execute

