# **Test Driven Development (TDD) Lab Guide**

* What is TDD
* What is Pytest

### Learning Resources

**Documentation:**

* [Python Documentation](https://docs.python.org/3/): The official Python guide.
* [Pytest Documentation](https://docs.pytest.org/en/7.1.x/contents.html): Details how to use and run Pytest.

**Online Tutorials and Courses:**

* [Unit Testing and Test Driven Development in Python](https://www.linkedin.com/learning-login/share?account=56744281&forceAccount=false&redirect=https%3A%2F%2Fwww.linkedin.com%2Flearning%2Funit-testing-and-test-driven-development-in-python%3Ftrk%3Dshare_ent_url%26shareId%3DFpSOpa0%252FQMOlU%252BPfWmg0AQ%253D%253D): A course from LinkedIn Learning covering unit testing and TDD with Python.

**Community Forums and Support:**

### Getting Started with Pytest

**Install Python:**

* Ensure Python (version 3.7 or higher) is installed on your system.
  + - If needed, download Python from [python.org](https://www.python.org/downloads/).

**Install Pytest:**

* Open a command line interface/terminal and install Pytest using pip:

pip install pytest

* + You can then verify if Pytest was successfully installed with the following command:

pytest --version

### Set Up Your Testing Environment

* Create a new folder on your machine for this project.
* Download the provided main.py file and the incomplete test\_suite\_pytest.py files. Place these in the previously created folder.

### Running Tests

* Execute Pytest tests with the following command:

pytest test\_suite\_pytest.py

* If Pytest is installed correctly, a passing test will issue the following output format:

======================== test session starts =====================  
…  
collected 1 item  
test\_suite.py . [100%]  
======================== 1 passed in 0.01s =====================

### Writing Pytest Tests

Open Your Test File

Basic Pytest Test Structure

### Test Examples

**Test 1 - Title**

**Test 2 - Title**

### Incomplete Test Scenarios

**Test 3 - Getting CSV Data**

**Test 4 - Writing CSV Data**

### Expected Test Results

Test 1

Test 2

Test 3

Test 4

### Conclusion

* What the lab taught