# SE Lab-7

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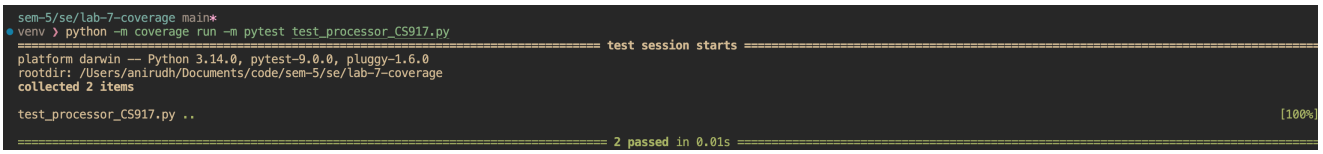
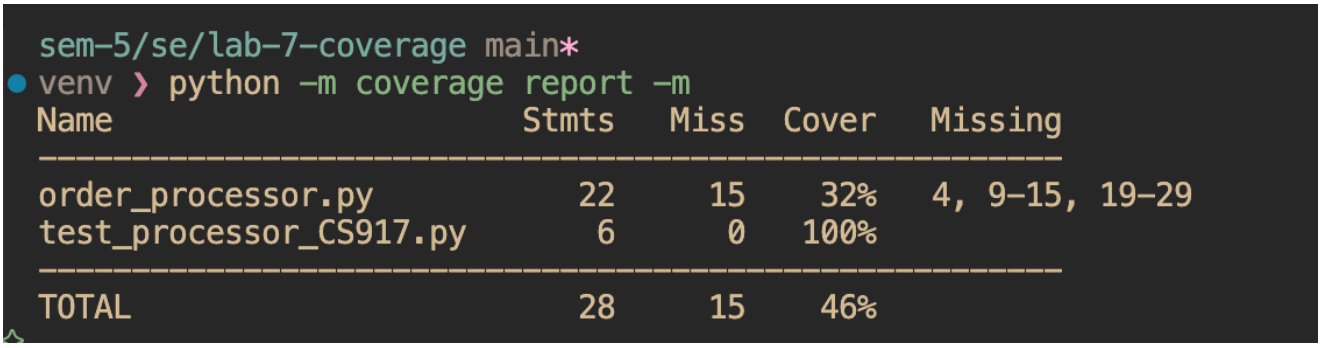
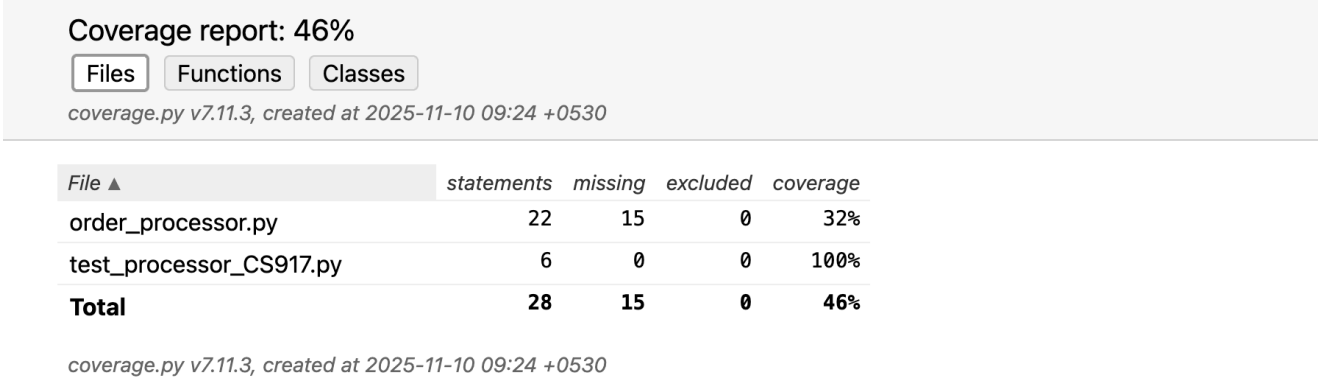
## 2



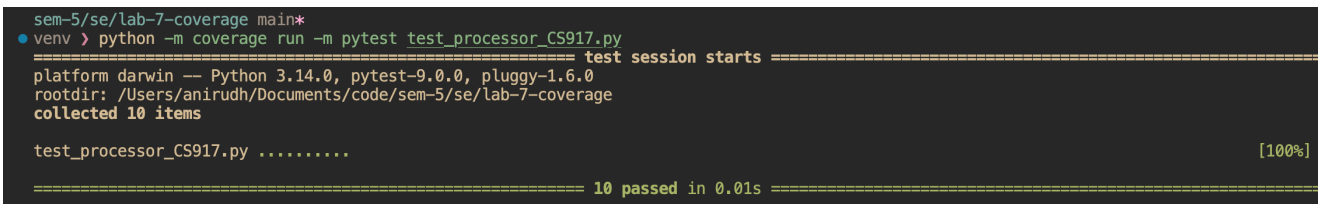

## 3




## 4




## 5



```
sem-5/se/lab-7-coverage main*
venv ❯ python -m coverage report -m
Name                      Stmts   Miss  Cover   Missing
-------------------------------------------------------
order_processor.py           22      0   100%
test_processor_CS917.py      31      0   100%
-------------------------------------------------------
TOTAL                        53      0   100%
```

Coverage report: 100%

Files | Functions | Classes

*coverage.py v7.11.3, created at 2025-11-10 09:26 +0530*

| File ▲ | statements | missing | excluded | coverage |
|---|---|---|---|---|
| order_processor.py | 22 | 0 | 0 | 100% |
| test_processor_CS917.py | 31 | 0 | 0 | 100% |
| **Total** | **53** | **0** | **0** | **100%** |

*coverage.py v7.11.3, created at 2025-11-10 09:26 +0530*

# Reflection

## 1. If the logic in order_processor.py changes, what's your strategy to ensure tests and coverage stay updated?

Run coverage reports after every code change to identify untested paths. Update existing tests when function logic changes and add new tests for any new branches or conditions. Use CI/CD pipelines to automatically run tests and enforce minimum coverage thresholds (e.g., 90%). Review coverage reports during code reviews to catch gaps before merging.

## 2. What are the trade-offs between writing more tests for coverage vs writing fewer high-quality tests?

Writing more tests increases coverage and catches edge cases but requires higher maintenance effort and longer test execution time. Many tests can become brittle and break frequently with code changes. Fewer high-quality tests focus on critical business logic, are easier to maintain, and run faster, but may miss edge cases and result in lower coverage. The best approach balances both prioritising comprehensive testing of critical paths while accepting lower coverage for trivial code.