

# Cheat sheet: Unit testing via pytest

## Running tests (from shell)

```
python3 -m pytest
    automatic test discovery
```

## Test definition

```
def test_testname():
    ...
    # fails if condition is False
    assert condition
```

## Test fixture

```
@pytest.fixture
def fixturename():
    ...
    return fixturevalue

def test_sometest(fixturename):
    argument fixturename contains
    return value of fixturename()
```

## Parameterized tests

```
@pytest.mark.parametrize("param",
                           iterable)
def test_sometest(param):
    argument param contains actual
    value of iteration over iterable
```

## Test coverage

(coverage / python3-coverage)

```
coverage run --source=. -m pytest
    runs tests, collects coverage
coverage report -m
    short coverage report
coverage html -d htmldir
    detailed HTML report in htmldir
```

## Code linting (pylint / pylint3)

```
pylint sourcedir/sourcefile
```