

## Remix IDE - Unit Testing

### Unit Testing

Test your smart contract by creating a `foo_test.sol` file (open `ballot_test.sol` to see the example).

You will find more informations in the [documentation](#) Then use the stand alone NPM module `remix-tests` to run unit tests in your Continuous Integration <https://www.npmjs.com/package/remix-tests>.

For more details, see How to test smart contracts guide in our documentation.

Generate test file

☒ `browser/ballot_test.sol`
  
☒ `browser/test_test.sol`

Run Tests

The remix allows us to do unit testing of the contract that we have created the two functionalities in the analysis tab are:

- **Generate test File:** This create a new solidity file in the current folder suffixed with `_test`. This file contains the minimum you need for running unit testing.
- **Run Tests:** This execute tests. The execution is run in a separate environment and the result is displayed below.

Available special functions:

- `beforeEach()` - runs before each test
- `beforeAll()` - runs before all tests

Assert library

Available functions	Supported types
<code>Assert.ok()</code>	bool
<code>Assert.equal()</code>	uint, int, bool, address, bytes32, string
<code>Assert.notEqual()</code>	uint, int, bool, address, bytes32, string
<code>Assert.greaterThan()</code>	uint, int
<code>Assert.lesserThan()</code>	uint, int