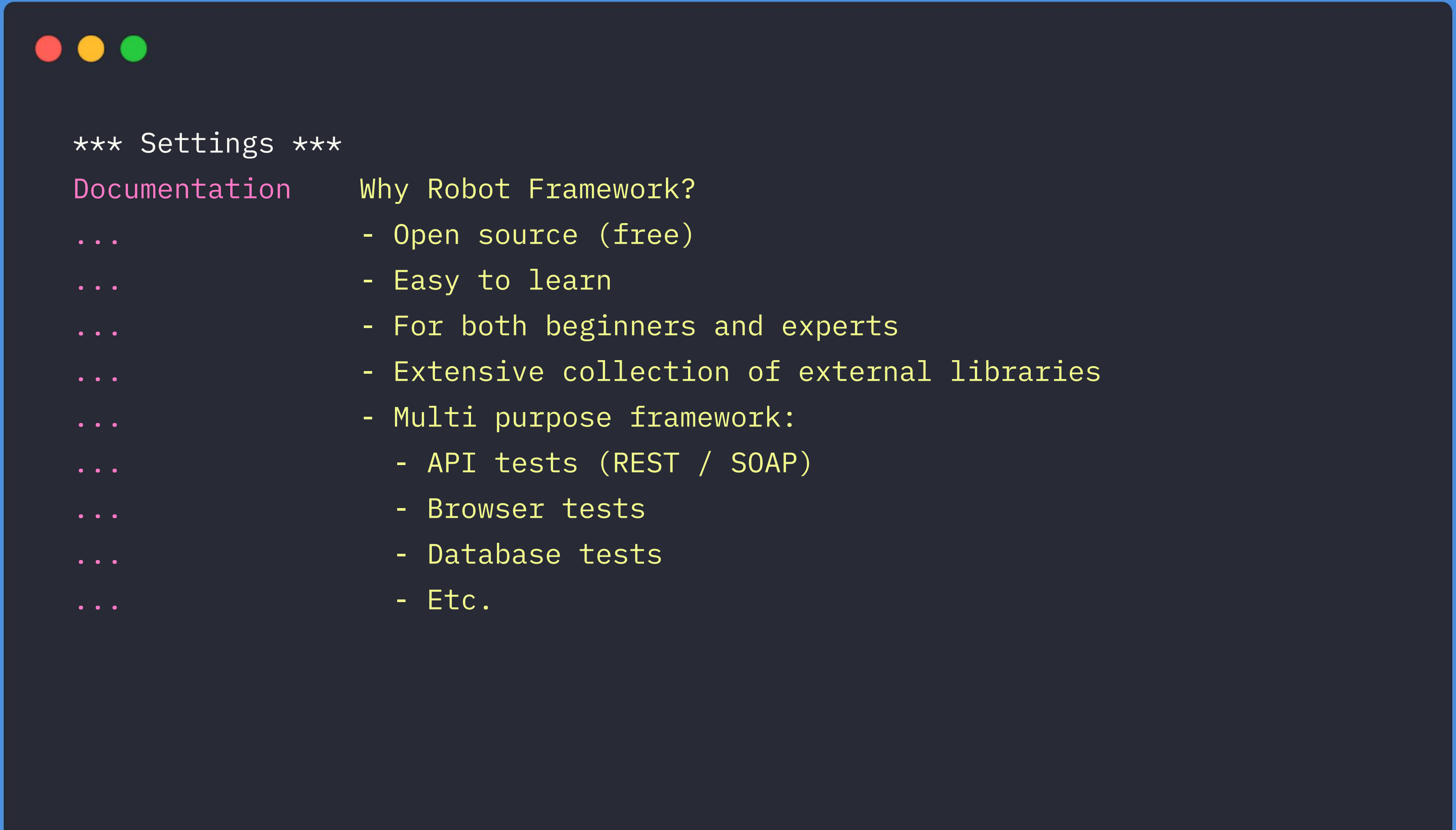
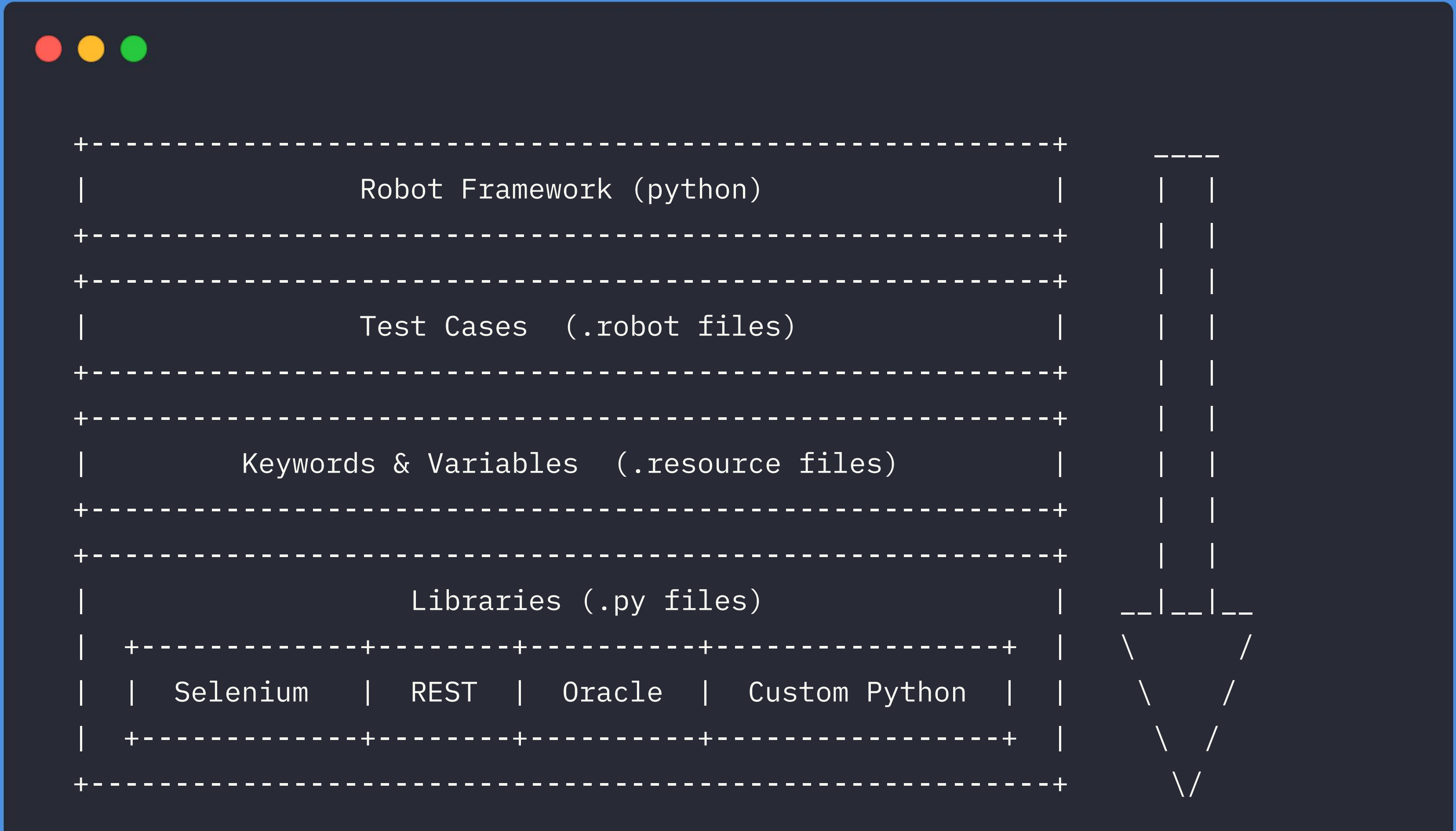
```
*** Settings ***
Documentation     Robot Framework Workshop

Resource    Rein van der Vegt
Resource    Tim Lolkema

*** Variables ***
${GITHUB}         https://github.com/tlolkema/robot-workshop
```

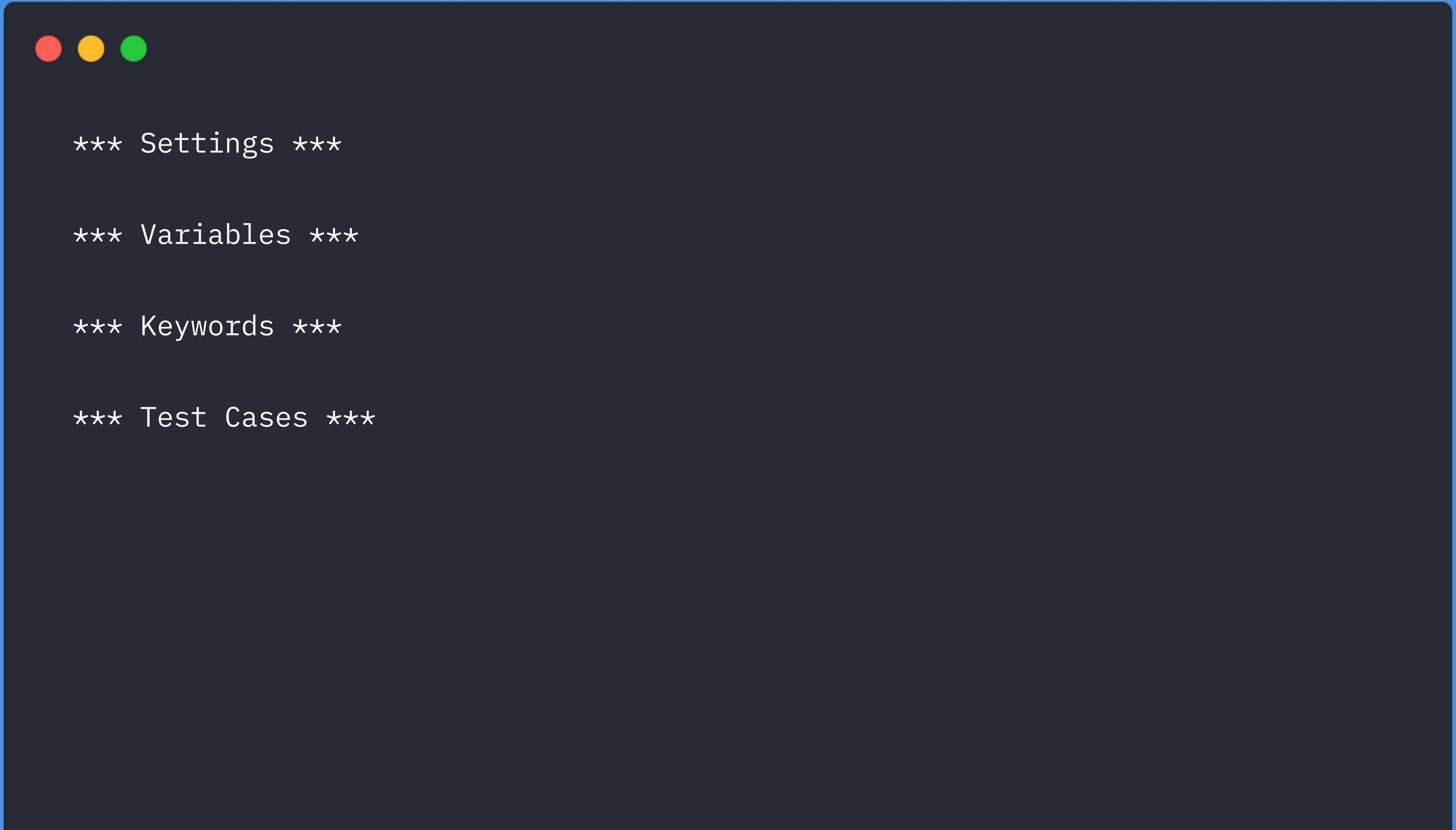
```
*** Keywords ***
Robot Framework Presentation
    Introduction
    Robot Framework basics    1. Settings    2. Variables    3. Test Cases
    ...                       4. Keywords    5. Libraries
    Running Tests
    Setup & Teardown
    SeleniumLibrary
    Custom Python Library

Robot Framework Workshop
    Exercises
```



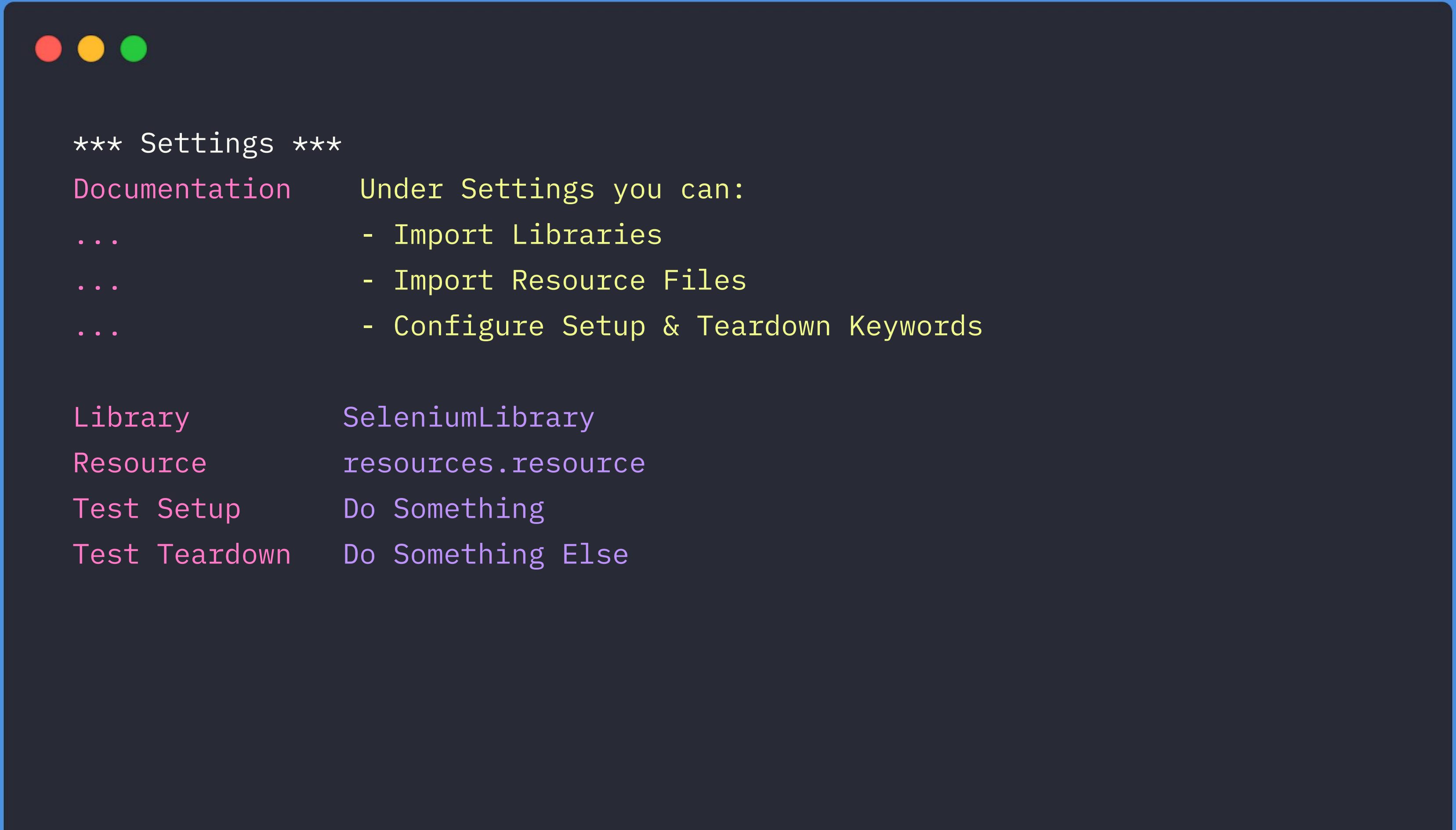
```
*** Settings ***
Documentation    Why Robot Framework?
...              - Open source (free)
...              - Easy to learn
...              - For both beginners and experts
...              - Extensive collection of external libraries
...              - Multi purpose framework:
...                - API tests (REST / SOAP)
...                - Browser tests
...                - Database tests
...                - Etc.
```



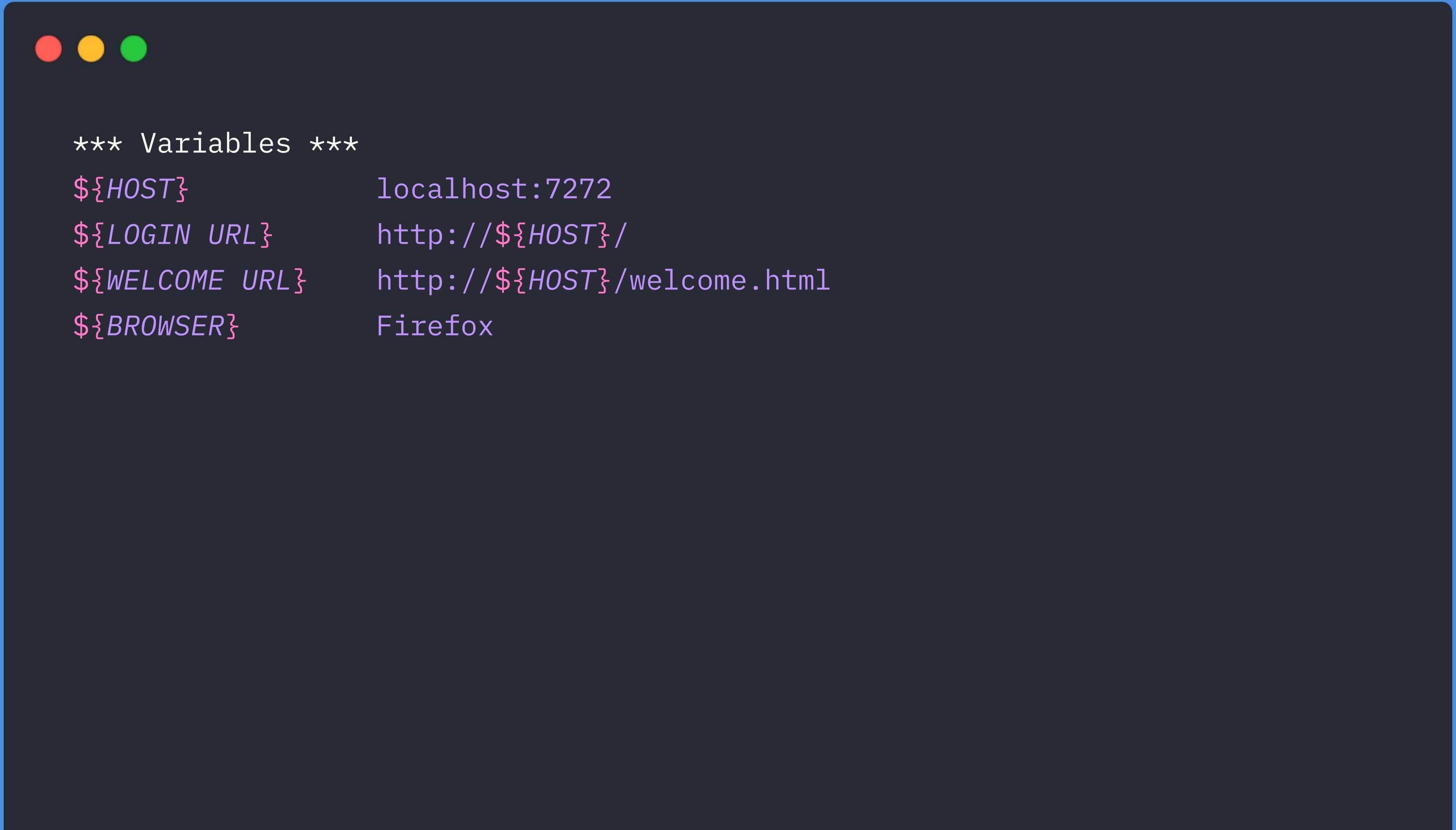
```
+---------------------------------------------------------+     ____
|                Robot Framework (python)                 |     |  |
+---------------------------------------------------------+     |  |
+---------------------------------------------------------+     |  |
|                Test Cases  (.robot files)               |     |  |
+---------------------------------------------------------+     |  |
+---------------------------------------------------------+     |  |
|         Keywords & Variables  (.resource files)         |     |  |
+---------------------------------------------------------+     |  |
+---------------------------------------------------------+     |  |
|                   Libraries (.py files)                 |   __|__|__
|  +-------------+--------+----------+-----------------+  |   \      /
|  |  Selenium   |  REST  |  Oracle  |  Custom Python  |  |    \    /
|  +-------------+--------+----------+-----------------+  |     \  /
+---------------------------------------------------------+      \/
```



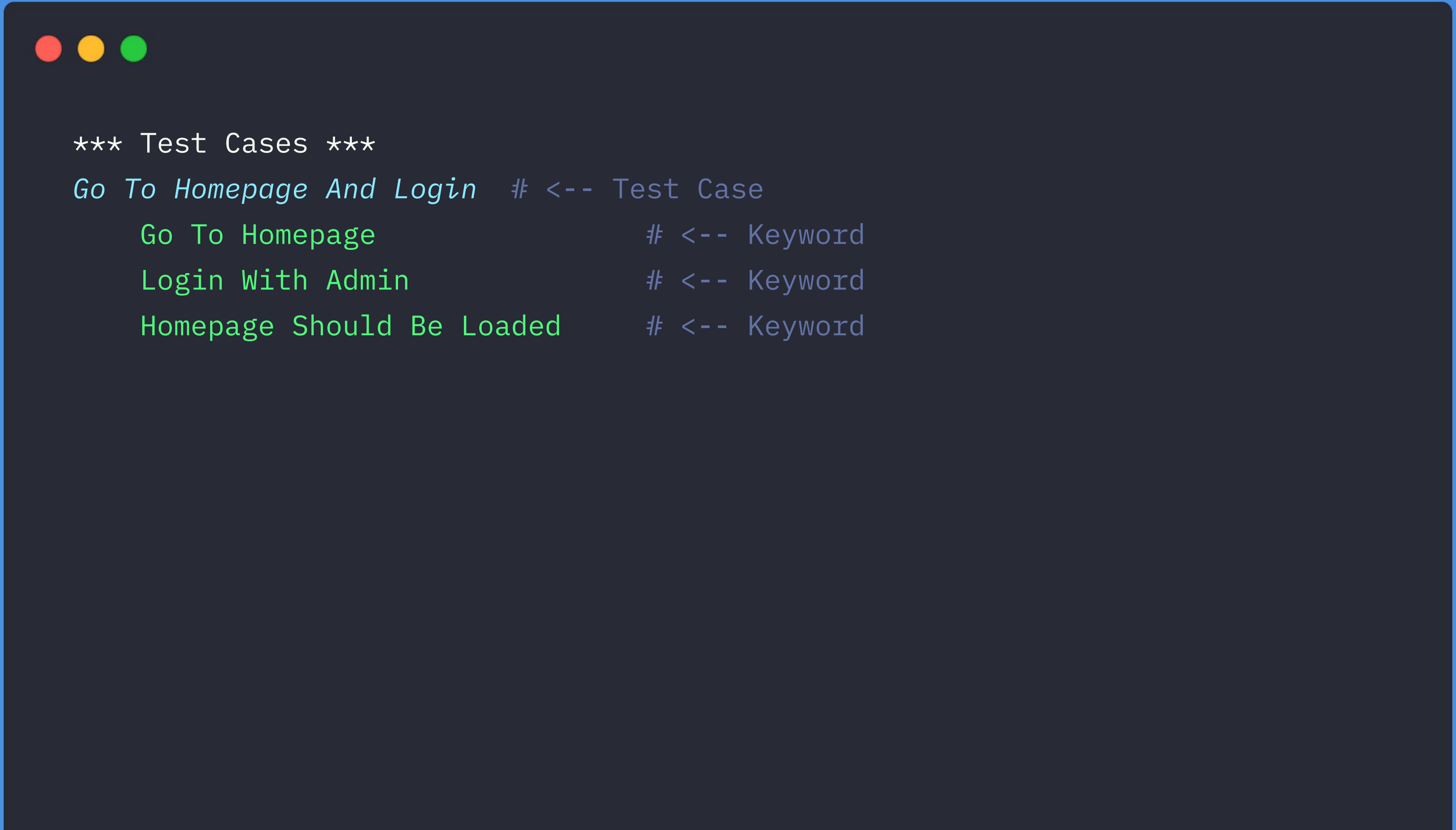
```
*** Settings ***

*** Variables ***

*** Keywords ***

*** Test Cases ***
```



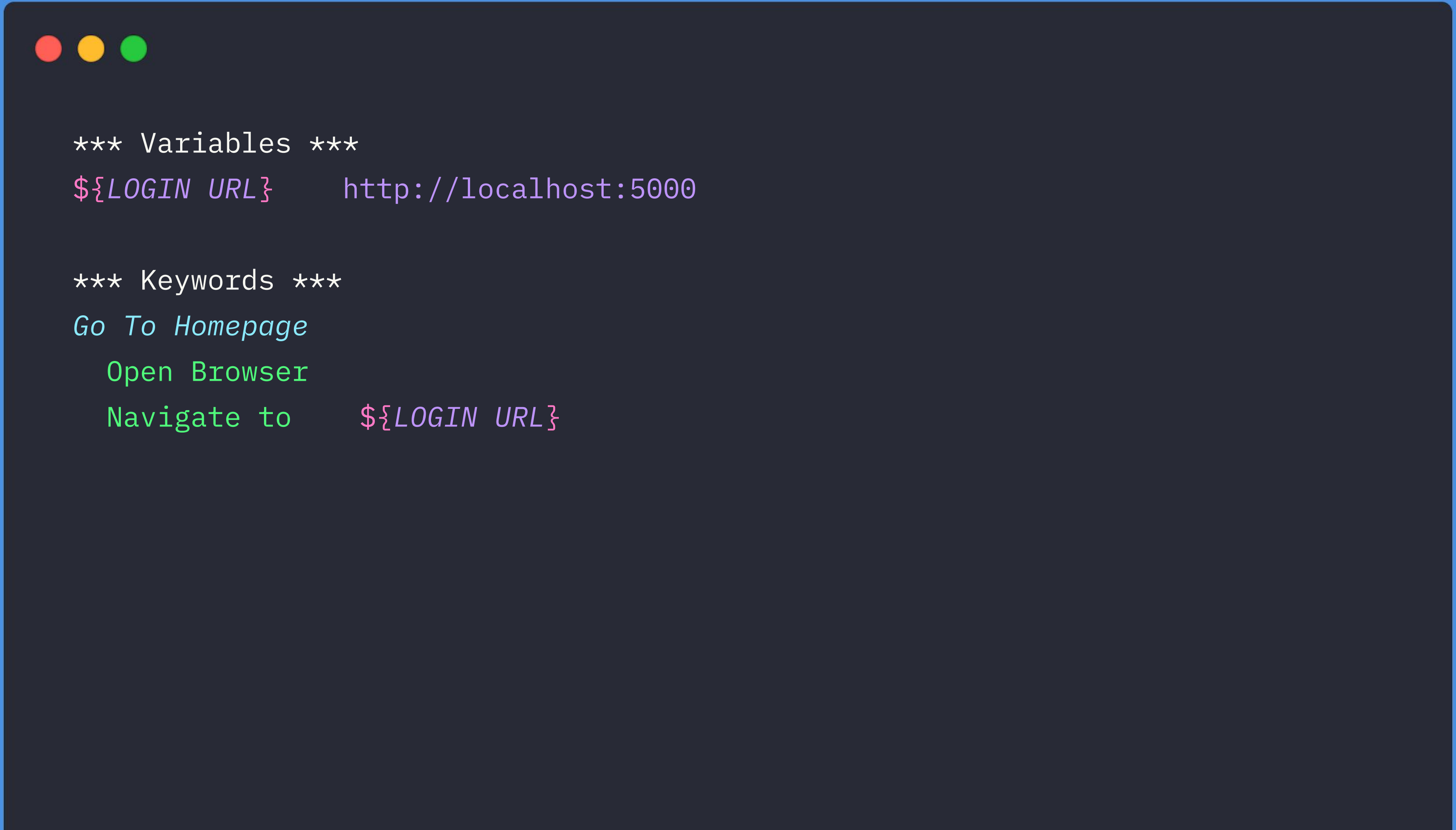
```
*** Settings ***
Documentation    Under Settings you can:
...              - Import Libraries
...              - Import Resource Files
...              - Configure Setup & Teardown Keywords

Library         SeleniumLibrary
Resource        resources.resource
Test Setup      Do Something
Test Teardown   Do Something Else
```



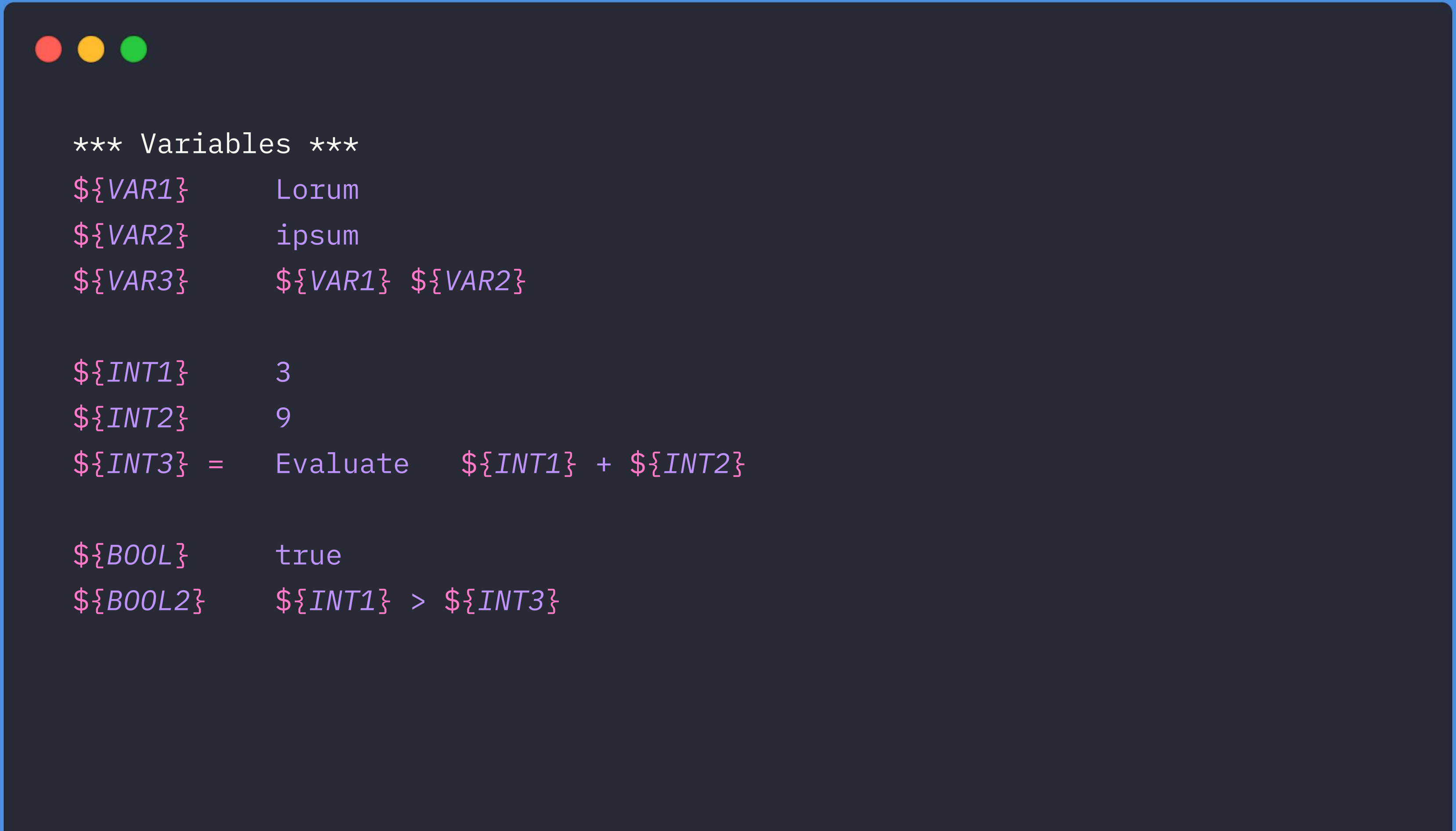
```
*** Variables ***
${HOST}              localhost:7272
${LOGIN URL}         http://${HOST}/
${WELCOME URL}       http://${HOST}/welcome.html
${BROWSER}           Firefox
```



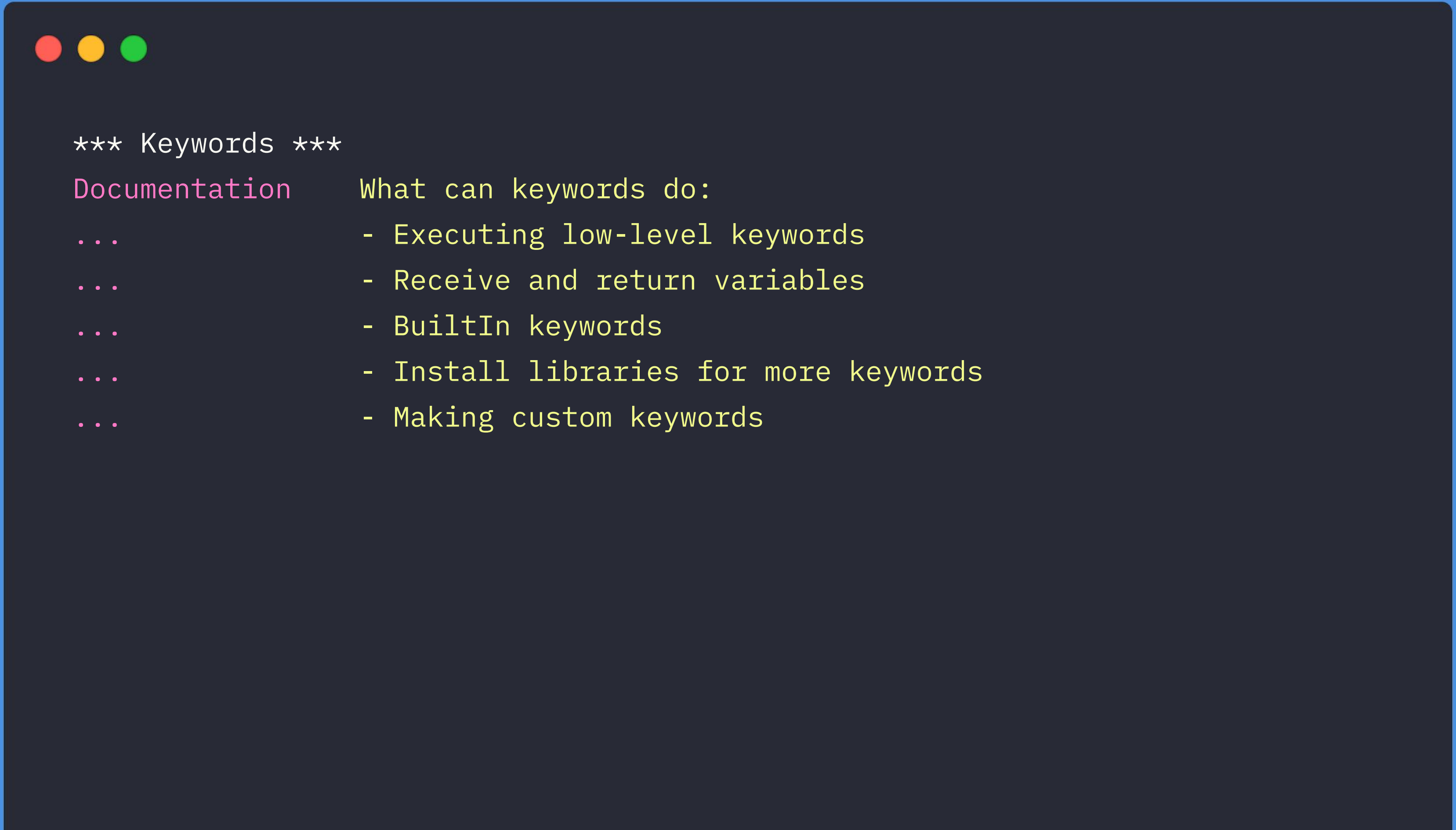
```
*** Test Cases ***
Go To Homepage And Login  # <-- Test Case
    Go To Homepage                 # <-- Keyword
    Login With Admin               # <-- Keyword
    Homepage Should Be Loaded      # <-- Keyword
```



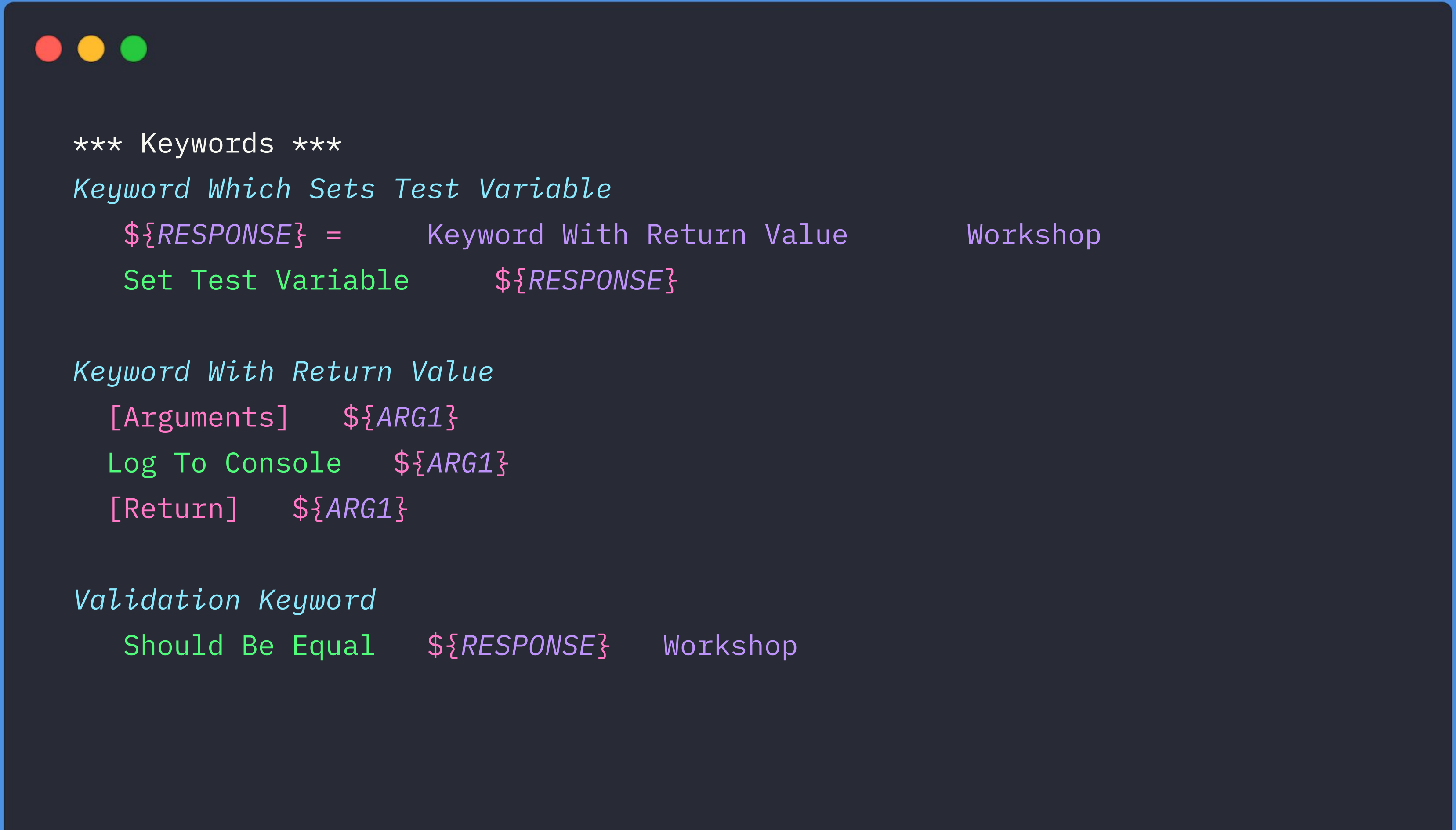
```
*** Variables ***
${LOGIN URL}    http://localhost:5000

*** Keywords ***
Go To Homepage
  Open Browser
  Navigate to    ${LOGIN URL}
```



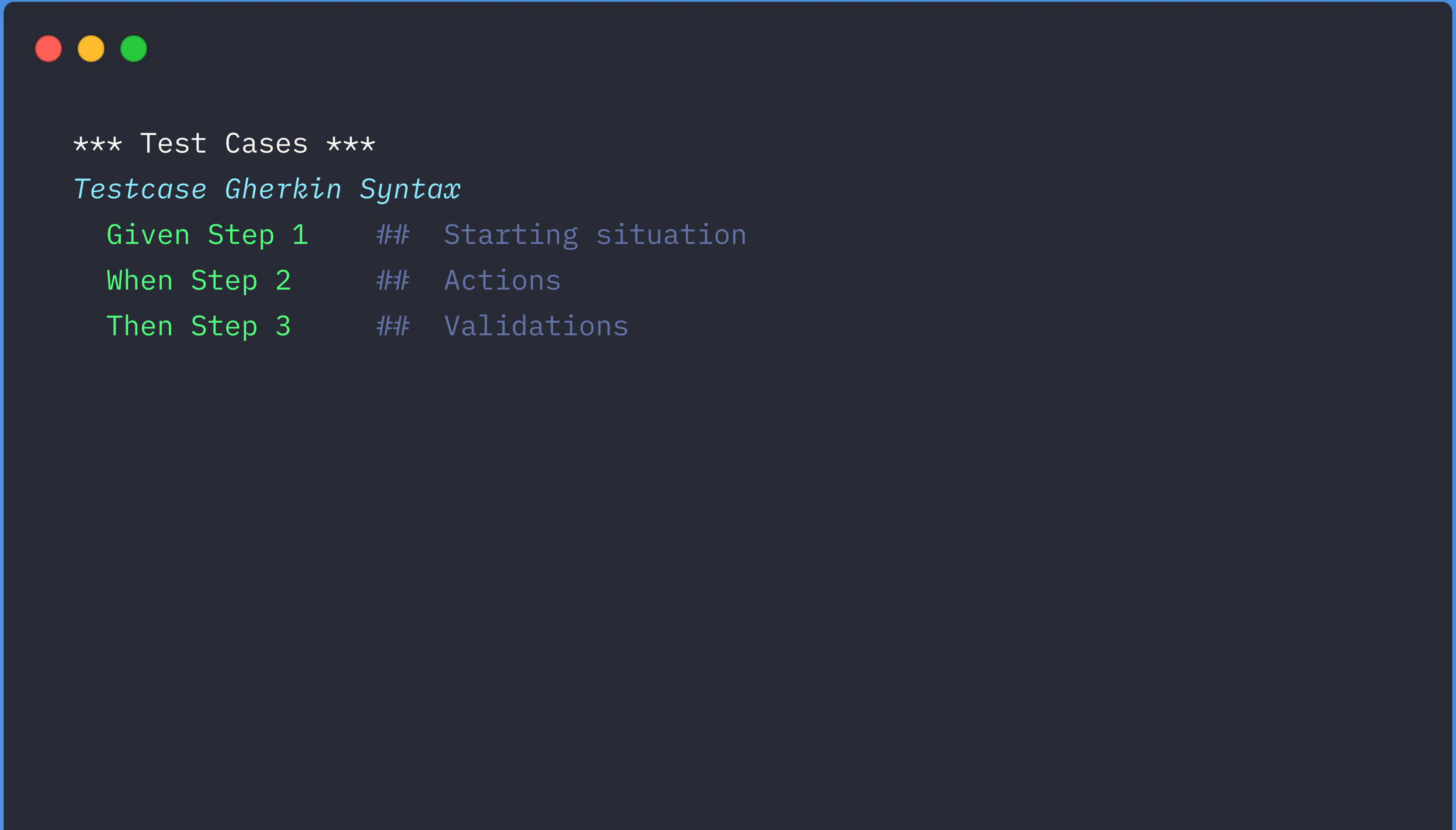
```
*** Variables ***
${VAR1}     Lorum
${VAR2}     ipsum
${VAR3}     ${VAR1} ${VAR2}

${INT1}     3
${INT2}     9
${INT3} =   Evaluate   ${INT1} + ${INT2}

${BOOL}     true
${BOOL2}    ${INT1} > ${INT3}
```



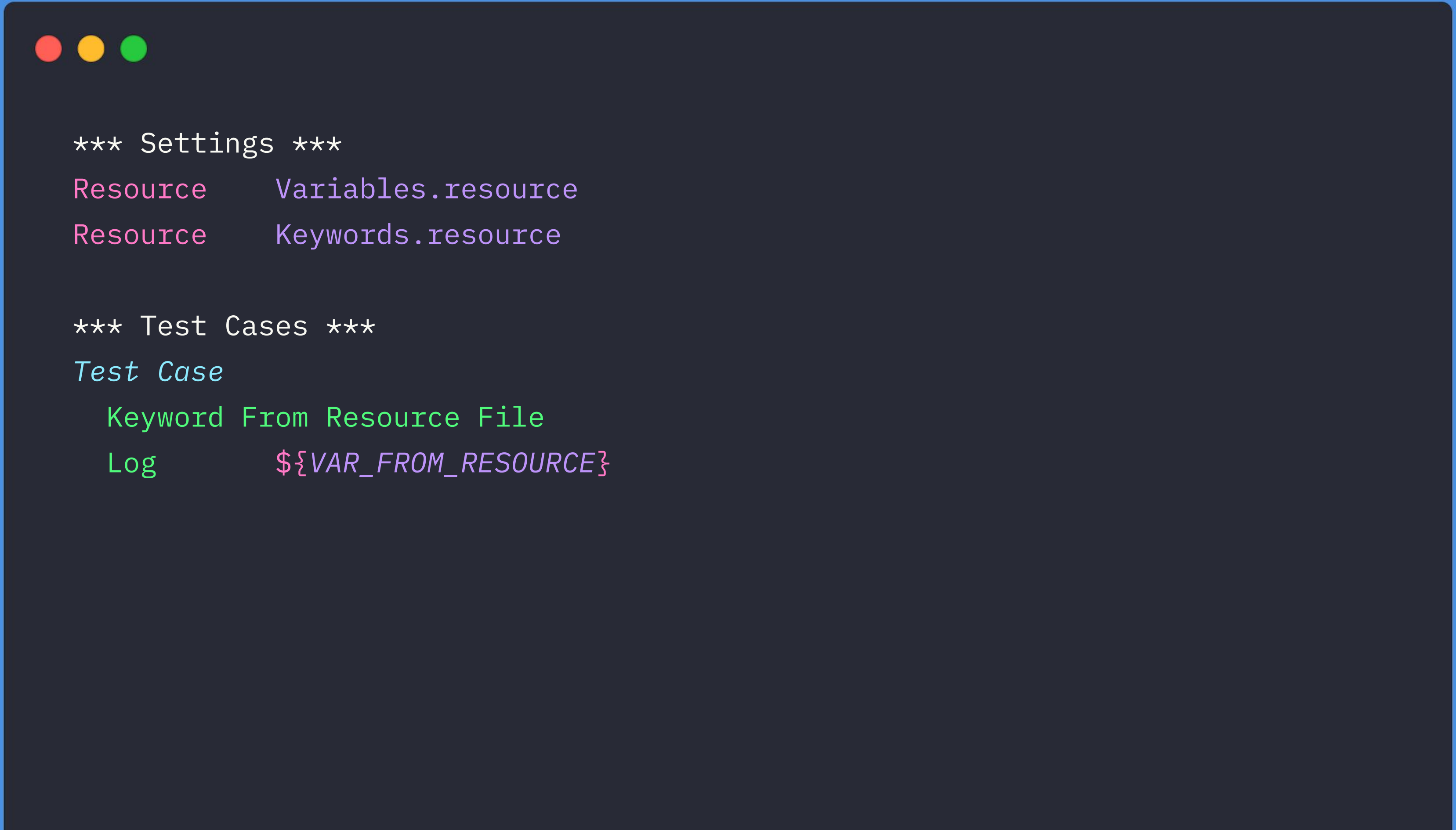
```
*** Keywords ***
Documentation    What can keywords do:
...              - Executing low-level keywords
...              - Receive and return variables
...              - BuiltIn keywords
...              - Install libraries for more keywords
...              - Making custom keywords
```



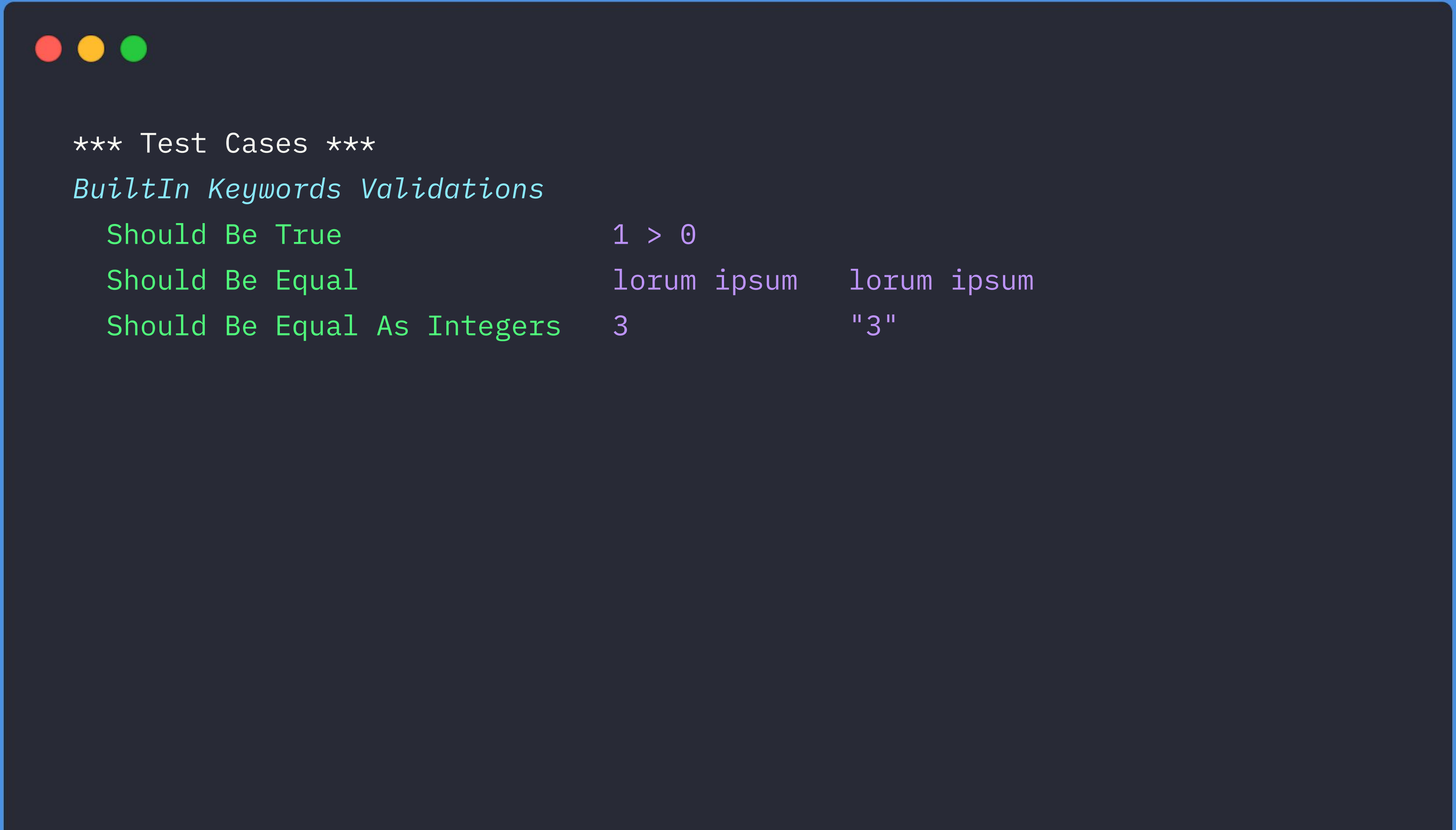
```
*** Keywords ***
Keyword Which Sets Test Variable
    ${RESPONSE} =     Keyword With Return Value       Workshop
    Set Test Variable     ${RESPONSE}

Keyword With Return Value
   [Arguments]    ${ARG1}
   Log To Console    ${ARG1}
   [Return]    ${ARG1}

Validation Keyword
    Should Be Equal    ${RESPONSE}    Workshop
```



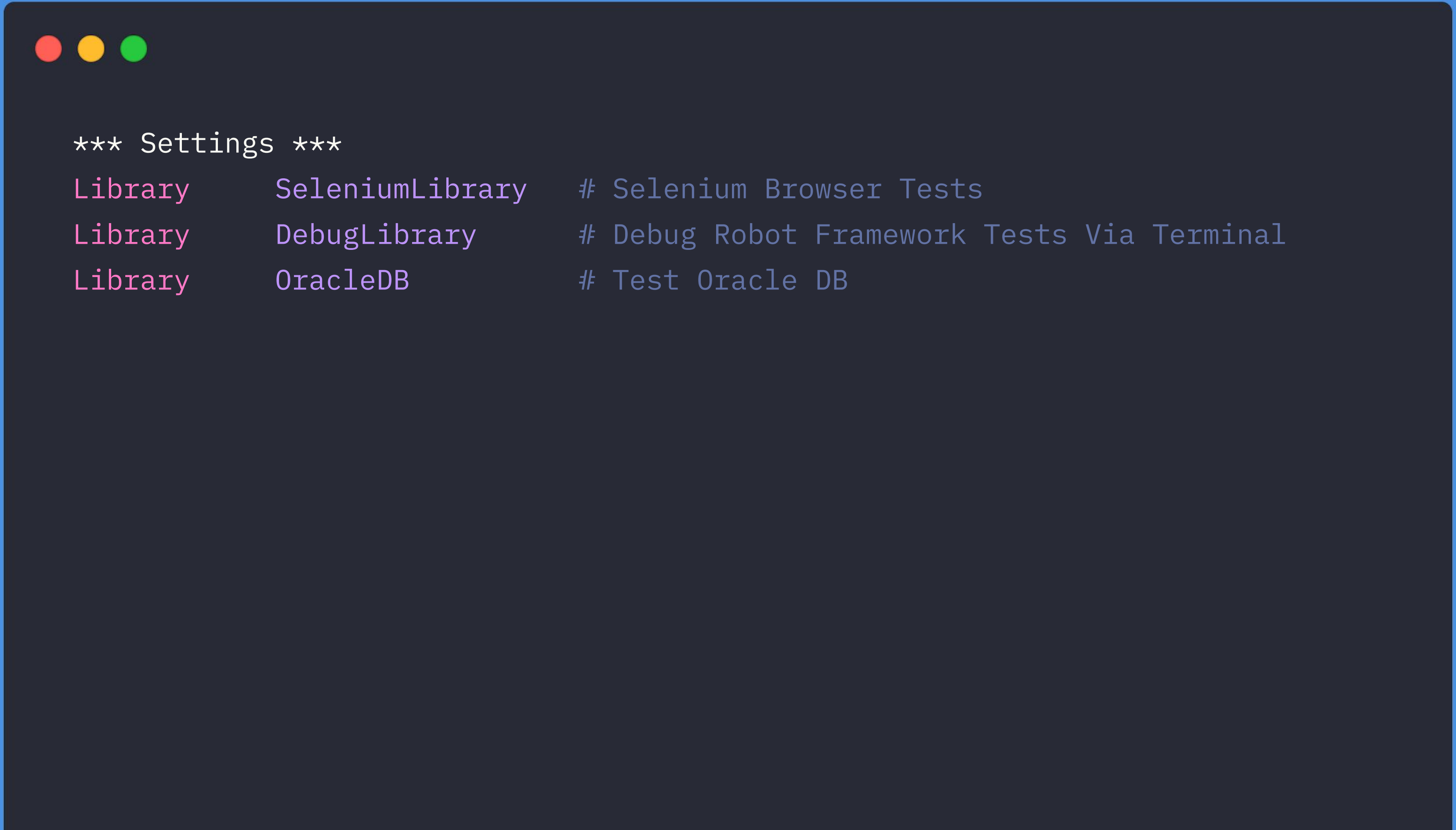
```
*** Test Cases ***
Testcase Gherkin Syntax
    Given Step 1    ##  Starting situation
    When Step 2     ##  Actions
    Then Step 3     ##  Validations
```



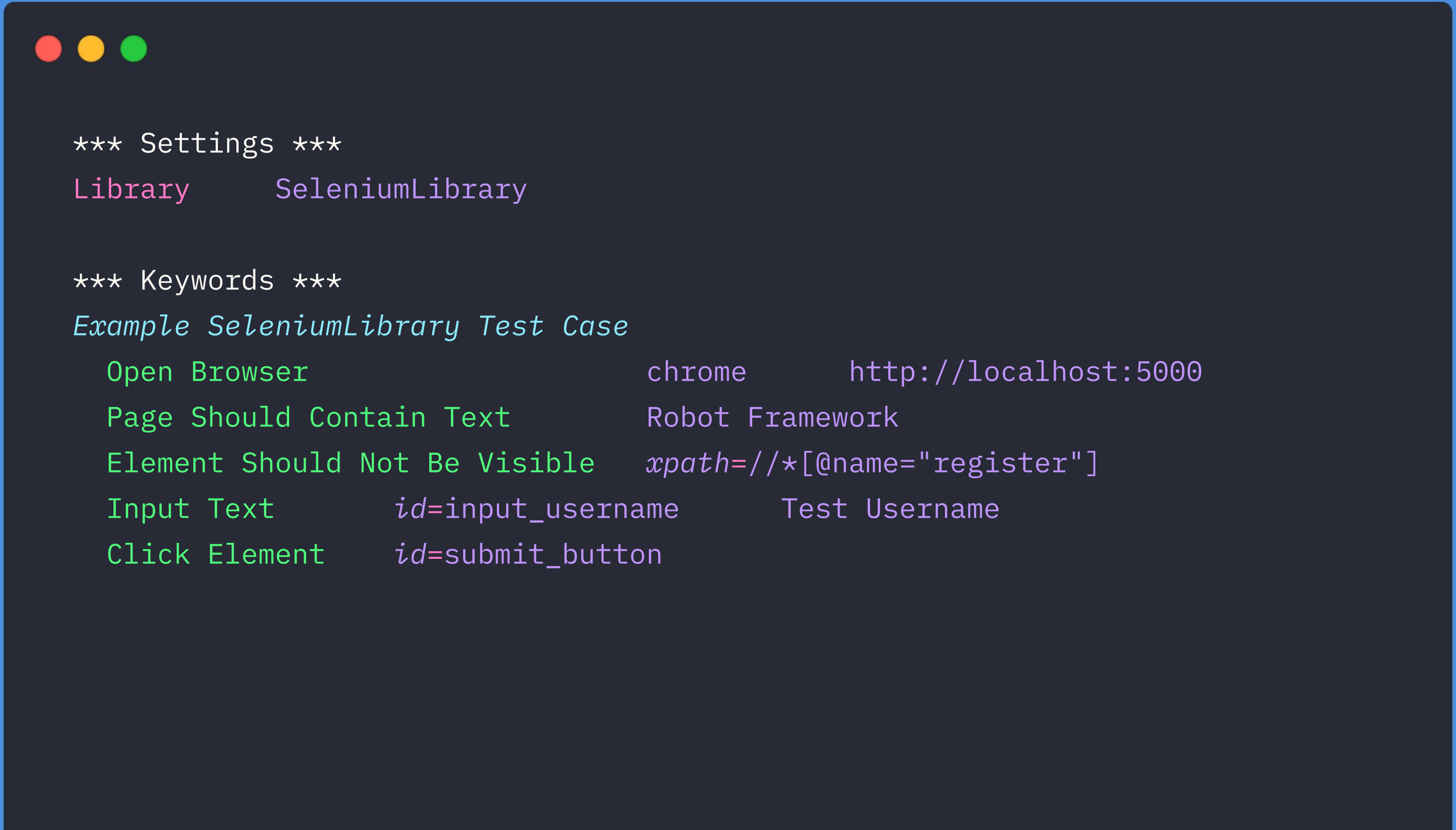
```
*** Settings ***
Resource    Variables.resource
Resource    Keywords.resource

*** Test Cases ***
Test Case
  Keyword From Resource File
  Log       ${VAR_FROM_RESOURCE}
```



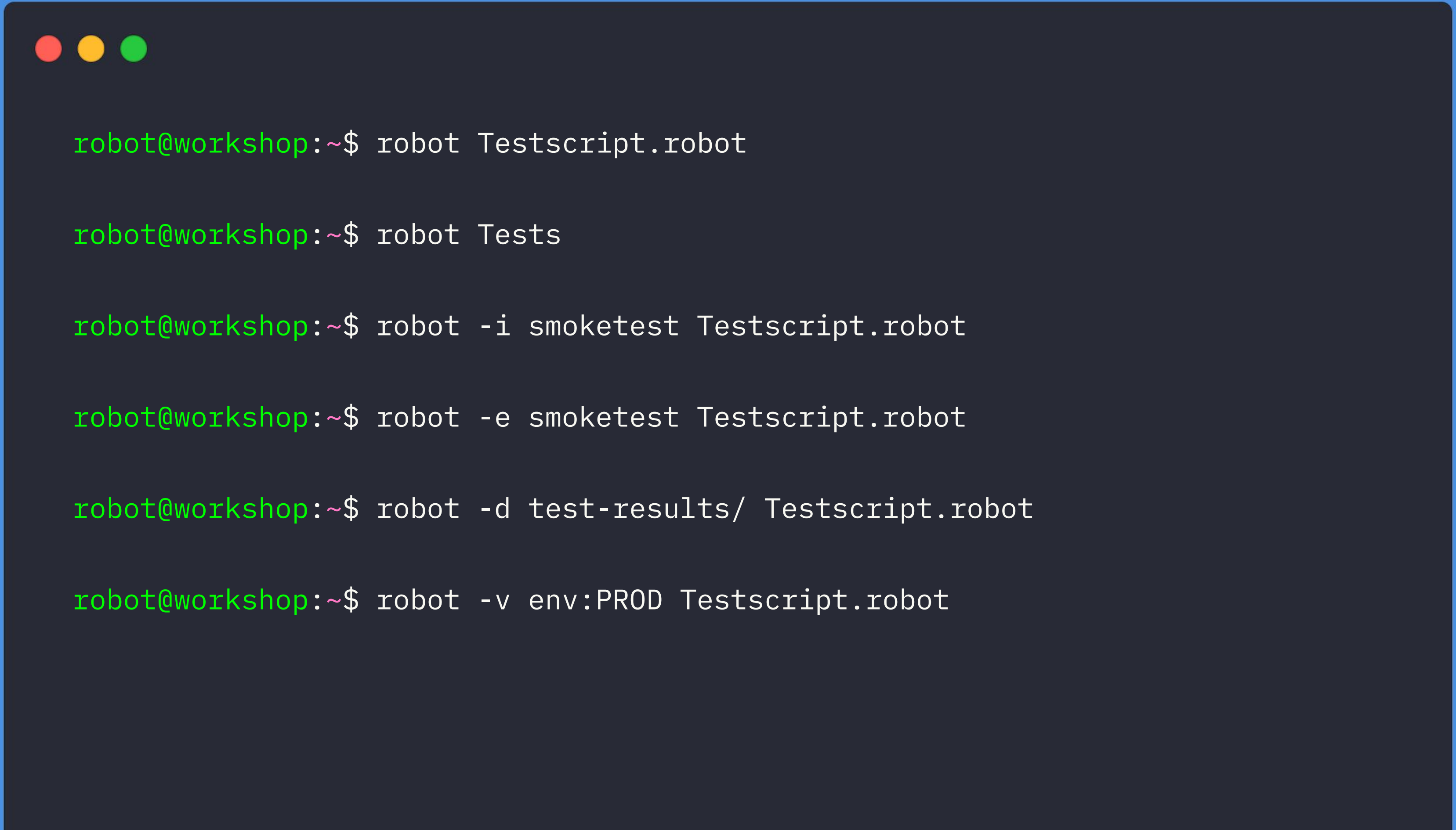
```
*** Test Cases ***
BuiltIn Keywords Validations
  Should Be True                1 > 0
  Should Be Equal               lorum ipsum   lorum ipsum
  Should Be Equal As Integers   3             "3"
```



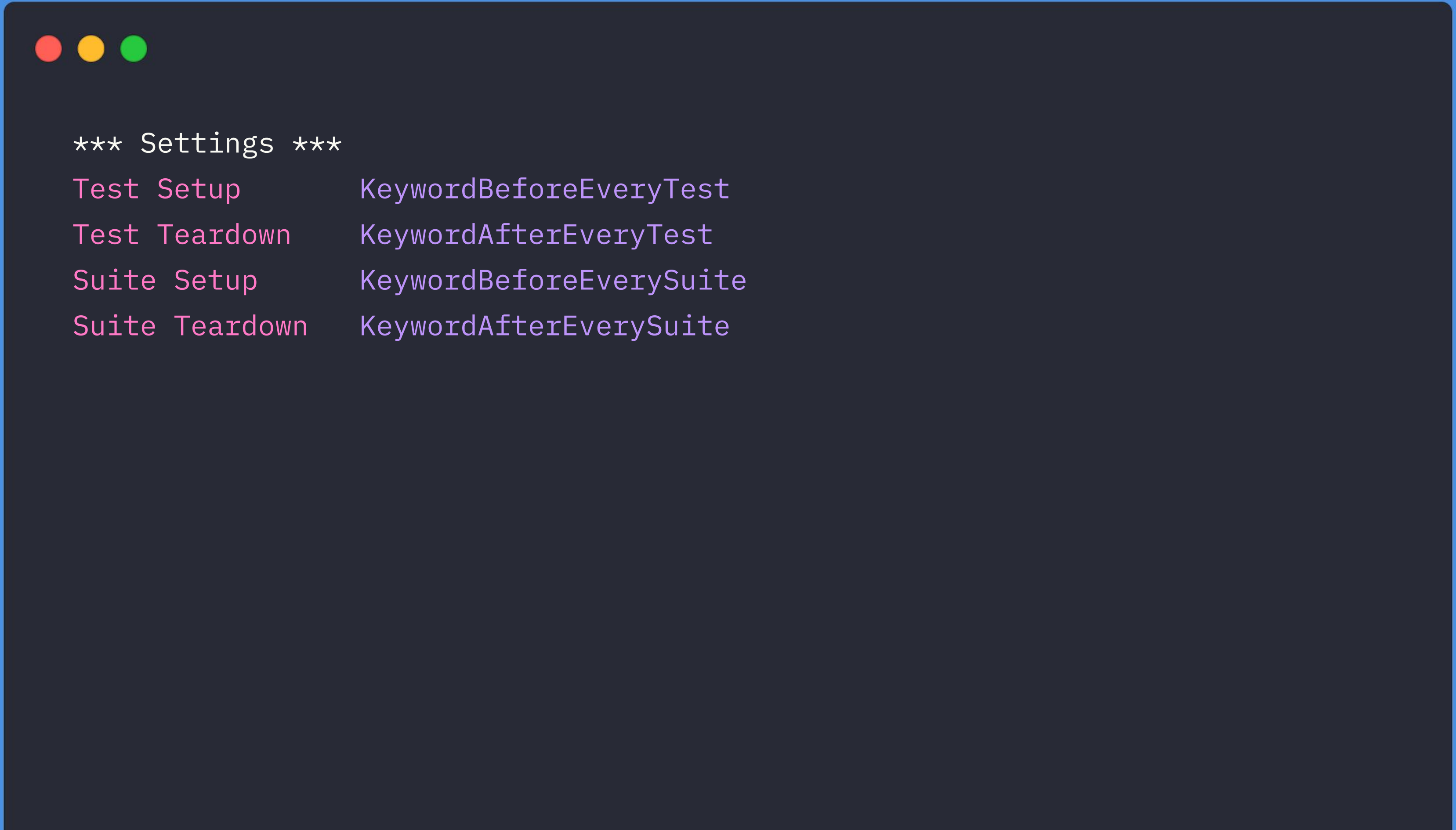
```
*** Settings ***
Library     SeleniumLibrary    # Selenium Browser Tests
Library     DebugLibrary       # Debug Robot Framework Tests Via Terminal
Library     OracleDB           # Test Oracle DB
```



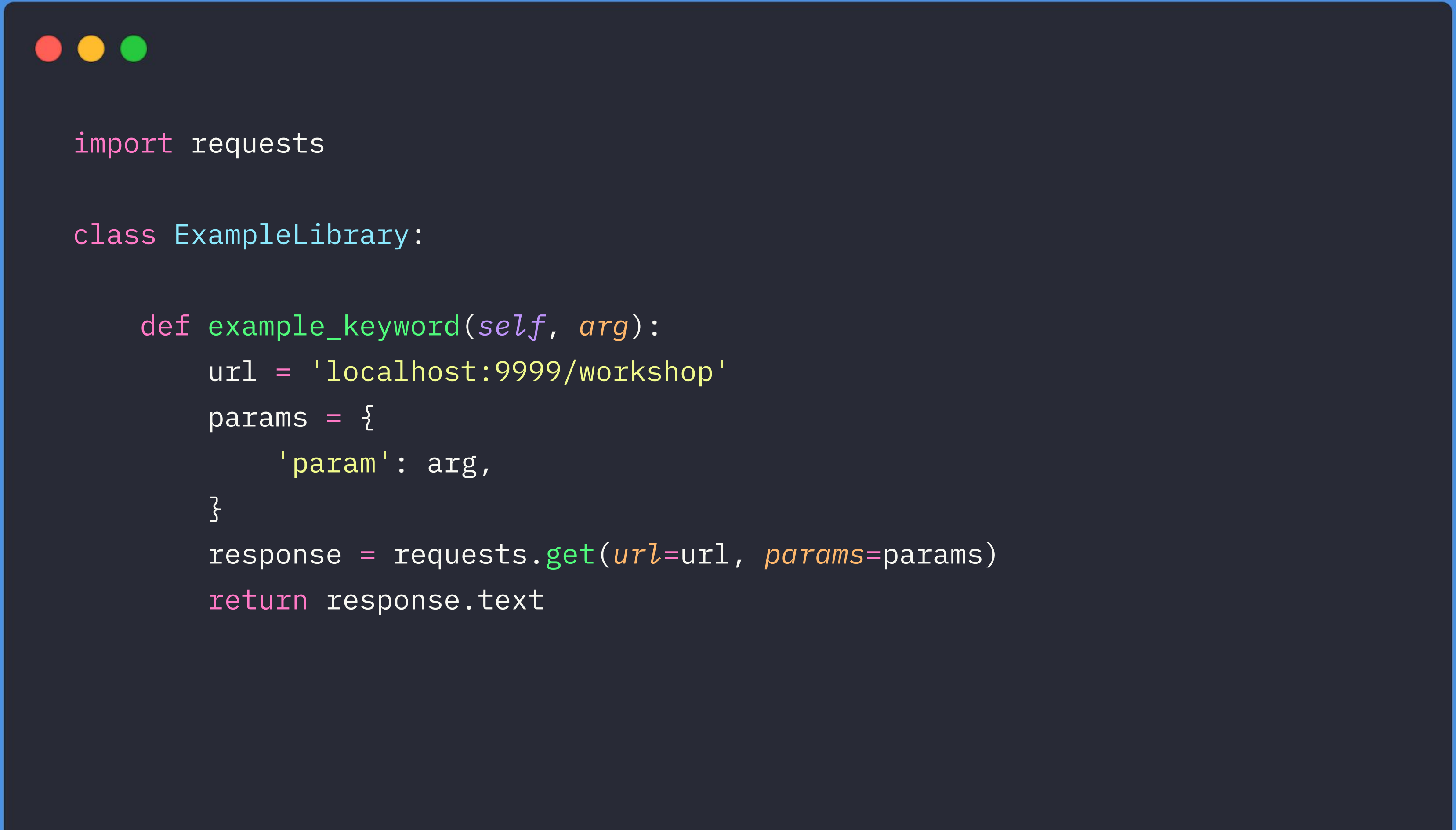
```
*** Settings ***
Library     SeleniumLibrary

*** Keywords ***
Example SeleniumLibrary Test Case
  Open Browser                     chrome     http://localhost:5000
  Page Should Contain Text         Robot Framework
  Element Should Not Be Visible    xpath=//*[@name="register"]
  Input Text        id=input_username      Test Username
  Click Element     id=submit_button
```



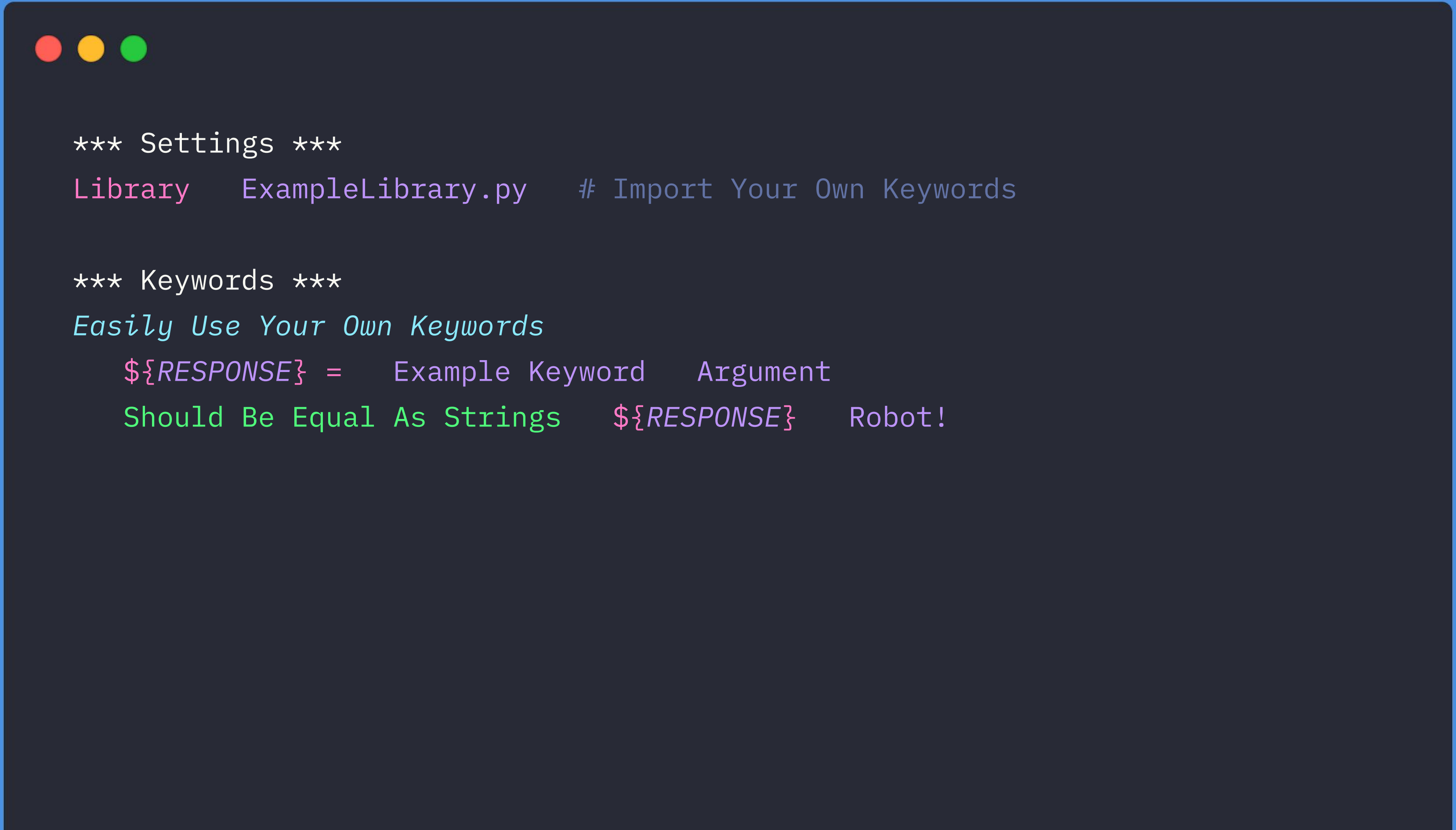
```
robot@workshop:~$ robot Testscript.robot

robot@workshop:~$ robot Tests

robot@workshop:~$ robot -i smoketest Testscript.robot

robot@workshop:~$ robot -e smoketest Testscript.robot

robot@workshop:~$ robot -d test-results/ Testscript.robot

robot@workshop:~$ robot -v env:PROD Testscript.robot
```



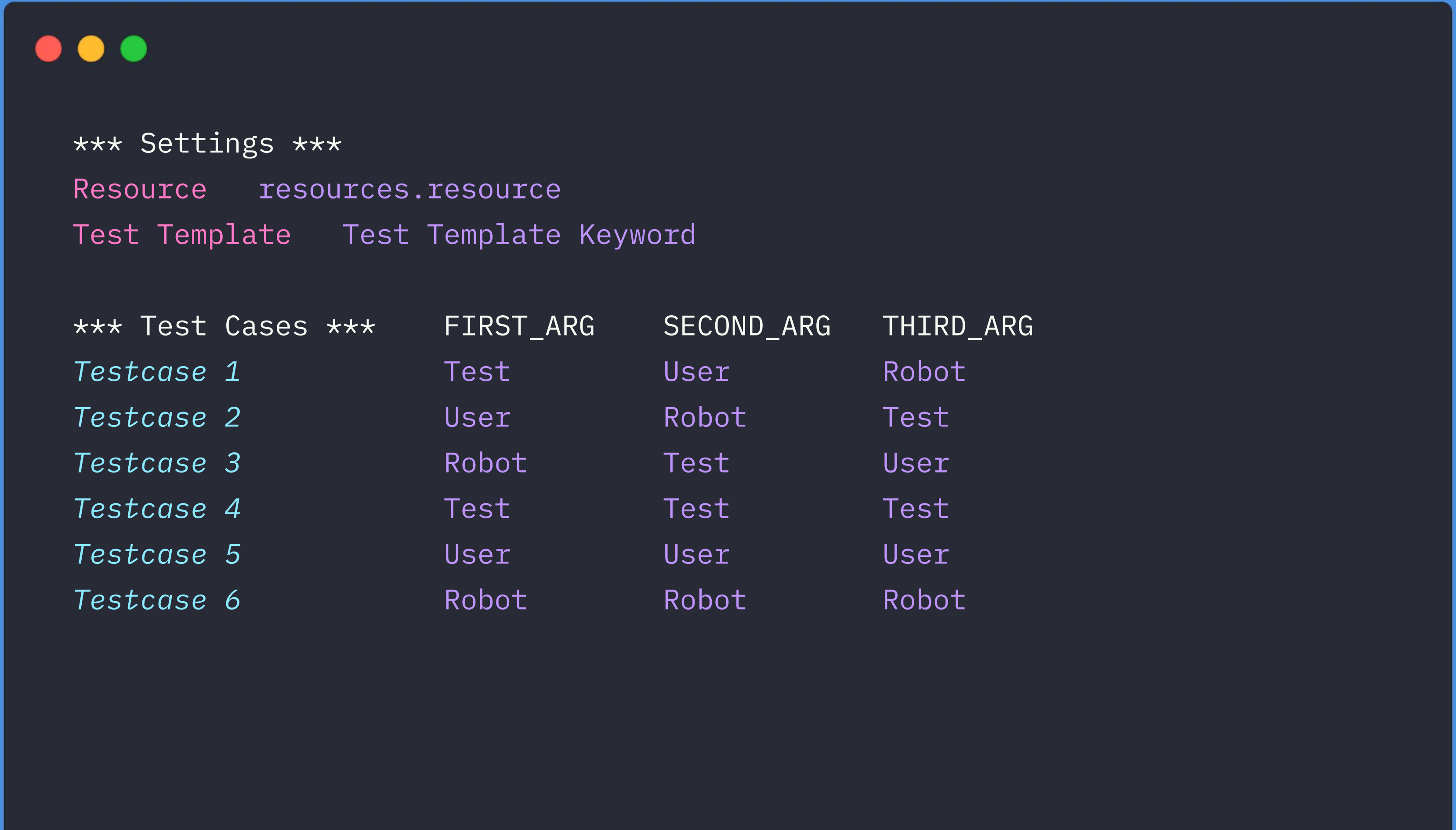
```
*** Settings ***
Test Setup       KeywordBeforeEveryTest
Test Teardown    KeywordAfterEveryTest
Suite Setup      KeywordBeforeEverySuite
Suite Teardown   KeywordAfterEverySuite
```



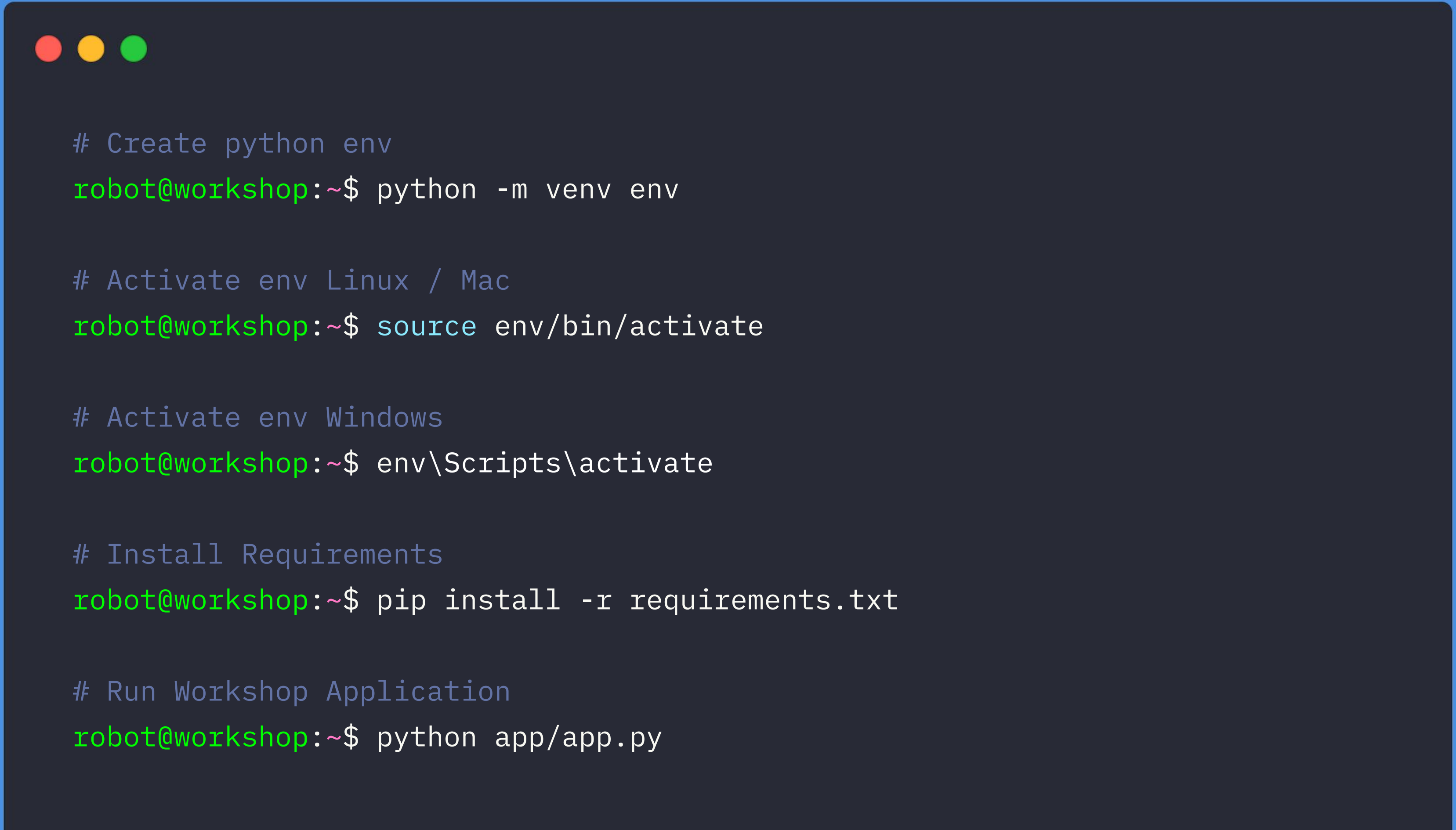
```python
import requests

class ExampleLibrary:

    def example_keyword(self, arg):
        url = 'localhost:9999/workshop'
        params = {
            'param': arg,
        }
        response = requests.get(url=url, params=params)
        return response.text
```



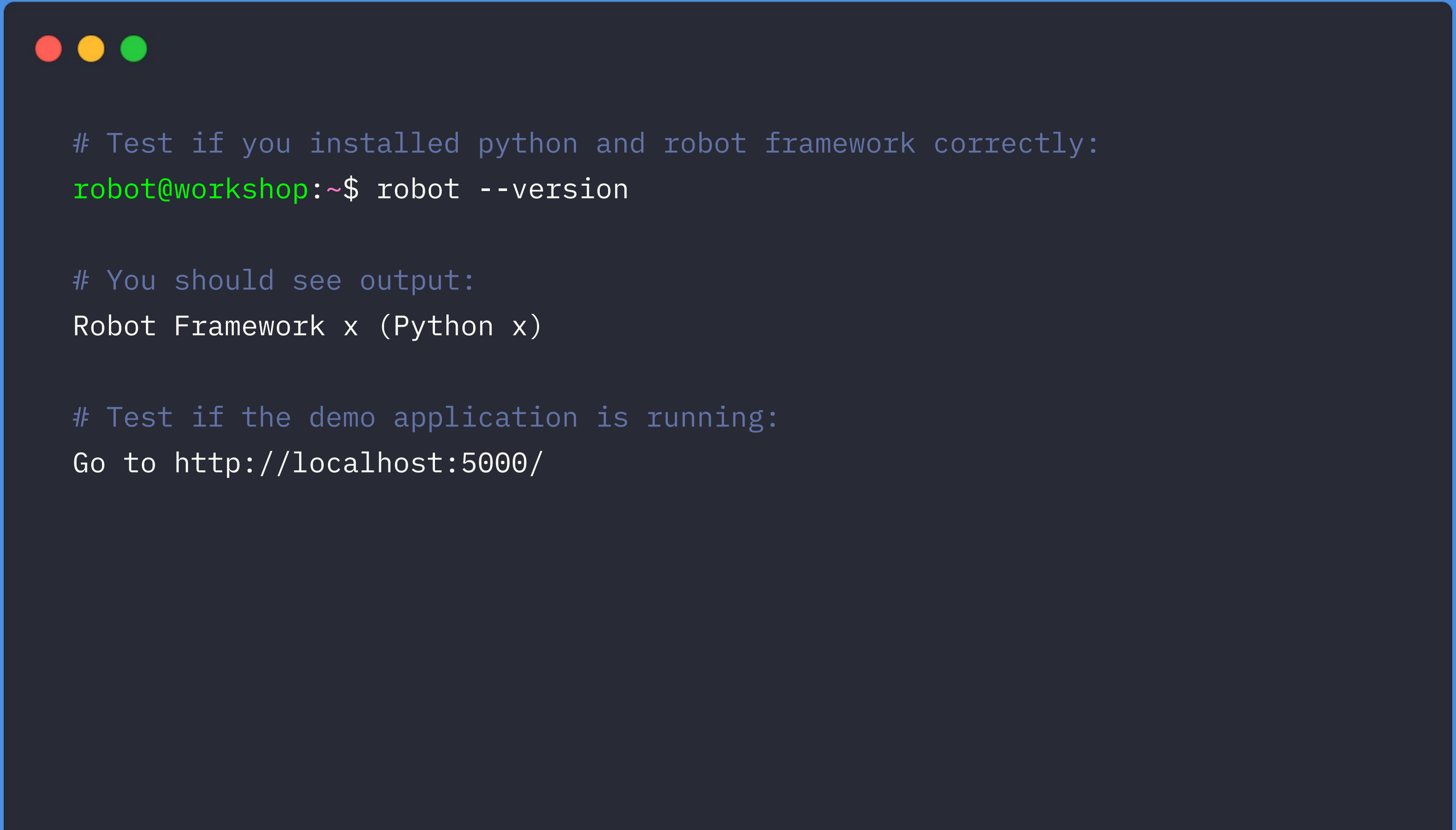
```
*** Settings ***
Library    ExampleLibrary.py    # Import Your Own Keywords

*** Keywords ***
Easily Use Your Own Keywords
    ${RESPONSE} =    Example Keyword    Argument
    Should Be Equal As Strings    ${RESPONSE}    Robot!
```



```
*** Settings ***
Resource    resources.resource
Test Template    Test Template Keyword

*** Test Cases ***    FIRST_ARG    SECOND_ARG    THIRD_ARG
Testcase 1            Test         User          Robot
Testcase 2            User         Robot         Test
Testcase 3            Robot        Test          User
Testcase 4            Test         Test          Test
Testcase 5            User         User          User
Testcase 6            Robot        Robot         Robot
```



```
# Create python env
robot@workshop:~$ python -m venv env

# Activate env Linux / Mac
robot@workshop:~$ source env/bin/activate

# Activate env Windows
robot@workshop:~$ env\Scripts\activate

# Install Requirements
robot@workshop:~$ pip install -r requirements.txt

# Run Workshop Application
robot@workshop:~$ python app/app.py
```



```
# Test if you installed python and robot framework correctly:
robot@workshop:~$ robot --version

# You should see output:
Robot Framework x (Python x)

# Test if the demo application is running:
Go to http://localhost:5000/
```

```
*** Settings ***
Documentation    Break & Workshop Time!!!! :)
...
...                  ( (
...                   ) )
...                .........
...                |      |]
...                \      /
...                 `----'
```