

Robot Framework

<https://robotframework.org/>

Robot Framework

- Development started with Pekka Klärck's master's thesis in 2005
- The first version was developed the same year by Nokia Networks
- Written in the Python
- Open source automation framework
- Currently the development is continued by Robot Framework Foundation

Robot Framework

- Said: Robot Framework has an easy syntax, utilizing human-readable keywords.
- Can be extended by libraries with Python, Java etc.

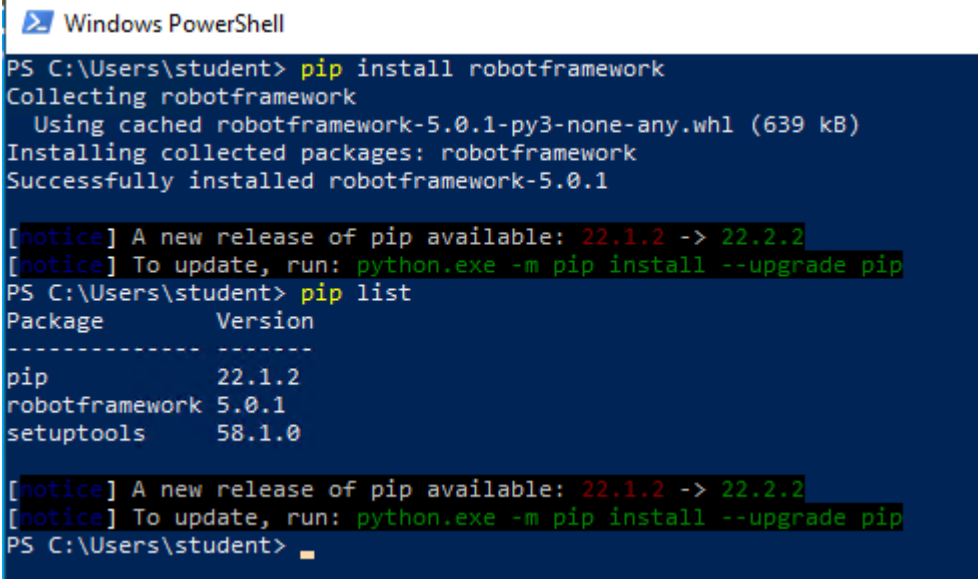
Good Stuff

- User Guide: <https://robotframework.org/robotframework/latest/RobotFrameworkUserGuide.html>
- BuiltIn Library: <https://robotframework.org/robotframework/latest/libraries/BuiltIn.html>
- Standard Libraries: <https://robotframework.org/robotframework/#standard-libraries>
- Selenium Library: <https://robotframework.org/SeleniumLibrary/SeleniumLibrary.html>

Install Robot Framework

- Python must be installed
- Open PowerShell
- Command:

pip install robotframework



```
Windows PowerShell
PS C:\Users\student> pip install robotframework
Collecting robotframework
  Using cached robotframework-5.0.1-py3-none-any.whl (639 kB)
Installing collected packages: robotframework
Successfully installed robotframework-5.0.1

[notice] A new release of pip available: 22.1.2 -> 22.2.2
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Users\student> pip list
Package      Version
-----
pip          22.1.2
robotframework 5.0.1
setuptools   58.1.0

[notice] A new release of pip available: 22.1.2 -> 22.2.2
[notice] To update, run: python.exe -m pip install --upgrade pip
PS C:\Users\student>
```

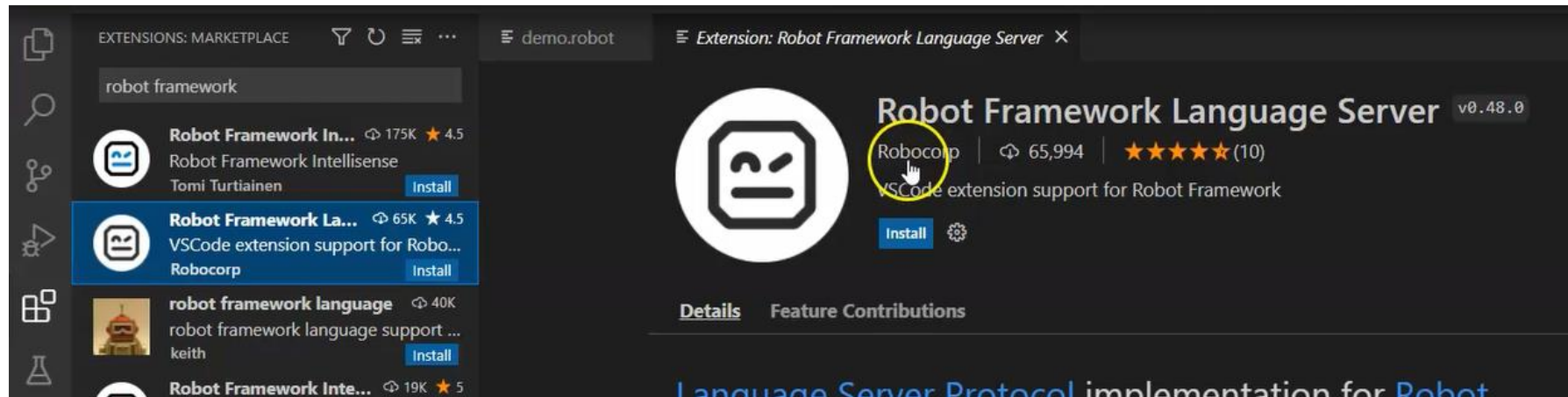
Run Robot Files

- All tests from file
- Single test from file

```
Windows PowerShell
PS C:\Esa\temp\vscode\RobotDemo> robot .\demo.robot
=====
Demo
=====
One named test case                                     | PASS |
-----
Ping web page and store the ping time                   | PASS |
-----
Demo                                                    | PASS |
2 tests, 2 passed, 0 failed
=====
Output: C:\Esa\temp\vscode\RobotDemo\output.xml
Log:    C:\Esa\temp\vscode\RobotDemo\log.html
Report: C:\Esa\temp\vscode\RobotDemo\report.html
PS C:\Esa\temp\vscode\RobotDemo> robot -t "One named test case" .\demo.robot
=====
Demo
=====
One named test case                                     | PASS |
-----
Demo                                                    | PASS |
1 test, 1 passed, 0 failed
=====
Output: C:\Esa\temp\vscode\RobotDemo\output.xml
Log:    C:\Esa\temp\vscode\RobotDemo\log.html
Report: C:\Esa\temp\vscode\RobotDemo\report.html
PS C:\Esa\temp\vscode\RobotDemo>
```

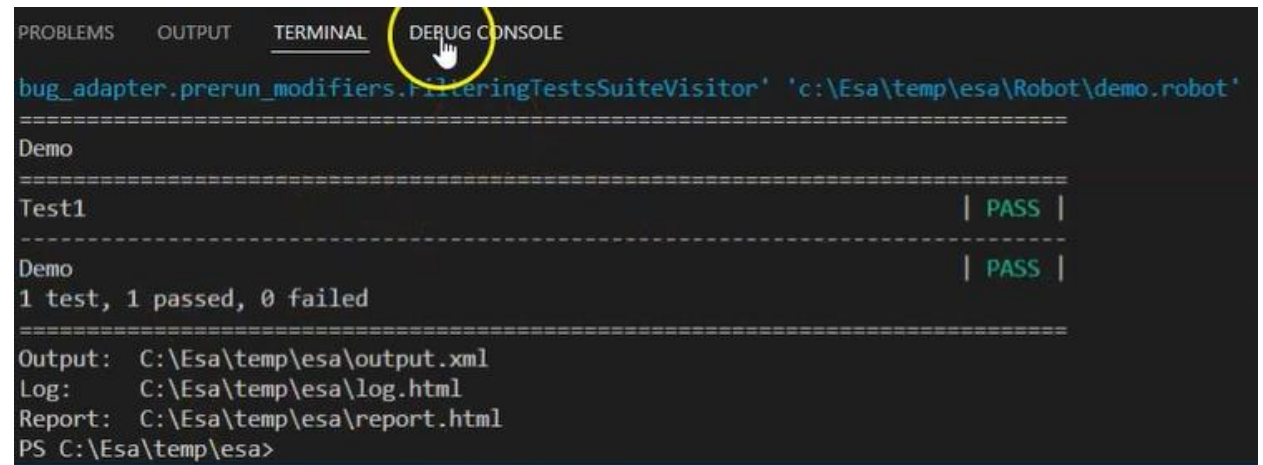
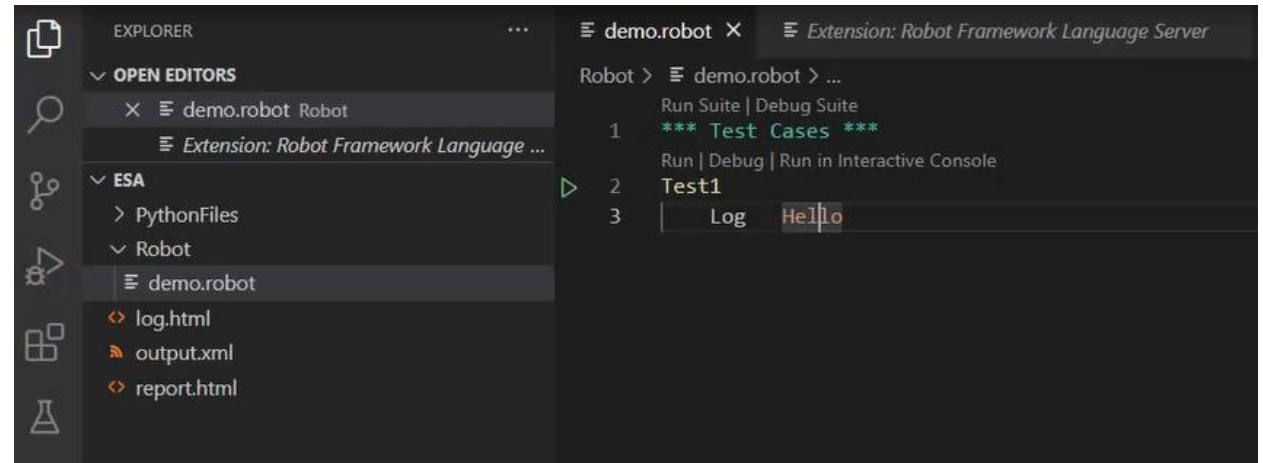
VSCode Extension

- Robot Framework Language Server



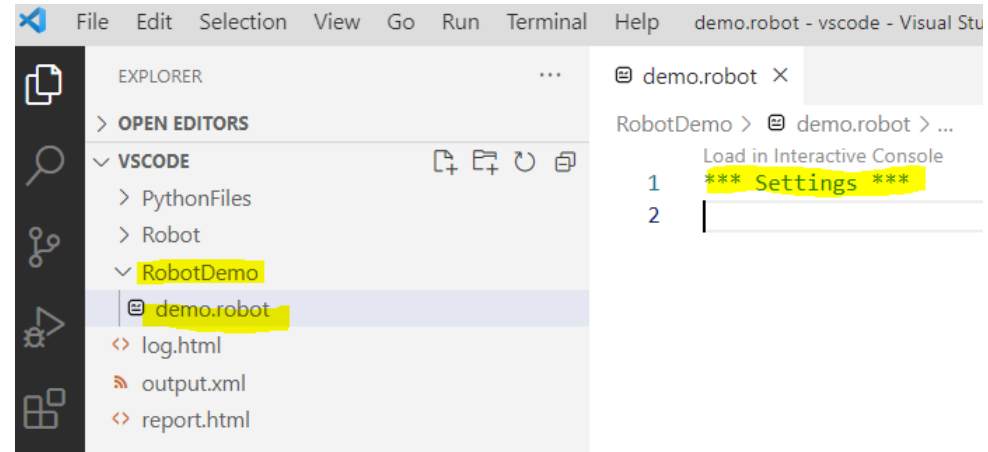
VSCode Extension

- Tiedostopääte .robot
- VSCode
 - Koodin väritys
 - Run-pikanapit



Start

- Create New Folder
- Create New File demo.robot
 - .robot –extension
- Start typing *S
 - Autocomplete to *** Settings ***



Sections

- Settings
 - Import libraries
- Variables
 - Create global variables
- Keywords
 - Create own keywords
- Test Cases
 - Create test cases

General

- Section headers are surrounded 3 *
 - *** Test Cases ***
- Between Keyword and argument there are 3 whitespaces
 - VSCode understands <tab> also

Variable And 1st Test Case

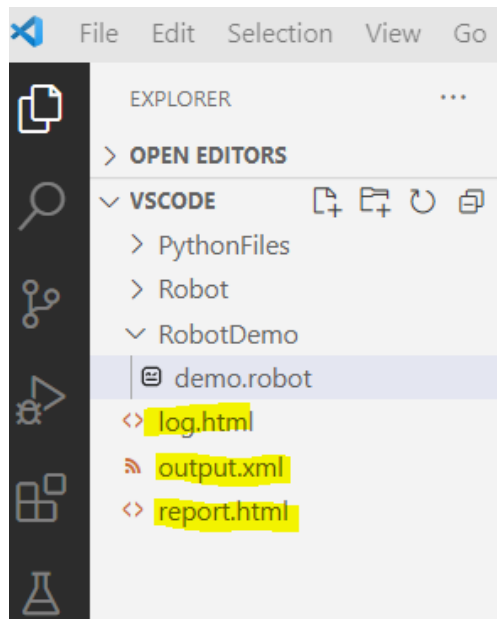
- Run by clicking "Run Suite"
- Outcome in terminal

```
=====
Demo
=====
Check outcome | PASS |
=====
Demo | PASS |
1 test, 1 passed, 0 failed
=====
Output: C:\Esa\temp\vscode\output.xml
Log:    C:\Esa\temp\vscode\log.html
Report: C:\Esa\temp\vscode\report.html
PS C:\Esa\temp\vscode> █
```

```
demo.robot X
RobotDemo > demo.robot > ...
Run Suite | Debug Suite | Load in Interactive Console
1 *** Settings ***
2 Library String
3
Load in Interactive Console
4 *** Variables ***
5 ${one} Donald
6 ${two} Duck
7
*** Test Cases ***
Run | Debug | Run in Interactive Console
> 9 Check outcome
10 | ${three}= Set Variable Donald Duck
11 | Should Be Equal ${one} ${two} ${three}
```

Detailed logs

- Test logs are created by RF



Report

- Open report.html with browser
- Detailed log is in log.html

Demo Report

Generated
20220816 14:20:59 UTC+03:00
4 minutes 19 seconds ago

Summary Information

Status: All tests passed
Start Time: 20220816 14:20:59.326
End Time: 20220816 14:20:59.348
Elapsed Time: 00:00:00.022
Log File: log.html

Test Statistics

Total Statistics	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
All Tests	1	1	0	0	00:00:00	

Statistics by Tag	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
No Tags						

Statistics by Suite	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
Demo	1	1	0	0	00:00:00	

Test Details

AllTagsSuitesSearch

Status: 1 test total, 1 passed, 0 failed, 0 skipped
Total Time: 00:00:00.001

Name	Documentation	Tags	Status	Message	Elapsed	Start / End
Demo: Check outcome			PASS		00:00:00.001	20220816 14:20:59.346 20220816 14:20:59.347

Log

Demo Log

Generated

20220816 14:20:59 UTC+03:00

5 minutes 25 seconds ago

REPORT

Test Statistics

Total Statistics	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
All Tests	1	1	0	0	00:00:00	

Statistics by Tag	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
No Tags						

Statistics by Suite	Total	Pass	Fail	Skip	Elapsed	Pass / Fail / Skip
Demo	1	1	0	0	00:00:00	

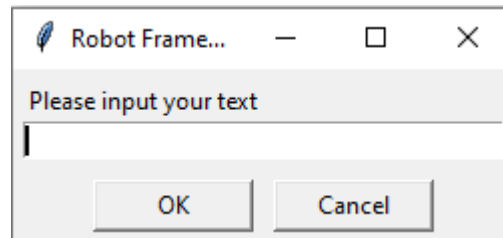
Test Execution Log

<div>SUITE</div> Demo	00:00:00.022
Full Name: Demo	
Source: c:\Esa\temp\vscode\RobotDemo\demo.robot	
Start / End / Elapsed: 20220816 14:20:59.326 / 20220816 14:20:59.348 / 00:00:00.022	
Status: 1 test total, 1 passed, 0 failed, 0 skipped	
<div>TEST</div> Check outcome	00:00:00.001
Full Name: Demo.Check outcome	
Start / End / Elapsed: 20220816 14:20:59.346 / 20220816 14:20:59.347 / 00:00:00.001	
Status: PASS	
<div>KEYWORD</div> <div>\$(three) = Builtin.Set Variable Donald Duck</div>	00:00:00.000
Documentation: Returns the given values which can then be assigned to a variables.	
Start / End / Elapsed: 20220816 14:20:59.347 / 20220816 14:20:59.347 / 00:00:00.000	
14:20:59.347 INFO \$(three) = Donald Duck	
<div>KEYWORD</div> <div>Builtin.Should Be Equal \$(one) \$(two), \$(three)</div>	00:00:00.000
Documentation: Fails if the given objects are unequal.	
Start / End / Elapsed: 20220816 14:20:59.347 / 20220816 14:20:59.347 / 00:00:00.000	

Get input from user

- Dialogs Library is needed
- Also new Test Case
- Try with correct and incorrect user input

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Settings ***
2  Library    Dialogs
3
4  *** Test Cases ***
Run | Debug | Run in Interactive Console
5  Ask User Input
6  |   ${user}=    Get Value From User    Please input your text
7  |   Should Be Equal    ${user}    Hello World
8  |
```



Create List and get value from list

- When user creates list @ character is used
- When user tries to access list afterwards \$ is used

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Variables ***
2  @{list}    1    2    3    4
3
4  *** Test Cases ***
Run | Debug | Run in Interactive Console
5  Check value from list
6  |     ${number}=    Set Variable    ${list}[2]
7  |     Should Be Equal    ${number}    3
```

Add new value to the list

- When we try to modify list, we need Collections-library

- <https://robotframework.org/robotframework/latest/libraries/Collections.html>

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Settings ***
2  Library      Collections
3
   Load in Interactive Console
4  *** Variables ***
5  @{list}      1    2    3    4
6
7  *** Test Cases ***
   Run | Debug | Run in Interactive Console
8  Add value to the list
9      ${addition}=    Set Variable    333
10     Append To List    ${list}    ${addition}
11     Should Be Equal    ${list}[4]    333
--
```

Length of a list

- Run Suite vs. Run single test

```
1 Run Suite | Debug Suite | Load in Interactive Console
2 *** Settings ***
3
4 Load in Interactive Console
5 *** Variables ***
6 @list 1 2 3 4
7
8 *** Test Cases ***
9 Run | Debug | Run in Interactive Console
10 Add value to the list
11     ${addition}= Set Variable 333
12     Append To List ${list} ${addition}
13     Should Be Equal ${list}[4] 333
14
15 *** Test Cases ***
16 Run | Debug | Run in Interactive Console
17 List length
18     ${length}= Get Length ${list}
19     ${expected}= Convert To Integer 4
20     Should Be Equal ${length} ${expected}
```

```
1 Run Suite | Debug Suite | Load in Interactive Console
2 *** Settings ***
3
4 Library Collections
5
6 Load in Interactive Console
7 *** Variables ***
8 @list 1 2 3 4
9
10 *** Test Cases ***
11 Run | Debug | Run in Interactive Console
12 Add value to the list
13     @list= Copy List ${list}
14     ${addition}= Set Variable 333
15     Append To List ${list} ${addition}
16     Should Be Equal ${list}[4] 333
17
18 *** Test Cases ***
19 Run | Debug | Run in Interactive Console
20 List length
21     ${length}= Get Length ${list}
22     ${expected}= Convert To Integer 4
23     Should Be Equal ${length} ${expected}
```

Length of a list / Test Setup

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Settings ***
2  Library      Collections
3  Test Setup   Create Data For Tests
4
5  *** Keywords ***
6  Load in Interactive Console
7  Create Data For Tests
8      @{list}=    Create List    1    2    3    4
9      Set Test Variable    ${list}
10
11 *** Test Cases ***
12 Run | Debug | Run in Interactive Console
13 Add value to the list
14     ${addition}=    Set Variable    333
15     Append To List    ${list}    ${addition}
16     Should Be Equal    ${list}[4]    333
17
18 *** Test Cases ***
19 Run | Debug | Run in Interactive Console
20 List length
21     ${length}=    Get Length    ${list}
22     ${expected}=    Convert To Integer    4
23     Should Be Equal    ${length}    ${expected}
```

Ordering the list / Removing from the list

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Settings ***
2  Library      Collections
3  Test Setup   Create Data For Tests
4
5  *** Keywords ***
6  Load in Interactive Console
7  Create Data For Tests
8      @{names}=    Create List    Donald    Mickey    Goofy    Scrooge    Daisy
9      Set Test Variable    ${names}
10
11 *** Test Cases ***
12 Run | Debug | Run in Interactive Console
13 Put list in alphabetical order
14     Sort List    ${names}
15     Should Be Equal    ${names}[0]    Daisy
16
17 *** Test Cases ***
18 Run | Debug | Run in Interactive Console
19 Remove name from list
20     Remove From List    ${names}    0
21     Should Be Equal    ${names}[0]    Mickey
22
```

FOR loop

- Let's loop through values from 1 to 10

[-] TEST	Loop through the numbers	00:00:00.003
Full Name: Demo.Loop through the numbers		
Start / End / Elapsed: 20220816 15:16:50.307 / 20220816 15:16:50.310 / 00:00:00.003		
Status: PASS		
[-] FOR	`\${index}` IN RANGE [1 10]	00:00:00.002
Start / End / Elapsed: 20220816 15:16:50.307 / 20220816 15:16:50.309 / 00:00:00.002		
[+] ITERATION	`\${index}` = 1	00:00:00.001
[+] ITERATION	`\${index}` = 2	00:00:00.000
[+] ITERATION	`\${index}` = 3	00:00:00.000
[+] ITERATION	`\${index}` = 4	00:00:00.000
[+] ITERATION	`\${index}` = 5	00:00:00.000
[-] ITERATION	`\${index}` = 6	00:00:00.001
Start / End / Elapsed: 20220816 15:16:50.308 / 20220816 15:16:50.309 / 00:00:00.001		
[-] KEYWORD	`\${new}` = Builtin. Set Variable `\${index}`	00:00:00.001
Documentation: Returns the given values which can then be assigned to a variables.		
Start / End / Elapsed: 20220816 15:16:50.308 / 20220816 15:16:50.309 / 00:00:00.001		
15:16:50.309 INFO `\${new}` = 6		
[+] ITERATION	`\${index}` = 7	00:00:00.000
[+] ITERATION	`\${index}` = 8	00:00:00.000
[+] ITERATION	`\${index}` = 9	00:00:00.000

```
Run Suite | Debug Suite
1 *** Test Cases ***
Run | Debug | Run in Interactive Console
2 Loop through the numbers
3     FOR    `${index}`    IN RANGE    1    10
4         |    `${new}`=    Set Variable    `${index}`
5     END
```

FOR loop

- Loop list variable

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Variables ***
2  @list    Donald    Goofy    Daisy    Mickey
3
4  *** Test Cases ***
Run | Debug | Run in Interactive Console
5  Loop through the list
6      FOR    ${item}    IN    @list
7      |    ${new}=    Set Variable    ${item}
8      END
```

```
- TEST Loop through the list 00:00:00.007
Full Name: Demo.Loop through the list
Start / End / Elapsed: 20220816 15:18:44.812 / 20220816 15:18:44.819 / 00:00:00.007
Status: PASS
- FOR ${item} IN [ @list ] 00:00:00.001
Start / End / Elapsed: 20220816 15:18:44.818 / 20220816 15:18:44.819 / 00:00:00.001
+ ITERATION ${item} = Donald 00:00:00.001
+ ITERATION ${item} = Goofy 00:00:00.000
- ITERATION ${item} = Daisy 00:00:00.000
Start / End / Elapsed: 20220816 15:18:44.819 / 20220816 15:18:44.819 / 00:00:00.000
- KEYWORD ${new} = BuiltIn.Set Variable ${item} 00:00:00.000
Documentation: Returns the given values which can then be assigned to a variables.
Start / End / Elapsed: 20220816 15:18:44.819 / 20220816 15:18:44.819 / 00:00:00.000
15:18:44.819 INFO ${new} = Daisy
+ ITERATION ${item} = Mickey 00:00:00.000
```

Create Folder and File

- OperatingSystem Library is needed

- <https://robotframework.org/robotframework/latest/libraries/OperatingSystem.html>

```
1  *** Settings ***
2  Library    OperatingSystem
3
4  *** Test Cases ***
5  Run | Debug | Run in Interactive Console
6  Make new directory
7      Create Directory    c:/temp/RobotTesting
8      Directory Should Exist    c:/temp/RobotTesting
9
10 *** Test Cases ***
11 Run | Debug | Run in Interactive Console
12 Create new txt file
13     ${path}= Set Variable    c:/temp/RobotTesting/
14     Create File    ${path}example.txt    Hi, we must be having fun?
15     File Should Exist    ${path}example.txt
16     File Should Not Be Empty    ${path}example.txt
```


Delete File and Folder

```
16  *** Test Cases ***  
    Run | Debug | Run in Interactive Console  
17  Delete file and folder  
18      ${path}= Set Variable    c:/temp/RobotTesting/  
19      Remove file    ${path}example.txt  
20      Directory Should Be Empty    ${path}  
21      Remove Directory    ${path}
```

Run commands / Ping

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Settings ***
2  Library      OperatingSystem
3
4  *** Test Cases ***
5  Run | Debug | Run in Interactive Console
6  Ping web page and store the ping time
7  |     ${output}=    Run And Return Rc And Output    ping www.google.com
   |     Log          ${output}
```

```
- TEST Ping web page and store the ping time 00:00:03.065
Full Name: Demo.Ping web page and store the ping time
Start / End / Elapsed: 20220817 08:45:18.934 / 20220817 08:45:21.999 / 00:00:03.065
Status: PASS

- KEYWORD ${output} = OperatingSystem.Run And Return Rc And Output ping 00:00:03.058
www.google.com
Documentation: Runs the given command in the system and returns the RC and output.
Start / End / Elapsed: 20220817 08:45:18.934 / 20220817 08:45:21.992 / 00:00:03.058
08:45:18.940 INFO Running command 'ping www.google.com 2>&1'.
08:45:21.992 INFO ${output} = (0, '\nPing www.google.com [216.58.210.164] with 32 bytes of
data:\nReply from 216.58.210.164: bytes=32 time=2ms TTL=59\nReply from
216.58.210.164: bytes=32 time=2ms TTL=59\nReply from 216.58.210.1...

- KEYWORD BuiltIn.Log ${output} 00:00:00.000
Documentation: Logs the given message with the given level.
Start / End / Elapsed: 20220817 08:45:21.992 / 20220817 08:45:21.992 / 00:00:00.000
08:45:21.992 INFO (0, '\nPing www.google.com [216.58.210.164] with 32 bytes of data:\nReply from
216.58.210.164: bytes=32 time=2ms TTL=59\nReply from 216.58.210.164: bytes=32
time=2ms TTL=59\nReply from 216.58.210.164: bytes=32 time=2ms TTL=59\nReply from
216.58.210.164: bytes=32 time=2ms TTL=59\n\nPing statistics for 216.58.210.164:\n
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),\nApproximate round trip
times in milli-seconds:\n Minimum = 2ms, Maximum = 2ms, Average = 2ms')
```

Read, transform and create list

- Read text from file (OperatingSystem)
- Remove characters (String)
- Create a list from words (Collections)

<https://robotframework.org/robotframework/latest/libraries/String.html>

Text

The aim of international services at Hame University of Applied Sciences is to support the development of the international competence of our staff and students. International services, i.e. HAMK International provides services to promote international student, trainee and staff mobility and also gives information about the many different ways to become international at HAMK. When you want to go abroad for studies or work placement or you are wondering about which alternative is the best for you, the staff of HAMK International will help you to find the best solution. Each degree programme has an international contact person who is responsible for the coordination of incoming students.

Read File

Run Suite | Debug Suite | Load in Interactive Console

```
1 *** Settings ***
2 Library String
3 Library OperatingSystem
4 Library Collections
5
6 *** Test Cases ***
7 Read text from file and create a words list
8     ${path}= Set Variable c:/temp/RobotTesting/example_text.txt
9     ${output}= Get File ${path}
```

TEST	Read text from file and create a words list	00:00:00.008
Full Name:	Demo.Read text from file and create a words list	
Start / End / Elapsed:	20220817 09:05:01.203 / 20220817 09:05:01.211 / 00:00:00.008	
Status:	PASS	
KEYWORD	\${path} = BuiltIn.Set Variable c:/temp/RobotTesting/example_text.txt	00:00:00.000
Documentation:	Returns the given values which can then be assigned to a variables.	
Start / End / Elapsed:	20220817 09:05:01.209 / 20220817 09:05:01.209 / 00:00:00.000	
09:05:01.209	INFO	\${path} = c:/temp/RobotTesting/example_text.txt
KEYWORD	\${output} = OperatingSystem.Get File \${path}	00:00:00.000
Documentation:	Returns the contents of a specified file.	
Start / End / Elapsed:	20220817 09:05:01.210 / 20220817 09:05:01.210 / 00:00:00.000	
09:05:01.210	INFO	Getting file 'c:\temp\RobotTesting\example_text.txt'.
09:05:01.210	INFO	\${output} = The aim of international services at Hame University of Applied Sciences is to support the development of the international competence of our staff and students. International services, i.e. HAMK Inte...

Remove all , and .

6 *** Test Cases ***

Run | Debug | Run in Interactive Console

7 Read text from file and create a words list

8 \${path}= Set Variable c:/temp/RobotTesting/example_text.txt

9 \${output}= Get File \${path}

10 \${output}= Remove String \${output} . ,

11 @{wordList}= Split String \${output}

[-] TEST	Read text from file and create a words list	00:00:00.002
	Full Name:	Demo.Read text from file and create a words list
	Start / End / Elapsed:	20220817 09:07:59.313 / 20220817 09:07:59.315 / 00:00:00.002
	Status:	PASS
[+] KEYWORD	\${path} = BuiltIn.Set Variable c:/temp/RobotTesting/example_text.txt	00:00:00.000
[-] KEYWORD	\${output} = OperatingSystem.Get File \${path}	00:00:00.001
	Documentation:	Returns the contents of a specified file.
	Start / End / Elapsed:	20220817 09:07:59.313 / 20220817 09:07:59.314 / 00:00:00.001
	09:07:59.314	INFO Getting file 'c:\temp\RobotTesting\example_text.txt'.
	09:07:59.314	INFO \${output} = The aim of international services at Hame University of Applied Sciences is to support the development of the international competence of our staff and students. International services, i.e. HAMK Inte...
[-] KEYWORD	\${output} = String.Remove String \${output}, . ,	00:00:00.000
	Documentation:	Removes all removables from the given string.
	Start / End / Elapsed:	20220817 09:07:59.314 / 20220817 09:07:59.314 / 00:00:00.000
	09:07:59.314	INFO \${output} = The aim of international services at Hame University of Applied Sciences is to support the development of the international competence of our staff and students International services ie HAMK Internat...
[-] KEYWORD	@{wordList} = String.Split String \${output}	00:00:00.001
	Documentation:	Splits the string using separator as a delimiter string.
	Start / End / Elapsed:	20220817 09:07:59.314 / 20220817 09:07:59.315 / 00:00:00.001
	09:07:59.315	INFO @{wordList} = [The aim of international services at Hame University of Applied Sciences is to support the development of the international competence of our staff and ...

Find from list

6 *** Test Cases ***

Run | Debug | Run in Interactive Console

7 Read text from file and create a words list

8 \${path}= Set Variable c:/temp/RobotTesting/example_text.txt

9 \${output}= Get File \${path}

10 \${output}= Remove String \${output} . ,

11 @{wordList}= Split String \${output}

12 \${index}= Get Index From List \${wordList} staff

13 \${place}= Convert To Integer 22

14 Should Be Equal \${index} \${place}

TEST

Read text from file and create a words list

00:00:00.003

Full Name:

Demo.Read text from file and create a words list

Start / End / Elapsed:

20220817 09:11:38.458 / 20220817 09:11:38.461 / 00:00:00.003

Status:

PASS

+ KEYWORD

\${path} = BuiltIn.Set Variable c:/temp/RobotTesting/example_text.txt

00:00:00.000

+ KEYWORD

\${output} = OperatingSystem.Get File \${path}

00:00:00.001

+ KEYWORD

\${output} = String.Remove String \${output}, . ,

00:00:00.000

+ KEYWORD

@{wordList} = String.Split String \${output}

00:00:00.000

- KEYWORD

\${index} = Collections.Get Index From List \${wordList}, staff

00:00:00.001

Documentation:

Returns the index of the first occurrence of the `value` on the list.

Start / End / Elapsed:

20220817 09:11:38.460 / 20220817 09:11:38.461 / 00:00:00.001

09:11:38.460

INFO

\${index} = 22

- KEYWORD

\${place} = BuiltIn.Convert To Integer 22

00:00:00.000

Documentation:

Converts the given item to an integer number.

Start / End / Elapsed:

20220817 09:11:38.461 / 20220817 09:11:38.461 / 00:00:00.000

09:11:38.461

INFO

\${place} = 22

- KEYWORD

BuiltIn.Should Be Equal \${index}, \${place}

00:00:00.000

Documentation:

Fails if the given objects are unequal.

Start / End / Elapsed:

20220817 09:11:38.461 / 20220817 09:11:38.461 / 00:00:00.000

Keyword

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Settings ***
2  Library      String
3  Library      OperatingSystem
4
5  *** Keywords ***
6  Load in Interactive Console
7  Split text
8      [Arguments]    ${text}
9      @{list}=      Split String    ${text}
10     ${word}=      Set Variable    ${list}[1]
11     [Return]      ${word}
12
13 *** Test Cases ***
14 Run | Debug | Run in Interactive Console
15 New test
16     ${text}=      Set Variable    My beautiful shoes
17     ${word}=      Split text    ${text}
18     Should Be Equal    ${word}    beautiful
19     Create File    c:/temp/RobotTesting/word.txt    ${word}\n
```

> This PC > (C:) Windows > temp > RobotTesting

Name	Date modified
word.txt	17.8.2022 9.16

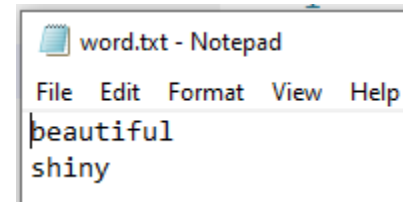
word.txt - Notepad

File Edit Format View Help

beautiful

Append file

```
19  *** Test Cases ***  
    Run | Debug | Run in Interactive Console  
20  Another test  
21      ${text}=    Set Variable    Your shiny car  
22      ${word}=    Split text    ${text}  
23      Should Be Equal    ${word}    shiny  
24      Append To File    c:/temp/RobotTesting/word.txt    ${word}  
25      Run    c:/temp/RobotTesting/word.txt
```




Custom Library with Keywords

- Lots of times companies create their own keyword to better support their own workflows and testing scopes
- Functionalities can be created using Python coding

Create Python file





📁 > This PC > (C:) Windows > temp > RobotTesting

Name	Date modified
 mylibrary.py	17.8.2022 9.26

```
1 def Get_Max_From_List(list):  
2     value = max(list)  
3     return value
```

Custom Library

```
Run Suite | Debug Suite | Load in Interactive Console
1  *** Settings ***
2  Library      c:/temp/RobotTesting/mylibrary.py
3
4  *** Test Cases ***
5  Run | Debug | Run in Interactive Console
6  Get max value from list
7  |   @{list}=   Create List   1   5   3
   |   ${value}=  Get Max From List   ${list}
```

 SUITE Demo	00:00:00.020
Full Name:	Demo
Source:	c:\Esa\temp\vscode\RobotDemo\demo.robot
Start / End / Elapsed:	20220817 09:28:44.536 / 20220817 09:28:44.556 / 00:00:00.020
Status:	1 test total, 1 passed, 0 failed, 0 skipped
<hr/>	
 TEST Get max value from list	00:00:00.002
Full Name:	Demo.Get max value from list
Start / End / Elapsed:	20220817 09:28:44.553 / 20220817 09:28:44.555 / 00:00:00.002
Status:	PASS
 KEYWORD @{list} = BuiltIn.Create List 1, 5, 3	00:00:00.000
 KEYWORD \${value} = mylibrary.Get Max From List \${list}	00:00:00.000
Start / End / Elapsed:	20220817 09:28:44.554 / 20220817 09:28:44.554 / 00:00:00.000
09:28:44.554	INFO \${value} = 5