

To run the test open Matlab.

Then go to this directory on Matlab and execute the "run" script.

The run script reads the file "input.txt" and builds a Context Tree.

The tree returned is an array of noe and each node is a data structure.

To access a node: tree{NUMBER OF THE NODE}

Each node has a name which is the **name**, the **index of the parent**, the **index of each child**, the **number of times it was called by the parent on that stack** and **its own index**

The screenshot displays the MATLAB R2012b environment. The 'Variables - tree' editor shows a table with 8 columns and 6 rows. The first row is highlighted with a red box. The 'Command Window' shows the execution of the 'run' script and the 'tree' function. The 'Workspace' window shows the variables 'ans' and 'tree'.

	1	2	3	4	5	6	7	8
1	<1x1 struct>	<1x1 struct>	<1x1 struct>	<1x1 struct>	<1x1 struct>	<1x1 struct>		
2								
3								
4								
5								
6								

```
>> run
>> tree(1)

ans =

    name: 'ROOT'
   parent: []
    child: [2 4]
 times_called: 1
    index: 1

>> tree(2)

ans =

    name: 'printOne'
   parent: 1
    child: 3
 times_called: 2
    index: 2
```

Workspace:

Name	Value	Min
ans	<1x1 struct>	
tree	<1x6 cell>	

Command History:

```
[token, remain] = strtok('time(1)');
contextTree
strfind(remain, remain)
contextTree
run
clear
run
clear
run
clear
run
tree(1)
tree(2)
```