

# Getting Started with MATLAB, Python and R

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# 1 Help

## 1.1 Getting Help

Language	MATLAB/Octave	Python	R
Browse help interactively	<code>doc</code>	<code>help()</code>	<code>help.start()</code>
Help on using help	<code>Octave: help -i % browse with Info</code>	<code>help</code>	<code>help()</code>
Help for a function	<code>help help</code> or <code>doc doc</code>	<code>help(plot)</code> or <code>?plot</code>	<code>help(plot)</code> or <code>?plot</code>
Help for a toolbox/library package	<code>help plot</code>	<code>help(pylab)</code>	<code>help(package='splines')</code>
Demonstration examples	<code>help splines</code> or <code>doc splines</code>		<code>demo()</code>
Example using a function	<code>demo</code>		<code>example(plot)</code>

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## 1.2 Searching available help documentation

Language	MATLAB/Octave	Python	R
Search help files	<code>lookfor plot</code>		<code>help.search('plot')</code>
Find objects by partial name			<code>apropos('plot')</code>
List available packages	<code>help</code>	<code>help(); modules [Numeric]</code>	<code>library()</code>
Locate functions	<code>which plot</code>	<code>help(plot)</code>	<code>find(plot)</code>
List available methods for a function			<code>methods(plot)</code>

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## 1.3 Using interactively

Language	MATLAB/Octave	Python	R
Start session	<code>Octave: octave -q</code>	<code>ipython -pylab</code> or JupyterLab	RStudio
Auto completion	<code>Octave: TAB</code> or <code>M-?</code>	<code>TAB</code>	
Run code from file	<code>foo(.m)</code>	<code>execfile('foo.py')</code> or <code>run foo.py</code>	<code>source('foo.R')</code>
Command history	<code>Octave: history</code>	<code>hist -n</code>	<code>history()</code>
Save command history	<code>diary on [..] diary off</code>		<code>savehistory(file=".Rhistory")</code>
End session	<code>exit</code> or <code>quit</code>	<code>CTRL-D</code> <code>CTRL-Z # windows</code> <code>sys.exit()</code>	<code>q(save='no')</code>