

## IPython -- An enhanced Interactive Python - Quick Reference Card

ipython	Open IPython terminal console
ipython qtconsole	Open IPython qtconsole
ipython notebook	Open IPython Notebook (browser interface)
ipython notebook --pylab inline	Open IPython Notebook with inline graphs
ipython notebook --pylab qt	Open IPython Notebook with popup graphs
ipython3	Use the Python3 version of IPython
ipython --help-all	Show all IPython start flags

### Shortcuts:

Shortcut	Action
Shift-Enter	run cell
Ctrl-Enter	run cell in-place
Alt-Enter	run cell, insert below
Ctrl-m x	cut cell
Ctrl-m c	copy cell
Ctrl-m v	paste cell
Ctrl-m d	delete cell
Ctrl-m z	undo last cell deletion
Ctrl-m -	split cell
Ctrl-m a	insert cell above
Ctrl-m b	insert cell below
Ctrl-m o	toggle output
Ctrl-m O	toggle output scroll
Ctrl-m l	toggle line numbers
Ctrl-m s	save notebook
Ctrl-m j	move cell down
Ctrl-m k	move cell up
Ctrl-m y	code cell
Ctrl-m m	markdown cell
Ctrl-m t	raw cell
Ctrl-m 1-6	heading 1-6 cell
Ctrl-m p	select previous
Ctrl-m n	select next
Ctrl-m i	interrupt kernel
Ctrl-m .	restart kernel
Ctrl-m h	show keyboard shortcuts

## Within IPython:

obj?, obj??	Get help, or more help for object (also works as ?obj, ??obj).
?foo.*abc*	List names in 'foo' containing 'abc' in them.
%magic	Information about IPython's 'magic' % functions.

Magic functions are prefixed by % or %% , and typically take their arguments without parentheses, quotes or even commas for convenience. Line magics take a single % and cell magics are prefixed with two %%.

### Example magic function calls:

%alias d ls -F	'd' is now an alias for 'ls -F'
alias d ls -F	Works if 'alias' not a python name
alist = %alias	Get list of aliases to 'alist'
cd /usr/share	Obvious. cd -<tab> to choose from visited dirs.
%cd??	See help AND source for magic %cd
%timeit x=10	time the 'x=10' statement with high precision.
%%timeit x=2**100 x**100	time 'x*100' with a setup of 'x=2**100'; setup code is not counted. This is an example of a cell magic.

### System commands:

!cp a.txt b/	System command escape, calls os.system()
cp a.txt b/	after %rehashx, most system commands work without !
cp \${f}.txt \$bar	Variable expansion in magics and system commands
files = !ls /usr	Capture sytem command output
files.s, files.l, files.n	"a b c", ['a','b','c'], '\n\n'

### History:

_i, _ii, _iii	Previous, next previous, next next previous input
_i4, _ih[2:5]	Input history line 4, lines 2-4
exec _i81	Execute input history line #81 again
%rep 81	Edit input history line #81
_, __, _	previous, next previous, next next previous output
_dh	Directory history
_oh	Output history
%hist	Command history. '%hist -g foo' search history for 'foo'

### Autocall:

f 1,2	f(1,2) # Off by default, enable with %autocall magic.
/f 1,2	f(1,2) (forced autoparen)
,f 1 2	f("1","2")
;f 1 2	f("1 2")