

# Essential Shortcuts in Python Cheat Sheet

## Python sys Variables

argv	Command line args
builtin_module_names	Linked C modules
byteorder	Native byte order
check_interval	Signal check frequency
exec_prefix	Root directory
executable	Name of executable
exitfunc	Exit function name
modules	Loaded modules
path	Search path
platform	Current platform
stdin, stdout, stderr	File objects for I/O
version_info	Python version info
winver	Version number

## Python List Methods

append(item)	pop(position)
count(item)	remove(item)
extend(list)	reverse()
index(item)	sort()
insert(position, item)	

## Python Time Methods

replace()	utcoffset()
isoformat()	dst()
__str__()	tzname()
strftime(format)	

## Python Class Special Methods

__new__(cls)	__lt__(self, other)
__init__(self, args)	__le__(self, other)
__del__(self)	__gt__(self, other)
__repr__(self)	__ge__(self, other)
__str__(self)	__eq__(self, other)
__cmp__(self, other)	__ne__(self, other)
__index__(self)	__nonzero__(self)
__hash__(self)	
__getattr__(self, name)	
__getattribute__(self, name)	
__setattr__(self, name, attr)	
__delattr__(self, name)	
__call__(self, args, kwargs)	

## Python Indexes and Slices

len(a)	6
a[0]	0
a[5]	5
a[-1]	5
a[-2]	4
a[1:]	[1,2,3,4,5]
a[:5]	[0,1,2,3,4]
a[:-2]	[0,1,2,3]
a[1:3]	[1,2]
a[1:-1]	[1,2,3,4]
b=a[:]	Shallow copy of a
Indexes and Slices of a=[0,1,2,3,4,5]	

## Arithmetic Operators

x + y	add	x - y	subtract
x * y	multiply	x / y	divide
x % y	modulus	x ** y	xy

Assignment shortcuts: x op= y

Example: x += 1 increments x

## Python sys.argv

sys.argv[0]	foo.py
sys.argv[1]	bar
sys.argv[2]	-c
sys.argv[3]	qux
sys.argv[4]	--h
sys.argv for the command: \$ python foo.py bar -c qux --h	

## Python File Methods

close()	readlines(size)
flush()	seek(offset)
fileno()	tell()
isatty()	truncate(size)
next()	write(string)
read(size)	writelines(list)
readline(size)	

## Python String Methods

capitalize() *	lstrip()
center(width)	partition(sep)
count(sub, start, end)	replace(old, new)
decode()	rfind(sub, start, end)
encode()	rindex(sub, start, end)
endswith(sub)	rjust(width)
expandtabs()	rpartition(sep)
find(sub, start, end)	rsplit(sep)



Python String Methods (cont)	
index(sub, start, end)	rstrip()
isalnum() *	split(sep)
isalpha() *	splittlines()
isdigit() *	startswith(sub)
islower() *	strip()
isspace() *	swapcase() *
istitle() *	title() *
isupper() *	translate(table)
join()	upper() *
ljust(width)	zfill(width)
lower()* Methods marked are locale dependant for 8-bit strings.	

Data Types	
Integer	-256, 15
Float	-253.23, 1.253e-10
String	"Hello", 'Goodbye', ""Multiline""
Boolean	True, False
List	[ value, ... ]
Tuple	( value, ... ) <sup>1</sup>
Dictionary	{ key: value, ... }
Set	{ value, value, ... } <sup>2</sup>
<sup>1</sup> Parentheses usually optional <sup>2</sup> Create an empty set with set()	

Conversion Functions	
int(expr)	Converts expr to integer
float(expr)	Converts expr to float
str(expr)	Converts expr to string
chr(num)	ASCII char num

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Python Datetime Methods	
today()	fromordinal(ordinal)
now(timezoneinfo)	combine(date, time)
utcnow()	strptime(date, format)
fromtimestamp(timestamp)	
utcfromtimestamp(timestamp)	

Python os Variables	
altsep	Alternative sep
curdir	Current dir string
defpath	Default search path
devnull	Path of null device
extsep	Extension separator
linesep	Line separator
name	Name of OS
pardir	Parent dir string
pathsep	Path separator
sep	Path separator
Registered OS names: "posix", "nt", "mac", "os2", "ce", "java", "riscos"	

Python Date Formatting	
%a	Abbreviated weekday (Sun)
<sup>1</sup> Sunday as start of week. All days in a new year preceding the first Sunday are considered to be in week 0. <sup>2</sup> 0 is Sunday, 6 is Saturday. <sup>3</sup> Monday as start of week. All days in a new year preceding the first Monday are	

Python Date Formatting	
%a	Abbreviated weekday (Sun)
%A	Weekday (Sunday)
%b	Abbreviated month name (Jan)
%B	Month name (January)
%c	Date and time
%d	Day (leading zeros) (01 to 31)
%H	24 hour (leading zeros) (00 to 23)
%I	12 hour (leading zeros) (01 to 12)
%j	Day of year (001 to 366)
%m	Month (01 to 12)
%M	Minute (00 to 59)
%p	AM or PM
%S	Second (00 to 61 <sup>4</sup> )
%U	Week number <sup>1</sup> (00 to 53)
%w	Weekday <sup>2</sup> (0 to 6)
%W	Week number <sup>3</sup> (00 to 53)
%x	Date
%X	Time
%y	Year without century (00 to 99)
%Y	Year (2008)
%Z	Time zone (GMT)
%%	A literal "%" character (%)

<sup>1</sup> Sunday as start of week. All days in a new year preceding the first Sunday are considered to be in week 0.

<sup>2</sup> 0 is Sunday, 6 is Saturday.

<sup>3</sup> Monday as start of week. All days in a new year preceding the first Monday are considered to be in week 0.

<sup>4</sup> This is not a mistake. Range takes account of leap and double-leap seconds.

Arithmetic Operators			
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Assignment shortcuts: x op= y			
Example: x += 1 increments x			