

Python Advanced Syntax

- List

Name	Comment
:-----	-----
map	map(lambda x: str(x), [1, 2, 3])
create fixed size array	l = [None] * 5
insert elements to head	array.insert(0,var)
delete a given element	del a[1]
list as stack	item = l.pop()
sort in descending	sorted([8, 2, 5], reverse=True)
sort by attribute	sorted([('ebb',12),('abc',14)], key=lambda x: x[1])
generate a-z	map(chr, range(ord('a'), ord('z')+1))
map/reduce	reduce((lambda x, y: "%s %s" % (x, y)), l)
return all but last	list[:-1]
replace ith to jth	list[i:j] = otherlist
combine two list	list1 + list2
get sum	sum(list)

- Compact Coding

Name	Comment
:-----	-----
return if.. else	return val if i>0 else 0
multiple assignment	l, r = 2, 3
swap values	left, right = right, left

- Integer

Name	Comment
:-----	-----
min, max	min(2, 3), max(5, 6, 2)
generate range	for num in range(10,20)
generate range	for num in xrange(20)
get ascii	ord('a'), chr(97)
mininum, maximum in	sys.maxsize, -sys.maxsize-1
print integer in binary	"{0:b}".format(10)

- String

Name	Comment
:-----	-----
reverse string	"hello world"[::-1]
array to string	' '.join(['a', 'b'])
string to array	list("abc")

- Set

Name	Comment
:-----	-----
intersection	list(set(l1).intersection(set(l2)))
list to set	set(list1)

- Bit Operator

Name	Comment
:-----	-----
mod	x % 2
shift left	x << 1 ; a <=< 2
shift righ	x >> 2
and	x & y
complement	~x
xor	x ^ y
power	2 ** 3
bool complement	not x