Python One-Liners

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prompt	command	result
Assigning multiple values to variables	`name, quantity, price = 'Book', 3, 4.99`	`>>> print(name, quantity, price)` `Book 3 4.99`

Conditional [] comprehension	`one = ['a', 1, 'b', 'b', 4, '1']`
	`two = ['h', 'l', 1, 'a', 'j', '1']`
	`common = [x for x in one if x in two]`
		`>>> print(common)`
		`['a', 1, '1']`

[] comprehension	`lib = [4,8,2,4,0,3]` `double_nums = [num * 2 for num in lib]`	`>>> print(double_nums)` `[8, 16, 4, 8, 0, 6]`

Swapping two variables	`a = 1`
	`b = 2`
	`a, b = b, a`
		`>>> print(a, b)`
		`2 1`

Conditional comprehension, ternery operator	`one = [1, 2, 3, 4, 5, 6, 7]` `new = [x if x % 2 == 0 else x * 2 for x in one]`	`>>> print(new)` `[2, 2, 6, 4, 10, 6, 14]`

Reverse []	`one = ['a', 'b', 'c', 'd', 'e']`
	`two = one[::-1]`
	`or`
	`three = ['a', 'b', 'c', 'd', 'e'][::-1]`
		`>>> print(two)`
		`['e', 'd', 'c', 'b', 'a']`
		`>>> print(three)`
		`['e', 'd', 'c', 'b', 'a']`

Check for False	`a = [True, True, True]`
	`b = [True, True, False]`
		`>>> print(all(a))`
		`True`
		`>>> print(all(b))`
		`False`

Printing elements of a collection	`a = [1, 2, 'three', 4, 5]`	`>>> print(a)`
		`[1, 2, 'three', 4, 5]`
		`>>> print(*a)`
		`1 2 three 4 5`

Converting string with numbers to integer []	`a = '1 2 3 4 5'` `b = list(map(int, a.split()))`	`>>> print(b)` `[1, 2, 3, 4, 5]`
Find the Most Frequent Element []	`a = [4, 1, 2, 2, 3, 3, 3]` `most_frequent = max(set(a), key=a.count)`	`>>> print(most_frequent)` `3`

Unique values only []	`values = ['h',1,'b','b',4,'1','a',4]`
	`option_1 = list({x for x in values})`
	`or`
	`option_2 = list(set(values))`
	`or`
	`option_3 = [x for x in set(values)]`
	`or`
	`option_4 = []`
	`[option_4.append(x) for x in values if x not in option_4]`
		`>>> print(option_1)`
		`[1, 'h', 4, 'a', 'b', '1']`
		`>>> print(option_2)`
		`[1, 'h', 4, 'a', 'b', '1']`
		`>>> print(option_3)`
		`[1, 'h', 4, 'a', 'b', '1']`
		`>>> print(option_4)`
		`['h', 1, 'b', 4, '1', 'a']`

Traverse []	one = ['a', 'b', 'c', 'd', 'e', 'f', 'g'] result = one[2:6:2] or result = [x for x in one[2:6:2]]	>>> print(result) ['c', 'e']
Merge two lists into {:}	one = [1, 2, 3, 4, 5] two = ['a', 'b', 'c', 'd', 'e'] hm = dict([(one[i], two[i]) for i in range(len(one))]) or hm = {one[i]: two[i] for i in range(len(one))}	>>> print(hm) {1: 'a', 2: 'b', 3: 'c', 4: 'd', 5: 'e'}
Moderate {:}	old_stock = {'water': 1.42, 'cheese': 2.5, 'milk': 2.0} price = 0.76 correction = {item: value*price for (item, value) in old_stock.items()}	>>> print(correction) {'water': 1.0792, 'cheese': 1.9, 'milk': 1.52}
Simple value operation (λ fn)	squared = lambda x: x ** 2	>>> print(squared(5)) 25
Multiple value operation (λ fn)	value = lambda x, y: x + 2 - y	>>> print(value(2,1)) 3