Untitled

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In [7]: # List Comprehension - applying same operation over a list

In [8]: x = [1,2,3,4,5]

In [9]: lst=[num**2 for num in x]

In [10]: lst

Out[10]: [1, 4, 9, 16, 25]

In [11]: # Map - applying the same external function over a list

In [12]: def times2(toDo):
             return toDo*2

In [13]: map(times2,x) #gives just address, need to be broadcasted by list (same issue for map

Out[13]: <map at 0x7fc14801f5f8>

In [14]: list(map(times2,x))

Out[14]: [2, 4, 6, 8, 10]

In [ ]: # Lambda - applying inline function over a list

In [15]: list(map(lambda num:num*2, x))

Out[15]: [2, 4, 6, 8, 10]

In [17]: # Filter - runnilg lambda function for filtering on a condition

In [19]: list(filter(lambda num:num%2==0, x))

Out[19]: [2, 4]

In [20]: # Zip - putting to lists in a list of tuples of couples

In [21]: a=["A","B", "C"]

In [23]: b=[1,2,3,4]
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In [44]: zipped=zip(a,b)

In [45]: zipped #told you so, need broadcasting to list

Out[45]: <zip at 0x7fc14802f388>

In [46]: list(zipped) #no 4 included, and yet no error

Out[46]: [('A', 1), ('B', 2), ('C', 3)]

In [27]: # Tuple unpacking - how-to

In [49]: tupled_list = [(1,2),(3,4),(5,6)]

In [51]: for a,b in tupled_list:
             print(a)

1
3
5
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