iter-tools2

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In [18]: import itertools as it
         # https://www.geeksforgeeks.org/iterator-functions-python-set-2islice-starmap-tee/

In [19]: li = [2, 4, 5, 7, 8, 10, 20]
         t_list = [ (1, 10, 5), (8, 4, 1), (5, 4, 9), (11, 10 , 1) ]

In [20]: # islice(iterable, start, stop, step)
         # selectively prints the values mentioned in its iterable container

         print (list(it.islice(li,1, 6, 2)))

[4, 7, 10]

In [21]: # starmap(func., tuple list)
         # returns the value according to the function from each tuple of list.

         print (list(it.starmap(max,t_list)))

[10, 8, 9, 11]

In [22]: # takewhile(func, iterable)
         # opposite of dropwhile(), it prints the values till the function returns false for 1

         print (list(it.takewhile(lambda x : x%2==0,li )))

[2, 4]

In [23]: # tee(iterator, count)
         # splits the container into a number of iterators mentioned in the argument.

         itr_li = iter(li)
         tee_li = it.tee(itr_li, 3)                    # Here "li" can also be used insted of "itr_

         for i in tee_li:
                 print (list(i))
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[2, 4, 5, 7, 8, 10, 20]
[2, 4, 5, 7, 8, 10, 20]
[2, 4, 5, 7, 8, 10, 20]
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In [24]: # zip_longest(iterable1, iterable2, fillval.)
         # prints the values of iterables alternatively in sequence. If one of the iterables i.

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print (list(it.zip_longest('loonngg','short',fillvalue='-' )))
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[('l', 's'), ('o', 'h'), ('o', 'o'), ('n', 'r'), ('n', 't'), ('g', '-'), ('g', '-')]
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