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EXTRA EXTRA

1. Exercices

All exercises must be performed by means of the functions or methods requested (more complex structures are optional):

1. Write a Python program to triple all numbers of a given list of integers. Use Python map

2. Create a function that takes a list of digits and returns the number they correspond to. For example [1,2,3] corresponds to the number one hundred twenty-three (123). Use the reduce function.

3. Write a Python program to listify the list of given strings individually using Python map. Listify means to create a list with each character:

   Input: `['Red', 'Blue']`

   Output: [[‘R’, ‘e’, ‘d’] , [‘B’, ‘l’, ‘u’, ‘e’]]

   ```
   color = ['Red', 'Blue', 'Black', 'White', 'Pink']
   ```

4. Create a function that returns the words from a list of words that start with a specific letter. Use the filter function. The function must be called as:

   ```
   filter_words([Dog,'Cat','Ball','Apple','Book','Python'], 'B')
   ```

5. Write a Python program to add (element to element) three given lists using Python map and lambda functions.

   ```
   nums1 = [1, 2, 3]; nums2 = [4, 5, 6]; nums3 = [7, 8, 9]
   ```

6. Make a function that takes a list and returns a dictionary containing the values of the list as the key and the index as the value. Use the enumerate function.

7. Make a function that returns the count of the number of elements in the list whose value is equal to its index. Use the enumerate function. Execute the function as:

```
count_match_index([0,2,2,1,5,5,6,10])
```

8. Make a function that takes a list comprehension to return a list of equal length, where each value is the two strings of L1 and L2 concatenated with a connector between them. Example: Lists: ['A', 'a'] ['B','b'] Connector: '-' Output: ['A-B'] ['a-b']. Use the zip function.

9. Write a Python program to create a list containing the power of said number in bases raised to the corresponding number in the index using Python map.

   pow() is given to map two list objects, one for each base and index parameter.

```
bases_num = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]

index = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```