

Python Homework Loops, Lambda Functional Operators

WEEK 1



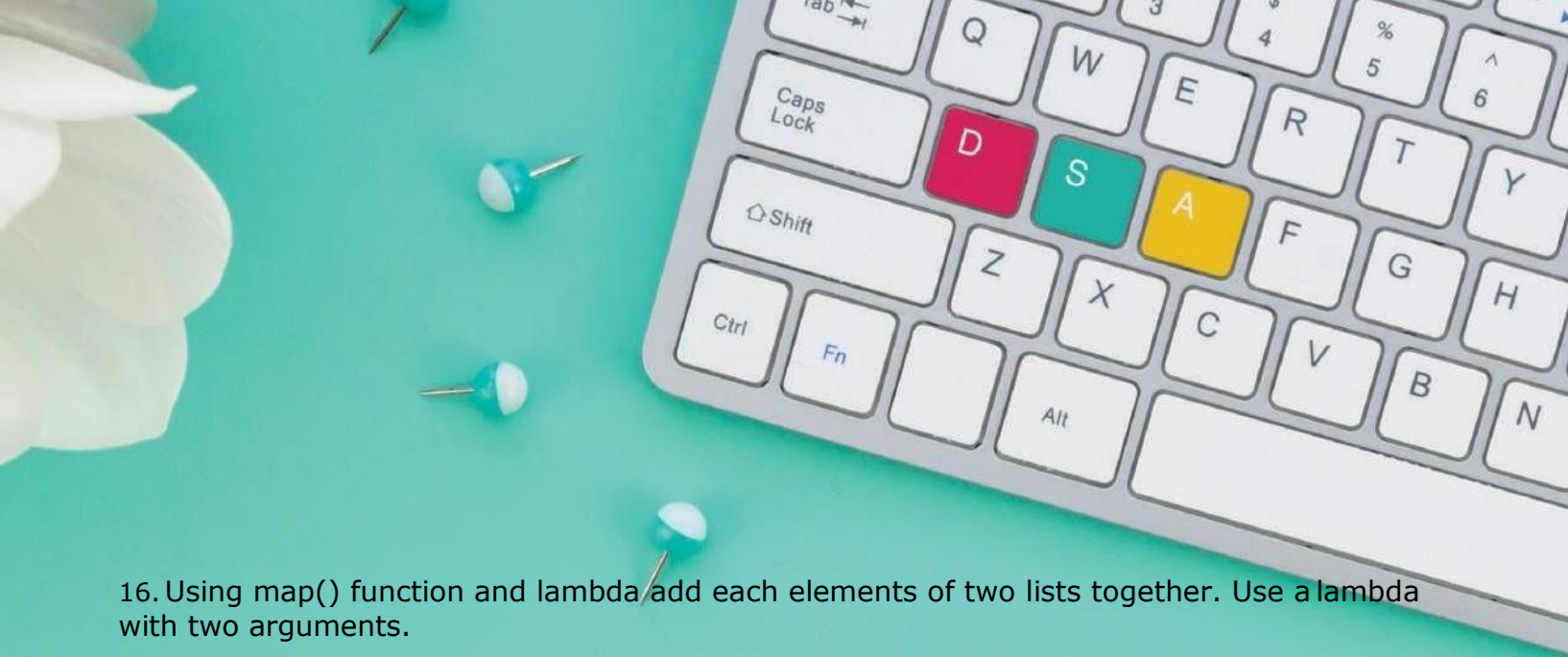
Data Science
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You are asked to provide answers for the following questions:

1. Print First 10 natural numbers using while loop.
2. Display -10 to -1 using for loop.
3. Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.
4. Calculate the sum of all number between 1 and 111.
5. Reverse the following list using for loop:
`list1 = [10, 20, 30, 40, 50]`
6. Write a Python program to find those numbers which are divisible by 7 and 5, between 1500 and 2700 (both included).
7. Display a message "Done" after successful execution of for loop.
8. Write a Python program to create a lambda function that adds 15 to a given number passed in as an argument, also create a lambda function that multiplies argument x with argument y and print the result.
9. Write a Python program to square and cube every number in a given list of integers using Lambda.
10. Write a lambda function that returns takes x as parameter and returns x+2. Then assign it to a variable named L.
11. Write a function which takes two arguments: a and b and returns the multiplication of them: a*b. Assign it to a variable named f.
12. Write a Python program to add two given lists using map and lambda.
13. Write a map function that adds plus 5 to each item in the list.
14. Write a map function that adds "Hello, " in front of each item in the list.
15. Using map() function and len() function create a list that's consisted of lengths of each element in the first list.



16. Using `map()` function and `lambda` add each elements of two lists together. Use a `lambda` with two arguments.
17. Using `map()` , `lambda` and `count()` functions create a list consisted of the number of occurrence of letter: a.
18. Using `map()`, `lambda` and `count()` functions create a list consisted of the number of occurrence of both letters: A and a.
19. Using `filter()` function filter the list so that only negative numbers are left.
20. Using filter function, filter the even numbers so that only odd numbers are passed to the new list.
21. Using `filter()` and `list()` functions and `.lower()` method filter all the vowels in a given string.
22. This time using `filter()` and `list()` functions filter all the positive integers in the string.
23. Using `map()` and `filter()` functions add 2000 to the values below 8000.
24. Write a Python program to count the even, odd numbers in a given array of integers using Lambda.
25. Write a Python program to filter a given list whether the values in the list are having length of 6 using Lambda.
26. Write a Python program to find numbers divisible by nineteen or thirteen from a list of numbers using Lambda.
27. Using `zip()` function and `list()` function, create a merged list of tuples from the two lists given.
28. First create a range from 1 to 8. Then using `zip`, merge the given list and the range together to create a new list of tuples.
29. Using `zip` and `dict` functions create a dictionary which has its key-value pairs coming from `lst1` and `lst2`.
30. Using `zip`, `list` and `sorted` functions create a sorted list of tuples from `lst1` and `lst2`.