

CS Homework #16

map(lambda) and list comprehensions

Deadline: 2/9/2020, 9:00 pm. Save your code as lastname_homework16.py and submit on Edmodo. Please, run your code before submitting. If you get an error, try to fix it before submitting your homework. If you get help from anyone, please, make sure that you actually understand the solution.

See the posted class notes for the examples of using map, lambda, and list comprehension.

Task 1

Study posted homework 15 solutions for the problems that you did not complete. It is in your interest to understand the solutions! If you completed all problems in homework 15, skip this task.

Task 2

Use the following string: `mystr = "School Nova is awesome!"` How would you generate a list showing the number of characters in each word in the string? In other words, your result should be a list `[6, 4, 2, 8]`. Try to do this without using `map(lambda)` and list comprehension.

Task 3

Now complete Task 2 using the `map(lambda)` approach.

Task 4

Now complete Task 2 using the list comprehension approach.

Task 5

Create a list that contains all number between 0 and 100 which contain number 7. Use for loop and if statement to accomplish this task. Your list should look like this: `[7, 17, 27, 37, 47, 57, 67, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 87, 97]`.

Task 6

Complete Task 5 using the `filter(lambda)` approach. See class notes for an example of using `filter(lambda)`.