

CSCA20 - Lab 5

Dictionaries

Learning Objectives

In this lab, we're playing with dictionaries, and focusing specifically on how to do things that are difficult to do with lists, but easy with dictionaries.

Marks

Your TA will record your marks during the tutorial section. Part of your responsibility is to demonstrate your solutions to your TA accurately.

Arrived with pre-lab completed	/1
Showed up on time & worked through lab	/2
Successfully demonstrated working code	/1
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TOTAL	/4

Prelab

- Download the starter code, it consists of 3 functions and no global code, when you run it, nothing should happen
- Write some code to test out the functions. You don't need sophisticated input or error checking, but you should write some code that will run the functions with a variety of inputs, and print the return values and the lists to see if they're updated correctly

Lab

Nick was looking through Brian's solutions for Term Test #1, and commented that "These functions would be a lot easier to write and simpler if you used dictionaries". But Brian disagrees, he thinks that his code is just fine the way it is.

Your job is to see if Nick or Brian is correct. Re-implement the functions to use dictionaries instead of lists. The functionality should be the same, the only difference should be the inputs. You'll also need to update your testing code

Protip: Brian's lecture last week may be particularly helpful for one of the functions

Postlab

(This section will not be marked, but it's good practice if you finish the lab early or want to continue to work at home)

Hopefully you found that using dictionaries is much easier than lists for things like what we asked you to do in term test 1. Also, you hopefully found that breaking your code into functions will make your life easier

- Re-design the rest of your term test 1 solution to use dictionaries instead of lists. Breaking things up into helpful functions should wind up making everything simpler and cleaner, but also using dictionaries will simplify a lot of things.
- Hopefully you should find that you can now complete the term test in much less time, not only because of the use of dictionaries, but also using functions, and having a better understanding of the requirements