**HW 6C**

**Learning Experience**

Part 1:

The first part of the assignment was a good practice to get an introduction to dictionaries. The program was about to create students with their grades as dictionaries, and the goals was to calculate the average score of the class. First, we needed to create a list to store each dictionary student. In order to get the average of the class, we needed to create three functions. The first function **average()** takes a list of numbers and returns the total average of that list. The second function **get\_average()** passes a student dictionary to get his scores and calculate his average score. Finally, the **get\_class\_average()** takes a list that contains all students and calculate the average of each student to later user the **average()** function to calculate the average of all students. This gives one value which is the average score of all students in a class.

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Once I have the whole average of the class, I printed it out in a single print statement. The result I have gotten with only having the students Gary, Alice, Tyler was 83.8666666; however, I used the format() built-in function to format the float in a two decimal places. The result was finally 83.87.



Part 2:

The second part of the assignment I used the website <https://pythonguides.com/python-dictionary-append/>. The website explains some other useful ways to add data into a dictionary.

The first one is the **append()** which appends values to a key. If there is a value already store, the value will become a list and the new value will be added

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The second approach is to append lists to each key. By doing this, we can use the notation += to add up a list.

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The last approach is to convert a list to a dictionary with a default value. We can use the **dict.fromkeys()** built-in function to create a new dictionary from a list and create keys with a default value. The format is the following: **dict.fromkeys(nameOfTheList, 'a\_defaultValue\_for\_eachKey')**

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**Part 1 Test 1**

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**Part 2 Test 1**

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