Lab **Type**

Exercise 1.

Write a Python program that prints each item and its corresponding type from the following list.

Sample List:

datalist = [1452, 11.23, 1+2j, True, 'UIC', (0, -1), [5, 12], {"class":496, "section":'A'}]

Output: int, float, complex, bool, str, tuple, list, dict

Exercise 2.

Write a program that accepts a sentence from the keyboard, calculate and print out each unique character and its corresponding number of occurrences. Don't count spaces.

For example, if the input sentence is: *the world is beautiful!,* then the output should be the following:

{'t': 2, 'h': 1, 'e': 2, 'w': 1, 'o': 1, 'r': 1, 'l': 2, 'd': 1, 'i': 2, 's': 1, 'b': 1, 'a': 1, 'u': 2, 'f': 1, '!': 1}

Hint:
1) use index to get a character in a string
2) use dictionary to store characters and their corresponding values (# of appearance)