DAT-119 – Python 1

# Homework 8

As always, you need to write these programs *without searching online*. You can use the textbook, the Jupyter notebooks, conversations with your colleagues and me, and the approved resources; that’s all. If you get code from anywhere besides your own brain (*especially* if it comes from any approved outside resource or from reading ahead in the book), you need to cite the source in a comment.

Also, as always, **be sure to follow the style guide**, including turning in a plan with your code. Seriously, **don’t forget to plan before you code!**

1. Write a script that gets a sentence from the user and then uses a dictionary to summarize the number of occurrences of each letter. Ignore case, ignore blanks, and ignore punctuation. Display a two-column table of the letters (in alphabetical order) and their counts.

**Example program outputs:**

Give me a sentence, and I'll count the letters: *A quick brown fox jumps over the lazy dog*

a: 2 b: 1

c: 1 d: 1

e: 2 f: 1

g: 1 h: 1

i: 1 j: 1

k: 1 l: 1

m: 1 n: 1

o: 4 p: 1

q: 1 r: 2

s: 1 t: 1

u: 2 v: 1

w: 1 x: 1

y: 1 z: 1

Give me a sentence, and I'll count the letters: *Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.*

a: 7 b: 1

c: 4 d: 8

e: 11 g: 2

i: 11 l: 6

m: 6 n: 5

o: 10 p: 3

q: 1 r: 6

s: 6 t: 9

u: 6

(notice f, h, j, k, and v-z did not print in the second example, because they weren’t in the string)

1. Read **Chapter 8. (Not 7.)** Bring questions to class next week.