DAT-119 – Python 1

**Homework 10**

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!**

A couple of weeks ago we wrote a really nice todo list app. The problem is, a user has to start their todo list over every time they run the app, and they lose their list when they close it.

Let’s fix that.

Using your previous implementation of the todo list app (or if you aren’t happy with yours, you can use my solution), make the app read from and write to a file as needed to maintain the lists between sessions.

A fancy implementation of this would read/write to/from files *every time a change is made*, which would help keep the user’s data safe even if the program crashes. But an *entirely sufficient* implementation, for your first time maintaining persistent data in external files, is to read from the files when the app opens and write to the files when the user chooses to exit. I am OK with the sufficient implementation and only recommend the fancy implementation if you want to challenge yourself a bit. (And *only* after you have the sufficient implementation complete. Do it the easy way first; then try the harder way if you want to.)

Help me out: **call your todo file “todo\_app\_todo.txt” and your done file “todo\_app\_done.txt.”** If you only use one file (which I do not recommend), you can call it “todo\_app\_data.txt.” (Do not add your name or anything to the text file names; they’re great just like that.)

The first time the app runs, it will have to create the files. You can check to see if it’s the first time the app is running by looking for each file:

import os

# exists will be True if the file is there, False if not

exists = os.path.isfile('todo\_app\_todo.txt')

**To Turn In by next Wednesday:**

1. As always, upload your planning document and your .py file, via Blackboard, for the program specified above. (There is no need to send me your .txt files.)
2. Remember to have your initial project plan ready for class next week! There is also a place to turn it in, under “Things you’ll need all semester” -> “Final Project.”