LAB #8
Lists in Python &
Begin Assignment #7

Check your grades on BB to make sure they are accurate!!! If not, then contact the TAs or myself!!!! Remember, there is no lab during Thanksgiving Holidays.

You need to use the TAs office hours and class study sessions to get extra help in understanding the material and what is required from an assignment or lab!!!

1. In this course, all our labs involve paired programming. You do not have to keep the same partner for each lab, but you MUST work with someone in each lab, as specified in the student handout.

2. At this time, you need to pair with someone in the lab, and finish the rest of the lab as a pair.

Practice Lists in Python (2 pts):

3. Let’s make a list, which is mutable. If you need to, review Monday’s slides.
   - First, ask the user for the number of scores he/she will be entering.
   - Create an array to hold the scores and initialize all the elements to 0.
   - Then, prompt the user for all the scores.
   - Sort all the scores for the user and print the sorted list to the screen.
   - Sum all the scores, and print the average to the screen.

More Lists in Python (4 pts):

4. Write a python program that takes integer numbers from the user and adds them to a list of numbers, if the number isn’t already in the list. You cannot use the in/not in operator, index(), or insert() functions to accomplish the task.

   After you have created the list, then ask the user if they want to replace any values in the list. If they do, then get the value to find and the replacement value. Once again, do not use the in/not in operator or index() function to accomplish the task.

Write Assignment #7 get_initial_input() function (4 pts)

1. Since your Assignment #7 is a larger program, let’s begin by using incremental programming and write the first function of your program. Remember the
requirements: You must have a main function, i.e. `def main():`, which creates any variables you need for the program and calls other functions using variables created inside of the main function. The only call or variable creation you are allowed to have outside of main (or any other function) is the call to `main()`, at the very bottom of your program.

At this point, let’s implement the `get_initial_input()` based on your design. This function will do the following (and feel free to define and call other functions from inside `get_initial_input()`):

- Ask the user for the number of tests, assignments, quizzes, and labs in their course.
- Ask the user if there is a final with a separate weight from the tests above, e.g. a course has 2 tests, each weighing 12.5%, and 1 final weighing 15%.
- For each category having a number > 0
  - Prompt the user for the weighted percent, out of 100%, which should total 100% for all categories!!

Make sure you sign-up with a TA for demoing/explaining your Assignment #6 this week and Assignment #7 after Thanksgiving. This is how all assignments are graded in the course, and if you sign-up and do not make your appointment without rescheduling, then you will be penalized 50 points!!!