

CS 8 – Introduction to Computer Science
HOMEWORK 6
Print this form and write your answers on it.

SCORE: (out of 40)

Submit this homework (hardcopy) to class. DUE DATE is 03/05/18.

Name: _____

Umail: _____@umail.ucsb.edu

Perm ID Number: _____

Lab Time Circle one: 1 PM 2 PM 3 PM 4 PM

Based on Ch. 4 material. If you need more space to write your answers, feel free to use an extra blank page and attach it to this homework.

To answer some of the questions on this homework, it will be very helpful to have a computer system running Python version 3.x (e.g., 3.4.3) available to you.

Answer all the following questions on a separate sheet of paper that you staple to this one. All the answers must be in the form of correct Python code.

You have been given the following lists of students and their test scores:

```
names = ['joe', 'tom', 'barb', 'sue', 'sally']  
scores=[10, 23, 13, 18, 12]
```

1. (8 pts) Write a function `makeMixedList`, that takes **2 lists** and **returns 1 list** that combines the names with the scores, like this: `['joe', 12, 'tom', 23, ...etc...]`. Of course, this should work for any 2 lists that you give the function.
2. (10 pts) Write a function, `makeDictionary`, that takes the **2 lists** and **returns 1 dictionary** with the names as the keys and the scores as the values. Assign the result of `makeDictionary` to `scoreDict` which will be used in the exercises that follow.
3. (5 pts) Using `scoreDict`, find the score for `'barb'`.
4. (2 pts) What instruction(s) would you use to add a new person to the new dictionary, `'john'` and his score of 19?
5. (2 pts) Create a sorted list of all the scores in `scoreDict`.
6. (2 pts) Calculate the average of all the scores in `scoreDict`.
7. (2 pts) What instruction(s) would you use to update the score for `'sally'` to be 13?
8. (3 pts) Tom has just dropped this class. Delete `'tom'` and his score from `scoreDict`.
9. (6 pts) Print out a table of students and their scores with the students listed in *alphabetical order*.