**CS 110 HW#4A**

**Functions & Dictionaries**

1. Zelle 6.4. – sumN , sumNCubes

2. Zelle 6.10 – acronym. Note there is a typo in Zelle: Exercise 5 from Chapter 5 should read Exercise 4 from Chapter 5.

3. Zelle 6.11 - squareEach

4. Zelle 6.13 - toNumbers

5. Zelle 6.14 – compute sum of square of nums from a file

6. [Extra Credit] Write a program which uses a dictionary that reads in a file, gettysberg.txt , that I provide and which prints out the number of occurrences of each character in the file.

7. [Extra Credit] Write a program which uses a dictionary that reads in a file, gettysberg.txt, that I provide and which prints out the percent relative frequency of each letter. Percent relative frequency of a letter is defined as 100 times the number of times that letter occurs divided by the total number of letters. Compare the letter frequency you find from the file to that shown in <http://en.wikipedia.org/wiki/Letter_frequency> for the English language.