Homework #2

For all homework assignments, you are free to consult with others on concepts, but I expect the final code you turn in to be your own. If you are just learning programming for the first time, I would suggest you try to spend at least 30 min thinking about each problem before seeking assistance. Even then, the first few assignments may be very frustrating and time consuming, but if you don't practice the fundamentals now, you may be in real trouble later in the class. The only way to learn programming is by doing. There are many possible ways to do each problem. If you need my help, you can email at any time, or find me any time my office door is open (mornings are usually better). We will go over the solutions at the beginning of class, so homework must be turned in before the next class !

- x="abracadabra" Write a program to determine and print out a list of the unique letters in 'x'. eg "abcdr" (in any order).
- s="1 2 4 8 16 32" Write a program to convert 's' to a list of integers, multiply each one by 2, and print the resulting list.
- Ask the user to enter a 1-letter amino acid sequence, eg -"AAKDVKFGNDAGVKMLRGVNVLADAVKVTLGPKGRNVVLDKSF" Then count the number of each amino acid present in the sequence and print the results. Ignore whitespace, and accept either upper or lower-case letters.

To hand in your homework: For each problem, create a ".py" file containing the program that solves it. This should not be a Word doc, or a PDF, but a text file you could execute. Use comments to document your answer! Please send all solutions attached to a single email message with the subject "Homework 2". <u>sludtke@bcm.edu</u>