Assignment – 1

CS 170 Total Points: 100

Note: Only typed submissions are accepted. You are required to use the coding techniques you have learned in the first two chapters.

Each problem carries 20 points.

YOUR SOLUTIONS MUST BE YOUR ORIGINAL WORK.

1. Modify the chaos program so that the number of values to print is determined by the user. You will have to add a line near the top of the program to get another value from the user:

   n = eval(input('how many numbers should I print? "))

   Then you will need to change the loop to use n instead of a specific number.
2. Modify the chaos program so that it accepts two inputs and then prints a table with two columns similar to the one shown in section 1.8. (you will probably not be able to get the columns to line up as nicely as those in the example, and that's fine)
3. Modify the convert.py program with a loop so that it executes 4 times before quitting. Each time through the loop the program should get another temperature from the user and print the converted value.
4. Modify the futval.py program so that the number of years for the investment is also a user input. Make sure to change the final message to reflect the correct number of years.
5. (modify the futval.py program from the problem# 4 above) Suppose you have an investment plan where you invest a certain fixed amount every 5 years for the total of 15 years. In other words now you have 3 principal values, one for each 5 year term. The total principal input for the second 5 year term would be the output of the first 5 year term plus the extra investment the user is willing to do. And similarly the input for the third 5 year term would be the output of the second 5 year term plus the extra investment the user is willing to do.

   Inputs: 3 principal values, one each for the three terms

   3 interest rates (apr), one each for the three terms

   Output: total value of the investment after 15 years