CS 160 – Assignment 9

Problem Description:  
In this program we are going to explore a very elementary ‘database’ using Python. Your program should create and store a list of 20 student names and their corresponding scores. Then prompt the user to enter a student name and then display the student’s name along with his/her corresponding score. The user should be able to keep looking up student scores until he/she enters the single character ‘q’ to quit the program.

# Inputs

Your Python program should accept a name as input and keep asking for names until they enter ‘q’ to quit.

# Output

Your program should print the corresponding student’s name and score. Please see examples of output below.

# Approach

1. Start by entering and running the following Python code  
   names = ['Jim', 'Sarah', 'Jason', 'Lynne', 'Ginny', 'Joe', 'Susan']  
   print (names)  
   You should see that Python displays your list of names.
2. Now see what happens when you change the second line to  
   print (names[0] + ‘, ‘ + names[1])  
   You should see that Python prints the first two names. It is worth noting that names[0] displays the first name in the list and names[1] displays the second name.
3. Now write a loop to display all the names in the list, one per line. Your program will look like this  
   for i in range (0, 7):  
    print (...)  
   where you have to fill in the ...
4. Now add a second list to your program comprising integers, which will represent the scores the students got on a particular test:  
   scores = [88, 92, 95, 84, 85, 92, 89]  
   The idea is that n-th score in the score list corresponds to the n-th student in the names list.
5. Modify your program in Python to prompt the user to enter a student name and then display the student’s name along with his/her corresponding score.

========== RESTART: C:/Temp/list.py =============  
Please enter the name: Ginny  
Ginny scored 85

>>>

1. Finally, extend your program so the user can keep looking up student scores until he/she enters the single character ‘q’ to quit the program.

# Examples of output

Python 3.5.2 (v3.5.2:4def2a2901a5, Jun 25 2016, 22:01:18) [MSC v.1900 32 bit (Intel)] on win32

Type "copyright", "credits" or "license()" for more information.

>>>

=================== RESTART: C:/Temp/a09.py =====================  
Please enter the name: Ginny

Ginny scored 85

Please enter the name: Susan

Susan scored 89

Please enter the name: Jim

Jim scored 88

Please enter the name: q

# References:

Refer to this pdf file (link [here](http://anh.cs.luc.edu/python/hands-on/3.1/Hands-onPythonTutorial.pdf)) sections:

* 1.6 Variables and Assignment page 17
* 1.9.4 Program Documentation String page 23
* 1.10 Input/output page 23.
* 3.1.5 Multiple Tests and if-elif statements page 119
* 3.3.1 Simple while Loops page 141
* 1.13.5 Simple Repeat Loop (for loops) page 50
* 2.1.2 String Indices page 73
* 1.13.2 The list Type page 46

Also check out this [link](http://learnpython.org/) for more tutorials.