CS8, FALL 2015, UCSB

hw3: (Based on Miller/Ranum, Chapters 1-2-3) No. of questions: 6. Total No. of pts: 30

Accepted: On paper, beginning of your lab session on Tuesday, October 20. You will need to print this homework and fill it in legibly.

Name: (1 pts) _____________________________________________________________

UCSBNetID (1 pts) ________________________________________________________

Lab Section (1 pts)
Circle one:   Tue. 9:00am  Tue. 10:00am  Tue. 11:00am  Tue. 12:00pm

0. (1 pts) What is the name of your CS8 lab/project partner? Note that your partner must be in the same lab section as yourself and you both must put each other for this to work.

Partner name: _________________________________________________________

To answer the questions on this homework, it will be helpful to have a computer running Python. You can either use the computers in CSIL, or your own machine.

1. If the name "Leila" were stored in a variable name in Python, you could use an index—i.e. a number inside square brackets such as [1], [2], or [-3] to pull out particular letters of the name, such as name[1], name[2], name[-3], etc.

a. (1 pts) What do you write to assign the variable name to the value "Leila"?

b. (1 pts) Suppose you type the assignment statement in (a) at the >>> prompt.
What would be result if you then type name[-2] at the >>> prompt?

c. (1 pts) (continuing....) What would be the result for name[2]?
d. (4 pts) What are *two* expressions you could write that involve filling in the [ ] in
\texttt{name[ ]} with some number, that would result in returning the middle letter in "Leila",
that is the "i"?
(Hint: one uses a positive index, and the other uses a negative index)

2. (4 pts) Set the variable \texttt{movie} to the string \texttt{Prizzi’s Honor}. The single quote is part
of the string.

3. (1 pts) Section 3.2.3 talks about the \texttt{index} operator. What symbol is used for the
index operator?

4. (1 pts) Section 3.2.4 talks about the \texttt{slice} operator. What symbol is used for the
slice operator?

5. If you write this at the Python shell prompt:

\begin{verbatim}
>>> team = "Lakers"
\end{verbatim}

then type each of the following at the shell prompt, what will the result be?

a. (1 pts) >>> team[0]

b. (1 pts) >>> team[0:2]

c. (1 pts) >>> team[-1]

d. (1 pts) >>> team[1:3]
e. (1 pts) >>> team[0:9]

f. (1 pts) >>> team[:]

6. (7 pts) Write a function isLong(myString) that takes a string myString as a parameter, and returns True if the length of that string has more than 7 characters, and returns False if it has 7 or fewer characters.

Test cases:

- isLong("Frankenstein") should return True
- isLong("Parsifal") should return True
- isLong("pirate") should return False
- isLong("Shelley") should return False