Computer Science 1 — CSci 1100
Lab 2 — Strings and String Functions

Lab Overview

In this lab, you will write a series of short Python programs to manipulate strings, read input, and output greetings. Start by making a folder for Lab 2 in your Dropbox where you keep your Computer Science 1 material. Then start working on the following four checkpoints. This is one of the few — perhaps only — labs of the semester that has four.

Note that the string techniques that you practice in this lab are also used and expanded upon in Homeworks and lecture exercises. Pay attention and ask questions!

The mode of submission is similar to Lab 01.

Checkpoint 1: Framing Spam

Write a short (three line) Python program that prints

```
**********
** spam **
**********
```

In doing so, make sure you use

```
print('*' * 10)
```

rather than

```
print('**********')
```

This will come in handy when you modify your code in later checkpoints. Save the program in a file called `check1.py`. Show a TA or mentor your program output. Congratulations, you are done with Checkpoint 1.

Checkpoint 2: Framing Four-Letter Input

Copy your program from Checkpoint 1 into a new program, `check2.py`, and open it in Spyder. Add code to use the `input` function discussed at the end of Lecture 3 to read a four letter word into a string. Modify your code to output this word instead of `spam`. The output when you run your program should look like

```
Enter a four letter word: eggs
**********
** eggs **
**********
```

When you have this working, show it to a TA or mentor. Congratulations, you have completed Checkpoint 2.

Checkpoint 3: Framing Any Word

Be sure you save `check2.py` and make a copy of it called `check3.py`. You will modify this for Checkpoint 3.

If the user types a word that is either longer or shorter than four letters, your output will look a bit funny. For example,

```
Enter a four letter word: inquisition
**********
** inquisition **
**********
```

Hence, in this checkpoint, you must modify your code to ask for a single word of any length and then frame it properly. To do so, you need to use the string `len` function to help you decide how many `'*'` to output. The result of running your program should look like

```
Enter a word: inquisition
****************
** inquisition **
****************
```

When you have this working, show it to a TA or mentor. Congratulations, you have completed Checkpoint 3.

Checkpoint 4: Framed Greeting

Please come to lab for the last checkpoint.