Computer Science 1 — CSci 1100
Lab 2 — Strings and String Functions
Fall 2018

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 HW 1 and your lecture exercises. Pay attention and ask questions!

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 the TA or a mentor both the program and the result of running it. 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 the TA or a 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.