

SI Session 10/05

By Cody Ptacek

Session Opener: 3:2:1

Activity:

- Write down **3** things that you feel you know well enough to teach.
- Write down **2** things you feel you are struggling to understand.
- Write down **1** potential test question.

Go around the room/your table and look at others' 3:2:1's.

- Does anybody have questions on a topic you could teach?
- Do you know the answer to their question?

Activity: Conceptual Questions

Question 1:

What will using the `list()` function on a string produce?

Question 2:

What will using the `str()` function on a list produce?

Question 3:

What are three of the iterables that we have dealt with so far in this class?

Question 4

What will the following logical statement evaluate to:

`not(7 > 3 and (5 != 8 or False))`

Activity: Functions

Task

- Write a function that takes a list of words and a string as parameters.
- Return the percent of the words in the list that are longer than the provided word.

Example Call:

```
my_list = ['dog', 'cat', 'shark', 'giraffe', 'goldfish']  
print(percent_longer(my_list, 'goat'))
```

Output:

```
0.60000000
```

Activity: File IO

Task

- Write a program that reads in a series of quotes from a txt file.
- Each quotes occupies one line of the file.
- Have the program print the longest quote by number of words.
 - You don't need to worry about punctuation.
 - In the event of a tie, pick the first quote you encountered of the longest length.

example.txt

Four score and seven...

We the people of the United States, in order to...

A man a plan a canal panama

Output

We the people of the United States, in order to...

Activity: Loops

Task

- Get a list of 100 words from a user.
- Iterate through the list, counting the total number of 'e's in all the words in a case insensitive way.
- Print the number of 'e's

5 word example output

Type word 1: **I**

Type word 2: **love**

Type word 3: **big**

Type word 4: **cuddly**

Type word 5: **elephants!**

Total # of 'e's: 3

Session Closer

Construct a Study Plan

- What topics did you struggle with during this session?
- What resources do you have available to learn more about those topics?
- When are you going to take time to study?
- How much time would you like to spend studying before your midterm?
- What notes, questions, topics, etc will you study?