

LAB #10

Wrapping Up the Fall Quarter

Check your grades on Canvas to make sure they are accurate!!! We do not have more labs, and you need to make sure your grade is correct!!!

Make sure you have Assignments #1 - #9 graded because this is the last week the TAs will hold office hours for grading or helping anyone!!! We will grade Assignment #10 during finals week. You do not need to demo Assignment #10!!!

You can pair with someone or do this on your own.

These are two example problems are taken from a list of 46 simple python exercises:

http://www.ling.gu.se/~lager/python_exercises.html

If you finish early try more of these on your own. ☺

(5 pts) Code the design/pseudocode

```
# Description: This is where execution of the program begins. The main function will get
# the number of verses to sing as a command line argument, and then sing the song
# with that many verses.
```

```
# Parameters: none
```

```
# Preconditions: none
```

```
# Postconditions: none
```

```
# Return: none
```

```
main()
```

```
    Make sure there is a command-line argument
```

```
    Read the number of verses as a string
```

```
    if the string is an integer, i.e. send string to is_positive_int()
```

```
        send the converted integer to sing_song()
```

```
    else
```

```
        print an error message
```

```
# Description: This function checks to see if a string is an int
```

```
# Parameters: s
```

```
# Preconditions: s is a string
```

```
# Postconditions: none
```

```
# Return: bool, true if it is an int and false otherwise
```

```
is_positive_int(s)
```

```
    for all the characters in s
```

```
        if (the character is not between '0' and '9' inclusive)
```

```
            return false
```

```
    return true
```

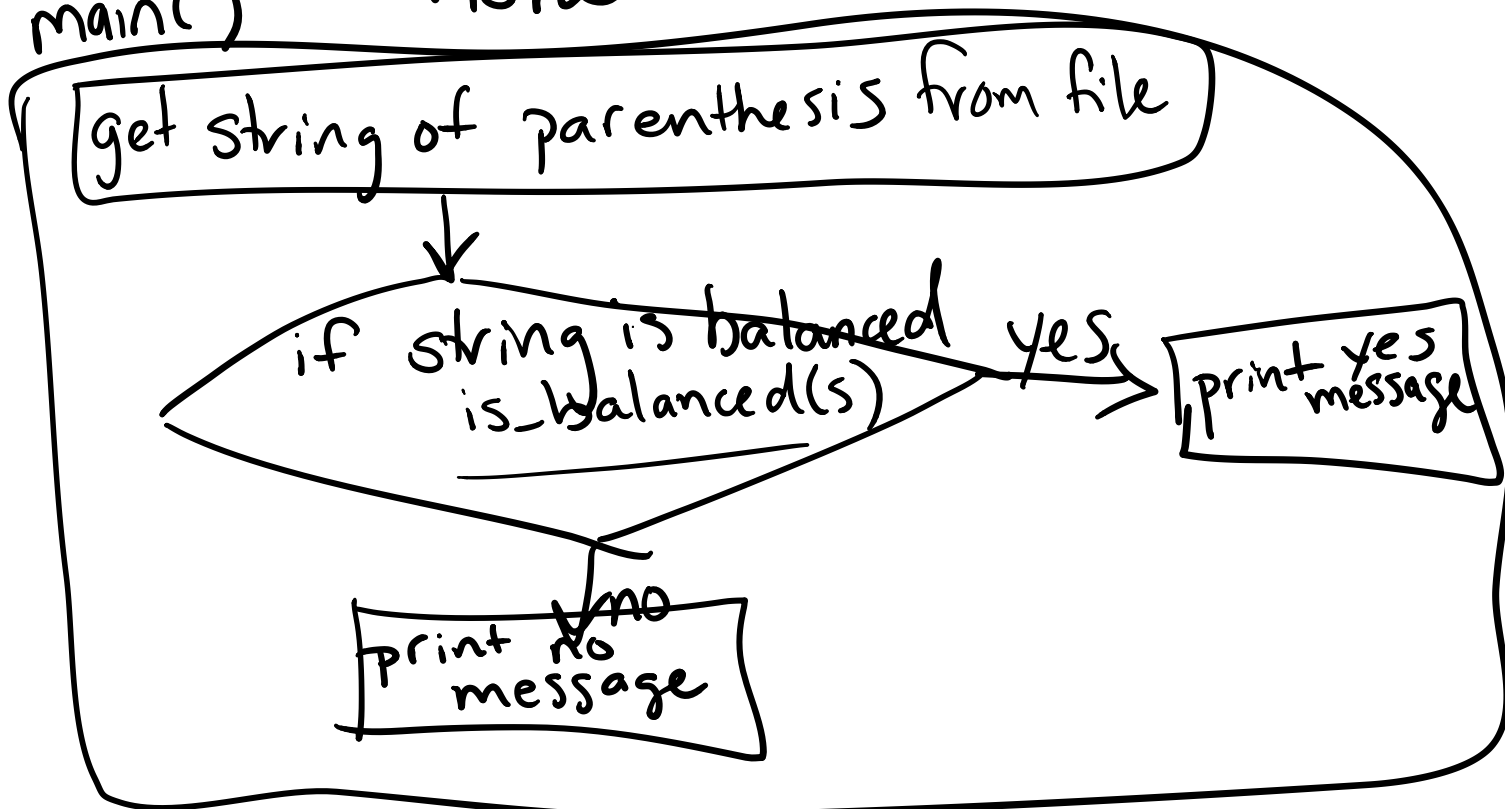
```

# Description: This function sings the song, "99 bottles of beer on the wall", but it starts
# at a specific verse/number.
# Parameters: n
# Preconditions: n is an integer value
# Postconditions: none
# Return: none
sing_song(n)
    while n verses is greater than 0
        print "n bottles of beer on the wall. Take one down, pass it around. n-1
        bottles of beer on the wall."
        decrement n by 1

```

(5 pts) Code the design/flowchart

Description - this is where execution begins and it gets a string from the user and checks if the string is balanced parenthesis
Parameters, preconditions, post conditions, + return:
main() none



Description - checks to see if string is balanced parenthesis. For example:
(), (() () , () () are balanced

(,) ,) (,) (())) , ()) (are not balanced

Parameters: s

Pre conditions: none

Post conditions: none

Return: True if string is balanced parenthesis
False otherwise

is-balanced(s)

