Lab 3 - Print Triangles

Goals

- Familiarity with variables
- Familiarity with if and if/else statements
- Learn how to use the random library
- Learn how to cast variables as different data types
- Understanding of Python input and output

Setup

• When you rename the skeleton code, use the following naming convention

```
ITP115_l#_lastname_firstname
```

(replace # with this lab number)

• Your new file must begin with comments in the following format (replace the name and email with your actual information):

```
# Name
# ITP 115, Fall 2016
# Lab L^ (replace ^ with this lab number)
# USC email
```

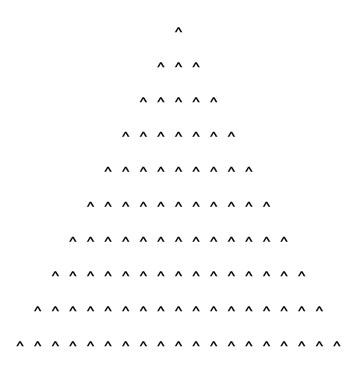
Requirements

Your program must perform the following:

- Write a program that uses a **while** loop to produce a triangle.
- Triangle should be 10 lines tall
- In order to **center** the triangle, you will need to include initial spaces on each line
- Bottom row of triangle has 19 ^ symbols
- Between every ^ symbols is a single **space**
- Hint #1:
 - You can use the * to repeat strings. For example, print("hello" * 4)
 will print hellohellohello
- Hint #2:
 - You need at least one while loop to control how many rows to print
 - You will most likely need two counters:

- numSpaces to track initial spaces on each line
- numSymbols to track how many symbols are printed on each line

Sample Output



Here is an alternate way to visualize the triangle. The initial spaces are represented as + symbols and the inner spaces are represented as _

^^_^_^_^_

Deliverables and Submission Instructions

- A compressed folder (zip file) containing you Python code. This can be done by:
 - a. Windows (you must find the folder on your computer—this can't be done within *PyCharm*):
 - i. Select your lab file
 - ii. Right click
 - iii. Send to ->
 - iv. Compressed (zipped) folder
 - v. Rename this folder with the following name:

ITP115_l#_lastname_firstname

(replace # with this assignment number)

- vi. Submit this zipped folder through Blackboard
- b. OSX (you must find the folder on your computer—this can't be done within PyCharm):
 - i. Select your lab file
 - ii. Right click
 - iii. Compress 1 item
 - iv. Rename this folder with the following name:

ITP115_l#_lastname_firstname

(replace # with this assignment number)

v. Submit this zipped folder through Blackboard