# Lab 4.03 - Nested For Loops

## Instructions

In this lab we will be drawing images using nested for loops.

For each of the following problems, you will write a function that will draw the desired output. You may use an extra function if you find it helpful.

1. Write a function, draw\_7, to draw the 7x7 square (shown below)

\* \* \* \* \* \* \*  
 \* \* \* \* \* \* \*  
 \* \* \* \* \* \* \*  
 \* \* \* \* \* \* \*  
 \* \* \* \* \* \* \*  
 \* \* \* \* \* \* \*  
 \* \* \* \* \* \* \*

1. Write a function stars\_and\_stripes, that will draw a 3 sets of rows. 1st a row of 7 stars followed by a row of 7 dashes (shown below)

\* \* \* \* \* \* \*  
 - - - - - - -  
 \* \* \* \* \* \* \*  
 - - - - - - -  
 \* \* \* \* \* \* \*  
 - - - - - - -

1. Write a function, increasing\_triangle that will print out the following:

1  
 1 2  
 1 2 3  
 1 2 3 4  
 1 2 3 4 5  
 1 2 3 4 5 6  
 1 2 3 4 5 6 7

1. Write a function, vertical\_stars\_and\_stripes that will print out the following:

- \* - \* - \* -  
 - \* - \* - \* -  
 - \* - \* - \* -  
 - \* - \* - \* -  
 - \* - \* - \* -  
 - \* - \* - \* -  
 - \* - \* - \* -

## Bonus

Use a function to create your own pattern or drawing. Some possible pattern ideas:

1. Write a function that will print a border around a 7x7 square (shown below)

\* \* \* \* \* \* \* \*  
 \* - - - - - - \*  
 \* - - - - - - \*  
 \* - - - - - - \*  
 \* - - - - - - \*  
 \* - - - - - - \*  
 \* - - - - - - \*  
 \* - - - - - - \*  
 \* \* \* \* \* \* \* \*

1. Write a function that will print the following balanced\_triangle.

1  
 1 2  
 1 2 3  
 1 2 3 4  
 1 2 3 4 5  
 1 2 3 4 5 6  
 1 2 3 4 5 6 7  
 1 2 3 4 5 6  
 1 2 3 4 5  
 1 2 3 4  
 1 2 3  
 1 2  
 1

1. Write a function that will print the following triangle.

\*  
 \*\*\*  
 \*\*\*\*\*