

# 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)

```
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```

2. 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)

```
* * * * *
- - - - -
* * * * *
- - - - -
* * * * *
- - - - -
```

3. Write a function, `increasing_triangle` that will print out 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
```

4. Write a function, `vertical_stars_and_stripes` that will print out the following:

```
- * - * - * -
- * - * - * -
- * - * - * -
```

```
- * - * - * -
- * - * - * -
- * - * - * -
- * - * - * -
```

## Bonus

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

```
* * * * *
* - - - - *
* - - - - *
* - - - - *
* - - - - *
* - - - - *
* - - - - *
* * * * *
```

2. 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
```

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

```
  *
 ***
*****
```