

Exercises: Level 1

1. Iterate 0 to 10 using for loop, do the same using while loop.
2. Iterate 10 to 0 using for loop, do the same using while loop.
3. Write a loop that makes seven calls to print(), so we get on the output the following triangle:

```
#  
##  
###  
####  
#####  
#####  
#####  
#####
```

4. Use nested loops to create the following:

```
# # # # # # # #  
# # # # # # # #  
# # # # # # # #  
# # # # # # # #  
# # # # # # # #  
# # # # # # # #  
# # # # # # # #  
# # # # # # # #
```

5. Print the following pattern:

```
0 x 0 = 0  
1 x 1 = 1  
2 x 2 = 4  
3 x 3 = 9  
4 x 4 = 16  
5 x 5 = 25  
6 x 6 = 36  
7 x 7 = 49  
8 x 8 = 64
```

$$9 \times 9 = 81$$

$$10 \times 10 = 100$$

6. Iterate through the list, ['Python', 'Numpy', 'Pandas', 'Django', 'Flask'] using a for loop and print out the items.
7. Use for loop to iterate from 0 to 100 and print only even numbers
8. Use for loop to iterate from 0 to 100 and print only odd numbers

Exercises: Level 2

1. Use for loop to iterate from 0 to 100 and print the sum of all numbers.

The sum of all numbers is 5050.

2. Use for loop to iterate from 0 to 100 and print the sum of all evens and the sum of all odds.

The sum of all evens is 2550. And the sum of all odds is 2500.

Exercises: Level 3

1. Go to the data folder and use the [countries list](#) file. Loop through the countries and extract all the countries containing the word *land*.
2. This is a fruit list, ['banana', 'orange', 'mango', 'lemon'] reverse the order using loop.
3. Go to the data folder and use the [countries list](#) file.
 1. What are the total number of languages in the data
 2. Find the ten most spoken languages from the data
 3. Find the 10 most populated countries in the world