

Lesson 01 - Introduction to Python

First Python Code

Characters

A character is any single item that can be printed to the screen. This can be letters, Numbers, or any other symbol the computer can display. Characters must be surrounded by “ ” or it will not display properly

Strings

A string is any collection of 2 or more characters in a row. For Example, this sentence is a string made up of letters, Spaces and symbols such as the comma and full stop.

Functions

A function is what a command is known as in Python. For Example, the function to place text on to the screen is the print command and is structured as follows

```
1 print("This is the print command")
```

This will place the sentence *This is the print command* to the screen.

Note the structure of the brackets and inverted commas to print a string to the screen.

Exercises

Exercise 01

Task 01

Using one print function, produce this output

```
1 Hello world.
```

Task 02

Using two print functions, produce this output

```
1 Question. what do you call it when you have your mom's mom on  
  social media?  
2 Answer. Instagran
```

Task 03

Using one print function and this code `\U0001f600`, produce this output.

```
1 😊
```

Hint Even though this is a smiley face, you will still need to print the code like a string

Exercise 02

Task 01

Using one print function, produce this output

```
1 I am learning how to use the newline and tab special characters.
```

Task 02

Modify this code to replicate the output shown, using only one print function and the newline special character `\n`.

```
1 print("My favourite animal")  
2 print("is the giraffe!")
```

```
1 My favourite animal
2 Is the giraffe!
```

Task 03

Modify the Following Code using the tab command to create the output below

```
1 print("I know how to use the tab special character!")
```

```
1 I      know      how to   use the tab special character.
```

Task 4

Using one print function, produce this output using the **newline** and **tab** special characters

```
1 Today I learned.
2     How to use
3         The newline
4             and tab
5                 special characters
```

Exercise 03

Task 01

Using one print function, produce this square using the newline and tab special characters.

```
1 *****
2 *           *
3 *           *
4 *           *
5 *****
```

Task 02

using just 1 print command recreate the shape below

```
1      *
2     *  *
3    *    *
4   *      *
5  *****
```

Exercise 04

Task 01

Using one print function, produce this square inside a triangle with the word “Python!” inside of the square. Achieve this by using the newline and tab special characters.

```
1      *
2     *  *
3    *  *  *  *
4   *  *PYTHON!*  *
5  *  *  *  *  *
6 *  *  *  *  *  *  *  *
7
```

Task 02

Using one print function, produce this circle. Achieve this by using the newline and tab special characters.

```
1      *****
2     **          **
3    **          **
4    **          **
5    **          **
6    **          **
7     **          **
8      *****
```