LESSON 01 - INTRODUCTION

We will use Thonny for python coding. If you do not have Thonny installed on your account you can install it by going to this link: https://thonny.org/

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

ESCAPE CHARACTERS

Escape characters are characters that are generally used to perform certain tasks and their usage in code directs the compiler to take a suitable action mapped to that character.

\n ---> prints a newline

\t ---> prints a tab space

\' ---> prints a single quote

\" ---> prints a double quote

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

```
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.

PRACTICE CODE

EXERCISES

EXERCISE 01

TASK 01

Using one print function, produce this output

```
Hello world.
```

TASK 02

Using two print functions, produce this output

```
Question. How do you find out the weather when you're on vacation?
Answer. Go outside and look up
```

TASK 03

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

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

```
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.

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

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

TASK 03

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

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

```
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

```
Today I learned.
      How to use
            The newline
                  and tab
                        special characters
```

EXERCISE 03

TASK 01

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

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

TASK 02

using just 1 print command recreate the shape below

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

EXERCISE 04

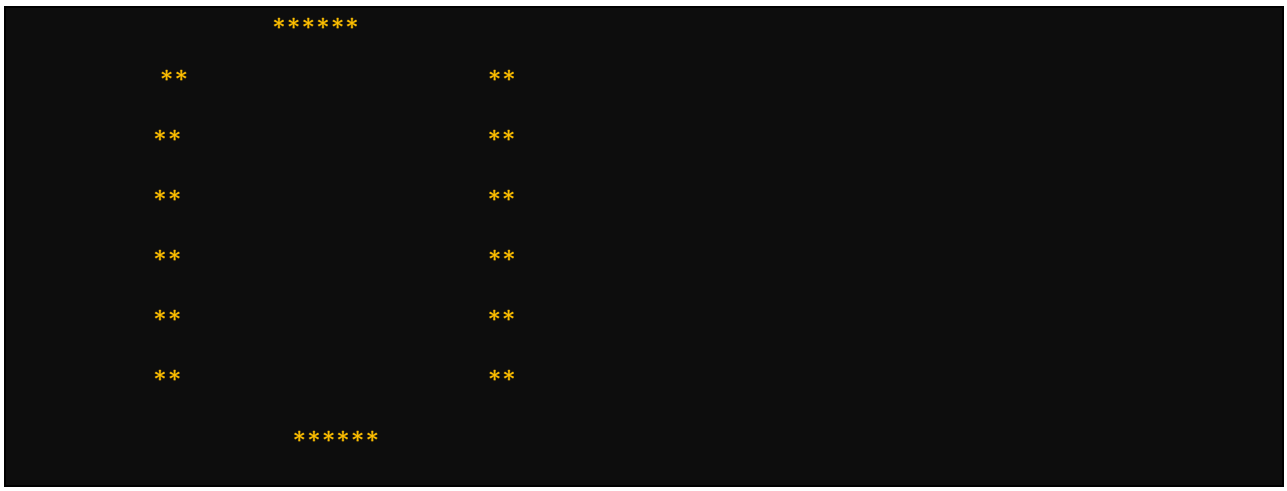
TASK 01

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.

```
                              *
                        *           *
                  *     *     *     *     *
            *           *  PYTHON!  *           *
      *                 *           *                 *
*     *     *     *     *     *     *     *     *     *     *
```

TASK 02

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



TASK 03

Replicate the output shown, using only one print function and the newline special character \n , tab special character \t and the escape character for quotes \' or \"

```
Here's a single-quote escape
	This is an "escape" of a double-quote
```