## PYTHON TO JAVASCRIPT!!! - PART 1

## **Instruction**

- ☐ You need to complete the XXXXX part with the JAVASCRIPT equivalent code
- ☐ You can work in team or by yourself
  - Search on internet
  - o or read the 1-Javascript Cheat Sheet.pdf
  - o <a href="https://www.w3schools.com/js/default.asp">https://www.w3schools.com/js/default.asp</a>
- ☐ **IMPORTANT**: you need to test the code before writing it !!!

	PYTHON	JAVASCRIPT
COMMENTS	# this is a comment in python	SINGLE LINE COMMENT - // MULTI LINE COMMENT - /* */
	for n in range( <number>):</number>	
LOOPS	<pre>for n in range (3):     print("hello") &gt;hello &gt;hello &gt;hello</pre>	<pre>for (let n = 0; n &lt; 3; n++) {     console.log("hello"); }</pre>
	<pre>for n in range(start, end)  for n in range (2,5):     print(n) &gt;2 &gt;3 &gt;4</pre>	<pre>for (let n = 2; n &lt; 5; n++) {    console.log(n); }</pre>
	<pre>for value in array: numbers = [5, 6, 7] for value in numbers:     print(value) &gt;5 &gt;6 &gt;7</pre>	<pre>let numbers = [5,6,7]; for (let value of numbers) {     console.log(value); }</pre>
	<pre>while <boolean> x = int(input()) while x != 5:     print ("try again") x = int(input())</boolean></pre>	<pre>let number = prompt("Enter Number"); while (number != 5) {     console.log("try again")     number = prompt("Enter Number") }</pre>

```
IF/ ELIF / ELSE :
            if <BOOLEAN>:
                                                        let x = 5;
               < instructions>
                                                        if (x < 5 \&\& x > 6) {
             elif <BOOLEAN>:
                                                            console.log("monday");
               < instructions>
                                                        else if (x > 10) {
            else:
                                                            console.log("friday");
               < instructions>
CONDITION
                                                        }else {
             if x<5 and y>6:
                                                            console.log("sunday");
                  result = "monday"
                                                        }
             elif x> 10 :
                  result = "friday"
             else:
                  result = "sunday"
             WRITE ON PYTHON CONSOLE
                                                        WRITE ON BROWSER CONSOLE
             print( <STRING> );
                                                        console.log("ronan the best");
             print("ronan the best") :
                                                        WRITE ON HTML DOCUMENT
                                                        document.write("ronan the best")
OUTPUT
                                                        DISPLAY AN ALERT
                                                        alert("ronan the best");
NUMBER
                                                        INCREMENT A VARIABLE VALUE
             INCREMENT A VARIABLE VALUE
OPERATORS
            x = 10
                                                        let x = 10;
             x += 1
                                                        x += 1;
             print(x)
                                                        console.log(x);
             > 11
                                                        MODULO
             MODULO
                                                        console.log (10%3);
             print(10 % 3)
             >1
                                                        POWER
                                                        let n1 = 4;
             POWER
                                                        let n2 = n1 ** 2
             n1 = 4
            n2 = n1 ** 2
                                                        console.log(n2)
             print(n2)
             >16
```

```
STRING
                                                        CONCATENATE STRINGS
             CONCATENATE STRINGS
OPERATORS
             <STRING> + <STRING>
                                                        console.log ("ronan" + "hello");
             print("ronan" + "hello")
             >ronanhello
                                                        REMOVE THE LAST CHARACTERS:
             REMOVE THE LAST CHARACTERS:
                                                        const text = "ronan";
             <STRING> [: -1 ]
                                                        const newText = text.slice(0,-2);
             print("ronan"[:-2] )
                                                        console.log(newText);
             REMOVE THE FIRST CHARACTERS:
                                                        REMOVE THE FIRST CHARACTERS:
             <STRING> [1: ]
                                                        const text = "ronan";
             print("ronan"[1:] )
                                                        const newText = text.slice(1);
             >onan
                                                        console.log(newText);
             BREAK A LINE
                                                        BREAK A LINE
            text = "\n"
                                                        console.log("hi\nho");
            print( "hi\nho")
             >hi
             >ho
                                                        GET NUMBER OF CHARCTERS
             GET NUMBER OF CHARCTERS
             count = len(<STRING>)
                                                        let text = "ronan";
                                                        console.log(text.length);
             print( len("ronan") )
             >5
                                                        GET CHARACTER AT INDEX
             GET CHARACTER AT INDEX
            char = text[3]
                                                        let text = "abcd";
                                                        console.log(text.charAt(1))
             print( "abcd"[1] )
             >b
                                                        CONVERT A STRING TO A NUMBER
             CONVERT A STRING TO A NUMBER
             number = int(<STRING>)
                                                        let str1 = "4";
                                                        let str2 = "5";
             print( int("4") + int("5"))
                                                        console.log(parseInt(str1)+parseInt(str2));
             >9
                                                        CHECK IF A STRING IS A NUMBER
             CHECK IF A STRING IS A NUMBER
```

```
booleanVariable= <STRING>.isNumeric()
                                           text = "Hello";
                                           console.log(isNaN(text));
CHANGE A STRING TO UPPERCASE
                                           CHANGE A STRING TO UPPERCASE
text = <STRING>.upper()
                                           let text = "hello";
                                           console.log(text.toUpperCase());
print("hello".upper())
>HELLO
CHANGE A STRING TO LOWER CASE
                                           CHANGE A STRING TO LOWER CASE
text = <STRING>.lower()
                                           let text = "HELLO";
                                           console.log(text.toLowerCase());
print("HellO".lower())
>hello
```