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 read the 1-Javascript Cheat Sheet.pdf
 - o https://www.w3schools.com/js/default.asp
- **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 /* |
| | <pre>for n in range(<number>): for n in range (3): print("hello") >hello >hello >hello</number></pre> | <pre>for (let i = 0; i < 9; i++) { console.log("hello") }</pre> |
| LOOPS | <pre>for n in range(start, end) for n in range (2,5) : print(n) >2 >3 >4</pre> | <pre>for (let i = 2; i < 5; i++) { console.log(i) }</pre> |
| | <pre>for value in array: numbers = [5, 6, 7] for value in numbers : print(value) >5 >6 >7</pre> | <pre>let number = [5,6,7] for (key in array) { console.log(number[key]) }</pre> |
| | <pre>while <boolean> x = int(input()) while x != 5: print ("try again") x = int(input())</boolean></pre> | <pre>let text = ""; let i = 0; while (i < 10) { text += " The number is " + i; i++; }</pre> |

| CONDITION | <pre>if/ELIF/ELSE : if <boolean> :</boolean></pre> | <pre>let x = 5 let y = 6 let result = "" if (x < 5 && y > 6){ result = "monday" }else if (x > 10){ result = "friday" }else{ result = "sunday" } console.log(result)</pre> |
|---------------------|--|---|
| OUTPUT | <pre>WRITE ON PYTHON CONSOLE print(<string>); print("ronan the best") :</string></pre> | WRITE ON BROWSER CONSOLE console.log ("hello world") WRITE ON HTML DOCUMENT let create =document.createElement("create"); create.textContent = "THE BEST!"; document.body.appendChild(create) console.log(create) DISPLAY AN ALERT let display ="ronan the best" alert(display) |
| NUMBER OPERATORS | <pre>INCREMENT A VARIABLE VALUE x = 10 x += 1 print(x) > 11 MODULO print(10 % 3) >1 POWER n1 = 4 n2 = n1 ** 2 print(n2) >16</pre> | INCREMENT A VARIABLE VALUE let x=10 let y=1 console.log(x+y) MODULO let x=10 let y=1 console.log(x%y) POWER let x=10 let y=1 console.log(x*y) |

```
STRING
                                                    CONCATENATE STRINGS
             CONCATENATE STRINGS
OPERATORS
                                                    let sumString="ronan"+"hello"
             <STRING> + <STRING>
                                                        console.log(sumString)
             print("ronan" + "hello")
             >ronanhello
             REMOVE THE LAST CHARACTERS:
                                                    REMOVE THE LAST CHARACTERS:
             <STRING> [: -1]
                                                    let str = "hello";
             print("ronan"[:-2] )
                                                    str = str.substring(0, str.length - 1);
                                                    console.log(str);
                                                    REMOVE THE FIRST CHARACTERS:
             REMOVE THE FIRST CHARACTERS:
                                                    let str = 'Hello';
             <STRING> [1: ]
                                                    str = str.slice(1);
             print("ronan"[1:] )
                                                    console.log(str);
             >onan
             BREAK A LINE
                                                    BREAK A LINE
             text = "\n"
                                                    let str = "Hello World!\nThis is my string";
                                                    console.log(str);
             print( "hi\nho")
             >hi
             >ho
                                                    GET NUMBER OF CHARCTERS
             GET NUMBER OF CHARCTERS
             count = len(<STRING>)
                                                    let text = "Hello World!";
                                                    let newlength = text.length;
             print( len("ronan") )
                                                    console.log(newlength)
             >5
                                                    GET CHARACTER AT INDEX
             GET CHARACTER AT INDEX
                                                    let string = "Hello World!";
             char = text[3]
                                                    console.log( string.charAt(6) );
             print( "abcd"[1] )
             >b
             CONVERT A STRING TO A NUMBER
                                                    let str1 = '5';
                                                    let str2 = '15';
             number = int(<STRING>)
                                                    let result = Number(str1) + Number(str2);
                                                    console.log(result);
             print( int("4") + int("5"))
             >9
```

```
CHECK IF A STRING IS A NUMBER
                                     function isInt(str) {
booleanVariable= <STRING>.isNumeric()
                                       return !isNaN(str) &&
                                     Number.isInteger(parseFloat(str));
                                     }
CHANGE A STRING TO UPPERCASE
                                     let myText = "hello world"
                                         console.log (myText.toUpperCase())
text = <STRING>.upper()
print("hello".upper())
>HELLO
CHANGE A STRING TO LOWER CASE
                                     let myText = "HELLO WORLD"
text = <STRING>.lower()
                                         console.log (myText.toLowerCase())
print("HellO".lower())
>hello
```