# **PYTHON TO JAVASCRIPT!!! - PART 2**

Instruction

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

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|  | **PYTHON** | **JAVASCRIPT** |
| **BOOLEAN**  **OPERATORS** | **IS EQUAL, IS GREATER**  x = 5  y = 5  print (x == y)  >True  **AND / OR / NOT**  x = 5  y = 5  print (not (x == y and ( x>5 or y<10) ))  >false | IS EQUAL, IS GREATER  let x = 5  let y = 5  console.log(x==y);  AND / OR / NOT  console.log(! (x==y && (x>5 || y<10))); |
| **TYPES** | CONVERT A STRING TO INTEGER  **int**(<**STRING>)**  n = ‘5’  print (int(n) + int(n))  >10  CONVERT A INTEGER TO STRING  **str**(<**INTEGER>)**  n = 5  print (str(n) + str(n))  >55 | CONVERT A STRING TO INTEGER  let n ="5";  console.log(parseInt(n)+ parseInt(n));  CONVERT A INTEGER TO STRING  let n =5;  console.log(n.toString()+ n.toString()); |
| **FUNCTION** | DEFINE A FUNCTION  def sum(n1, n2):  total = n1 + n2  return total  print(sum(100,200)) -> 300 | DEFINE A FUNCTION  Function sub(para1,par2){ return para1 + para2  DEFINE AN ARRAY FUNCTION  **XXXXX** |
| **DATA**  **STRUCTURES** | **ARRAY**  # Create empty array  array = []  fruits = [“apple”, “banana”]  # Create array with values  array = [12, 13, 15, 16]  # Access using index  value = array[2]  # Insert value at index  array.insert(1, 20)  # Insert value at the end  array.append(20)  # Remove using index  array.pop(2)  # Get a sub array  subarray = array[2:25]  **ARRAY 2D**  # Create array2D with values  array2D = [ [12, 13, 15, 16], [4, 5, 6, 7]]  # Access using index  value = array2D[2][0]  **DICTIONARY**  # Create empty dictionary  dic = {}  # Create array with values  dic = { **key1**:**value1**, **key2**:**value2** … }  # Access using **key**  value = dic[**key1**]  # Add value for a new key  dic[**key3**] = **value3**  # Update value from existing key  dic[**key2**] = **value2New**  # Remove using key  dic. pop(**key2**) | **ARRAY**  # Create empty array  var arr = [];  # Create array with values  var arryOfvalue=[1,2,3,4];  # Access using index  var index =arryOfvalue[1];  # Insert value at index  **XXXXXXXXXXXXXXX**  # Insert value at the end  var newValue = arryOfvalue.push(5);  # Remove using index  arr.pop(1);  # Get a sub array  **XXXXX**  **ARRAY 2D**  # Create array2D with values  var arr2d = [      [1,2,3],      [4,5,6],      [7,8,9],  ];  # Access using index  let value = arr2d[2][0];  **DICTIONARY**  # Create empty dictionary  var dictionary = {};  # Create array with values  var student = {name:"kea",age:"24",sex:"male"};  # Access using **key**  let key = student.name ;  # Add value for a new key  student[favorite] = "fooball";  # Update value from existing key  student["age"] = 21  # Remove using key  delete student["age"]; |

**Q2 The 3 ways to declare a variable in JS**

var a = 4

Let a = 4

const a = 4

* Can you explain what the differences?
* Var we use for create global variable.
* Let we use have block scop.
* Const we can not change variable value.