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 !!!

	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
		let X = 5
		let Y = 5
		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(String(n) + String(n))

FUNCTION	DEFINE A FUNCTION
	`def sum(n1, n2):`
	`  total = n1 + n2`
	`  return total`
	
	`print(sum(100,200)) -> 300`
		DEFINE A FUNCTION
		function sum (n1 , n2){
		total = n1 + n2
		return total
		}
		console.log(sum(100,200))
		
		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]
		ARRAY
		# Create empty array
		let array;
		
		# Create array with values
		let array = [12,13,14,15]
		
		# Access using index
		let value = array[2]
		
		# Insert value at index
		arrray.splice(1,0,20)
		
		# Insert value at the end
		array.push(20)
		
		# Remove using index
		array.splice(2,1)
		
		# Get a sub array
		subarray = array.slice(2:25)
		
		ARRAY 2D
		
		# Create array2D with values
		let array2D[[12,13,15,16],[4,5,6,7]]
		
		# Access using index
		value = array2D[2][0]
		
		OBJECT
		# Create empty object
		let dic= {};
		
		# Create array with values
		let 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)
		# Add value for a new key
		dic.key3 = 4
		
		# Update value from existing key
		dic[“key2”] = value2New
		
		# Remove using key
		delete dic.key2

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: You can change and use this variable everywhere.
- let: You can change this variable value but you can’t use it everywhere. you can only use it in one block.
- const: You can’t change this variable value and you can’t use it everywhere. you can only use it in one block.