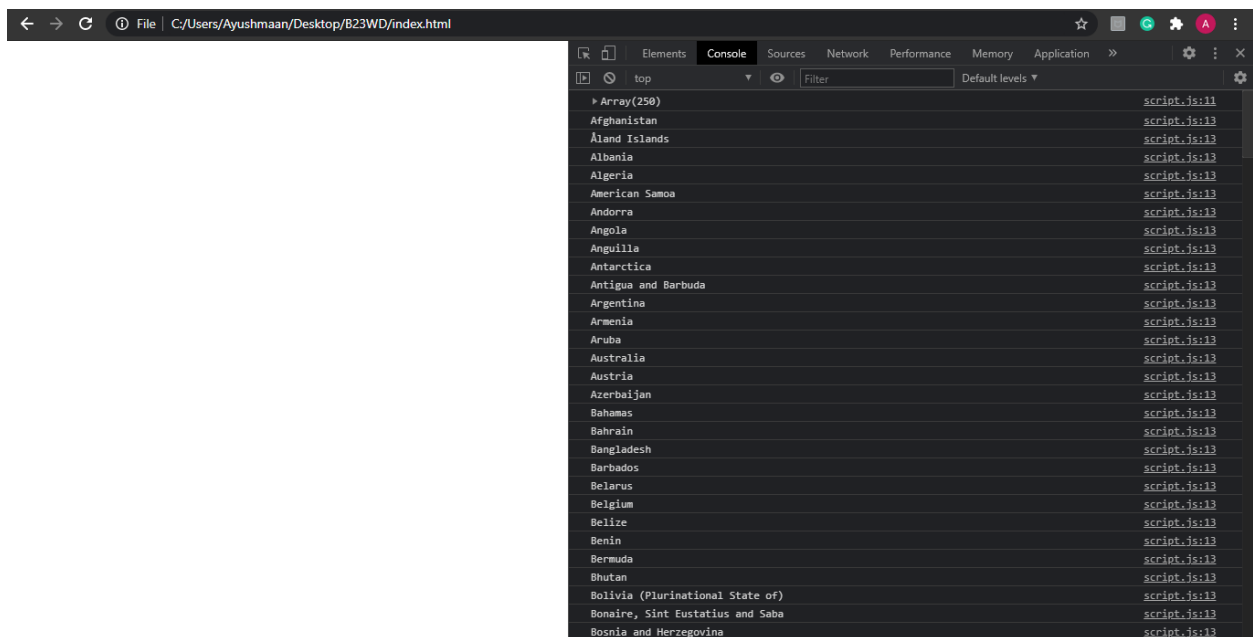


## TASK 2

1. Load the rest countries data using your html and script.js file and run a for loop on the data and print all the country name in the console.

```
B23WD > index.html > html > body > script
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Document</title>
8 </head>
9 <body>
10   <script src="script.js"></script>
11 </body>
12 </html>
```

```
B23WD > JS script.js > ...
1 //CREATE A REQUEST INSTANCE
2 var req = new XMLHttpRequest();
3 //INITIATE A CONNECTION
4 req.open('GET','https://restcountries.eu/rest/v2/all',true)
5 //SENDING THE REQUEST
6 req.send()
7 //LOAD THE FUNCTION
8 //Will ONLY BE TRIGGERED WHEN THE DATA HAS BEEN RETRIEVED SUCCESSFULLY
9 req.onload = function(){
10   var data = JSON.parse(this.response)
11   console.log(data)
12   for(var i in data){
13     console.log(data[i]["name"])
14   }
15 }
16
```



2. Difference between copy by value and copy by reference.

- In Call by value method original value is not modified whereas, in Call by reference method, the original value is modified.
- In Call by value, a copy of the variable is passed whereas in Call by reference, a variable itself is passed.
- In Call by value, actual and formal arguments will be created in different memory locations whereas in Call by reference, actual and formal arguments will be created in the same memory location.

### 3. How to copy by value a composite datatype (array + objects).

- To make the changes in one array without affecting the other, we can use the spread operator to overcome this.

```
let arr1 = [1,2,3]
```

```
let arr2 = [...arr1]
```

```
arr2.push(4)
```

```
console.log(arr1)
```

```
console.log(arr2)
```