**Day-4 Task**

1. **How to compare two JSON have the same properties without order?**

var obj1 = { name: "Person 1", age:5 };

var obj2 = { age:5, name: "Person 1" };

var same=true;

if(Object.keys(obj1).length==Object.keys(obj2).length){

for(var key in obj1) {

if(obj1[key] == obj2[key]) {

continue;

}

else {

same=false;

break;

}

}

}

else {

same=false;

}

console.log(`Properties are equal : ${same}`);

//Prints: Properties are equal : true

1. **Use the rest countries API url ->** [**https://restcountries.eu/rest/v2/all**](https://restcountries.eu/rest/v2/all) **and display all the country flags in console.**

var request = new XMLHttpRequest();

request.open('GET','https://raw.githubusercontent.com/rvsp/restcountries-json-data/master/res-countries.json');

request.send();

request.onload=function(){

    var data = JSON.parse(request.response);

    //console.log(data);

    for (var i = 0; i<data.length; i++){

            console.log(data[i].flag);

    }

}

1. **Use the same rest countries and print all countries name, region, sub region and population.**

var request = new XMLHttpRequest();

request.open('GET','https://raw.githubusercontent.com/rvsp/restcountries-json-data/master/res-countries.json');

request.send();

request.onload=function(){

    var data = JSON.parse(request.response);

    //console.log(data);

    for (var i = 0; i<data.length; i++){

      console.log(data[i].name, data[i].region, data[i].subregion, data[i].population);

    }

}

1. **Swapping 2 numbers;**

let a = 2;

let b = 6;

[b,a] = [a,b];

console.log(a,b);

1. **Power of any number x ^ y.**

let a = 5;

let b = 6;

console.log(Math.pow(a,b))

(or)

console.log(a\*\*b);

1. **Display the asterisk pattern as shown below(No loop needed):  
   \*\*\*\*\*  
   \*\*\*\*\*  
   \*\*\*\*\*  
   \*\*\*\*\*  
   \*\*\*\*\***

let s = "\*\*\*\*\*";

console.log(s);

console.log(s);

console.log(s);

console.log(s);

console.log(s);

1. **Calculate electricity bill?  
   For example, a consumer consumes 100 watts per hour daily for one month. Calculate the total energy bill of that consumer if per unit rate is 10?**

let consumed\_units = 100;

let total\_consumedUnits = (consumed\_units\*24\*30)/1000;

let total\_cost = total\_consumedUnits \* 10;

console.log(total\_cost)

1. **var myarray = [11,22,33,44,55]**

**write a code to count the elements in the array. Don’t use length property**

var a = [11,22,33,44,55];

function arrayLength(a){

var length = 0;

while(a[length]!==undefined){

length++;

}

return length;

}

console.log(arrayLength(a));

1. **Write a loop that makes seven calls to console.log to output the following triangle:**

#  
##  
###  
####  
#####  
######  
#######

let triangle = "#"

do {

console.log(triangle);

triangle = triangle + "#";

} while (triangle.length !== 8);

1. **Iterate through the string array and print it contents**

var strArray= ["<option>Jazz</option>","<option>Blues</option>","<option>New Age</option>","<option>Classical</option>","<option>Opera</option>"]

for( let i=0; i<strArray.length; i++) {

console.log(strArray[i]);

}

1. **Starting from the existing friends variable below, change the element that is currently “Mari” to “Munnabai”.**

let friends = ['Mari','MaryJane','CaptianAmerica','Munnabai','Jeff','AAK chandran'];

friends.splice(0,1,"Munnabai")

console.log(friends);

1. **Starting from the friends variable below, Loop and Print the names till you meet CaptianAmerica.**

let friends = ['Mari','MaryJane','CaptianAmerica','Munnabai','Jeff','AAK chandran'];

for (let i=0; i<friends.length; i++){

if(friends[i] === "CaptianAmerica"){

break;

}

console.log(friends[i])

}

1. **Concat all the names the friends array and return as comma “,” seperated string.**

let friends1 = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

let friends2 = ["Gabbar","Rajinikanth","Mass","Spiderman","Jeff","ET"];

console.log(`${friends1},${friends2}`)