# JavaScript Problem Solutions

## Reverse String using Array Swap

let ch = "SrashtSi"  
let ch1 = ch.split('')  
let n = ch1.length-1;  
for (let i =0 ; i< ch1.length/2; i++)  
{  
 let temp = ch1[i];  
 ch1[i] = ch1[n-i]  
 ch1[n-i] = temp  
}  
console.log(ch1.join(''))

## Find Duplicates in Array and Count Frequency

const check = [1,2,3,4,1,5,6,7,5,5,6,7,7]  
console.log(check.sort());  
let obj = {}  
for (let i =0 ; i<check.length ; i++)  
{  
 let n = check[i]  
 if ( obj[n] === undefined)  
 {  
 obj[n] = 1   
 }  
 else  
 {  
 obj[n] = obj[n] +1  
 }  
}  
const numData = []  
for (let key in obj)  
{  
 if (obj[key] > 1)  
 {  
 console.log("key =>",key , "frequency", obj[key])  
 }  
 else  
 {  
 numData.push(key)  
 }  
}  
console.log(numData.join(), "DATA IS")

## Find Only Non-Repeated Elements from Array

const check = [1,2,3,4,1,5,6,7,5,5,6,7,7]  
  
let obj = {}  
for (let i =0 ; i<check.length ; i++)  
{  
 let n = check[i]  
 if ( obj[n] === undefined)  
 {  
 obj[n] = 1   
 }  
 else  
 {  
 obj[n] = obj[n] +1  
 }  
}  
const numData = []  
for (let key in obj)  
{  
 if (obj[key] ===1)  
 {  
 numData.push(key)  
 }  
}  
console.log(numData.join(), "DATA IS")

## Sum of Array Elements

const num = [1,2,3,4,5];  
let sum =0;  
for (let i =0 ; i< num.length ; i++)  
{  
 sum = sum+num[i]  
}  
console.log(sum);

## Toggle String Case

function toggleString(str) {  
 let toggled = "";  
 for (let char of str) {  
 if (char === char.toUpperCase()) {  
 toggled += char.toLowerCase();  
 } else {  
 toggled += char.toUpperCase();  
 }  
 }  
 return toggled;  
}  
  
console.log(toggleString("HeLLo WoRLD SraSHTI"));

## First Repeated Character (Case-insensitive)

function firstRepeatedChar(str) {  
 let arr = [];  
 for (let i = 0; i < str.length; i++) {  
 let code = str.charCodeAt(i);  
 arr[i] = (code >= 65 && code <= 90) ? String.fromCharCode(code + 32) : str[i];  
 }  
 for (let i = 0; i < arr.length - 1; i++) {  
 for (let j = i + 1; j < arr.length; j++) {  
 if (arr[i] === arr[j]) {  
 return arr[i];  
 }  
 }  
 }  
 return "No repeated character";  
}

## First Repeated Character using Nested Loops

const t0 = "CHE=ck";  
let t = t0.split("")  
let repeatedChar = null;  
  
for (let i = 0; i < t.length; i++) {  
 let isRepeated = false;  
  
 for (let j = 0; j < i; j++) {  
 if (t[i] === t[j]) {  
 repeatedChar = t[i];  
 isRepeated = true;  
 break;  
 }  
 }  
  
 if (isRepeated) {  
 break;  
 }  
}  
  
if (repeatedChar) {  
 console.log("FIRST REPEATED LETTER:", repeatedChar);  
} else {  
 console.log("No duplicate letters");  
}

## Reverse Each Word in a Sentence

const s1 = "Srashti you are good women";  
const words = s1.split(" ");  
let s2 = "";  
  
for (let i = 0; i < words.length; i++) {  
 let reversedWord = "";  
 for (let j = words[i].length - 1; j >= 0; j--) {  
 reversedWord += words[i][j];  
 }  
 s2 += reversedWord + " ";  
}  
console.log("Reversed each word:", s2.trim());

## Reverse Words in Larger Sentence

const s1 = "Srashti you are good women and too my good friend";  
const words = s1.split(" ");  
let s2 = "";  
for (let i =0 ; i<words.length ; i++)  
{  
 let reverseWord = "";  
 for (let j = words[i].length-1 ; j>=0 ; j--)  
 {  
 reverseWord += words[i][j];  
 }  
 s2 += reverseWord + " ";  
}  
console.log ("ReverseEachWords" , s2);