**Practical Tasks**

1. **Write a program which remove the duplicate characters from words**

let data = "aabbcccddddyyyyyyyyyyy";

let arr = [];

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

if(data[i] === data[i+1]){

if(!arr.includes(data[i+1])){

arr.push(data[i+1]);

}

}

}

let result = arr.join('')

console.log(result)

1. **Write a program which count the no of words, starting with Capital Letter**

let count = 1;

function processData(s){

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

if(s[i].toUpperCase() === s[i]){

count++;

}

}

console.log(count)

}

processData("theEarthCircle")

1. **The code you've provided aims to rotate the array to the right by k steps.**

let k = 3;

let arr = [1,2,3,4,5];

let originalArr = [1,2,3,4,5];

let newArr = [];

function processData(){

let arrLength = originalArr.length - k;

for(var j=arrLength; j<originalArr.length; j++){

newArr.push(originalArr[j])

arr.splice(j);

}

for(var j=0; j<newArr.length; j++){

arr.unshift(newArr[j]);

}

console.log(arr)

}

processData()

1. **Fibonacci Series**

function fib(n){

let series = [0,1];

for(var i=2; i<n; i++){

let res = series[i-1] + series[i-2];

series.push(res);

}

console.log(series)

}

fib(9)

1. **Add Dashed before odd number**

function addDashed(n){

let arr =[];

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

if(n[i] % 2 == 0){

arr.push(n[i]);

}

else{

arr.push(`-${n[i]}`);

}

}

let res = arr.join('');

console.log(res)

}

addDashed("63475345342")

1. **Capitalize the first character of words**

let name = "jump over the fox";

let res = name.split(' ');

let arr = [];

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

let newWord = res[i][0].toUpperCase()+res[i].slice(1)+" ";

arr.push(newWord)

}

let data = arr.join('');

console.log(data)

1. **Print the Star like Below  
   Output will be :**

#

##

###

####

#####

######

function staircase(n) {

let hash = "";

for(var i=0; i<n; i++){

for(var j=1; j<n-i; j++){

hash = hash + " "

}

for(var k=0; k<=i; k++){

hash = hash + "#";

}

hash = hash + "\n";

}

console.log(hash)

}

staircase(6)

1. **Take Diagonals of array , subtract dg1-dg2 and take modulus of it.**

let arr =[

[1,2,3],

[3,4,5],

[6,7,9]];

let count = 0;

let reverse = arr[0].length-1;

let a = [];

let b =[];

let res1 = 0;

let res2 = 0;

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

let dg1 = arr[i][count];

let dg2 = arr[i][reverse];

a.push(dg1)

b.push(dg2)

count++;

reverse--;

}

for(var k=0; k<a.length; k++){

res1 = res1 + a[k]

res2 = res2 + b[k]

}

console.log(Math.abs(res1-res2))

1. **Given five positive integers, find the minimum and maximum values that can be calculated by summing exactly four of the five integers. Then print the respective minimum and maximum values as a single line of two space-separated long integers.**

**Sample Input = [2,3,5,6,7,1]  
Sample Output = 17,23**function miniMaxSum(arr) {

let min = 0;

let max = 0;

//sor array in ascending order

for(var k=0; k<arr.length; k++){

for(var l=k+1; l<arr.length; l++){

if(arr[k] > arr[l]){

temp = arr[k];

arr[k]= arr[l];

arr[l]=temp;

}

}

}

for(var i=0; i<arr.length-1; i++){

min = min + arr[i];

}

for(var j=arr.length-1; j>0; j--){

max = max + arr[j];

}

console.log(`${min} ${max}`)

}

miniMaxSum([4,2,6,8,1,3])

1. **Convert given time to 24 hours format**

function convertTo24(time){

let tt = time.split(':');

console.log()

let check = tt[2]

if(check[2] === "P"){

if(tt[0] != "12"){

let change = parseInt(tt[0]) + 12;

tt[0] = change;

}

}

if(check[2]=="A"){

if(tt[0] == "12"){

tt[0] = "00";

}

}

let removeAM = tt[2].slice(0,-2);

tt[2] = removeAM;

let res = tt.join(':');

console.log(res)

}

1. **Write Palindrome Program**function palindrome(string){

let newString = '';

for(var i=string.length-1; i>=0; i--){

newString = newString + string[i];

}

if(string == newString){

console.log("Palindrome")

}

else{

console.log("Not palindrome")

}

}

1. **How do you calculate the number of numerical digits in a string?**

function numericalDigit(string){

let num = '0123456789';

let count = 0;

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

if(num.includes(string[i])){

count++;

}

}

console.log(count)

}

numericalDigit("Tint345")

1. **Write program which print max no of repetition in string?**

let count = 1;

let res = 0;

function repeat(string){

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

count =1;

for(var j=i+1; j<string.length; j++){

if(string[i] == string[j]){

count++

}

else{

break;

}

i=j;

if(count > res){

res = count

}

}

}

console.log(res)

}

repeat("aabbccccccdaaaa");