1. Do the below programs in anonymous function & IIFE
   1. Print odd numbers in an array

function ()

{

}

function ()

Print odd numbers in an array

anonymous : function(array){

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

if(array[i]%2!=0){

console.log(array[i])

}

}

}

IIFE : (function(array){

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

if(array[i]%2!=0){

console.log(array[i])

}

}

})([1,2,3,4])

* 1. Convert all the strings to title caps in a string array

anonymous : function (str) {

str = str.toLowerCase().split(' ');

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

str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1);

}

return str.join(' ');

}

IIFE : (function (str) {

str = str.toLowerCase().split(' ');

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

str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1);

}

return str.join(' ');

})("SRI IS MY NAME");

* 1. Sum of all numbers in an array

anonymous : function(array){

var sum = 0;

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

sum = sum + array[i];

}

return sum;

}

IIFE : (function(array){

var sum = 0;

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

sum = sum + array[i];

}

return sum;

* 1. Return all the prime numbers in an array

Anonymous Function:

function(numArray){

numArray = numArray.filter((number) => {

for (var i = 2; i <= Math.sqrt(number); i++) {

if (number % i === 0) return false;

}

return true;

});

console.log(numArray);

}

IIFE

(

function(numArray){

numArray = numArray.filter((number) => {

for (var i = 2; i <= Math.sqrt(number); i++) {

if (number % i === 0) return false;

}

return true;

});

console.log(numArray);

})([1,2,3,4])

* 1. Return all the palindromes in an array

function (arr, n)

{

// Traversing each element of the array

// and check if it is palindrome or not

for (let i = 0; i < n; i++)

{

let ans = isPalindrome(arr[i]);

if (ans == false)

return false;

}

return true;

}

IIFE :

( function (arr, n)

{

// Traversing each element of the array

// and check if it is palindrome or not

for (let i = 0; i < n; i++)

{

let ans = isPalindrome(arr[i]);

if (ans == false)

return false;

}

return true;

})([1,2,3] , 3)

* 1. Return median of two sorted arrays of the same size.

function getMedian(ar1, ar2, n) {

// Initialize variables to store the median

let median;

// If the arrays are empty, return null

if (n === 0) {

return null;

}

// If the arrays have only one element, return the average of the two elements

if (n === 1) {

return (ar1[0] + ar2[0]) / 2;

}

// Find the median of the two arrays

median = (ar1[n / 2] + ar2[n / 2]) / 2;

// Return the median

return median;

}

// Example usage:

const ar1 = [1, 2, 3, 4, 5];

const ar2 = [6, 7, 8, 9, 10];

const median = getMedian(ar1, ar2, ar1.length);

console.log(median); // 5.5

IIFE:

(function() {

// Get the two sorted arrays.

const nums1 = [1, 3, 5, 7, 9];

const nums2 = [2, 4, 6, 8, 10];

// Merge the two arrays.

const mergedArray = nums1.concat(nums2);

// Sort the merged array.

mergedArray.sort((a, b) => a - b);

// Calculate the median.

const median = mergedArray[mergedArray.length / 2];

// Return the median.

return median;

})();

* 1. Remove duplicates from an array

function(array){

let dup = [...new Set(array)];

console.log(dup);

}

IIFE : (function(array){

let dup = [...new Set(array)];

console.log(dup);

})([1,1,2,3,4])

Q.Rotate an array by K times

function reverse(array , li , ri){

while(li < ri){

int temp = a[li];

a[li]= a[ri];

a[ri] = temp;

li++;

ri--;

}

}

* 1. Rotate an array by k times

Anonymous: function(array , k){

k = k % a.length;

if(k < 0){

k += a.length;

}

reverse(a, 0, a.length - k - 1);

reverse(a, a.length - k, a.length - 1);

reverse(a, 0, a.length - 1);

}

IIFE : (function(array , k){

k = k % a.length;

if(k < 0){

k += a.length;

}

reverse(a, 0, a.length - k - 1);

reverse(a, a.length - k, a.length - 1);

reverse(a, 0, a.length - 1);

})([1,2,3,4] , 2)

1. Do the below programs in arrow functions.
   1. Print odd numbers in an array

Arrow Function oddNumbers = (array) => {

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

if(array[i]%2!=0){

console.log(array[i])

}

}

}

* 1. Convert all the strings to title caps in a string array

Arrow Function : titleCase = (str) => {

str = str.toLowerCase().split(' ');

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

str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1);

}

return str.join(' ');

}

* 1. Sum of all numbers in an array

Arrow: sum = (array)=>{

var sum = 0;

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

sum = sum + array[i];

}

return sum;

}

* 1. Return all the prime numbers in an array

primeNumber = (numArray) => {

numArray = numArray.filter((number) => {

for (var i = 2; i <= Math.sqrt(number); i++) {

if (number % i === 0) return false;

}

return true;

});

console.log(numArray);

}

* 1. Return all the palindromes in an array

Palindrome = (arr, n) =>

{

// Traversing each element of the array

// and check if it is palindrome or not

for (let i = 0; i < n; i++)

{

let ans = isPalindrome(arr[i]);

if (ans == false)

return false;

}

return true;

}