**Javascript Programs**

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

let arr = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];

let odd = (

(num)=>{

let ans = [];

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

{

if(num[i]%2 !== 0)

{

ans.push(num[i]);

}

}

return ans;

}

)(arr);

console.log(odd);

1. Convert all strings to title caps in string array.

let str = ["welcome", "to", "javascript"];

let caps = (

(word)=>{

return word.map((ch)=>{

return ch.toLowerCase().charAt(0).toUpperCase().concat(ch.substr(1));

})

}

)(str)

console.log(caps);

1. Sum of all numbers in an array.

let array = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];

let sum = (

(nums)=>{

let sum = 0;

for(let i of nums)

{

sum += i;

}

return sum;

}

)(array);

console.log(sum);

1. Return all the prime numbers in an array.

let num = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20];

function isPrime(n)

{

if(n<2)

{

return false;

}

for(let i=2; i<n; i++)

{

if(n%i === 0)

{

return false;

}

}

return true;

}

let Prime = (

(nums)=>{

let ans = [];

for(let i of nums)

{

if(isPrime(i))

{

ans.push(i);

}

}

return ans;

}

)(num);

console.log(Prime);

1. Return all the palindromes in an array.

let str1 = ["abc", "ada", "car", "racecar", "cool", "level"];

function isPalindrome(str)

{

let a = str;

str = str.split("").reverse().join("");

return str == a;

}

let checkPalindrome = (

(str)=>{

let ans = [];

for(let i of str)

{

if(isPalindrome(i))

{

ans.push(i);

}

}

return ans;

}

)(str1);

console.log(checkPalindrome);

1. Return median of two sorted arrays.

let ar1 = [1, 12, 15, 26, 38];

let ar2 = [2, 13, 17, 30, 45];

let n = ar1.length;

let findMedian = (

(ar1, ar2, n)=>{

let i = n-1;

let j = 0;

while(ar1[i]>ar2[j] && j<n && i>-1)

{

let temp = ar1[i];

ar1[i] = ar2[j];

ar2[j] = temp;

i--;

j++;

}

ar1.sort(function (a, b){return a-b;})

ar2.sort(function (a, b){return a-b;})

return parseInt((ar1[n-1]+ar2[0])/2);

}

)(ar1, ar2, n);

console.log(findMedian);

1. Removing duplicate elements from array.

let duplicates = ["apple", "mango", "apple", "orange", "mango", "mango"];

let removeDuplicates = (

(arr)=>{

return arr.filter((item, index)=>arr.indexOf(item)===index)}

)(duplicates);

console.log(removeDuplicates);

1. Rotate an array by K times.

let rotateArray = [1, 3, 5, 7, 8];

let k = 2;

let rotate = (

(arr, noOfShifts)=>{

let temp = 0;

const len = arr.length;

noOfShifts = noOfShifts%len;

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

{

temp = arr.pop();

arr.unshift(temp);

}

return arr;

}

)(rotateArray, k);

console.log(rotate);

Note: In this above answers itself has the answers (Arrow Function ) for second questions.