1. Do the below programs in anonymous function & IIFE

1. Print odd numbers in an array

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

3. Sum of all numbers in an array

4. Return all the prime numbers in an array

5. Return all the palindromes in an array

6. Return median of two sorted arrays of same size

7. Remove duplicates from an array

8. Rotate an array by k times

Anonymous functions

//Question 1

//a. Print odd numbers in an array

let oddFilter = function (arr) {

let narr = []

for (let i of arr) if (i % 2 == 1) narr.push(i)

return narr

}

//b. Convert all the strings to title caps in a string array

let title = function (str) {

return str.replace(

/\w\S\*/g,

function (txt) {

return txt.charAt(0).toUpperCase() + txt.substr(1).toLowerCase();

}

);

}

//c. Sum of all numbers in an array

let sum = function (arr) {

let s = 0

for (let i of arr) s += i

return s

}

//d. Return all the prime numbers in an array

let isPrime = function (n) {

for (let i = 2; i < n; i++) if (n % i === 0) return false

return true

}

let primeArr = function (arr) {

let primes = []

for (let i of arr) if (isPrime(i)) primes.push(i)

return primes

}

//e. Return all the palindromes in an array

let isPalindrome = function (s) { return s.split('').reverse().join('') == s }

let allPalindromes = function (arr) {

let palindromes = []

for (let i of arr) if (isPalindrome(i)) palindromes.push(i)

return palindromes

}

//f. Return median of two sorted arrays of same size

let getMedian = function (ar1, ar2, n) {

let n1 = ar1.length;

if (n1 == n2) {

let n2 = ar2.length;

let i = 0;

let j = 0;

let count;

let m1 = -1, m2 = -1;

for (count = 0; count <= n; count++) {

if (i == n) {

m1 = m2;

m2 = ar2[0];

break;

}

else if (j == n) {

m1 = m2;

m2 = ar1[0];

break;

}

if (ar1[i] <= ar2[j]) {

m1 = m2;

i++;

m2 = ar1[i];

}

else {

m1 = m2;

m2 = ar2[j];

j++;

}

}

return (m1 + m2) / 2;

}

else return "Can't be found for array of equal lengths"

}

//g. Remove duplicates from an array

let removeDuplicates = function (arr) {

return [...new Set(arr)]

}

//h. Rotate an array by k times

let arrRotation = function (arr, k) {

n = arr.length

if (k > n) k = k % n

arr = arr.slice(k, n).concat(arr.slice(0, k))

return arr

}

IIFE format

//a. Print odd numbers in an array

let oddFilter = (function (arr) {

let narr = []

for (let i of arr) if (i % 2 == 1) narr.push(i);

return narr

})(arr);

//b. Convert all the strings to title caps in a string array

let title = (function (str) {

return str.replace(

/\w\S\*/g,

function (txt) {

return txt.charAt(0).toUpperCase() + txt.substr(1).toLowerCase();

}

);

})(str);

//c. Sum of all numbers in an array

let sum = (function (arr) {

let s = 0

for (let i of arr) s += i

return s

})(arr);

//d. Return all the prime numbers in an array

let isPrime = (function (n) {

for (let i = 2; i < n; i++) if (n % i === 0) return false

return true

})(n);

//e. Return all the palindromes in an array

let primeArr = (function (arr) {

let primes = []

for (let i of arr) if (isPrime(i)) primes.push(i)

return primes

})(arr)

//f. Return median of two sorted arrays of same size

let allPalindromes = (function (arr) {

let palindromes = []

for (let i of arr) {

if (i.split("").reverse().join('') == i) {

palindromes.push(i)

}

}

console.log(palindromes)

})(arr)

//g. Remove duplicates from an array//g. Remove duplicates from an array

let getMedian = (function (ar1, ar2, n) {

var i = 0;

var j = 0;

var count;

var m1 = -1, m2 = -1;

for (count = 0; count <= n; count++) {

if (i == n) {

m1 = m2;

m2 = ar2[0];

break;

}

else if (j == n) {

m1 = m2;

m2 = ar1[0];

break;

}

if (ar1[i] <= ar2[j]) {

m1 = m2;

i++;

m2 = ar1[i];

}

else {

m1 = m2;

m2 = ar2[j];

j++;

}

}

return (m1 + m2) / 2;

})(ar1, ar2, n);

//h. Rotate an array by k times

let arrRotation = (function (arr, k) {

n = arr.length

if (k > n) k = k % n

arr = arr.slice(k, n).concat(arr.slice(0, k))

return arr

})(arr, k)

Do the below programs in arrow functions

1. Print odd numbers in an array

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

3. Sum of all numbers in an array

4. Return all the prime numbers in an array

5. Return all the palindromes in an array

//Question 3

//a. Print odd numbers in an array

let odds = (arr) => { return arr.filter(n => n % 2 == 1) }

//b. Convert all the strings to title caps in a string array

let titleCase = (str) => {

let arr = str.split(' ')

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

arr[i] = arr[i][0].toUpperCase() + arr[i].substr(1).toLowerCase()

}

return arr.join(' ')

}

let titleArr = (arr) => {

for (let i = 0; i < arr.length; i++) arr[i] = titleCase(arr[i])

return arr

}

//c. Sum of all numbers in an array

let sum = (arr) => arr.reduce((a, b) => a + b, 0)

//d. Return all the prime numbers in an array

let isprime = (n) => {

for (let i = 2; i < n; i++)if (n % i == 0) return false

return true

}

let allPrimes = (arr) => arr.filter(n => isprime(arr))

//e. Return all the palindromes in an array

let isPalindrome = s => s.split('').reverse().join('') == s

let allPalindromes = (arr) => {

let palindromes = []

for (let i of arr) if (isPalindrome(i)) palindromes.push(i)

return palindromes

}