1. Do the below programs in anonymous function & IIFE

a) Print odd numbers in an array

let arr = [1, 2, 3, 4, 1001, 507, 199, 8, 9, 10, 11];

let result = [];

const oddNumber = function (a) {

a.forEach(v => {

if (v % 2) result.push(v);

})

return result;

}

console.log(`a. ${oddNumber(arr)}`);

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

const str = ['mango', 'apple', 'banana', 'melon', 'orange'];

const titleCap = function (s)

{

s.forEach((v, i) => {

str[i] = v.charAt(0).toUpperCase() + v.substr(1).toLowerCase();

})

return str;

}

console.log(`b. ${titleCap(str)}`);

1. ) Sum of all numbers in an array

let res;

const sum = function (a)

{

res = a.reduce((x, y) => x + y);

return res;

}

console.log(`c. ${sum(arr)}`)

1. ) Return all the prime numbers in an array;

let r = [];

let c = 0;

const prime = function (a) {

1. forEach(v => {

if (v === 2 || v === 3) r.push(v);

for (let j = 2; j \* j <= v; j++) {

if (v % j !== 0)

++c;

}

if (c > 1) r.push(v);

c = 0;

})

return r;

}

console.log(`d. ${prime(arr)}`)

1. ) Return all the palindromes in an array

const arr1 = ['malayalam', 'tamil', 'madam', 'refer', 'thilip'];

let e = [];

const palindrome = function (a) {

1. forEach(v => {

let reverse = v.split("").reverse().join("");

if (v === reverse) e.push(v);

})

return e;

}

console.log(`e. ${palindrome(arr1)}`)

1. ) Return median of two sorted arrays of same size

let a1 = [1, 5, 3];

let a2 = [4, 6, 2, 7];

let ans;

const median = function (a, b) {

let c = [...a, ...b];

c.sort((a, b) => a - b)

let d = Math.trunc(c.length / 2);

(!(c.length % 2)) ? ans = ((c[d - 1] + c[d]) / 2) : ans = c[d];

return ans

}

console.log(`e. ${median(a1, a2)}`);

1. ) Rotate an array by k times

let arr2 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

let k = 5;

for (let i = 1; i <= k; i++)

{

let b = arr2[0];

for (let j = 0; j < arr2.length; j++)

{

arr2[j] = arr2[j + 1];

if (j === arr2.length - 1) arr2[j] = b;

}

}

console.log(`h. ${arr2}`);

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

let arrA = [1, 2, 3, 4, 1001, 507, 199, 8, 9, 10, 11];

let resultA = [];

const arrowOdd = (a) => {

1. forEach(v => {

if (v % 2) resultA.push(v);

})

return resultA;

}

console.log(`a. ${arrowOdd(arrA)}`);

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

const strA = ['mango', 'apple', 'banana', 'melon', 'orange'];

const titleCapArr = (s) => {

s.forEach((v, i) => {

strA[i] = v.charAt(0).toUpperCase() + v.substr(1).toLowerCase();

})

return strA;

}

console.log(`b. ${titleCapArr(str)}`);

1. ) Sum of all numbers in an array

let resA;

const sumArr = (a) => {

resA = a.reduce((x, y) => x + y)

}

console.log(`c. ${sumArr(arrA)}`);

1. ) Return all the prime numbers in an array

let rA = [];

let cA = 0;

const primeArr = (a) => {

1. forEach(v => {

if (v === 2 || v === 3) rA.push(v);

for (let j = 2; j \* j <= v; j++)

{

if (v % j !== 0)

++cA;

}

if (cA > 1)

rA.push(v);

cA = 0;

})

return rA;

}

console.log(`d. ${primeArr(arrA)}`);

1. ) Return all the palindromes in an array

const arr1A = ['malayalam', 'tamil', 'madam', 'refer', 'thilip'];

let eA = [];

const palindromeArr = (a) => {

1. forEach(v => {

let reverse = v.split("").reverse().join("");

if (v === reverse)

eA.push(v); })

return eA;

}

console.log(`e. ${palindromeArr(arr1A)}`)