1.Do the below programs in anonymous function & IIFE

**Print odd numbers in an array**

**anonymous function:**

var arr=[1,2,3,4];

var compute=function(arr){

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

if(arr[i]%2===1){

console.log(arr[i]);

}

}

}

compute(arr);

**IIFE**

var arr=[1,2,3,4];

(function(arr)

{

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

if(arr[i]%2===1)

console.log(arr[i]);

})(arr);

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

**anonymous function:**

var compute=function(str){

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

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

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

}

return str.join(' ');

}

console.log(compute("geeks for geek"));

**IIFE:**

Var str=[“geeks for geek”]

function(str){

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

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

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

}

return str.join(' ');

}

console.log(strr);

**Sum of all numbers in an array**

**anonymous function:**

var arr=[1,2,3,4];

let sum=0;

var compute=function(arr){

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

sum+=arr[i];

}

console.log(sum);

};

compute(arr);

**IIFE**

var arr=[1,2,3,4];

let sum=0;

(function(arr){

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

sum+=arr[i];

}

console.log(sum);

})(arr);

**Return median of two sorted arrays of same size**

**anonymous function:**

var arr1 = [1, 12, 15, 26, 38];

var arr2 = [2, 13, 17, 30, 45];

var compute=function(arr1,arr2,n){

var i=0;

var j=0;

var count;

var m1=-1, m2=-1;

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

if(arr1[i]<=arr2[j])

{

m1=m2;

m2=arr1[i];

i++

}

else

{

m1=m2;

m2=arr2[j];

j++;

}

return (m1 + m2)/2;

};

var n1 = arr1.length;

var n2 = arr2.length;

if (n1 == n2)

console.log(compute(arr1, arr2,n1));

**IIFE**

var arr1 = [1, 12, 15, 26, 38];

var arr2 = [2, 13, 17, 30, 45];

(function(arr1,arr2,n){

var i=0;

var j=0;

var count;

var m1=-1, m2=-1;

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

if(arr1[i]<=arr2[j])

{

m1=m2;

m2=arr1[i];

i++

}

else

{

m1=m2;

m2=arr2[j];

j++;

}

return (m1 + m2)/2;

});

var n1 = arr1.length;

var n2 = arr2.length;

if (n1 == n2)

console.log(arr1, arr2,n1);

**Remove duplicates from an array**

**anonymous function:**

var removeDuplicates=function(arr, n)

{

if (n==0 || n==1)

return n;

var temp = new Array(n);

var j = 0;

for (var i=0; i<n-1; i++)

if (arr[i] != arr[i+1])

temp[j++] = arr[i];

temp[j++] = arr[n-1];

for (var i=0; i<j; i++)

arr[i] = temp[i];

return j;

}

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

var n = arr.length;

n = removeDuplicates(arr, n);

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

console.log( arr[i]);

**IIFE:**

function(arr, n)

{

if (n==0 || n==1)

return n;

var temp = new Array(n);

var j = 0;

for (var i=0; i<n-1; i++)

if (arr[i] != arr[i+1])

temp[j++] = arr[i];

temp[j++] = arr[n-1];

for (var i=0; i<j; i++)

arr[i] = temp[i];

return j;

}

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

var n = arr.length;

n = (arr, n);

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

console.log( arr[i]);

**Rotate an array by k times**

**anonymous function:**

var rotate = function(a, n, k)

{

k = k % n;

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

if (i < k) {

console.log(a[n + i - k] + " ");

}

else {

console.log((a[i - k]) + " ");

}

}

console.log("<br>");

}

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

let N = Array.length;

let K = 2;

rotate(Array, N, K);

**IIFE:**

function(a, n, k)

{

k = k % n;

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

if (i < k) {

console.log(a[n + i - k] + " ");

}

else {

console.log((a[i - k]) + " ");

}

}

console.log("<br>");

}

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

let N = Array.length;

let K = 2;

console.log(Array, N, K);

**Return all the prime numbers in an array**

var compute=function(lowerNumber,higherNumber){

for (let i = lowerNumber; i <= higherNumber; i++) {

let flag = 0;

for (let j = 2; j < i; j++) {

if (i % j == 0) {

flag = 1;

break;

}

}

if (i > 1 && flag == 0) {

console.log(i);

}

}

}

compute(2,10);

**IIFE**

function(lowerNumber,higherNumber){

for (let i = lowerNumber; i <= higherNumber; i++) {

let flag = 0;

for (let j = 2; j < i; j++) {

if (i % j == 0) {

flag = 1;

break;

}

}

if (i > 1 && flag == 0) {

return(i);

}

}

}

Console.log(2,10);

**3.Do the below programs in arrow functions**

**Print odd numbers in an array**

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

let res=arr.filter(arr=>arr%2);

console.log(res);

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

var titlecase=str=>str.split(' ').map((word) => word[0].toUpperCase() + word.slice(1).toLowerCase()).join(' ');

console.log(titlecase("deepan ela"));

**Sum of all numbers in an array**

let total = [ 4,5,6,7 ].reduce(( previousValue, currentValue ) => previousValue + currentValue);

console.log(total);