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

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

     let oddnum=function(arr){

         temp=[]

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

             if(arr[i]%2!==0){

                 temp.push(arr[i])

            }

         }

          return temp;

     }

    console.log(oddnum(arr)) ;

output:

[1, 3, 5, 7, 9]

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

let name=["ganesh kalyan ","cristiano ronaldo","leonel messi","dhoni","naimer"];

       let uppercase=( function(name)

        {

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

            console.log(name[i].toUpperCase());

          }

        } ) ;

       uppercase(name)

output:

GANESH KALYAN

CRISTIANO RONALDO

LEONEL MESSI

DHONI

NAIMER

1. Sum of all numbers in an array

let arr=[22,45,65,78,99,10,99,79,100,50];

 let addition=function(arr){

    let count=0;

     for(let  i=0;i<arr.length;i++){

         count+=arr[i]

     }

     return count;

 }

 console.log(addition(arr));

output:

647.

1. Return all the prime numbers in an array

let arr=[2,3,4,5,10,11,12,77,13]

let isprime= ( function (arr){

    var temp=[];

   for(let i=0;i<=arr.length;i++){

       var count=0;

       if(arr[i]===1){

           console.log(arr[i])

       }

       else{

           for(let j=1;j<=arr[i];j++){

               if(arr[i]%j===0){

                  count++

               }

           }

       }

        if(count===2){

                   temp.push(arr[i])

               }

   }

   return temp;

 })

 console.log(isprime(arr))

output:

[2, 3, 5, 11, 13]

1. Return all the palindromes in an array

let polindrom=["ganesh","eye","101","kalyan","radar", "reviver","nan","cristiano","ronaldo","madam"];

let ispolindrom= (function (polindrom){

    let poli=[]

    for(i=0;i<polindrom.length;i++){

        let reverse=polindrom[i].split('').reverse().join('')

        if(polindrom[i]===reverse){

            poli.push(polindrom[i])

            }

    }

    return poli;

})

console.log(ispolindrom(polindrom));

output:

['eye', '101', 'radar', 'reviver', 'nan', 'madam']

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

let arr1=[1,2,3,4,5,6,7];

 let arr2=[3,77,45,2,8,88,97];

 let n=[...arr1,...arr2]

 //console.log(n.length)

 let merge=function (n){

   if(n.length%2===0){

     var nan=Math.round((n[((n.length)/2)-1]+n[((n.length)/2)])/2)

     console.log(nan)

   }

   else{

    let oddarray=Math.round (n [((n.lenght-1)/2)]) ;

    console.log(oddarray)

   }

 }

 merge(n)

output: 5

1. Remove duplicates from an array

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

let duplicate= ( function(num){

    var  obj={}

    for(i=0;i<num.length;i++){

        obj[num[i]]=true;

        }

    console.log(Object.keys(obj))

})

duplicate(num)

output:

['1', '2', '3', '4']

1. Rotate an array by k times

let arr=[2,3,4,5,10,11,12]

    let k=3

    let rotate= function (arr,k){

        for(let i=0;i<k;i++){

            let value= arr.unshift(arr.pop());

            console.log(arr)

        }

    }

    rotate(arr,k)

output:

[12, 2, 3, 4, 5, 10, 11]

[11, 12, 2, 3, 4, 5, 10]

 [10, 11, 12, 2, 3, 4, 5]

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

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

     let oddnum=(arr)=>{

         temp=[]

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

             if(arr[i]%2!==0){

                 temp.push(arr[i])

            }

         }

          return temp;

     }

    console.log(oddnum(arr)) ;

output:

[1, 3, 5, 7, 9]

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

let name=["ganesh kalyan ","cristiano ronaldo","leonel messi","dhoni","naimer"];

       let uppercase=function(name)=>

        {

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

            console.log(name[i].toUpperCase());

          }

        };

       uppercase(name)

output:

GANESH KALYAN

CRISTIANO RONALDO

LEONEL MESSI

DHONI

NAIMER

1. Sum of all numbers in an array.

let arr=[22,45,65,78,99,10,99,79,100,50];

 let addition=function(arr)=>{

    let count=0;

     for(let  i=0;i<arr.length;i++){

         count+=arr[i]

     }

     return count;

 }

 console.log(addition(arr));

output:

647.

1. Return all the prime numbers in an array.

let arr=[2,3,4,5,10,11,12,77,13]

let isprime= function (arr)=>{

    var temp=[];

   for(let i=0;i<=arr.length;i++){

       var count=0;

       if(arr[i]===1){

           console.log(arr[i])

       }

       else{

           for(let j=1;j<=arr[i];j++){

               if(arr[i]%j===0){

                  count++

               }

           }

       }

        if(count===2){

                   temp.push(arr[i])

               }

   }

   return temp;

 }

 console.log(isprime(arr))

output:

[2, 3, 5, 11, 13]

1. Return all the palindromes in an array.

let polindrom=["ganesh","eye","101","kalyan","radar", "reviver","nan","cristiano","ronaldo","madam"];

let ispolindrom=function (polindrom)=>{

    let poli=[]

    for(i=0;i<polindrom.length;i++){

        let reverse=polindrom[i].split('').reverse().join('')

        if(polindrom[i]===reverse){

            poli.push(polindrom[i])

            }

    }

    return poli;

}

console.log(ispolindrom(polindrom));

output:

['eye', '101', 'radar', 'reviver', 'nan', 'madam']