1. Do the below programs in anonymous function & IIFE

a.Print odd numbers in an array

A.anonymous:

var arr=userInput[0].split(" ")

var oarr=[]

let res=function(arr)

{

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

{

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

{

oarr.push(arr[i])

}

}

return oarr ;

}

console.log(res(arr))

B.iife:

var arr=userInput[0].split(" ")

var oarr=[]

let res=(function(arr)

{

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

{

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

{

oarr.push(arr[i])

}

}

return oarr ;

})(arr)

console.log(res)

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

A.anonymous:

var arr=userInput[0].split(" ")

var oarr=[]

let res=function(arr)

{

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

{

var split=arr[i].split("")

split[0]=split[0].toUpperCase()

oarr.push(split.join(""))

}

return oarr ;

}

console.log(res(arr))

B.iife:

var arr=userInput[0].split(" ")

var oarr=[]

let res=(function(arr)

{

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

{

var split=arr[i].split("")

split[0]=split[0].toUpperCase()

oarr.push(split.join(""))

}

return oarr ;

})(arr)

console.log(res)

c.Sum of all numbers in an array

A.anonymous:

var arr=userInput[0].split(" ").map(Number)

var sum=0

let res=function(arr)

{

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

{

sum=sum+arr[i]

}

return sum ;

}

console.log(res(arr))

B.iife:

var arr=userInput[0].split(" ").map(Number)

var sum=0

let res=(function(arr)

{

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

{

sum=sum+arr[i]

}

return sum ;

})(arr)

console.log(res)

d.Return all the prime numbers in an array

A.anonymus

var ui=userInput[0].split(" ")

var res=[]

var isprime=function(arr){

arr.forEach(function(element)

{

n=element

if(n>1)

{

for(var j=2;j<n;j++)

{

if(n%j===0)

{

return false;

}

}

res.push(n)

}

return false

})

return res.join(" ")

}

console.log(isprime(ui))

B.iife:

var ui=userInput[0].split(" ")

var res=[]

var isprime=((arr)=>{

arr.forEach(function iterate(element)

{

n=element

if(n>1)

{

for(var j=2;j<n;j++)

{

if(n%j===0)

{

return false;

}

}

res.push(n)

//console.log(n);

}

return false

})

console.log(res)

})(ui)

e.Return all the palindromes in an array

A.anonymous:

let num=userInput[0].split(" ").map(Number)

let res=[]

let palindrome=function(arr){

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

{

if(arr[i]<10)

{

res.push(arr[i])

}

else

{

temp=parseInt(String(arr[i]).split("").reverse().join(""))

if(temp===arr[i])

{

res.push(arr[i])

}

}

}

return res.join(" ") ;

}

console.log(palindrome(num))

B.iife:

let num=userInput[0].split(" ").map(Number)

let res=[]

let palindrome=(function(arr){

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

{

if(arr[i]<10)

{

res.push(arr[i])

}

else

{

temp=parseInt(String(arr[i]).split("").reverse().join(""))

if(temp===arr[i])

{

res.push(arr[i])

}

}

}

return res.join(" ") ;

})(num)

console.log(palindrome)

f.Return median of two sorted arrays of same size

A.anonymous:

let arr=userInput

if((arr[0].split(" ")).length!==(arr[1].split(" ")).length)

{

console.log(`Given Arrays are not of same size`)

}

else

{

let sarr=([...arr[0].split(" ").map(Number),...arr[1].split(" ").map(Number)])

var res=[]

var num=function(arr){

let id=Math.round(arr.length/2)

if(arr.length%2===0)

{

res.push(arr[id-1],arr[id])

}

return res.join(" ") ;

}

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

var sum=0

var median=function(res){

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

{

sum=sum+res[i]

}

return sum/2 ;

}

console.log(`median is :${median(res)}`)

}

B.iife:

let arr=userInput

if((arr[0].split(" ")).length!==(arr[1].split(" ")).length)

{

console.log(`Given Arrays are not of same size`)

}

else

{

let sarr=([...arr[0].split(" ").map(Number),...arr[1].split(" ").map(Number)])

var res=[]

var num=(function(arr){

let id=Math.round(arr.length/2)

if(arr.length%2===0)

{

res.push(arr[id-1],arr[id])

}

return res.join(" ") ;

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

var sum=0

var median=(function(res){

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

{

sum=sum+res[i]

}

return sum/2 ;

})(res)

console.log(`median is :${median}`)

}

g.Remove duplicates from an array

A.anonymous:

let arr=userInput[0].split(" ")

let duplicates=function(arr)

{

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

{

for(var j=i+1;j<arr.length;j++)

{

if(arr[i]===arr[j])

{

arr.splice(j,1)

}

}

}

return arr.join(" ")

}

console.log(duplicates(arr))

B.iife:

let arr=userInput[0].split(" ")

let duplicates=(function(arr)

{

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

{

for(var j=i+1;j<arr.length;j++)

{

if(arr[i]===arr[j])

{

arr.splice(j,1)

}

}

}

return arr.join(" ")

})(arr)

console.log(duplicates)

h.Rotate an array by k times

A.anonymous:

let arr=userInput[0].split(" ")

let k=parseInt(userInput[1])

var count=0

let rotate=function(arr,k)

{

for(var i=1;i<=arr.length;i++)

{

count++

if(count===k)

{

var temp=arr.splice(i)

var res=[...temp,...arr]

break;

}

if(i===arr.length)

{

i=0

}

}

return res.join(" ")

}

console.log(rotate(arr,k))

B.iife:

let arr=userInput[0].split(" ")

let k=parseInt(userInput[1])

var count=0

let rotate=(function(arr,k)

{

for(var i=1;i<=arr.length;i++)

{

count++

if(count===k)

{

var temp=arr.splice(i)

var res=[...temp,...arr]

break;

}

if(i===arr.length)

{

i=0

}

}

return res.join(" ")

})(arr,k)

console.log(rotate)

2. Do the below programs in arrow function

a.Print odd numbers in an array

var arr=userInput[0].split(" ")

var oarr=[]

let res=(arr)=>

{

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

{

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

{

oarr.push(arr[i])

}

}

return oarr.join(" ") ;

}

console.log(res(arr))

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

var arr=userInput[0].split(" ")

var oarr=[]

let res=(arr)=>

{

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

{

var split=arr[i].split("")

split[0]=split[0].toUpperCase()

oarr.push(split.join(""))

}

return oarr.join(" ") ;

}

console.log(res(arr))

c.Sum of all numbers in an array

var arr=userInput[0].split(" ").map(Number)

var sum=0

let res=(arr)=>

{

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

{

sum=sum+arr[i]

}

return sum ;

}

console.log(res(arr))

d.Return all the prime numbers in an array

let isPrime=(num)=>{

for(var i=2;i<num;i++)

{

if(num%i===0)

{

return false;

}

}

return true ;

}

let display=(n)=>{

let arr=[2]

for(var i=3;i<n;i+=2)

{

if(isPrime(i))

{

arr.push(i)

}

}

return arr

}

console.log(display(parseInt(userInput[0])))

e.Return all the palindromes in an array

let num=userInput[0].split(" ").map(Number)

let res=[]

let palindrome=(arr)=>{

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

{

if(arr[i]<10)

{

res.push(arr[i])

}

else

{

temp=parseInt(String(arr[i]).split("").reverse().join(""))

if(temp===arr[i])

{

res.push(arr[i])

}

}

}

return res.join(" ") ;

}

console.log(palindrome(num))