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 the same size.
7. Remove duplicates from an array
8. Rotate an array by k times

**1.Print odd numbers in an array**

**ANONYMOUS FUNCTION:**

var oddNumber=[]

var arr=function( \_input)

{

   for(var i=0;i<\_input.length;i++)

{

  if(\_input[i]%2===1)

  {

    var \_output=\_input[i]

    oddNumber.push(\_output)

  }

}

return oddNumber

}

arr([24,35,46,3,67,20])

console.log(oddNumber)

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

IIFE FUNCTION

(function(str) {

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

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

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

}

console.log(str.join(' '))

})

("hi all welcome")

**3.Sum of all numbers in an array**

**ANONYMOUS FUNCTION:**

var sumOfInput=0

var num=function(\_input)

{

  for(var i=0;i<\_input.length;i++)

 {

   sumOfInput =sumOfInput+\_input[i]

 }

 return sumOfInput

 }

num([2,3,5,6,7])

console.log(sumOfInput)

IIFE FUNCTION

var sumOfInput=0;

(function(\_input)

{

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

{

sumOfInput =sumOfInput+\_input[i]

}

return sumOfInput

})

([2,3,5,6,7])

console.log(sumOfInput)

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

**ANONYMOUS FUNCTION:**

var primeNumber=function(num)

{

num=num.filter((number)=>

{

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

{

if(number%i===0)

return false

}

return true

})

console.log(num)

}

primeNumber([2, 3, 4, 5, 7, 8, 9, 10])

**(or)**

var primeNumber=function(num)

{

var output=num.filter((\_input)=>

{

for(var i=2;i<=Math.sqrt(\_input);i++)

{

if(\_input%i===0)

return false

}

return true

})

console.log(output)

}

primeNumber([2, 3, 4, 5, 7, 8, 9, 10])

**5.Return all the palindromes in an array**

**ANONYMOUS FUNCTION:**

var palindrome= function(array)

{

array=array.filter((\_input)=>

{

var \_output=\_input.split("").reverse().join("")

if(\_input===\_output)

{return true}

return false

})

console.log(array)

}

palindrome(["apple","2002","BOB","civic","1993"])

**6. Return median of two sorted arrays of the same size.**

IIFE FUNCTION

( function(arr1,arr2)

{

var array=[...arr1,...arr2];

var sort=array.sort((a,b)=>(a-b))

var n=array.length

if(n%2===0)

{

console.log(((array[n/2]+array[n/2-1])/2))

}

else

{

console.log((array[Math.floor(n/2)]))

}

})

([1, 4, 5, 6, 10],[2, 3, 4, 5, 7])

**7.Remove duplicates from an array**

IIFE FUNCTION

(function(arr) {

var \_output=arr.filter((item, index) => arr.indexOf(item) === index);

console.log(\_output)

})

(["apple", "mango", "apple", "orange", "mango", "mango"])

**8.Rotate an array by k times----(left rotate)**

IIFE FUNCTION

(function(\_input)

{var rotateCount=1

var size=\_input.length-1

for(var j=1;j<=rotateCount;j++)

{

var temp=\_input[0]

for(var i=0;i<\_input.length-1;i++)

{

\_input[i]=\_input[i+1]

}

\_input[size]=temp

}console.log(\_input)

})

([30,20,40,50,60,80])

**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

**1.Print odd numbers in an array**

**ARROW FUNCTION:**

oddNumber=[]

var \_input=( \_input)=>

{

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

{

if(\_input[i]%2===1)

{

var \_output=\_input[i]

oddNumber.push(\_output)

}

}

return oddNumber

}

\_input([24,35,46,3,67,20])

console.log(oddNumber)

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

**ARROW FUNCTION:**

var str=(str)=>

{

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

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

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

}

console.log(str.join(' '))

}

str("hi all welcome")

**3.Sum of all numbers in an array**

**ARROW FUNCTION:**

var sumOfInput=0

var num= (\_input)=>

{

  for(var i=0;i<\_input.length;i++)

 {

   sumOfInput =sumOfInput+\_input[i]

 }

 return sumOfInput

 }

num([2,3,5,6,7])

console.log(sumOfInput)

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

**ARROW FUNCTION:**

var primeNumber=(num)=>

{

num=num.filter((number)=>

{

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

{

if(number%i===0)

return false

}

return true

})

console.log(num)

}

primeNumber([2, 3, 4, 5, 7, 8, 9, 10])

**5.Return all the palindromes in an array**

**ARROW FUNCTION:**

var palindrome= (array)=>

{

array=array.filter((\_input)=>

{

var \_output=\_input.split("").reverse().join("")

if(\_input===\_output)

{return true}

return false

})

console.log(array)

}

palindrome(["apple","2002","BOB","civic","1993"])