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

let a = [8,7,5,3,4,2,6,10]

 let oddNumbers = ((array)=>{

     let odd = []

     for(let i of array)

     {

         if(i%2!==0)

             odd.push(i)

     }

     return odd

})(a);

console.log(oddNumbers)

output:

1. *(3) [7, 5, 3]*
   1. **0**: 7
   2. **1**: 5
   3. **2**: 3
   4. **length**: 3
   5. Convert all the strings to title caps in a string array

anonymous :   function (str) {

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

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

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

    }

    return str.join(' ');

  }

IIFE : (function (str) {

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

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

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

    }

    return str.join(' ');

  })("BHARAN IS MY NAME");

* 1. Sum of all numbers in an array

anonymous  :  function(array){

    var sum = 0;

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

       sum = sum + array[i];

     }

     return sum;

  }

IIFE :       (function(array){

var sum = 0;

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

       sum = sum + array[i];

     }

     return sum;

})([1,2,3,4]

* 1. Remove duplicates from an array

anonymous :

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

function (array){

   let dup = [...new Set(array)];

   return(dup);

 }

 (array);

 IIFE :

 var array=[1,1,2,3,4,5];

(function (array){

   let dup = [...new Set(array)];

   return(dup);

 })

 (array);

* 1. Rotate an array by k times

Anonymous function : function(array , k){

    k = k % a.length;

      if(k < 0){

        k += a.length;

      }

      reverse(a, 0, a.length - k - 1);

      reverse(a, a.length - k, a.length - 1);

      reverse(a, 0, a.length - 1);

    }

IIFE :   (function(array , k){

    k = k % a.length;

      if(k < 0){

        k += a.length;

      }

      reverse(a, 0, a.length - k - 1);

      reverse(a, a.length - k, a.length - 1);

      reverse(a, 0, a.length - 1);

    })([1,2,3,4] ,

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

* 1. Print odd numbers in an array

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

let odd = (array)=>{

   let arr=[];

   for(let i=0; i<array.length; i++)

   {

     if(array[i]%2!==0)

     {

      arr.push(array[i])

     }

   }

   return arr;

}

console.log(odd(a))

output:

1. *(4) [1, 3, 5, 7]*
   1. **0**: 1
   2. **1**: 3
   3. **2**: 5
   4. **3**: 7
   5. **length**: 4
   6. Convert all the strings to title caps in a string array

let str="my name is bharan"

let def= (str)=>{

   str = str.toLowerCase().split(' ')

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

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

   }

   return str.join(' ')

}

console.log(def(str))

output:

My Name Is Bharan

* 1. Sum of all numbers in an array

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

let sum=0

let add=(a)=>

{

   for(let i=0; i<a.length; i++)

   {

     sum=sum+a[i]

   }

   return sum;

}

console.log(add(a))

output:

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