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

**Anonymous:**

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

var oddNumber = function(arr) {

for(var i in arr){

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

console.log(arr[i]);

}

}

}

oddNumber(arr);

**IIFE:**

(function(array){

for(var i in array){

if(array[i]%2!==0){

console.log(array[i]);

}

}

}

)([1,2,3,4,5,6,7,8]);

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

**Anonymous:**

var array=function(str) {

let sentance= str.toLowerCase().split(" ");

for(var i in sentance) {

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

}

var newstr="";

for(var j=0;j<sentance.length-1;j++)

{

newstr=newstr+sentance[j]+" ";

}

newstr=newstr+sentance[sentance.length-1];

return newstr;

};

console.log(array("anbu siva"));

**IIFE:**

(function(str) {

var sentance= str.toLowerCase().split(" ");

for(var i in sentance) {

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

}

let newStr="";

for(let j=0;j<sentance.length-1;j++)

{

newStr=newStr+sentance[j]+" "

}

newStr=newStr+sentance[sentance.length-1]

console.log(newStr);

}) ("anbu siva");

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

**Anonymous:**

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

let value=0;

var sum=function(arr){

for(var i in arr){

value+=arr[i];

}

return value;

}

console.log(sum(array));

**IIFE:**

(function(arr){

let value=0;

for(var i in arr){

value+=arr[i];

}

console.log(value)

})

([1,2,3]);

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

**Anonymous:**

let primeNumber=function(arr){

var result="";

for(var i in arr)

{

var count =0;

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

{

if(arr[i]%j===0) {

count++;

}

}

if(count===2)

{

result=result+arr[i]+" ";

}

}

return result;

}

console.log(primeNumber([1,2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,18]));

**IIFE:**

(function(arr){

var result ="";

for(var i in arr)

{

var count =0;

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

{

if(arr[i]%j===0) {

count++;

}

}

if(count===2)

{

result=result+arr[i]+" ";

}

}

console.log(result);

})

([1,2,3,4,5,6,7,8,9,10,11]);

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

**Anonymous:**

let palindrome=function(array){

var a="";

var b="";

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

{

a=a+array[i] ;

let c=0;

for(j=0;j<a.length;j++) {

if(a[j]===a[((a.length-1)-j)]) {

c++;

}

}

if(c===a.length) {

b=b+a+" ";

}

a="";

}

return b;

};

console.log(palindrome([525,11,32,123,323,44,57,121,202]));

**IIFE:**

(function(array){

let a="";

let b="";

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

a=a+array[i];

let total= 0;

for (j=0;j<a.length;j++) {

if(a[j]===a[((a.length-1)-j)]) {

total++;

}

}

if(total===a.length) {

b=b+a+" ";

}

a="";

}

console.log(b);

})

([24,23,11,34,33,121,156,55]);

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

**Anonymous:**

let arr=function(a,b){

let c=[];

let d=a.length;

let e=b.length;

let f=0;

let g=0;

let item=0;

while(f<d && g<e) {

if(a[f]<b[g]) {

c.push(a[f]);

f++;

}

else {

c.push(b[g]);

g++;

}

}

if(f<d)

{

for(let h=f;h<d;h++) {

c.push(a[h]);

}

}

else if(g<e) {

for (let i=g;i<e;i++ ) {

c.push(b[i]);

}

}

if (c.length%2===0) {

item=(c[(c.length/2)-1]+c[c.length/2])/2;

}

else {

item=c[Math.floor(c.length/2)];

}

return item;

};

console.log(arr([1,2,3,4],[5,6,7,8]));

**IIFE:**

(function(a,b){

let c=[];

let d=a.length;

let e=b.length;

let f=0;

let g=0;

let item=0;

while(f<d && g<e) {

if(a[f]<b[g]) {

c.push(a[f]);

f++;

}

else {

c.push(b[g]);

g++;

}

}

if(f<d)

{

for(let h=f;h<d;h++) {

c.push(a[h]);

}

}

else if(g<e) {

for (let i=g;i<e;i++ ) {

c.push(b[i]);

}

}

if (c.length%2===0) {

item=(c[(c.length/2)-1]+c[c.length/2])/2;

}

else {

item=c[Math.floor(c.length/2)];

}

console.log(item);

})

([1,2,3,4],[5,6,7,8]);

1. **Remove duplicates from an array**

**Anonymous:**

let array = function(arr) {

let temp=[];

for(let i=0;i<arr.length-1;i++) {

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

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

delete arr[j];

}

}

}

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

if(arr[k]%10===Math.floor(arr[k]%10)) {

temp.push(arr[k]);

}

}

let result="";

for(let l =0;l<temp.length-1;l++) {

result=result+temp[l]+" ";

}

result=result+temp[temp.length-1];

return result;

};

console.log(array([10,12,12,11,15,18,19,12,13,14,19]));

**IIFE:**

( function(arr) {

let temp=[];

for(let i=0;i<arr.length-1;i++) {

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

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

delete arr[j];

}

}

}

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

if(arr[k]%10===Math.floor(arr[k]%10)) {

temp.push(arr[k]);

}

}

let result="";

for(let l =0;l<temp.length-1;l++) {

result=result+temp[l]+" ";

}

result=result+temp[temp.length-1];

console.log(result);

})([10,12,12,11,15,18,19,12,13,14,19])

**h. Rotate an array by k times**

**Anonymous:**

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

var k=3;

const rotateArray1 = function(nums, k) {

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

nums.unshift(nums.pop());

}

return nums;

}

console.log(rotateArray1(nums,k));

**IIFE:**

( function(nums, k) {

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

nums.unshift(nums.pop());

}

console.log(nums);

}

)([1,2,3,4,5,8,9,1,1],3);

1. [**https://medium.com/@reach2arunprakash/guvi-zen-class-javascript-warm-up-programming-problems-15973c74b87f**](https://medium.com/@reach2arunprakash/guvi-zen-class-javascript-warm-up-programming-problems-15973c74b87f)
2. **Write a function called “addFive”.  
   Given a number, “addFive” returns 5 added to that number.**  
     
   Input:

addFive(5);  
addFive(0);  
addFive(-5)

**Output:**

10  
5  
0

**Code**: function addFive(num){

return num+5;

}

console.log(addFive(5));

console.log(addFive(0));

console.log(addFive(-5));

1. **Create a function that takes an array and returns the first element.**

**Code:**

function firstArrayelemnt(element){

return element[0];

}

console.log(firstArrayelemnt([101,12,154]))

console.log(firstArrayelemnt([12,13,12,34,55]))

console.log(firstArrayelemnt([1,2,3,4,]))

1. **Create a function that takes a string and returns it as an integer.**

**Code:**

function toInt(str){

return parseInt(str)

}

console.log(toInt("2"))

1. **Fill in your code that takes an number minutes and converts it to seconds.**

**Code:**

function toSeconds(min){

return min\*60;

}

console.log(toSeconds(3));

1. **Create a function that takes a number as an argument, increments the number by +1 and returns the result.**

**Code:**

function nextNumber(myint) {

return parseInt(myint)+1

}

console.log(nextNumber(2))

1. **Write a function that converts hours into seconds.**

**Code:**

function hourToSeconds(arr) {

for(var i in arr){

console.log(arr[i]\*3600)

}

}

hourToSeconds([1,2,3]);

1. **Find the Perimeter of a Rectangle  
   Create a function that takes height and width and finds the perimeter of a rectangle.**

**Code:**

function findPerimeter(w,h){

return 2\*(w+h)

}

console.log(findPerimeter(6,7));

1. **Less Than 100?  
   Given two numbers, return true if the sum of both numbers is less than 100. Otherwise return false.**

**Code:**

let lessthan100=function(n1,n2) {

let print;

let sum = n1+n2;

if (sum < 100) {

print = "True"

}

else{

print ="False"

}

return print;

}

console.log(lessthan100(10,5));

console.log(lessthan100(101,24));

1. **Check if an Integer is Divisible By Five  
   Create a function that returns true if an integer is evenly divisible by 5, and false otherwise.**

**Code:**

let divisibleBy5=function(n1) {

let print;

if (n1%5===0) {

print = "True"

}

else{

print ="False"

}

return print;

}

console.log(divisibleBy5(5));

console.log(divisibleBy5(-55));

console.log(divisibleBy5(37));

`**10. Find the maximum number in an array of numbers**

**Code:**

var maxNum = (arr) =>

Math.max(...arr);

console.log(maxNum([10,19,90,88,77]));

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

oddNumber=(Array=> {

for(var i in Array) {

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

console.log(Array[i]);

}

})

([1,2,3,4,6,7,8]);

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

result=(caps=> {

let sentance= caps.toLowerCase().split(" ");

for(var i in sentance) {

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

}

sentance.join(" ");

let newStr="";

for(let j=0;j<sentance.length-1;j++)

{

newStr=newStr+sentance[j]+" ";

}

newStr=newStr+sentance[sentance.length-1];

console.log(newStr);

});

(result("anbu arun"));

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

result=(arr=> {

let sum =0;

for (var i in arr) {

sum+=arr[i];

}

console.log(sum);

});

(result([10,12,3,4,8]))

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

primeNumber=(arr=> {

var result="";

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

{

var count =0;

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

{

if(arr[i]%j===0) {

count++;

}

}

if(count===2)

{

result=result+arr[i]+" ";

}

}

console.log(result)

});

(primeNumber([1,2,3,4,5,6,7,8]))

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

palindromes=(array=> {

var a="";

var b="";

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

{ a=a+array[i] ;

let c=0;

for(j=0;j<a.length;j++) {

if(a[j]===a[((a.length-1)-j)]) {

c++;

}

}

if(c===a.length) {

b=b+a+" ";

}

a="";

}

console.log(b)

});

(palindromes([525,11,32,123,323,44,57,121,202]));