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

**Anonymous function:**

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

var odd = function(arr) {

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

if(arr[i]%2===1){

console.log(arr[i]);

}

}

}

odd(arr)

**IIFE:**

(function(a) {

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

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

{

console.log(a[i])

}

}

})

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

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

**Anonymous function:**

let arr=function(str) {

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

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

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

}

sentance.join(" ");

let a="";

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

{

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

}

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

return a;

};

console.log(arr("guvi geek"));

**IIFE:**

(function(str) {

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

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

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

}

sentance.join(" ");

let a="";

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

{

a=a+sentance[j]+" "

}

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

console.log(a);

}) ("guvi geek");

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

**Anonymous Function:**

let arr= [1,2,3,4,5];

let total =0;

var sum = function(arr) {

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

total+=arr[i];

}

return total;

}

console.log(sum(arr))

**IIFE:**

(function(arr){

let total =0;

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

total=total+arr[i];

}

console.log(total);

})

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

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

**Anonymous function:**

let prime=function(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]+" ";

}

}

return result;

}

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

**IIFE:**

CODE: (function(arr){

var res ="";

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)

{

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

}

}

console.log(res);

})

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

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

**Anonymous function:**

let palindrome=function(ele){

var a="";

var b="";

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

{

a=a+ele[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([11,22,33,12,23,34,111,121,122,232,234]));

**IIFE:**

(function(ele){

let a="";

let b="";

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

a=a+ele[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);

})

([11,22,33,12,23,34,111,121,122,232,234]);

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

**Anonymous function:**

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],[6,7,8,9,10]));

**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],[6,7,8,9,10]);

1. **Remove duplicates from an array**

**Anonymous function:**

let arr = function(a) {

let b=[];

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

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

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

delete a[j];

}

}

}

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

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

b.push(a[k]);

}

}

let c="";

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

c=c+b[l]+" ";

}

c=c+b[b.length-1];

return c;

};

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

**IIFE:**

(function(a){

let b=[];

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

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

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

delete a[j];

}

}

}

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

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

b.push(a[k]);

}

}

let c="";

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

c=c+b[l]+" ";

}

c=c+b[b.length-1];

console.log(c);

})

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

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

**Anonymous function:**

let rotate=function(a,b) {

c=[];

d="";

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

{

c[(i+b)%(a.length)]=a[i];

}

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

d=d+c[i]+" ";

}

d=d+c[c.length-1];

return d;

};

console.log(rotate([1,2,3,4],5));

**IIFE:**

(function(a,b) {

c=[];

d="";

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

{

c[(i+b)%(a.length)]=a[i];

}

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

d=d+c[i]+" ";

}

d=d+c[c.length-1];

console.log(d);

})

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

1. **Javascript function warmup problems**
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**

**Answer:**

function addfive(a){

return a+5;

}

console.log(addfive(5));

console.log(addfive(0));

console.log(addfive(-5));

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

**Examples  
toSeconds(5) ➞ 300**

**toSeconds(3) ➞ 180**

**toSeconds(2) ➞ 120**

**Answer:**

function toseconds(min){

return min\*60;

}

console.log(toseconds(5));

console.log(toseconds(3));

console.log(toseconds(2));

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

**Examples  
getFirstElement([1, 2, 3]) ➞ 1**

**getFirstElement([80, 5, 100]) ➞ 80**

**getFirstElement([-500, 0, 50]) ➞ -500**

**Answer:**

function getfirstelement(ele){

return ele[0];

}

console.log(getfirstelement([1,2,3]))

console.log(getfirstelement([80,5,100]))

console.log(getfirstelement([-500,0,50]))

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

**Examples  
findPerimeter(6, 7) ➞ 26**

**findPerimeter(20, 10) ➞ 60**

**findPerimeter(2, 9) ➞ 22**

**Answer:**

function findperimeter(a,b){

return 2\*(a+b)

}

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

console.log(findperimeter(20,10));

console.log(findperimeter(2,9));

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

**Examples  
lessThan100(22, 15) ➞ true  
// 22 + 15 = 37**

**lessThan100(83, 34) ➞ false  
// 83 + 34 = 117**

Answer:

let lessthan100=function(a,b) {

let ans;

let sum = a+b;

if (sum < 100) {

ans = "True"

}

else{

ans ="False"

}

return ans;

}

console.log(lessthan100(22,15));

console.log(lessthan100(83,34));

1. **Old macdonald had a farm:**

**MacDonald is asking you to tell him how many legs can be counted among all his animals. The farmer breeds three species:**

**turkey = 2 legs  
horse = 4 legs  
pigs = 4 legs**

**The farmer has counted his animals and he gives you a subtotal for each species. You have to implement a function that returns the total number of legs of all the animals.**

**Examples  
CountAnimals(2, 3, 5) ➞ 36**

**CountAnimals(1, 2, 3) ➞ 22**

**CountAnimals(5, 2, 8) ➞ 50**

**Answer:**

let countAnimals=function(tur,horse,pigs) {

return tur\*2+horse\*4+pigs\*4

}

console.log(countAnimals(2,3,5))

console.log(countAnimals(1,2,3))

console.log(countAnimals(5,2,8))

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.**

**Examples  
divisibleByFive(5) ➞ true**

**divisibleByFive(-55) ➞ true**

**divisibleByFive(37) ➞ false**

**Answer:**

let divisibleby5=function(num1) {

let ans;

if (num1%5===0) {

ans = "True"

}

else{

ans ="False"

}

return ans;

}

console.log(divisibleby5(5));

console.log(divisibleby5(-55));

console.log(divisibleby5(37));

1. **Write a function called “isSameLength”.  
   Given two words, “isSameLength” returns whether the given words have the same length.  
   Input:  
   isSameLength(“GUVI”, “GEEK”);  
   Output:  
   true**

**Answer:**

let issamelength=function(a,b) {

if(a.length==b.length) {

return "true";

}

else {

return "false";

}

};

console.log(issamelength("Guvi","Geek"));

1. **Find the maximum number in an array of numbers**

**Answer:**

var findmax = (arr) =>

Math.max(...arr);

console.log(findmax([1,2,7,4,5,]));

1. **Reverse a string**

**Answer:**

function reversestring(str) {

return str.split("").reverse().join("");

}

console.log(reversestring("Javascript"));

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

**CODE:**

odd=(a=> {

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

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

console.log(a[i]);

}

})

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

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

**CODE:**

Title=(caps=> {

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

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

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

}

sentance.join(" ");

let a="";

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

{

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

}

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

console.log(a);

});

(Title("guvi geek"));

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

**CODE:**

Sum=(arr=> {

let total =0;

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

total+=arr[i];

}

console.log(total);

});

(Sum([1,2,3,4,5]))

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

**CODE:**

prime=(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)

});

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

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

**CODE:**

palindromes=(arr=> {

var a="";

var b="";

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

{

a=a+arr[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([22,33,12,23,34,111,121,122,232,234]));