1. Calculate the sum of numbers received in a comma delimited string

var num="1.5,2.3,3.1,4,5.5,6,7,8,9,10.9";

function sumCSV(s)

{

var a=s.split(",");

var sum=0;

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

{

sum=sum+parseFloat(a[i]);

}

console.log(sum.toFixed(2));

}

sumCSV(num);

1. Create a function that will merge two arrays and return the result as a new array

var ar1 = [1, 2, 3];

var ar2 = [4, 5, 6];

function mergeArrays(ar1, ar2)

{

var result = [];

for(let el of ar1)

{

result.push(el);

}

for(let ind of ar2)

{

result.push(ind);

}

return result;

}

var ar = mergeArrays(ar1, ar2);

console.log(ar);

1. Reverse a string

var str="JavaScript";

function reverseString(str)

{

var len=str.length;

for(var i=len-1;i>=0;i--)

{

console.log(str[i]);

}

}

reverseString(str);

1. Find the maximum number in an array of numbers

var ar = [-5, 10, -3, 12, -9, 5, 90, 0, 1];

function findMax(ar)

{

var a=Math.max(...ar);

return a;

}

var max = findMax(ar);

console.log(max);

1. Write a function `powersOfTwo` which will return list of all powers of 2 from 0 to n (where n is an exponent).

var n=4;

function powersOfTwo(n){

var res=[];

for(var i=0;i<=n;i++)

{

res[i]=Math.pow(2,i);

}

return res;

}

var a=powersOfTwo(n);

console.log(a);

1. Create a function that receives an array of numbers and returns an array containing only the positive numbers

var ar = [-5, 10, -3, 12, -9, 5, 90, 0, 1];

function getPositives(ar)

{

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

{

var si=Math.sign(ar[i]);

if(si===1)

{

console.log(ar[i]);

}

}

}

getPositives(ar);

1. Write a function called “removeProperty”. Given an object and a key, “removeProperty” removes the given key from the given object.

var obj={};

function removeProperty(obj,key){

delete obj.name;

}

removeProperty(obj, “name”);

1. Write a function called “addProperty”. Given an object and a key, “addProperty” adds a new property on the given object with a value of true.

var obj = {};

function addProperty(obj,key){

obj.mykey= true;

console.log(obj);

}

addProperty(obj,"mykey");

1. Write a function called “getLastElement”. Given an array, “getLastElement” returns the last element of the given array. If the given array has a length of 0, it should return ‘-1’.

function getLastElement(array){

var length=array.length;

if(length===0)

{

return -1;

}

else{

var a=length-1;

return array[a];

}

}

var b=getLastElement([1,2,3,5,6,7,8]);

console.log(b);

1. Write a function called “getNthElement”. Given an array and an integer, “getNthElement” returns the element at the given integer, within the given array. If the array has a length of 0, it should return ‘undefined’.

function getNthElement(array,n){

var length=array.length;

if(length===0)

{

return typeof(undefined);

}

else{

return array[n];

}

}

var b= getNthElement([1,2,3,5,6,7,8],4);

console.log(b);

1. Write a function called “isSameLength”. Given two words, “isSameLength” returns whether the given words have the same length.

var word1="surbhi";

var word2="mathur";

function isSameLength(word1, word2){

var len1=word1.length;

var len2=word2.length;

if(len1===len2)

{

return true;

}

else

{

return false;

}

}

console.log(isSameLength(word1,word2));

1. Write a function called “getLengthOfWord”. Given a word, “getLengthOfWord” returns the length of the given word.

function getLengthOfWord(word1){

var len=word1.length;

if(typeof(word1)==="string")

{

return len;

}

else{

return -1;

}

}

console.log(getLengthOfWord());

1. Write a function called “getFullName”. Given a first and a last name, “getFullName” returns a single string with the given first and last names separated by a single space.

var firstName="surbhi";

var lastName="mathur";

function getFullName(firstName, lastName){

var fullname=firstName.concat(" ",lastName);

return fullname;

}

console.log(getFullName(firstName,lastName));

1. Write a function called “areBothOdd”. Given 2 numbers, “areBothOdd” returns whether or not both of the given numbers are odd.

function areBothOdd(num1, num2){

if(num1%2!==0 && num2%2!==0)

{

return true;

}

else{

return false;

}

}

console.log(areBothOdd(1,3));

console.log(areBothOdd(2,7));

1. Write a function called “isEven”. Given a number, “isEven” returns whether it is even.

function isEven(num){

if(num%2===0)

{

return true;

}

else{

return false;

}

}

var even=isEven(6);

console.log(even);

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.

function divisibleByFive(num1) {

if(num1%5===0)

{

return true;

}

else{

return false;

}

}

console.log(divisibleByFive(102));

1. Frames Per Second  
   Create a function that returns the number of frames shown in a given number of minutes for a certain FPS.

function frames(num1,num2) {

var a=num1\*60;

var b=a\*num2;

return b;

}

var fps = frames(10,30);

console.log(fps);

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.

function CountAnimals(tur,horse,pigs) {

var t,h,p,sum;

t=2\*tur;

h=4\*horse;

p=4\*pigs;

sum=t+h+p;

return sum;

}

var legs = CountAnimals(5,2,8)

console.log(legs);

1. There is a single operator in JavaScript, capable of providing the remainder of a division operation. Two numbers are passed as parameters. The first parameter divided by the second parameter will have a remainder, possibly zero. Return that value.

function remainder(num1,num2) {

if(num1%num2===0)

{

return 0;

}

else{

return num1;

}

}

var res = remainder(4,2)

console.log(res);

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

function lessThan100(num1,num2) {

var sum=num1+num2;

if(sum<100)

{

return true;

}

else

{

return false;

}

}

var res = lessThan100(90,15)

console.log(res);

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

function findPerimeter(num1,num2) {

var a=2\*(num1+num2);

return a;

}

var peri = findPerimeter(6,7);

console.log(peri);

1. Convert Hours into Seconds. Write a function that converts hours into seconds.

var arr = [1, 2, 3];

function hourToSeconds(arr) {

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

{

var min=arr[i]\*60;

var sec=min\*60;

console.log(sec);

}

}

var data = hourToSeconds(arr);

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

var arr = [80,50,100];

function getFirstElement(arr) {

return arr[0];

}

var data = getFirstElement(arr)

console.log(data);

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

var myint = 15;

function nextNumber(myint) {

return myint+1;

}

var myNextint = nextNumber(myint)

console.log(myNextint);

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

var mystr = "5";

function toInteger(mystr) {

return parseInt(mystr);

}

var myint = toInteger(mystr)

console.log(myint);

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

var min = 3;

function toSeconds(min) {

return min\*60;

}

var secs = toSeconds(min)

console.log(secs);

1. Write a function called “getOpposite”. Given a number, return its opposite.

var num = 10;

function getOpposite(num) {

if(num===parseInt(num))

{

return -num;

}

else if(num===-num)

{

return num;

}

else

{

return -1;

}

}

var result = getOpposite(num)

console.log(result);

1. Write a function called “addFive”. Given a number, “addFive” returns 5 added to that number.

var num = 20;

function addFive(num) {

return num+5;

}

var result = addFive(num)

console.log(result);

1. Print the first 100 prime numbers

const prime=function( )

{

for(var i=0;i<=100;i++){

var isprime=false;

for(var j=2;j<=i;j++){

if(i%j===0 && j!==i)

{

isprime=true;

}

}

if(isprime===false)

{

console.log(i);

}

}

}

prime( );

1. Return an array, where the first element is the count of positives numbers and the second element is sum of negative numbers.

var ar = [-5, 10, -3, 12, -9, 5, 90, 0, 1];

function getPositives(ar)

{

var positive=[ ];

var newar=[];

var sum=0;

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

{

if(ar[i]>0)

{

positive.push(ar[i]);

}

else

{

sum=sum+ar[i];

}

}

newar.push(positive.length,sum);

console.log(newar);

}

getPositives(ar);

1. Create a function to calculate the distance between two points defined by their x, y coordinates

function getDistance(x1, y1, x2, y2)

{

var power=Math.pow((x2-x1),2)+Math.pow((y2-y1),2);

var distance= Math.sqrt(power);

return distance;

}

console.log(getDistance(3,4,4,3));