1. Declare four variables without assigning values and print them in console.

var a,b,c,d;

console.log(a,b,c,d);

1. How to get value of the variable myvar as output.

var myvar= 1;  
console.log("myvar");

1. Declare variables to store your first name, last name, marital status, country and age in multiple lines

var firstname;

var lastname;

var marital\_status;

var country;

var age;

1. Declare variables to store your first name, last name, marital status, country and age in a single line

var firstname, lastname, marital\_status, country,age;

1. Declare variables and assign string, boolean, undefined and null data types.

var a= “surbhi”;

var b= true;

var c;

var d=null;

1. Convert the string to integer: parseInt(), Number().

var p=parseInt("500");

console.log(p);

var n=Number("67");

console.log(n);

1. Square of a number

var num=7;

console.log(num\*num);

1. Swapping 2 numbers

var num1=45;

var num2=78;

console.log("before swap" + num1,num2);

var swap=num1;

num1=num2;

num2=swap;

console.log("after swap" + num1,num2);

1. Addition of 3 numbers

var a=24;

var b=45;

var c=89;

var sum;

sum=a+b+c;

console.log(sum);

1. Celsius to Fahrenheit conversion

var cel=20;

var fah=(cel\*9/5)+32;

console.log(fah);

1. Meter to miles

var meter=40;

var mile=meter\*0.000621;

console.log(mile);

1. Pounds to kg

var pounds=40;

var kg=pounds \* 0.45359237;

console.log(kg);

1. Calculate Batting Average

var b=10;

var ba= 5;

var avg=b/ba;

console.log(avg);

1. Calculate five test scores and print their average

var t1=100;

var t2=600;

var t3=400;

var t4=200;

var t5=567;

var total=(t1+t2+t3+t4+t5)/5;

console.log(total);

1. Power of any number x ^ y.

var a=28;

var power=2;

console.log(a\*\*power);

1. Calculate Simple Interest

var p=2000;

var r=5;

var t=8;

var si=(p\*r\*t)/100;

console.log(si);

1. Calculate area of an equilateral triangle

var t=30;

var area=(Math.sqrt(3)\*t\*t)/4;

console.log(area);

1. Area Of Isosceles Triangle

var a=12;

var iso=(1/2)\*a\*a;

console.log(iso);

1. Volume Of Sphere

var radius=4;

var pi=3.14;

var volume=(4/3)\*pi\*(radius\*radius\*radius);

console.log(volume);

1. Volume Of Prism

var base=4;

var height=7;

var volume=base\*height;

console.log(volume);

1. Find area of a triangle.

var b=24;

var h=12;

var area=(1/2)\*b\*h;

console.log(area);

1. Give the Actual cost and Sold cost, Calculate Discount Of Product

var actual\_cost=2000;

var sold\_cost=1600;

var d=(actual\_cost-sold\_cost)/actual\_cost;

var discount=d\*100;

console.log(discount);

1. Given their radius of a circle and find its diameter, circumference and area.

var radius=4;

var circum=2\*3.14\*radius;

var dia= 2\*radius;

var area= 3.14\*radius\*radius;

console.log(circum,dia,area);

1. Given two numbers and perform all arithmetic operations.

var num1=10;

var num2=20;

console.log(num1+num2);

console.log(num1-num2);

console.log(num1\*num2);

console.log(num1/num2);

console.log(num1%num2);

1. Display the asterisk pattern as shown below(No loop needed):  
   \*\*\*\*\*  
   \*\*\*\*\*  
   \*\*\*\*\*  
   \*\*\*\*\*  
   \*\*\*\*\*

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

console.log("\*\*\*\*\*");

1. Calculate electricity bill?  
   For example, a consumer consumes 100 watts per hour daily for one month. Calculate the total energy bill of that consumer if per unit rate is 10?

var rate=10;

var days=30;

var units=100;

var hours=24;

var totalunits=hours\*units;

var bill=totalunits\*days\*rate;

console.log(bill);

1. Program To Calculate CGPA

var marks=400;

var totalmarks=600;

var percent=(marks/totalmarks)\*100;

var cgpa=percent/9.5;

console.log(cgpa);

1. Write a loop that makes seven calls to console.log to output the following triangle:

#  
##  
###  
####  
#####  
######  
#######

var temp="";

for(var i=1;i<=7;i++)

{

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

{

temp=temp+"#";

}

temp=temp+"\n";

}

console.log(temp);

1. Iterate through the string array and print it contents

var strArray= ["<option>Jazz</option>",

"<option>Blues</option>",

"<option>New Age</option>",

"<option>Classical</option>",

"<option>Opera</option>"];

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

{

console.log(strArray[i]);

}

1. write a code to count the elements in the array . Don’t use length property

var myarray=[11,22,33,44,55];

var c=0;

for(var index in myarray)

{

c=c+1;

}

console.log(c);

1. Create an array called foods holds the names of your top 20 favorite foods, starting with the best food.

var foods=["rasmalai","pav bhaji","machurian","rasgulla","paneer tikka","hara bhara kabab","chole bature","puri sbzi","bhelpuri","samosa","chowmein","american choupsey","pastry","icecream","kheer","dosa","uttapam","sambhar vada","pani puri","dahi vada"];

1. Foods variable holds the names of your top 20 favorite foods, starting with the best food. How can you find your fifth favorite food?

var foods=["rasmalai","pav bhaji","machurian","rasgulla","paneer tikka","hara bhara kabab","chole bature","puri sbzi","bhelpuri","samosa","chowmein","american choupsey","pastry","icecream","kheer","dosa","uttapam","sambhar vada","pani puri","dahi vada"];

console.log(foods[5]);

1. Find the length of your foods array

var foods=["rasmalai","pav bhaji","machurian","rasgulla","paneer tikka","hara bhara kabab","chole bature","puri sbzi","bhelpuri","samosa","chowmein","american choupsey","pastry","icecream","kheer","dosa","uttapam","sambhar vada","pani puri","dahi vada"];

console.log(foods.length);

1. Starting from the existing friends variable below, change the element that is currently “Mari” to “Munnabai”.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

function dataHandling(input){

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

if(input[i]==="Mari")

{

input[i]="Munnabhai";

}

}

return input;

}

var a=dataHandling(friends);

console.log(a);

1. Starting from the friends variable below, Loop and Print the names till you meet CaptianAmerica.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

function dataHandling(input){

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

console.log(input[i]);

if(input[i]==="CaptianAmerica")

{

break;

}

}

}

dataHandling(friends);

1. Find the person is ur friend or not.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

function dataHandling(input,name){

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

if(name===input[i])

{

return input[i];

}

}

}

let found = dataHandling(friends,"Jeff");

console.log(found);

1. We have two lists of friends below. Use array methods to combine them into one alphabetically-sorted list.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

var friends2 = ["Gabbar","Rajinikanth","Mass","Spiderman","Jeff","ET"];

function dataHandling(input1,input2){

var friends3=input1.concat(input2);

var so=friends3.sort();

console.log(so);

}

dataHandling(friends,friends2);

1. Get the first item, the middle item and the last item of the array.

var a=[24,35,37,28,87,90];

var len=a.length;

console.log("first element" + a[0]);

console.log("last element" + a[a.length-1]);

console.log("middle element" + a[a.length/2]);

1. Add your name to the end of the friends array, and add another name to beginning.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

friends.push("surbhi");

friends.unshift("sandesh");

console.log(friends);

1. Add Mr or Ms to the names in the friends array.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

var a="Mr";

var b=[];

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

{

b[i]=a.concat(friends[i]);

}

console.log(b);

1. Concat all the names the friends array and return as comma “,” seperated string.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

var str=friends.toString();

console.log(str);

1. Find the friends names who has letter ‘a’ and return the list

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

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

{

var letter=friends[i].includes("a");

if(letter===true)

{

console.log(friends[i]);

}

}

1. Find the avg length of all the friends names. Get the individual length of the names and do the avg.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

var length;

var sum=0;

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

{

length=friends[i].length;

sum=(sum + length);

}

var avg=sum/6;

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

1. Find the names and return the list starting with letter M

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

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

{

var letter=friends[i].includes("M");

if(letter===true)

{

console.log(friends[i]);

}

}

1. Find the name with max characters and return the name

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

var len=[];

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

{

len[i]=friends[i].length;

}

var max=Math.max(...len);

for(var j=0;j<friends.length;j++)

{

if(friends[j].length===max)

{

console.log(friends[j]);

}

}

1. Find the name with min characters and return the name.

let friends = ["Mari","MaryJane","CaptianAmerica","Munnabai","Jeff","AAK chandran"];

var len=[];

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

{

len[i]=friends[i].length;

}

var min=Math.min(...len);

for(var j=0;j<friends.length;j++)

{

if(friends[j].length===min)

{

console.log(friends[j]);

}

}

1. Find the average in the array below. Make sure you add only the numbers and do avg.

const friendsInfo =[6, 12, "Mari", 1, true, "Munnabai", "200", "CaptianAmerica", 8, 10];

var sum=0;

var datatype;

var totalnumber=0;

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

{

datatype=typeof(friendsInfo[i]);

if(datatype==="number")

{

sum=sum+friendsInfo[i];

totalnumber++;

}

}

console.log((sum/totalnumber));

1. Print the contents of the input variable

var input = [

["0001", "Roman Alamsyah", "Bandar Lampung", "21/05/1989", "Membaca"],

["0002", "Dika Sembiring", "Medan", "10/10/1992", "Bermain Gitar"],

["0003", "Winona", "Ambon", "25/12/1965", "Memasak"],

["0004", "Bintang Senjaya", "Martapura", "6/4/1970", "Berkebun"]

]

function dataHandling(input){

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

console.log(input[i]);

}

}

dataHandling(input);

1. What the output:

myobject = {1:"one","11":1,"name":"arun"};

console.log(myobject["11"]);

console.log(myobject.name);

Output:

1

arun

1. Add a new key value pair to myobject  
   key : ten  
   value : ten

myobject = {1:"one","11":1,"name":"arun"};

myobject.ten="ten";

console.log(myobject);

1. Write out an object literal to represent the data below. Guvi, Geek, 6, IIT-M RP,Chennai.

var details={firstname:"GUVI",lastname:"GEEK",number:6,address:"IIT-M RP",city:"Chennai"};

console.log(details);