**GUVI: Zen Class — Variables Arrays & Objects**

# (task–3: Simple Programs todo for Condition , Looping and Arrays)

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

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

var i,j=[];

j.push("#");

for(i=0;i<7;i++)

{

console.log(j.join(""));

j.push("#");

}

2. 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>"]

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+=2)

console.log(strArray[i]);

-----------------------------------------------

Arrays:

1. var myarray=[11,22,33,44,55]

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

Declare an empty array;

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

var i=0,c=0;

var empty\_array=[];

while(myarray[i])

{

if(myarray[i])

c++;

i++;

}

console.log(c);

-----------------------------------------------

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

let foods=[]

let foods=['f1','f2','f3','f4','f5','f6'....'f20'];

-----------------------------------------------

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

let foods=[]

Find the length of your foods array

let foods=[];

var fifth\_fav=foods[4];

console.log("fifth favorite food=",fifth\_fav);

var length=foods.length;

-----------------------------------------------

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++) {  
  
}  
}

dataHandling(friends);

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]="Munnabai";

}

}

dataHandling(friends);

-----------------------------------------------

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

const friends = [  
“Mari”,  
“MaryJane”,  
“CaptianAmerica”,  
“Munnabai”,  
“Jeff”,  
“AAK chandran”  
];

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

dataHandling(friends);

const friends = [

“Mari”,

“MaryJane”,

“CaptianAmerica”,

“Munnabai”,

“Jeff”,

“AAK chandran”

];

function dataHandling(input){

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

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

break;

else

console.log(input[i]);

}

}

dataHandling(friends);

-----------------------------------------------

**Find the person is ur friend or not.**

**const friends = [  
“Mari”,  
“MaryJane”,  
“CaptianAmerica”,  
“Munnabai”,  
“Jeff”,  
“AAK chandran”  
];**

**function dataHandling(input, name){  
for (var i = 0; i < input.length; i++) {  
  
}  
}**

**let found = dataHandling(friends,”Jeff”);**

**console.log(found);**

const friends = [

"Mari",

"MaryJane",

"CaptianAmerica",

"Munnabai",

"Jeff",

"AAK chandran"

];

function dataHandling(input, name){

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

if(input[i]===name)

{

var f=1;

break;

}

}

if(f===1)

return "friend";

else

return "not a friend";

}

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

console.log(found);

-----------------------------------------------

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

**var friends1 = [  
“Mari”,  
“MaryJane”,  
“CaptianAmerica”,  
“Munnabai”,  
“Jeff”,  
“AAK chandran”  
];**

**var friends2 = [  
“Gabbar”,  
“Rajinikanth”,  
“Mass”,  
“Spiderman”,  
“Jeff”,  
“ET”  
];**

**function dataHandling(input){  
//Your code goes here  
}**

**dataHandling(friends);**

var friends1 = [

"Mari",

"MaryJane",

"CaptianAmerica",

"Munnabai",

"Jeff",

"AAK chandran"

];

var friends2 = [

"Gabbar",

"Rajinikanth",

"Mass",

"Spiderman",

"Jeff",

"ET"

];

function dataHandling(input){

//Your code goes here

input.sort();

}

var friends=friends1.concat(friends2);

dataHandling(friends);

console.log(friends);

-----------------------------------------------

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

first item: a[0];

last item: a[n-1];

middle item: a[a.length/2];

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

a.push(data);

a.unshift(data);

**3. Add Mr or Ms to the names in the friends array.**

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

a[i]="Mr/Ms "+a[i];

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

return a.join(",");

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

var list=[];

var result=[],j,n;

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

{

n=list[i];

for(j=0;j<n.length;j++)

if(n[j]==='A' || n[j]==='a')

{

result.push(n);

break;

}

}

console.log(...result);

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

var friends=[];

var length=0, avg;

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

length+=friends[i].length;

avg=length/friends.length;

console.log(avg);

**7. Find the names and return the list starting with letter M.**

var names=[];

var mnames=[];

var t;

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

{

t=names[i];

if(t[0]==='M' || t[0]==='m')

mnames.push(t);

}

console.log(...mnames);

**8. Find the name with max characters and return the name.**

var names=[];

var n=names[0];

var max=names[0].length;

for(var i=1;i<names.length;i++)

{

if(names[i].length>=max)

{

max=names[i].length;

n=names[i];

}

}

console.log(n);

**9. Find the name with min characters and return the name.**

var names=[];

var n=names[0];

var min=names[0].length;

for(var i=1;i<names.length;i++)

{

if(names[i].length<=min)

{

min=names[i].length;

n=names[i];

}

}

console.log(n);

-----------------------------------------------

**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];**

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

var i,s=0,c=0;

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

{

if(isNaN(friendsInfo[i])

{}

else

{

s=s+parseInt(friendsInfo[i]);

c++;

}

}

var avg=s/c;

console.log(avg);

-----------------------------------------------

**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++) {  
//Your code goes here**

**}  
}**

**dataHandling(input);**

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++) {

//Your code goes here

console.log(input[i].join(" "));

}

}

dataHandling(input);

-----------------------------------------------

**Objects:**

What the output

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

console.log(myobject.11);

console.log(myobject.name);

**o/p: compile time error, because the first key should be a string.**

-----------------------------------------------

**Add a new key value pair to myobject  
key : ten  
value : ten**

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

**//your code goes here**

**console.log(myobject);{"1":"one","11":1,"name":"arun","ten":"ten"} // Quotes might not get displayed that fine.**

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

//your code goes here

myobject.ten="ten";

console.log(myobject);

-----------------------------------------------

**Write out an object literal to represent the data below.**

**Guvi, Geek, 6, IIT-M RP,Chennai**.

obj\_literal={

"one":["Guvi", "Geek", "6", "IIT-M RP","Chennai"]

}

console.log(obj\_literal);

-----------------------------------------------

**How would you represent the following data using a combination of object literals and arrays? (You can describe a strategy without typing or writing out the whole thing.)**

**Guvi, Geek, 6, IIT-M RP,Chennai.  
Amazon, Inc, 31, SP Infocity, Chennai.  
Google, Alphabet, 34 Amphitheater Parkway, MountainView.  
Tesla, Inc , 32, 333 Santana Row,San Jose.**

obj\_literal={

"one":["Guvi", "Geek", "6", "IIT-M RP","Chennai"],

"two":["Amazon, Inc", "31", "SP Infocity", "Chennai"],

"three":["Google", "Alphabet", "34 Amphitheater Parkway", "MountainView"],

"four":["Tesla", "Inc" , "32", "333 Santana Row","San Jose"]

}

console.log(obj\_literal.one.join(" "));

console.log(obj\_literal.two.join(" "));

console.log(obj\_literal.three.join(" "));

console.log(obj\_literal.four.join(" "));