Day6\_prblm1

Task 3: Simple Programs todo for Condition , Looping and Arrays

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

|  |
| --- |
| let n = 5;  for (let i = 0; i < n; i++) {  for (let j = 0; j <= i; j++) {  console.log("#");  }  console.log("\n");  } |

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 (let i in strArray) {  console.log(strArray[i]);} |

**Arrays:**

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

|  |
| --- |
| var myarray = [11, 22, 33, 44, 55];  let count = 0;  for (let i in myarray) {  count++;  }  console.log(count); |

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

//let foods=[]

— — — — — — — — — — — — — — — -

b)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 = [

"butter chicken",

"nasi goreng",

"chicken xacuti",

"uzbek plov",

"mushroom risotto",

"chendol",

"pasta",

"crème brûlée",

"satay",

"blueberry muffin",

"honey chilli potato",

"mango",

"aloo paratha",

"laphing",

"aloo koni pitika",

"dosa",

"parota",

"coconut rice",

"curd rice ",

"chicken shwarma",

];

console.log(foods[4]); // it will be fifth favourite food.

console.log(foods.length); // it will be length of foods array

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(arr) {  for (var i = 0; i < arr.length; i++) {  let j = arr.indexOf("Mari");  arr[j] = "Munnabai";  }  }  dataHandling(friends);  console.log(friends); |

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++) {  if (input[i] === "CaptianAmerica") {  break;  } else {  console.log(input[i]);  }  }  }  dataHandling(friends); |

1. Find the person is ur friend or not.

|  |
| --- |
| const friends1 = [  "Mari",  "MaryJane",  "CaptianAmerica",  "Munnabai",  "Jeff",  "AAk chandran",  ];  function dataHandling(input, name){  for (var i = 0; i < input.length; i++) {  if (input[i] === "Jeff") {  return "friends";  }  }  }  let found = dataHandling(friends1,"Jeff");  console.log(found); |

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

var friendsA = [

"Mari",

"MaryJane",

"CaptianAmerica",

"Munnabai",

"Jeff",

"AAk chandran",

];

var friendsB = ["Gabbar", "Rajinikanth", "Mass", "Spiderma", "Jeff","ED"];

function dataHandling(arr1, arr2) {

let res = [];

for (let i in arr1) {

res.push(arr1[i]);

}

for (let i in arr2) {

res.push(arr2[i]);

}

res.sort((a, b) => {

if (a < b) return -1;

else if (a > b) return 1;

return 0;

});

return res;

}

console.log(dataHandling(friendsA, friendsB));

|  |
| --- |
| var friendsC = [  "Mari",  "MaryJane",  "CaptianAmerica",  "Munnabai",  "Jeff",  "AAk chandran",  ]; |

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

|  |
| --- |
| let m = friendsC.length / 2;  let n1 = friendsC.length - 1;  console.log(friendsC[0]);  console.log(friendsC[m]);  console.log(friendsC[n1]); |

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

|  |
| --- |
| friendsC.push("Andy");  friendsC.unshift("Simran"); |

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

friendsC[0] = "Ms Mari";

friendsC[1] = "Ms MaryJane";

friendsC[2] = "Mr CaptianAmerica";

friendsC[3] = "Ms Munnabai";

friendsC[4] = "Mr Jeff";

friendsC[5] = "Mr AAK chandran";

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

console.log(friendsC.join(","));

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

let res = friendsC.filter((e) => {

if (e.includes("a")) {

return e;

}

});

console.log(res);

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

let lenArr = [];

for (let i in friendsC) {

lenArr.push(friendsC[i].length);

}

console.log(lenArr);

let sum = 0;

for (let i in lenArr) {

sum += lenArr[i];

}

console.log(sum / friendsC.length); //avergae length of names

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

let res1 = friendsC.filter((e) => {

if (e[0] === "M") {

return e;

}

});

console.log(res1);

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

function maxChar(arr) {

let obj = {};

for (let i of friendsC) {

obj[i] = i.length;

}

let values = Object.values(obj);

let char = "";

let max = Math.max(...values);

for (let i in obj) {

if (obj[i] === max) {

char += i;

}

}

return char;

}

console.log(maxChar(friendsC));

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

function minChar(arr) {

let obj = {};

for (let i of friendsC) {

obj[i] = i.length;

}

let values = Object.values(obj);

let char = "";

let min = Math.min(...values);

for (let i in obj) {

if (obj[i] === min) {

char += i + ",";

}

}

return char;

}

console.log(minChar(friendsC));

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//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,];

let sum1 = 0;

let count1 = 0;

for (let i of friendsInfo) {

if (typeof i === "number") {

sum1 += i;

count1++;

}

}

console.log(sum1 / count1); //average of all numbers in array

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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 dataHandling1(arr) {

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

for (let j in arr[i]) {

console.log(arr[i][j]);

}

}

}

dataHandling1(input);

1. Add a new key value pair to myobject

// key : ten

// value : ten

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

//your code goes here

myobject.ten = "ten";

console.log(myobject);

3)a. Write out an object literal to represent the data below.

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

let obj1 = { name: "Guvi Geek", roadNo: 6, address: "IIT-M RP, Chennai" };

b. 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.

let obj2 = [

{ name: "Guvi Geek", roadNo: 6, address: "IIT-M RP, Chennai" },

{ name: "Amazon Inc", roadNo: 31, address: "SP Infocity, Chennai" },

{

name: "Google Alphabet",

roadNo: 34,

address: "Amphitheater Parkway, MountainView",

},

{ name: "Tesla Inc", roadNo: 32, address: "333 Santana Row,San Jose" },

];