**Task 1: Simple Programs todo for variables**

**Declare four variables without assigning values and print them in console**

**v**ar test;

var test1;

var test2;

var test3;

console.log(test);

console.log(test1);

console.log(test2);

console.log(test3);

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

var firstname= Ela;

var lastname= Deepan;

var maritalstatus=Married;

var country=India;

var age =26;

console.log(firstname);

console.log(lastname);

console.log(martialstatus);

console.log(country);

console.log(age);

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

let mydetail =["ela","Deepan","Married","India",26]

console.log(mydetail);

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

**I am 25 years old.**

let my={

"x":"I",

"y":"am",

"num":"25",

"z":"years",

"a":"old"

}

console.log(my.x+" "+my.y+" "+my.num+" "+my.z+" "+my.a);

**You are 30 years old.**

let my={

"x":"You",

"y":"are",

"num":"30",

"z":"years",

"a":"old"

}

console.log(my.x+" "+my.y+" "+my.num+" "+my.z+" "+my.a);

**6. Convert the string to integer**

**parseInt() :**

var a=30;

console.log(parseInt(a));

**Number()**

var a=true;

var value=Number(a);

console.log(value);

**Plus sign(+)**

var a="guvi";

var b="geek";

console.log(a+b);

**7. Write 6 statement which provide truthy & falsey values.**

let a=2;

let b=4;

if(a<b)

console.log(1);

else

console.log(0);

if(a===b)

console.log(1);

else

console.log(0);

if(a!=b)

console.log(1);

else

console.log(0);

var c=true;

var value=Number(c);

console.log(value);

var d=false;

var value1=Number(d);

console.log(value1);

if(b%a==0)

console.log(1);

else

console.log(0);

**Task 2: Simple Programs todo for Operators**

**Square of a number**

let a=5;

console.log(a\*a);

**Swapping 2 numbers**

let a=5;

let b=6;

let temp=a;

a=b;

b=temp;

console.log(a,b)

**Addition of 3 numbers**

let a=5;

let b=6;

let c=8;

console.log(parseInt(a+b+c));

**Celsius to Fahrenheit conversion**

var c=userInput[0];

var f=c\*(9/5)+32;

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

**Meter to miles**

let a=5

console.log(a\*0.000621)

**Pounds to kg**

let a=5

console.log((a\* 0.45359237).toFixed(2));

**Calculate Batting Average**

let ela=20;

let dee=40;

let radanya=60;

let avg=ela+dee+radanya/3

console.log(avg);

**Calculate five test scores and print their average**

let ela=20;

let dee=40;

let radanya=60;

let sri=60;

let dev=45;

let avg=ela+dee+radanya+sri+dev/5

console.log(avg);

**Calculate area of an equilateral triangle**

var a=userInput[0];

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

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

**Find area of a triangle.**

var l=userInput[0];

var b=userInput[1];

var rect=l\*b;

console.log(rect);

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

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

var sum = '';

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

sum = sum + '#';

console.log(sum);

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

let food=["idli","rice","potato","gobi","poori","chapathi","briyani","dosa","egg","chicken","mutton,fish","prawn","carrot","beetroot","beans","peas","bread","poha","upma"];

**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 food=["idli","rice","potato","gobi","poori","chapathi","briyani","dosa","egg","chicken","mutton,fish","prawn","carrot","beetroot","beans","peas","bread","poha","upma"];

console.log(food[4]);

**Find the length of your foods array**

let food=["idli","rice","potato","gobi","poori","chapathi","briyani","dosa","egg","chicken","mutton,fish","prawn","carrot","beetroot","beans","peas","bread","poha","upma"];

console.log(food.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”**

**];**

**Solution:**

friends.splice(0,1,"Munnabai");

console.log(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”**

**];**

**Solution :**

for(i=0;i<1;i++)

console.log(friends.slice(0,-3));

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

**const friends = [**

**“Mari”,**

**“MaryJane”,**

**“CaptianAmerica”,**

**“Munnabai”,**

**“Jeff”,**

**“AAK chandran”**

**];**

**Solution:**

for (var i = 0; i <1; i++)

if(friends.indexOf("AAK chandran")!=-1)

console.log(true);

else

console.log(false)

**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"

];

friends1.sort();

console.log(friends1);

var friends2 = [

"Gabbar",

"Rajinikanth",

"Mass",

"Spiderman",

"Jeff",

"ET"

];

friends2.sort();

console.log(friends2);

let arr;

function dataHandling(arr){

arr=friends1+","+friends2;

console.log(arr);

}

dataHandling(arr);

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

var arr = [

"Mari",

"MaryJane",

"CaptianAmerica",

"Munnabai",

"Jeff",

"AAK chandran"

];

function Gfg() {

let f=arr[0];

let l=arr[arr.length-1];

console.log(f);

console.log(l);

var middle = Math.floor(arr.length / 2);

console.log(middle);

}

Gfg();

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

arr[6]="Ela";

console.log(arr);

arr.splice(0,0,"Dev");

console.log(arr);

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

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

console.log(arr[0]+","+arr[1]+","+arr[2]+","+arr[3]+","+arr[4]+","+arr[5]+","+arr[6]+","+arr[7])

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

const startsWithA = arr.filter((arr) => arr.startsWith("A"));

console.log(startsWithA);

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

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

{

sum=((arr[i].length)/6);

console.log(sum);

}

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

const startsWithM = arr.filter((arr) => arr.startsWith("M"));

console.log(startsWithM);

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

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

**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 sum=parseInt(friendsInfo[0]+=friendsInfo[1]+=friendsInfo[3]+=friendsInfo[6]+=friendsInfo[8]+=friendsInfo[9])/6

console.log(sum);

**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++) {**

**}**

**Solution:**

function dataHandling(input){

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

console.log(input[i]);

}

}

dataHandling(input)

**}**

**Objects:**

**What the output**

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

**console.log(myobject.11);**

**console.log(myobject.name);**

**solution:**

1

Arun

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

**key : ten**

**value : ten**

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

**console.log(myobject);**

**{"1":"one","11":1,"name":"arun","ten":"ten"} // Quotes might not get displayed that fine.**

solution: myobject.ten ="ten"

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

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

**Solution:** console.log(myobject.name+","+myobject.Lastname+","+myobject.Location+","+myobject.city+".");

**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.**

Solution :

Option 1: Create a array, inside that array will create all these objects.

Option 2: create four objects and displaying it.

The option 1 will be better because, if we need to access a particular information of the data the code will not long as compared to option 2 and it is easy too.

**Write a code to print the numbers in the array**

**Output: 1234567891011**

**var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];**

**var new\_string = “”;**

**for (var i = 1; i < 11; i--) {**

**new\_string += numsArr[i]**

**}**

**console.log(new\_string);**

Solution : error in for loop declaration: for (var i = 0; i < 11; i++)