1.How to compare two JSON have the same properties without order

var obj1 = { name: "Person 1", age:5 };

var obj2 = { age:5, name: "Person 1" };

Json.stringify(obj1)===Json.stringify(obj2);

console.log(obj1, obj2);

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

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

Var a; var b; var c; var d;

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

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

Var myvar = 5

Console.log (myvar);=> 5

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

Var firstname= sakthi;

Var lastname= vel;

Var meritalstatus=single;

Var Country = india;

Var age= 27;

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

var detals= ['firstname: sakthi', 'lastname: vel', 'meritalstatus:single' ,"Country : india",'age':27];

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

var string = "guvi geek"

var boolean= true;

var undefined= undefined;

var null=object;

6. Convert the string to integer

* parseInt() => linteger.parseInt()
* Number() => num.toString();
* Plus sign(+) => console.log(+x)

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

1. False
2. 0 (zero)
3. "", '', `` (empty strings)
4. Null
5. Undefined
6. NaN (not a number)

# Task 2: Simple Programs todo for Operators

1. Square of a number:

let squaredNumber = math.pow(5,2);

console.log(5\*5 = ",squaredNumber);

1. Swapping 2 numbers

Let x=10;

Let y =20;

[x,y]=[y,x]

Console.log(x)=20

Console.log(y)=10

1. Addition of 3 numbers

function sum (a,b,c){

var sum =a+b+c;

console.log(sum);

}

1. Celsius to Fahrenheit conversion

function cToF(celsius)

{

const cTemp = celsius;

const cToFahr = cTemp \* 9 / 5 + 32;

const message = `${cTemp}\xB0C is ${cToFahr} \xB0F.`;

console.log(message);

}

5.Meter to miles

m /1,609.344=mi

6.Pounds to kg

kg=lb/2.2046

7.Calculate Batting Average

Batting Average = Runs Scored ÷ Times Out

8.Calculate five test scores and print their average

const average = arr => arr.reduce( ( p, c ) => p + c, 0 ) / arr.length;

const result = average( [ 4, 4, 5, 6, 6 ] );

console.log(result);🡺 5/

9.Power of any number x ^ y.

5,7

Result: **5^7 = 78125**

10.Calculate Simple Interest

Formula: SI = (P \* T \* R) / 100

11.Calculate area of an equilateral triangle

var side1 = 5;

var side2 = 5;

var side3 = 5;

var s = (side1 + side2 + side3)/2;

var area = Math.sqrt(s\*((s-side1)\*(s-side2)\*(s-side3)));

console.log(area); ====🡺10.82

12.Area Of Isosceles Triangle

Input: a = 2, b = 3

Output: altitude = 1.32, area = 1.98

13.Volume Of Sphere

radius = 5;

let volume = (4/3)\* Math.PI \* Math.pow(radius, 3); console.log('Volume of Sphere: '+volume.toFixed(2));

14.Volume Of Prism Input: l = 18, b = 12, h = 9

Output: Volume of triangular prism: 972

15. Find area of a triangle

var side1 = 5;

var side2 = 6;

var side3 = 7;

var s = (side1 + side2 + side3)/2;

var area = Math.sqrt(s\*((s-side1)\*(s-side2)\*(s-side3)));

console.log(area);

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

r = 10; d = 2 \* 10; c = 2 \* 3.14 \* 10; a = 3.14 \* (10 \* 10);

console.log("Diameter = " + d + " units<br />");

console.log("Circumference = " + c + " units<br />");

console.log("Area = " + a + " sq. units");

17. Given two numbers and perform all arithmetic operations

Addition: var num1 = 7;

var num2 = 3;

var mult = num1 + num2;

console.log(mult);

#### ****Subtraction :**** **var num1 = 7;**

#### **var num2 = 3;**

#### ****var mult = num1 - num2;****

#### ****console.log(mult);****

**Multiplication** : var num1 = 7;

var num2 = 3;

var mult = num1 \* num2;

console.log(mult);

**Divition: var num1 = 7;**

**var num2 = 3;**

**var mult = num1 / num2;**

**console.log(mult);**

18.Display the asterisk pattern as shown below

\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

let n = 5;

for (let i = 1; i <= n; i++) {

for (let j = 0; j < n; j++) {

string += "\*";}

string += "\n";}

console.log(string);

# 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:

let n = 7;

let string = "";

for (let i = 1; i <= n; i++) {

for (let j = 0; j < i; j++) {

string += "#"; }

string += "\n";}

console.log(string);

write a code to count the elements in the array

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

var len= arr.length;

console.log(len); 🡺 5

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

const food=[ 'salad','sandwich','bread','steak','fish','rice','eggs',

'friedrice','noodles', 'briyani','curry', 'omplete','chicken','mutton','chees','apple','milk','cookie','cake','pie'];

Find the length of your foods array

var len= food.length; //Now arr.length returns 5.Basically, len=5.

console.log(len); 🡺 20 /-

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

**let friends = ['Mari','MaryJane','CaptianAmerica','Munnabai','Jeff','AAKchandran'];**

**// ans**

**let temp =friends[0];**

**friends[0]=friends[3];**

**friends[3]=temp;**

**console.log(friends);**

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'];**

**var friends3=[...friends1,...friends2];**

**console.log(friends3); });**

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

myobject = {1:one,”11":1,”name”:”arun”}//your code goes

hereconsole.log(myobject);

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

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

**myobject.ten='ten' ;**

**console.log(myobject);**

**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];

**Ans// function avg(arr){**

**let count=0;**

**let sum =0;**

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

**if(!isNaN( parseInt(arr[i]))){**

**sum =sum+ arr[i];**

**count++ ; } }**

**return sum / count ;}**

**console.log(avg(friendsInfo));**

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

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

var obj= { a:'Guvi',b:'Geek',c:6, d:'IIT-M RP',e :'Chennai'}; console.log (obj);

ans// { a: 'Guvi', b: 'Geek', c: 6, d: 'IIT-M RP', e: 'Chennai' }

**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.

var headers =['a','b','c','d','e'];

var data =[['Guvi', 'Geek', 6, 'IIT-M RP','Chennai'], ['Amazon', 'Inc', 31, 'SP Infocity', 'Chennai'], ['Google', 'Alphabet', 34 ,'Amphitheater Parkway', 'MountainView'], ['Tesla', 'Inc' , 32, 'Santana Row','San Jose']];

**ANS //**

result = data.map(function (a) { var object = {}; headers.forEach(function (k, i) { object[k] = a[i]; }); return object; }); console.log(result);

[ { a: 'Guvi', b: 'Geek', c: 6, d: 'IIT-M RP', e: 'Chennai' },

{ a: 'Amazon', b: 'Inc', c: 31, d: 'SP Infocity', e: 'Chennai' },

{ a: 'Google', b: 'Alphabet',c: 34, d: 'Amphitheater Parkway',

e: 'MountainView' },

{ a: 'Tesla', b: 'Inc', c: 32, d: 'Santana Row', e: 'San Jose' } ]