**Task 5**

Problem 0 A

var cat = {

name: 'Fluffy',

activities: ['play', 'eat cat food'],

catFriends: [{

             name: 'bar',

             activities: ['be grumpy','eat bread omblet'],

             weight: 8,

             furcolor: 'white'

             },{

             name: 'foo',

             activities: ['sleep','pre-sleep naps'],

             weight: 3

            }]

            }

    cat.height=100;

    cat.weight=200;

    cat.name='Fluffyy';

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

    {

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

        {

            console.log(cat.catFriends[i].activities[j]);

        }

    }

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

    {

        console.log(cat.catFriends[i].name);

    }

   var tw = 0;

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

   {

       tw += cat.catFriends[i].weight;

   }

   console.log(tw);

   var act=' ';

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

   {

       act +=cat.activities[i]+',';

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

       {

           act +=cat.catFriends[i].activities[j]+',';

       }

   }

    console.log(act);

    cat.catFriends[0].activities[2]='run';

    cat.catFriends[0].activities[3]='jump';

    cat.catFriends[1].activities[2]='roll';

    cat.catFriends[1].activities[3]='dance';

    cat.catFriends[0].furcolor='Black';

    console.log(cat);

Problem 0 B

var myCar = {

    make:'Bugatti',

    model:'Bugatti La Voiture Noire',

    year:2019,

    accidents: [ {

                   date: 3/15/2019,

                   damage\_points: 5000,

                   atFaultForAccident: true

                   },

                   {

                   date: 7/4/2022,

                   damage\_points: 2200,

                   atFaultForAccident:true

                   },

                   {

                   date: 6/22/2021,

                   damage\_points: 7900,

                   atFaultForAccident: true

                   }]

            }

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

             {

              myCar.accidents[i].atFaultForAccident='false';

              console.log(myCar.accidents[i].date);

             }

             console.log(myCar);

Problem 1

var obj = {name:'RajiniKanth',age:33,hasPets:false};

function printAllValues(obj)

{

var arr = Object.values(obj)

    console.log(arr);

}

printAllValues(obj);

Problem 2

ar obj = {name:'RajiniKanth',age:33,hasPets:false};

function printAllKeys(obj)

{

var arr = Object.keys(obj);

    console.log(arr);

}

printAllKeys(obj);

Problem 3

var obj = {name: "ISRO", age: 35, role: "Scientist"};

function convertListToObject(obj) {

    var arr = Object.entries(obj);

    console.log(arr);

}convertListToObject(obj);

Problem 4

var arr = ["GUVI", "I", "am", "a geek"];

var newObject={};

function transformFirstAndLast(arr) {

    for(var i=0;i<1;i++){

        newObject[arr[i]]=arr[arr.length-1-i];

    }

 return newObject;

}

console.log(transformFirstAndLast(arr));

Problem 5

var arr = [['make', 'Ford'], ['model', 'Mustang'], ['year', 1964]];

function fromListToObject(arr) {

    var newObject = {};

    for(var i=0;i<arr.length;i++){

    var arr1=arr[i];

    newObject[arr1[0]]=arr1[1];

    //console.log(arr1)

    }

    return (newObject);

    }

    console.log(fromListToObject(arr));

Problem 6

var arr= [[["firstName","Vasanth"], ["lastName","Raja"], ["age","24"], ["role","JSWizard"]], [["firstName","Sri"], ["lastName","Devi"], ["age","28"], ["role","Coder"]]];

function transformEmployeeData(arr) {

    var tranformEmployeeList = []

    var new1={}

    var new2={}

    len=arr.length;

    n=parseInt(len/2);

    for(i=0;i<len;i++)

    {

       for(j=0;j<arr[i].length;j++)

       {

        if(i<=parseInt(n/2)){

        var arr1=arr[i][j];

        new1[arr1[0]]=arr1[1];

       }

    else{

    var arr2=arr[i][j];

    new2[arr2[0]]=arr2[1];

    }

    }

    }

    tranformEmployeeList.push(new1);

    tranformEmployeeList.push(new2);

    return tranformEmployeeList;

    }

    console.log(transformEmployeeData(arr));

Problem 7

var expected = {foo: 5, bar: 6};

var actual = {foo: 5, bar: 6};

assertObjectsEqual(actual, expected,'detects that two objects are equal');

function assertObjectsEqual(actual, expected, testName){

    var a = JSON.stringify(actual)

    var b = JSON.stringify(expected)

if(a===b)

{

    console.log("PASSED");

}

else

{

    console.log("FAILED");

}

}

Problem 8

var securityQuestions = [{

question: 'What was your first pet’s name?',

expectedAnswer: 'FlufferNutter'

},

{

question: 'What was the model year of your first car?',

expectedAnswer: 1985

},

{

question: 'What city were you born in?',

expectedAnswer: 'NYC'

}

]

function chksecurityQuestions(securityQuestions,question) {

return (securityQuestions[0].expectedAnswer ===ans )

}

var ans = 'FlufferNutter';

ques=Object.keys(securityQuestions);

var status = chksecurityQuestions(securityQuestions, ques, ans);

console.log(status);

var ans = 'DufferNutter';

var status = chksecurityQuestions(securityQuestions, ques, ans);

console.log(status);

Problem 9

var students = [

    {

    name: "Siddharth Abhimanyu", age: 21}, { name: "Malar", age: 25},

    {name: "Maari",age: 18},{name: "Bhallala Deva",age: 17},

    {name: "Baahubali",age: 16},{name: "AAK chandran",age: 23},   {name:"Gabbar Singh",age: 33},{name: "Mogambo",age: 53},

    {name: "Munnabhai",age: 40},{name: "Sher Khan",age: 20},

    {name: "Chulbul Pandey",age: 19},{name: "Anthony",age: 28},

    {name: "Devdas",age: 56}

    ];

    function returnMinors(arr)

    {

    for(var i=0;i<arr.length;i++)

    {

    if(arr[i].age <20){

    console.log(arr[i]);

        }

        }

        }

        console.log(returnMinors(students));