**Problem 0 - Part 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

}

]

}

***1. Add height and weight to Fluffy***

cat.height = 25;

cat.weight = 6;

***2. Fluffy name is spelled wrongly. Update it to Fluffyy***

cat["name"] = "Fluffyy"

***3. List all the activities of Fluffyy’s catFriends.***

console.log(cat.catFriends[0].activities)

console.log(cat.catFriends[1].activities)

***4. Print the catFriends names.***

console.log(cat.catFriends[0].name)

console.log(cat.catFriends[1].name)

***5. Print the total weight of catFriends***

console.log(cat.catFriends[0].weight + cat.catFriends[1].weight )

***6. Print the total activities of all cats (op:6)***

console.log(cat.activities.length + cat.catFriends[0].activities.length + cat.catFriends[0].activities.length)

***7. Add 2 more activities to bar & foo cats***

cat.catFriends[0].activities.push(‘again be grumpy’);

cat.catFriends[0].activities.push(‘again eat bread omlette’);

cat.catFriends[0].activities.push(‘again sleep’);

cat.catFriends[0].activities.push(‘again pre sleep naps’);

***8. Update the fur color of bar***

cat.catFriends[0][‘furcolor’] = ‘black’

**Problem 0 : Part 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  
}  
]  
}

***1.Loop over the accidents array. Change atFaultForAccident from true to false.***

for (let car in myCar.accidents){

myCar.accidents[car]["atFaultForAccident"] = false;

}

***2. Print the dated of my accidents***

for (let car in myCar.accidents){

console.log(myCar.accidents[car].date)

}

**Problem 1 :**

***Parsing an JSON object’s Values:***

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

function printAllValues(obj) {  
 console.log(Object.values(obj))  
}

**Problem 2 :**

***Parsing an JSON object’s Keys:***

function printAllValues(obj) {  
 console.log(Object.keys(obj))  
}

**Problem 3**

***Parsing an JSON object and convert it to a list:***

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

function convertListToObject(obj) {

var newArr = [];

for (let key in obj) {

let newArr1 = [];

newArr1.push(key);

newArr1.push(obj[key]);

newArr.push(newArr1);

}

console.log(newArr);

}

convertListToObject(obj);

**Problem 4**

***Parsing a list and transform the first and last elements of it:***

var newArr = [“GUVI”, “I”, “am”, “a geek”];

function transformFirstAndLast(arr) {  
 let newObject = {};

newObject[arr[0]] = arr[arr.length-1];  
 return newObject;  
}

console.log(transformFirstAndLast(newArr));

**Problem 5**

***Parsing a list of lists and convert into a JSON object:***

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

function fromListToObject(arr) {

var newObject = {};

for (let itr in arr){

newObject[arr[itr][0]] = arr[itr][1];

}

return newObject;

}

console.log(fromListToObject(newArr));

**Problem 6**

***Parsing a list of lists and convert into a JSON object:***

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

function transformEmployeeData(arr) {

var tranformEmployeeList = [];

for (let itr1 in newArr){

let newObj = {};

for (let itr2 in newArr[itr1]){

newObj[newArr[itr1][itr2][0]] = newArr[itr1][itr2][1];

}

tranformEmployeeList.push(newObj);

}

return tranformEmployeeList;

}

console.log(transformEmployeeData(newArr));

**Problem 7**

***Parsing two JSON objects and Compare:***

var expected = {foo: 5, bar: 6};

var actual = {foo: 6, bar: 5}

function assertObjectsEqual(actual, expected, testName){

if (JSON.stringify(actual) === JSON.stringify(expected)){

console.log("Passed");

}

else{

console.log("FAILED " + testName + " Expected " + JSON.stringify(expected) + ", but got" + JSON.stringify(actual));

}

}

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

**Problem 8**

***Parsing JSON objects and Compare:***

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,answer) {

let flagCheck = false;

for (let itr in securityQuestions){

if (securityQuestions[itr].question == question &&

securityQuestions[itr].expectedAnswer == answer){

flagCheck = true;

}}

return flagCheck;

}

//Test case1:

var ques = 'What was your first pet’s name?';

var ans = 'FlufferNutter';

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

console.log(stat); // true

//Test case2:

var ques = 'What was your first pet’s name?';

var ans = 'DufferNutter';

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

console.log(stat); // flase

**Problem 9**

***Parsing JSON objects and Compare:***

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)

{

let newArr = arr.filter((objEle) => {

return objEle.age < 20;

});

return newArr;

}

console.log(returnMinors(students));