# GUVI : Zen Code-Sprint : JavaScript Practice problems in JSON(Objects) and List

# Problem 0 : Part A (15 mins):

## **Playing with JSON object’s Values:**

Fluffy sorry, Fluffyy is my fav cat and it has 2 catFriends  
Write a code to get the below details of Fluffyy so that   
I can take him to vet.

**Basic Tasks to play with JSON**

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

Solution:

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 = 7;

cat.weight = 20;

console.log(cat);

##### Output:

{ name: 'Fluffy',

activities: [ 'play', 'eat cat food' ],

catFriends:

[ { name: 'bar', activities: [Array], weight: 8, furcolor: 'white' },

{ name: 'foo', activities: [Array], weight: 3 } ],

height: 7,

weight: 20 }

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

Solution:

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.name = "Fluffyy";

console.log(cat.name);

##### Output:

Fluffyy

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

Solution:

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

}

]

}

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

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

**4.Print the catFriends names.**

Solution:

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

}

]

}

console.log(cat.catFriends[0].name +" "+cat.catFriends[1].name);

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

Solution:

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

}

]

}

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

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

Solution:

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

}

]

}

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

##### Output:

play,eat cat food be grumpy,eat bread omblet be grumpy,eat bread omble

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

Solution:

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.catFriends[0].activities[2] = "lazy";

cat.catFriends[0].activities[3] = "drinks milk";

cat.catFriends[1].activities[2] = "eat pedigree";

cat.catFriends[1].activities[3] = "jumps";

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

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

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

Solution:

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.catFriends[0].furcolor = "red";

console.log(cat.catFriends[0].furcolor);

console.log(cat);

# Problem 0 : Part B (15 mins):

## **Iterating with JSON object’s Values**

Above is some information about my car. As you can see, I am not the best driver.  
I have caused a few accidents.  
Please update this driving record so that I can feel better about my driving skills.

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

Solution:

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 in myCar.accidents)

{

myCar.accidents[i].atFaultForAccident= false;

}

console.log(myCar);

2.Print the dated of my accidents

Solution:

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 in myCar.accidents){

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

}

# ****Problem 1 (5 mins):****

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

Write a function called “printAllValues” which returns an newArray of all the input object’s values.

Solution:

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

function printAllValues(obj) {

var val = Object.values(obj);

return val;

}

console.log(printAllValues(obj));

# Problem 2(5 mins) :

## **Parsing an JSON object’s Keys:**

Write a function called “printAllKeys” which returns an newArray of all the input object’s keys.

Solution:

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

function printAllValues(obj) {

var key = Object.keys(obj);

return key;

}

console.log(printAllValues(obj));

# Problem 9(20 mins):

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

Write a function to return the list of characters below 20 age

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}

];

var data = students.filter(function compute(element){

return element.age <20;

}).map(function compute(element){

return(element.name + " age is " + element.age );

})

console.log(data);