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.

```
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);
```

Q1. Add height and weight to Fluffy.
ANS : cat.height = "20cm"
cat.weight = "5"

Q2. Fluffy name is spelled wrongly. Update it to Fluffyy.
ANS : cat.name = "Fluffyy"

Q3. List all the activities of Fluffyy's cat Friends.
ANS : console.log(cat.catFriends[0].activities)
console.log(cat.catFriends[1].activities)

Q4. Print the catFriends names.
ANS : console.log(cat.catFriends[0].name)
console.log(cat.catFriends[1].name)

Q5. Print the total weight of catFriends.
ANS : console.log(cat.catFriends[0].weight + cat.catFriends[1].weight)

Q6. Print the total activities of all cats (op:6)
ANS : console.log(cat.activities)

```
console.log(cat.catFriends[0].activities)
console.log(cat.catFriends[1].activities)
```

Q7. Add 2 more activities to bar & foo cats

ANS :
```
cat.catFriends[0].activities[2]="playing with ball"
cat.catFriends[0].activities[3]="eat milk"
cat.catFriends[1].activities[2]="jumping on floors "
cat.catFriends[1].activities[3]="eat cat food"
```

Q8. Update the fur color of bar

ANS : cat.catFriends[0].furcolor = “grey”

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.

```
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
}
]
}
```

Q1. Loop over the accidents array. Change atFaultForAccident from true to false.

ANS :

```
for(let i = 0; i<3;i++){
   myCar.accidents[i].atFaultForAccident = false;
}
```

Q2. Print the dated of my accidents.

ANS :

```
for(let i = 0; i<3;i++){
   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.
Input (Object):
var object = {name: "RajiniKanth", age: 33, hasPets : false};
Output:
["RajiniKanth", 33, false]

Sample Function proto:

```
var obj = {name : "RajiniKanth", age : 33, hasPets : false};function printAllValues(obj) {
 // your code here
}
```

ANS :

```
var obj = {name : "RajiniKanth", age : 33, hasPets : false};
var arr = [];
printAllValues(obj)
function printAllValues(obj) {
   arr.push(obj);
```

```
}

console.log(arr)
```

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.
Example Input:
{name : 'RajiniKanth', age : 25, hasPets : true}
Example Output:
['name', 'age', 'hasPets']
Sample Function proto:

```
function printAllKeys(obj) {
// your code here
}
```

ANS :

```
obj = {name : 'RajiniKanth', age : 25, hasPets : true}

printAllValues(obj);

function printAllKeys(obj) {

   console.log(Object.keys(obj))

}
```

Problem 3(7–9 mins):
Parsing an JSON object and convert it to a list:
Write a function called "convertObjectToList" which converts an object literal into an array of arrays.
Input (Object):
var object = {name: "ISRO", age: 35, role: "Scientist"};
Output:
[["name", "ISRO"], ["age", 35], ["role", "Scientist"]]

Sample Function proto:

```
var obj = {name: "ISRO", age: 35, role: "Scientist"};
function convertListToObject(obj) {
```

```
// your code here
}
```

ANS :

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

printAllValues(obj);

function convertListToObject(obj) {

    console.log(Object.entries(obj))

}
```

Problem 4(5 mins):
Parsing a list and transform the first and last elements of it:
Write a function ‘transformFirstAndLast’ that takes in an array, and returns an object with:
1) the first element of the array as the object’s key, and
2) the last element of the array as that key’s value.
Input (Array):
var array = [“GUVI”, “I”, “am”, “Geek”];
Output:
var object = {
GUVI : “Geek”
}
Sample Function proto:

```
var arr = [“GUVI”, “I”, “am”, “a geek”];function transformFirstAndLast(arr) {

 return newObject;
}
```

ANS :

```
var arr = ["GUVI", "I", "am", "Geek"];

function transformFirstAndLast(arr) {

 var newObject = { [arr[0]] : arr[arr.length-1]};

 return newObject;

}

console.log(transformFirstAndLast(arr))
```

Problem 5 (7 -9 mins):

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

Write a function “fromListToObject” which takes in an array of arrays, and returns an object with each pair of elements in the array as a key-value pair.

Input (Array):

var array = [[“make”, “Ford”], [“model”, “Mustang”], [“year”, 1964]];

Output:

var object = {

make : “Ford”

model : “Mustang”,

year : 1964

}

Sample Function proto:

```
var arr = [[“make”, “Ford”], [“model”, “Mustang”], [“year”, 1964]];function fromListToObject(arr) {
 var newObject = {};

 return newObject;
}
```

ANS :

```
var arr = [["make", "Ford"],
          ["model", "Mustang"],
          ["year", 1964]];
function fromListToObject(arr) {
var newObject = {};
 for (let i = 0; i < arr.length; i++) {
       Object.assign(newObject, { [arr[i][0]] : arr[i][1]});
   }
   return newObject;
```

```
}

console.log(fromListToObject(arr));
```

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}
 ];function returnMinors(arr)
{}console.log(returnMinors(students));
```

ANS :

```
function returnMinors(arr)

{

    var temp = [];

    arr.forEach(element => {

        if(element.age<20){

            temp.push(element.name)

        }

    });

    return temp;

}

console.log(returnMinors(students));
```