Foor in json

A "For" Loop is used **to repeat a specific block of code a known number of times**. For example, if we want to check the grade of every student in the class, we loop from 1 to that number

**The ‘For’ Loop**

The For Loop comes first because of its simplicity and ease of use. It is a very user-friendly kind of loop that runs with a method of using a counter.

The value is first set with an appropriate condition, which is also called ‘initializing a loop’. Next, the terminal or final value is specified. The For Loop makes things really easy when you need to run a set of codes multiple times.

The For Loop is further divided into:**‍**

**1. Using an array**

The following piece of code is a perfect example of how to use a for loop through an array.

{% code-block language="js" %}  
var numbers = [ 10, 20, 30, 40, 50]   
for (var i=0; i < numbers.length; i++) {  
   console.log(numbers[i])  
} **‍**{% code-block-end %}  
Here, I have used all the numbers in the form of an array, then printed each of them in a console window. In the same way, you can make a loop through an array of strings.

### The ‘For In’ Loop

Another way of looping is the For In Loop. Unlike the For Loop, this loop won’t be using a counter. So this makes the whole process even more simple and hassle-free. In fact, the For In Loop is essentially a simplified version of the For Loop.

The following are different ways of looping using the For In technique.

#### ****1. Looping through an Object Property****

Here’s an example; you’ve got an object containing some properties and you need to look up each property and the value that it carries. Here’s how you would use the For In Loop to do so:  
{% code-block language="js" %}  
var person = {  
   fname: "Nick",  
   lname: "Jonas",  
   age: 26  
};   
for (let x in person) {  
   console.log(x + ": "+ person[x])  
} **‍**{% code-block-end %}

### ****The ForEach() Loop****

This method is used for looping through an array element. Here’s an example of this:

{% code-block language="js" %}  
var names = ["jerry", "tom", "pluto", "micky", "mini"];  
names.forEach(function1);  
function function1(currentValue, index) {  
   console.log("Index in array is: "+index + " ::  Value is: "+currentValue);  
} **‍**{% code-block-end %}

### ****Looping through JSON in more detail with examples****

#### Example 1:

We're making a list of books and we enter the title as “Lord of the Rings” and the year as “1994“and the count of pages as “3000”. Similarly, a large number of objects can be created and once it’s done, we will have a large database:

{% code-block language="js" %}  
var books = [  
   {  
       title: "Lord of the Rings",  
       year: 1994,  
       pages: 3000  
   },  
   {  
       title: "1984",  
       year: 1984,  
       pages: 2000  
   },  
   {  
       title: "Art of war",  
       year: 2000,  
       pages: 5000  
   }  
] **‍**{% code-block-end %}  
Now different things can be done with this database.

For example;

{% code-block language="js" %}  
alert(books.length); **‍**{% code-block-end %}  
When we run this, the browser will display three. Essentially, with this, we checked that there are three objects in this array.