

FOR LOOPS



IN THIS LESSON

For loops vs while loops

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For ... of loops



FOR LOOPS VS WHILE LOOPS

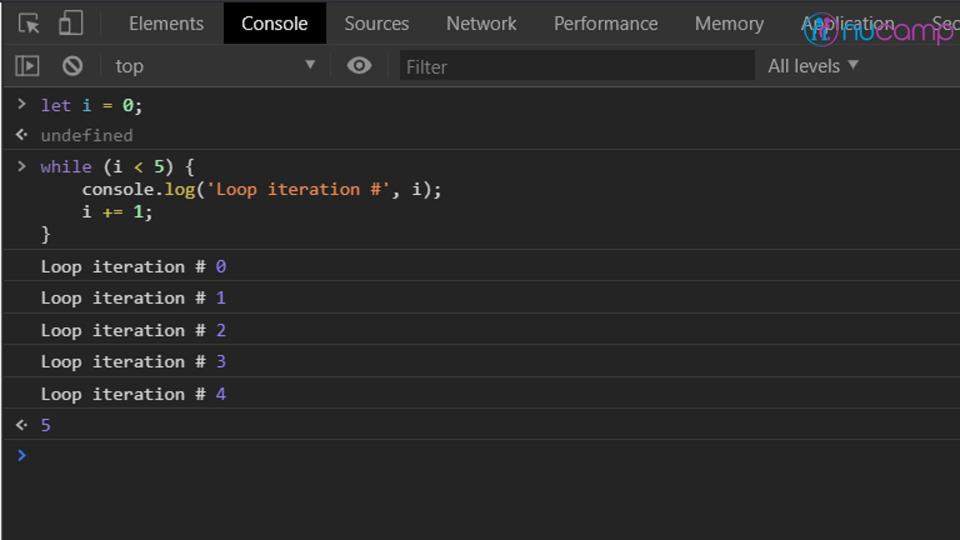
For loops are like **while** loops, but with built-in support for an incrementing iterator ... what does this mean?

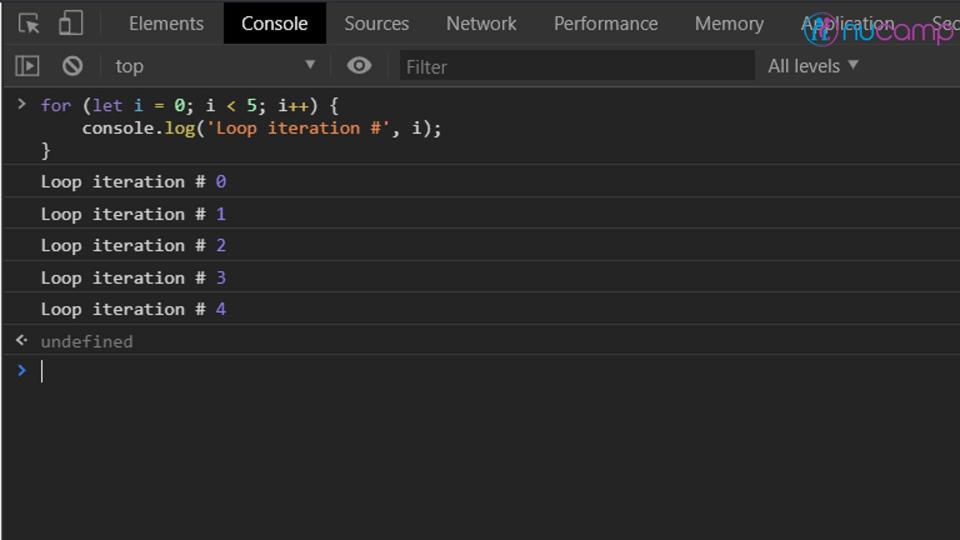
If we want a **while** loop to repeat X number of times, we can do this:

```
let i = 0;
while (i < 5) {
   console.log('Loop iteration #', i);
   i += 1;
}</pre>
```

The same logic expressed as a **for** loop looks like this:

```
for(let i = 0; i < 5; i++) {
  console.log('Loop iteration #', i);
}</pre>
```

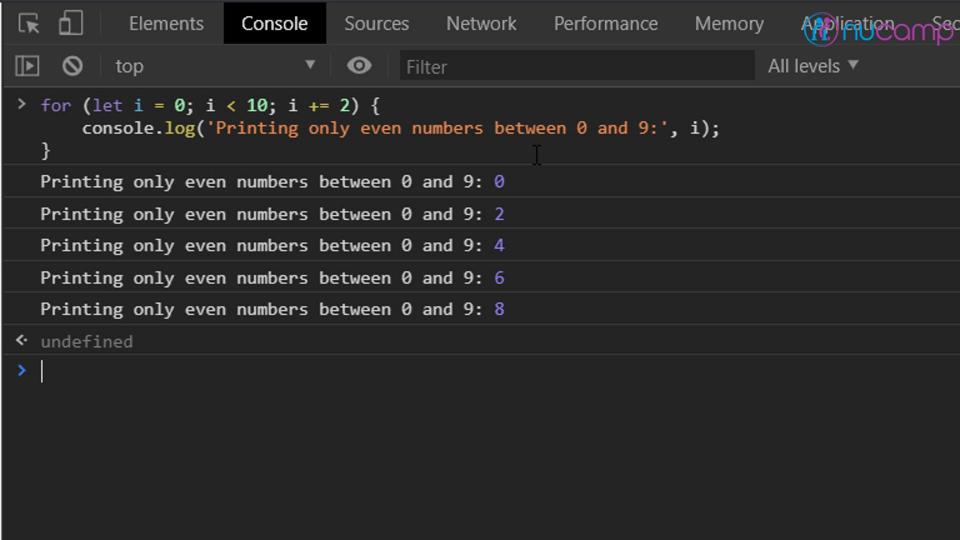




```
console.log('Loop iteration #', i);
                                                                              ampoun(📆
  Loop iteration # 0
  Loop iteration # 1
  Loop iteration # 2
  Loop iteration # 3
  Loop iteration # 4

    undefined

> for (let i = 0; i < 5; i += 1) {</pre>
      console.log('Loop iteration #', i);
  Loop iteration # 0
  Loop iteration # 1
  Loop iteration # 2
  Loop iteration # 3
  Loop iteration # 4
undefined
```





FOR LOOP SYNTAX & WALK-THROUGH

```
for (initialization; condition; final expression) {
    ...code to execute...
}
```



FOR LOOP SYNTAX & WALK-THROUGH

```
for ( let i = 0; i < 5; i++) {
  console.log('Loop iteration #', i);
}
```



FOR LOOPS & ARRAYS

We can use loops and arrays to set up a dynamic number of iterations

```
const guestsArray = ['Jack', 'Aravind', 'Samira', 'Haley', 'Lydia', 'Adrian'];
```

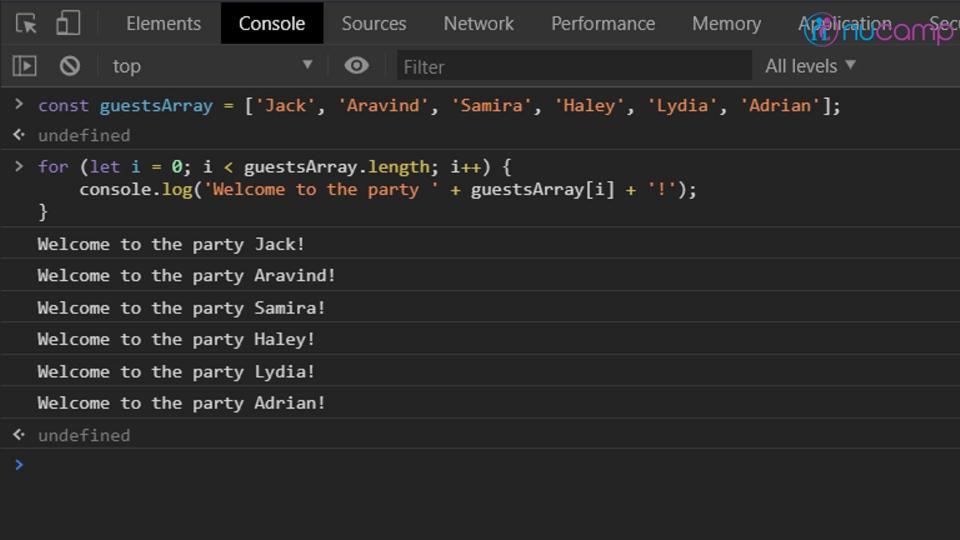
```
for (let i = 0; i < guestsArray.length; i++) {
   console.log('Welcome to the party ' + guestsArray[i] + '!');
}</pre>
```



FOR ... OF LOOPS

for ... of loop works with arrays and other iterables (data structures that contain lists of items that can be iterated over)

```
const guestsArray = ['Jack', 'Aravind', 'Samira', 'Haley', 'Lydia', 'Adrian'];
           for (const quest of questsArray) {
              console.log('Welcome to the party ' + guest + '!');
        for (const/let variableName of arrayName) {
           ... code to execute once per each item in the array ...
           ... use variableName to access each array item in turn ...
```



```
Welcome to the party Jack!
  Welcome to the party Aravind!
  Welcome to the party Samira!
  Welcome to the party Haley!
  Welcome to the party Lydia!
  Welcome to the party Adrian!
undefined
> for (const guest of guestsArray) {
      console.log('Welcome to the party ' + guest + '!');
  Welcome to the party Jack!
  Welcome to the party Aravind!
  Welcome to the party Samira!
  Welcome to the party Haley!
  Welcome to the party Lydia!
  Welcome to the party Adrian!
undefined
```

