

Callbacks Worksheet

A.C. 4.1

The `forEachElem` function takes an array and a callback function as arguments. It calls the callback once for each element of the array, passing the element as an argument to the callback.

The code below would log each element of the array. The last line can be restated in English: "For each element of the array, log its value."

```
var arr = [1, 5, 4, 1, 3];

forEachElem(arr, function (elem) {
  console.log(elem);
});
```

Given the below code on each line, what would be logged?

code	arr	What will be logged?	The code re-stated in English
<pre>forEachElem(arr, function (elem) { console.log(elem); })</pre>	[1,5,4,1,3]	1 6 4 1 3	"For each element in arr, log the element."
<pre>forEachElem(arr, function (elem) { console.log(elem - 1); })</pre>	[1,5,4,1,3]		
<pre>forEachElem(arr, function (elem) { console.log(elem * 2) })</pre>	[1,5,4,1,3]		

callback	arr	What will log to console?	What is the code saying?
<pre>sum = 0; forEach(arr, function(val) { sum += val; }); console.log(sum);</pre>	[1, 4, 3, 2]	9	"For each element of <code>arr</code> , add its value to the <code>sum</code> variable. Then, log the <code>sum</code> variable."
<pre>sum = 0; forEach(arr, function(val) { sum += val - 1; }); console.log(sum);</pre>	[1, 4, 3, 2]		
<pre>sum = 0; forEach(arr, function(val) { sum += val * 2; }); console.log(sum);</pre>	[1, 4, 3, 2]		