

Lesson

Thursday

# Introduction to Programming

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Text

Cheat sheet

## **Array.prototype.map()**

This is perhaps the most powerful looping method in JavaScript because it loops through a collection *and* also transforms it.

Here's an example:

```
const array = [0,1,2,3,4,5];
const doubledArray = array.map(function(element) {
  return element * 2;
});
doubledArray;
(6) [1, 2, 4, 6, 8, 10]
```

- Like `Array.prototype.forEach()`, `Array.prototype.map()` takes a function as an argument, which we call a callback function.
- With `Array.prototype.map()`, we *must* use a `return` statement (unlike `Array.prototype.forEach()`).

- Each time we iterate with `Array.prototype.map()`, we are specifying how the element should be transformed. In the example above, we specify that we should return `element * 2`.
- `Array.prototype.map()` returns a transformed array. We can't use it to return another data type such as a number or string.

## Documentation on MDN

For more information, check out the Mozilla documentation on `Array.prototype.map()`. ([https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global\\_Objects/Array/map](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/map))

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