

Trainer guide
Examples and exercises
JS-7 – Array map()

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This exercise gives learners practice on using the Array map() method in JavaScript.

index.js

- In this exercise, you will get the chance to practice using the Array map() method.

Demo

- Let's take a look at the first exercise.
- We have an array of numbers, and the task is to create a new array that contains all the numbers in the original array multiplied by two.
- *Replace the line `const doubledNumbers = []` with the following: `const doubledNumbers = numbers.map()`*
 - Like Array filter(), we always call map() on an existing array.
- And, like Array filter(), the map() method takes in a callback function as an argument.
 - This function will run for each element in the array. Whatever is returned from that function will become an element in the new array.
 - So, we want this function to take each number and return the result of multiplying it by two.
- Again, we'll write this callback function as an arrow function.
 - `const doubledNumbers = numbers.map((number) => {})`
 - The variable "number" represents the element of the array that is processed on each iteration – so, this function will run once with the value of "number" being equal to 1, then again with the value 2, then 3, etc.
 - Since we now have access to the individual numbers, we can double them:

```
const doubledNumbers = numbers.map((number) => {  
  return number * 2  
})
```

- View the console and see that the output is [2, 4, 6, 8, ...] – success!
- Because our callback function only contains one line that simply returns a value, we can rewrite it with an implied return:

```
const doubledNumbers = numbers.map((number) => number * 2)
```

Exercise

- Look at this array of objects called “painters”.
- Each element in the array has two properties – firstName and lastName.
- Your task is to use the map() method to create a new array of strings, where each value in the array is the full name of a painter.

Solve the exercise live before moving on.

[Solution reference](#)