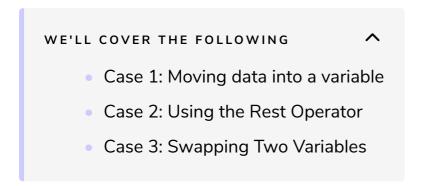# Destructuring an Array

This lesson goes over destructuring an array.

Case 1: Moving data into a variable

Destructuring an array puts data into separated variables, swaps data, or collects the remaining items of an array.

The first case is moving data into a variable. The assignment starts by having on the left side of the equal sign different variables between square brackets, separated by a comma. On the right side, you have the array.

```
let [arr1, arr2] = [1, 2]; // 1 and 2
let [arr3, arr4] = [1, 2, 3, 4]; // 1 and 2

console.log(arr1);
console.log(arr2);
console.log(arr3);
console.log(arr4);
```

Case 2: Using the Rest Operator

You can leverage the rest operator (...) to bring all remaining elements of the array into a smaller array. The accumulation of elements can be useful if you have plenty of data and would like to take a specific set and still hold a reference to the remaining one. An example is that you may know that the

first three elements contain information in these places all the time, but the

remaining are dynamically growing or shrinking depending on the scenario. It's possible to skip some elements by using a comma without a variable.

```
let [arr1, arr2] = [1, 2]; // 1 and 2
let [arr3, arr4] = [1, 2, 3, 4]; // 1 and 2
let [arr5, arr6, ...elements] = [1, 2, 3, 4, 5]; // 1 and 2 and [3,4,5]
let [arr7, arr8, , ...elements2] = [1, 2, 3, 4, 5]; // 1 and 2 and [4,5]

console.log(arr1);
console.log(arr2);
console.log(arr3);
console.log(arr4);
console.log(arr5);
console.log(arr6);
console.log(elements);
console.log(arr7);
console.log(arr8);
console.log(elements2);
```

Case 3: Swapping Two Variables

Furthermore, in destructuring an array, you can swap two variables. You need to have two variables of the same type first. Then, you open the bracket, set the two variables you want to swap separated by a comma, and then close the bracket. Use the equal sign followed by another set of square brackets with the two variables, but this time reverse the order.

```
let swap1 = 1;
let swap2 = 2; [swap1, swap2] = [swap2, swap1];
console.log(swap1, swap2);
```

Destructuring an array is a convenient way to move data quickly without relying on tedious operations to accomplish many simple tasks.