First thing's first

Create a function with two parameters that returns the result of the first parameter to the power of the second parameter.

Then log the result to the console.

```
const power = (num1, num2) => {
    return num1 ** num2;
}

console.log(power(2, 3));
```

Code

Nation

JavaScript Fundamentals

Arrays

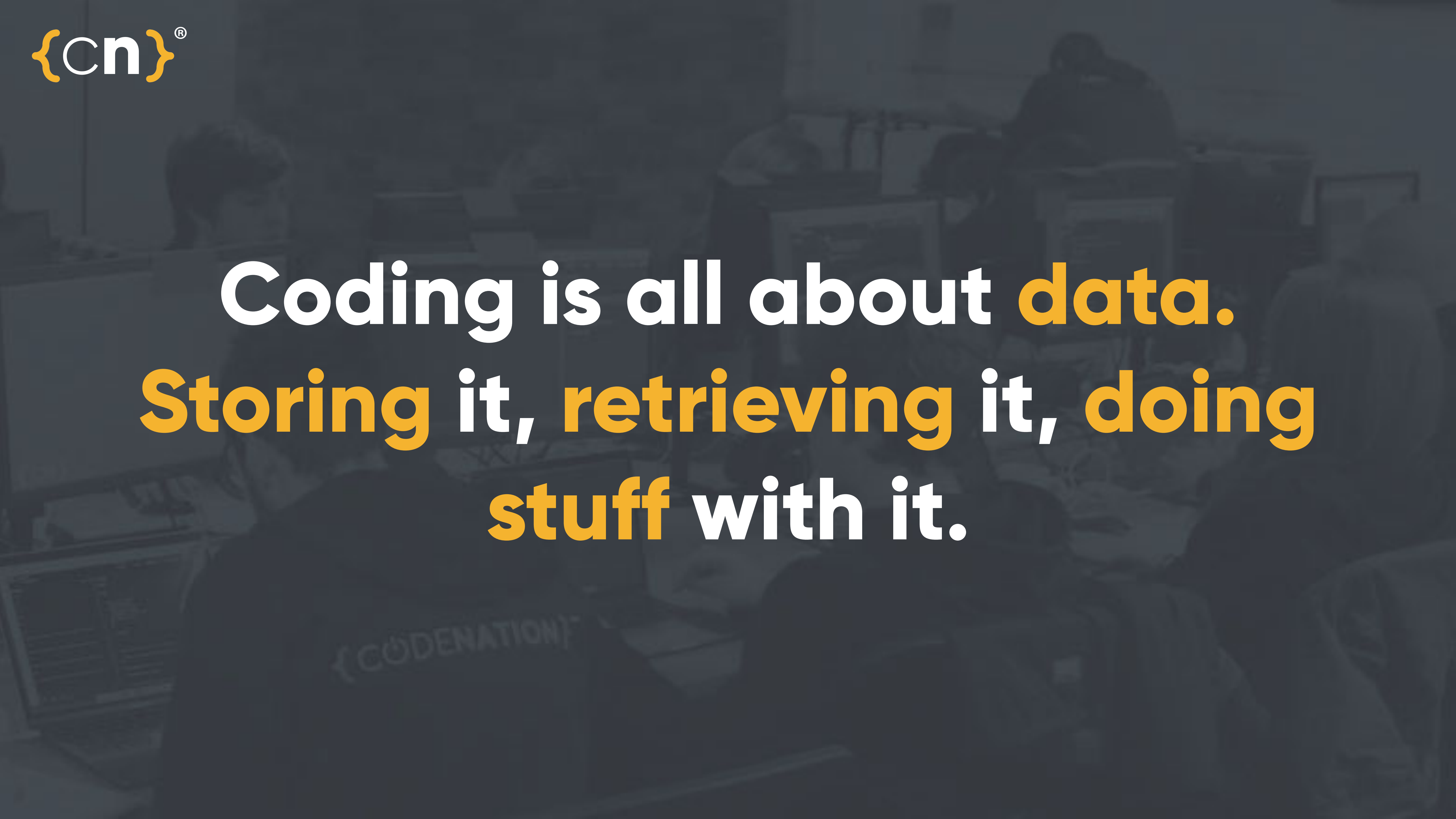
{codenation}®

Learning Objectives

- To understand the uses of arrays
- To understand the syntax of creating an array
- To use a variety of methods to work with arrays

{CODENATION}

Hip, hip..
ARRAY!



Coding is all about data. Storing it, retrieving it, doing stuff with it.

In the real world we make lists.

Alex - Cortado

Ben - Cortado

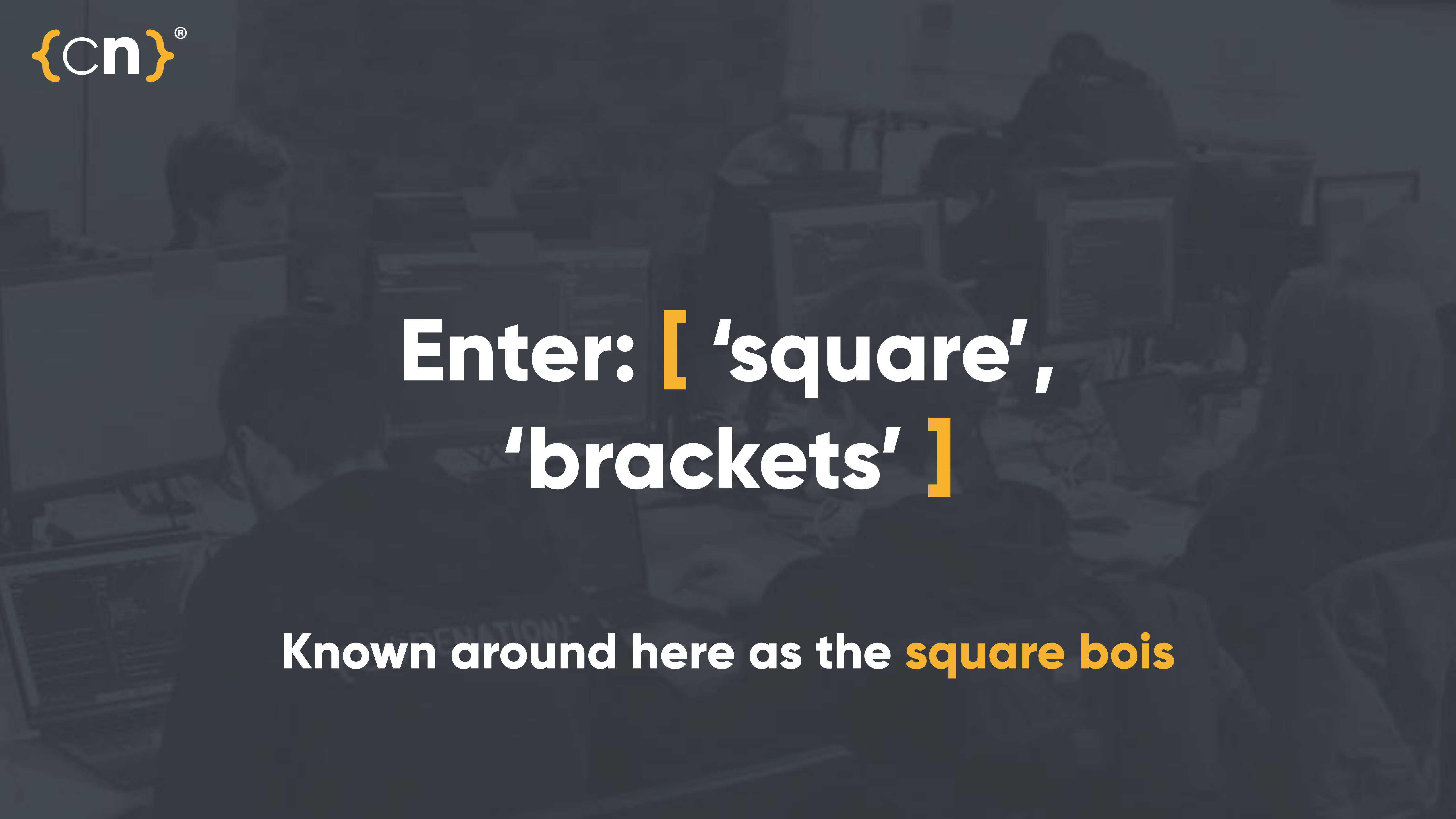
Charlie - whatever's new

We do the same with code.

```
let coffeeOrder = [
    "Alex – Cortado",
    "Ben – Cortado",
    "Charlie – Whatever's new"
];

console.log(coffeeOrder);
```

Like an good list, we can access individual items.



Enter: [‘square’, ‘brackets’]

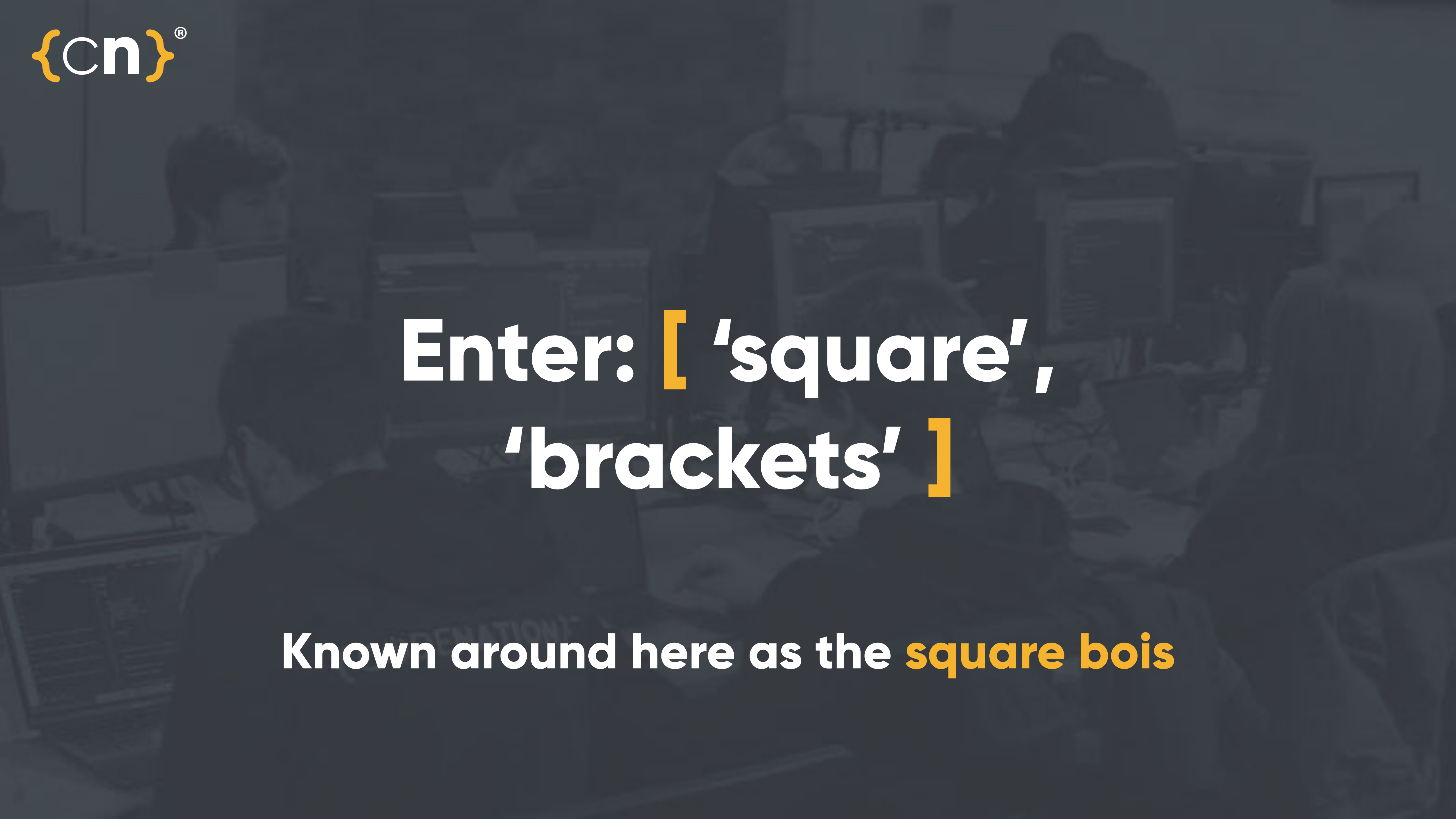
Known around here as the square bois

```
console.log(coffeeOrder[2]);
console.log(coffeeOrder[2]);
```

↓

Charlie – whatever's new

But wasn't that the 3rd item?



Enter: ['square', 'brackets']

Known around here as the **square bois**

Arrays in JavaScript work with an index, starting at 0

As for it's items we can also add, remove, append, modify, copy..

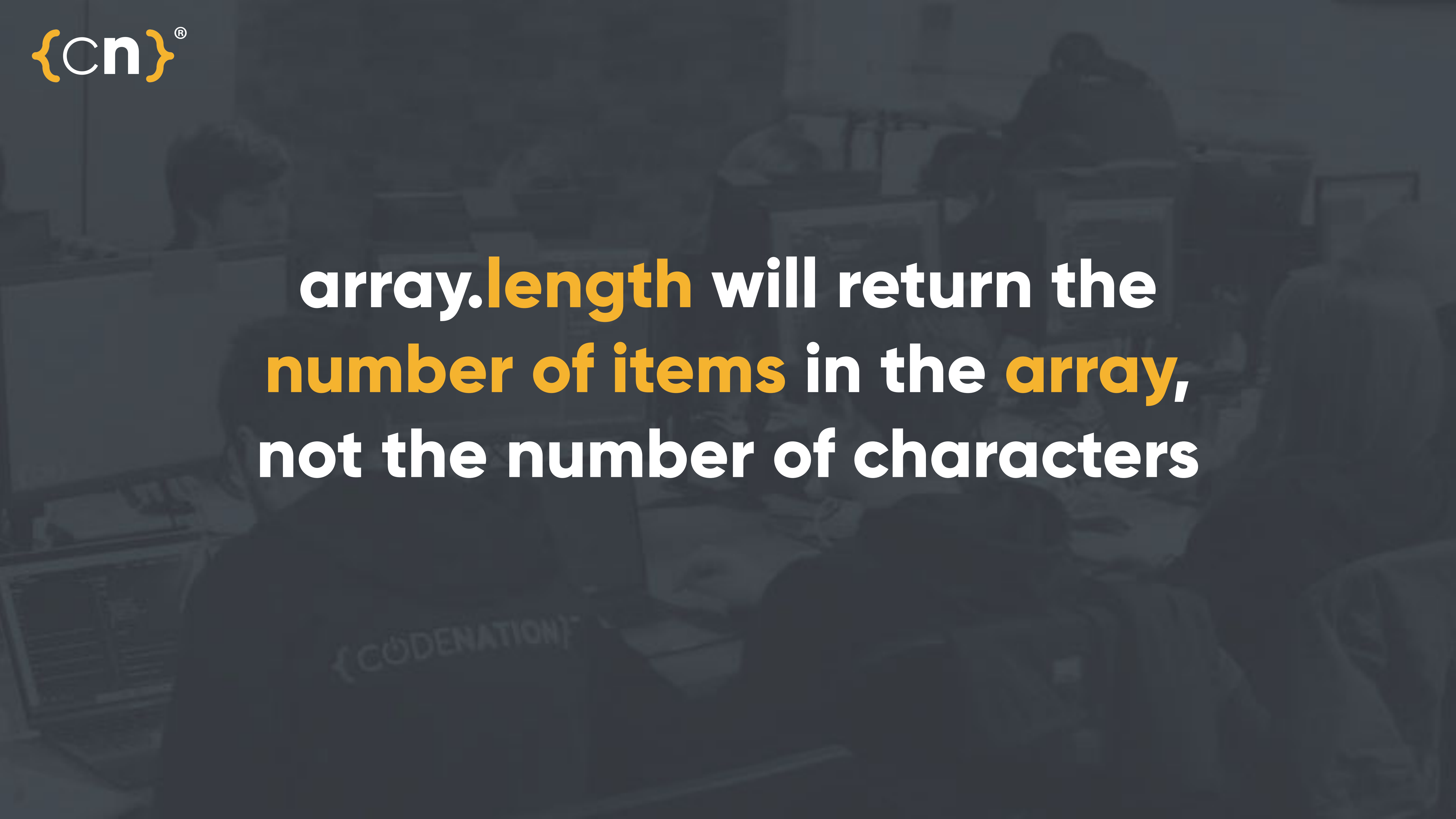
```
let coffeeOrder = [
    "Alex - Cortado",
    "Ben - Cortado",
    "Charlie - Whatever's new"
];

coffeeOrder[1] = "Ann - Vanilla latte";
```

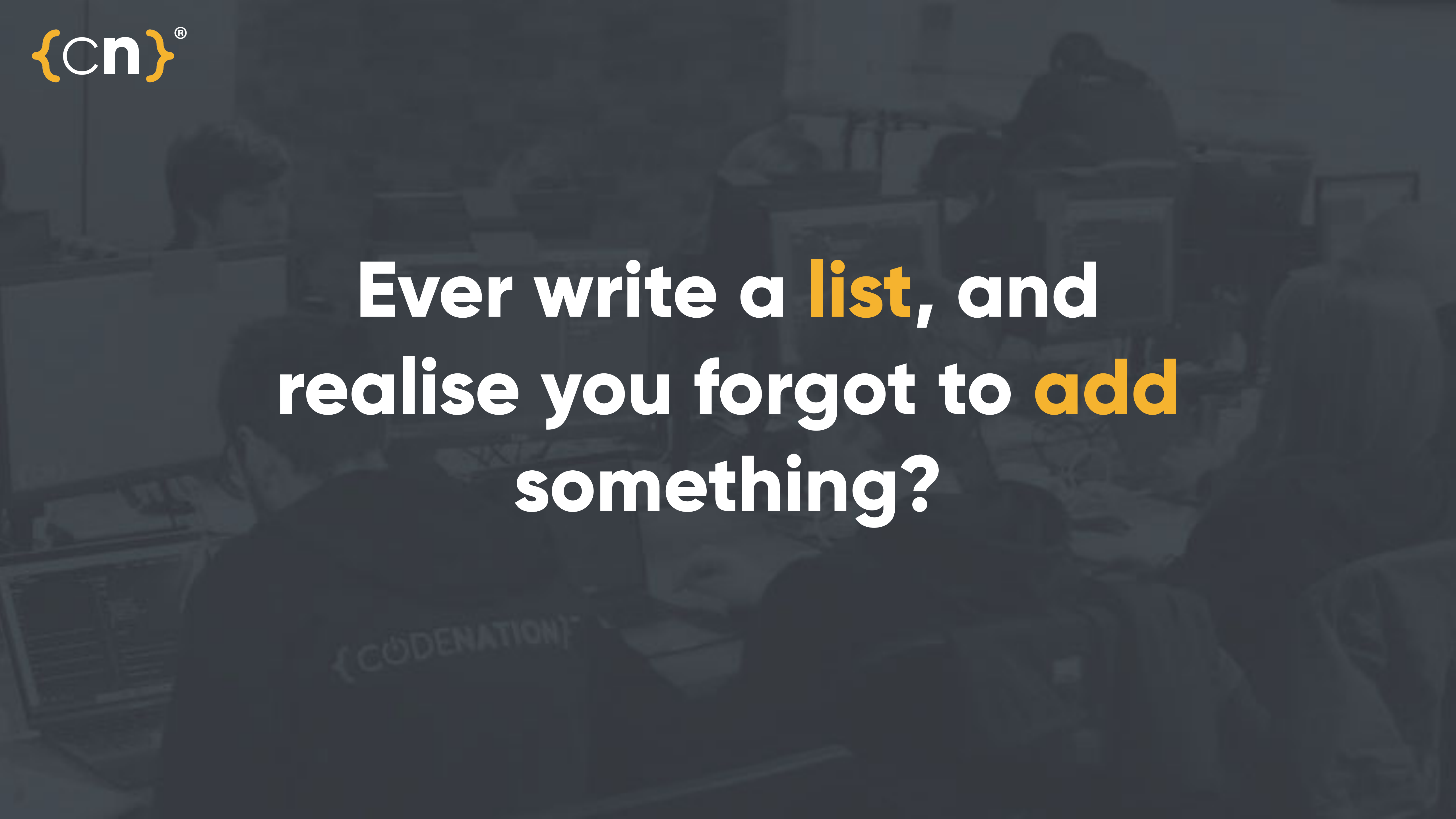
Items in an array also have properties, as we've explored before...

```
let coffeeOrder = [
    "Alex – Cortado",
    "Ben – Cortado",
    "Charlie – Whatever's new"
];

console.log(coffeeOrder.length);
```



array.length will return the number of items in the array, not the number of characters



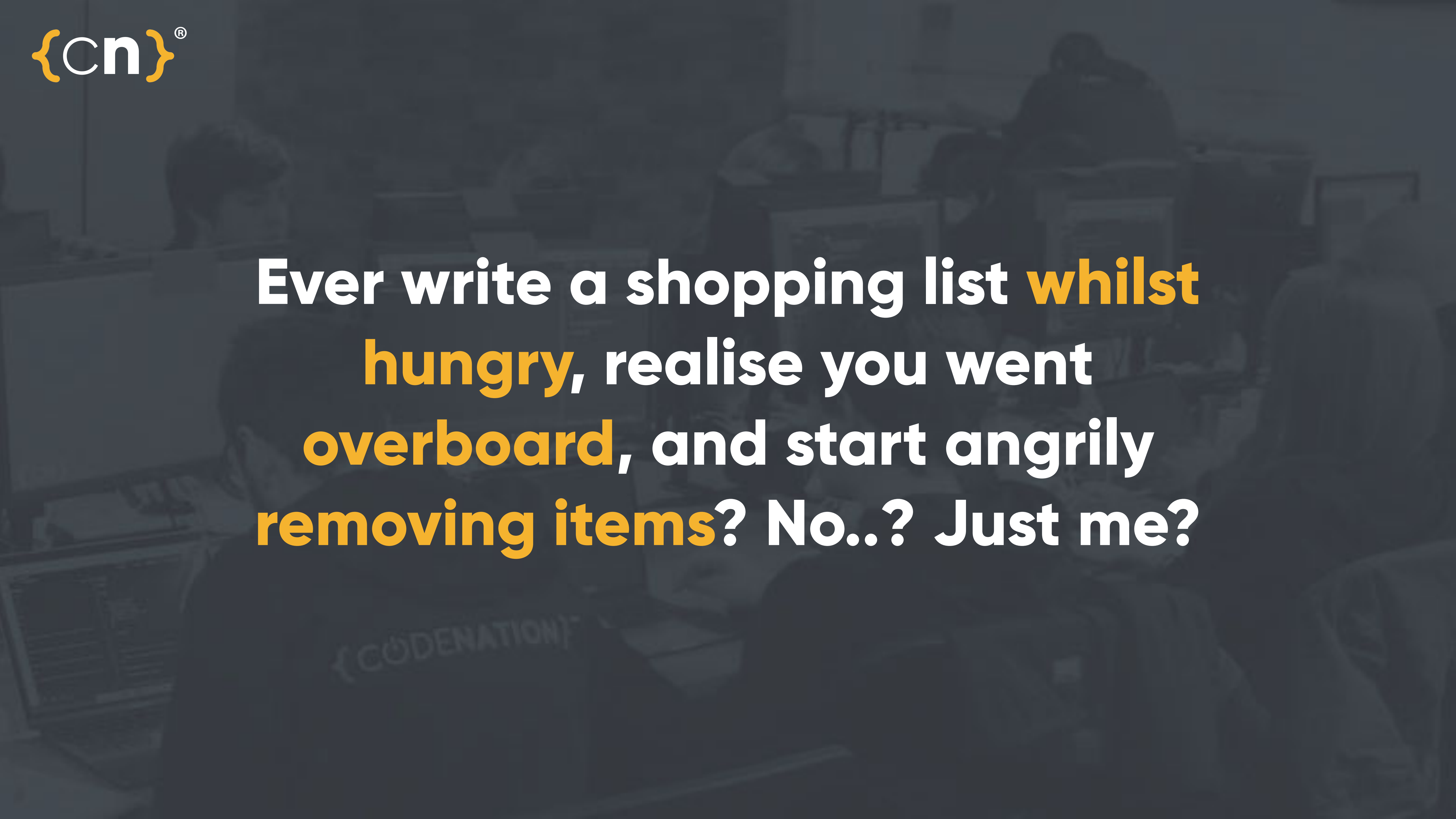
Ever write a list, and realise you forgot to add something?

Say hello to a method

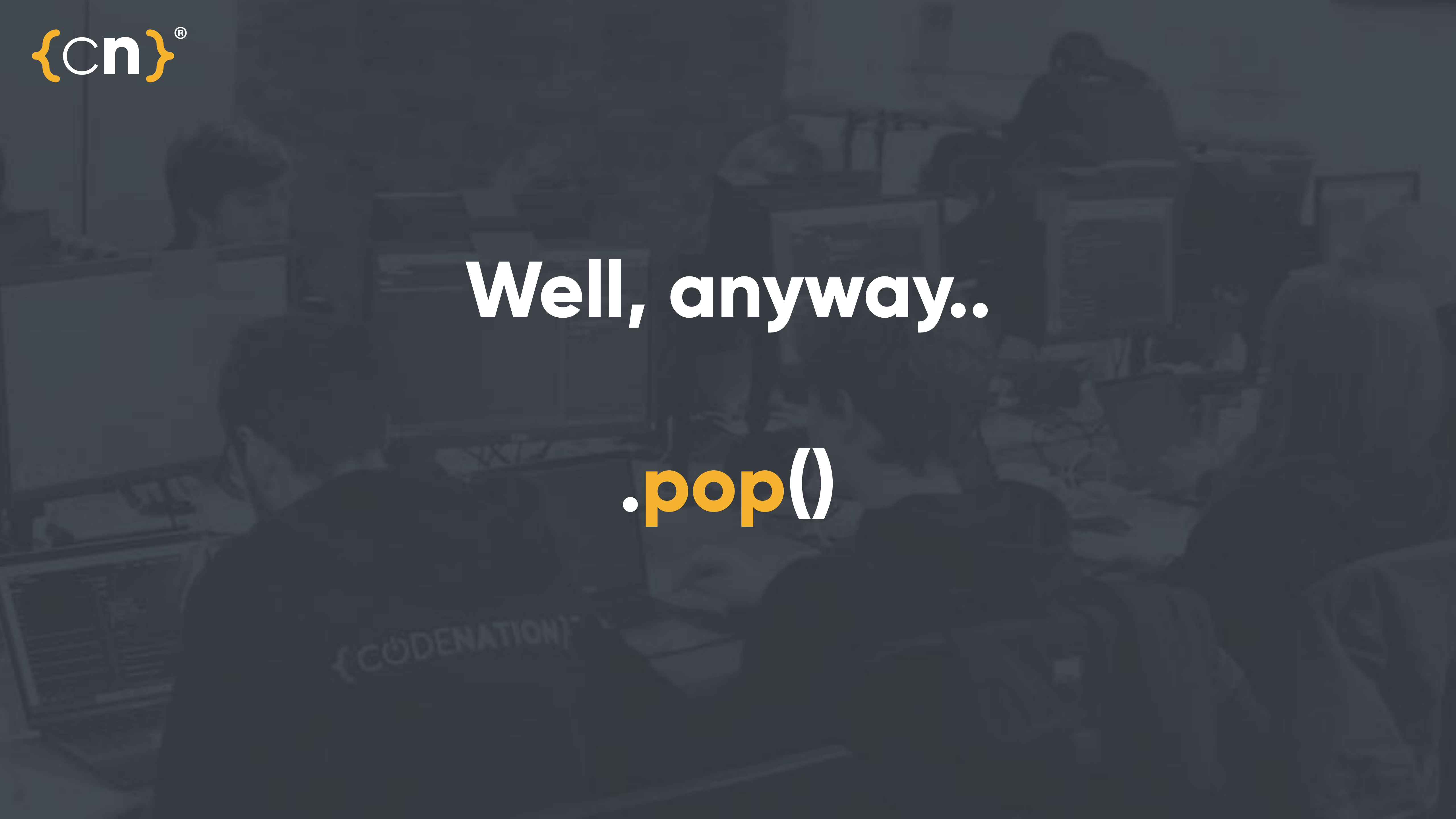
.push()

```
let coffeeOrder = [
    "Alex - Cortado",
    "Ben - Cortado",
    "Charlie - Whatever's new"
];

coffeeOrder.push("Donna - espresso");
```



Ever write a shopping list **whilst hungry**, realise you went **overboard**, and start angrily **removing items**? No..? Just me?

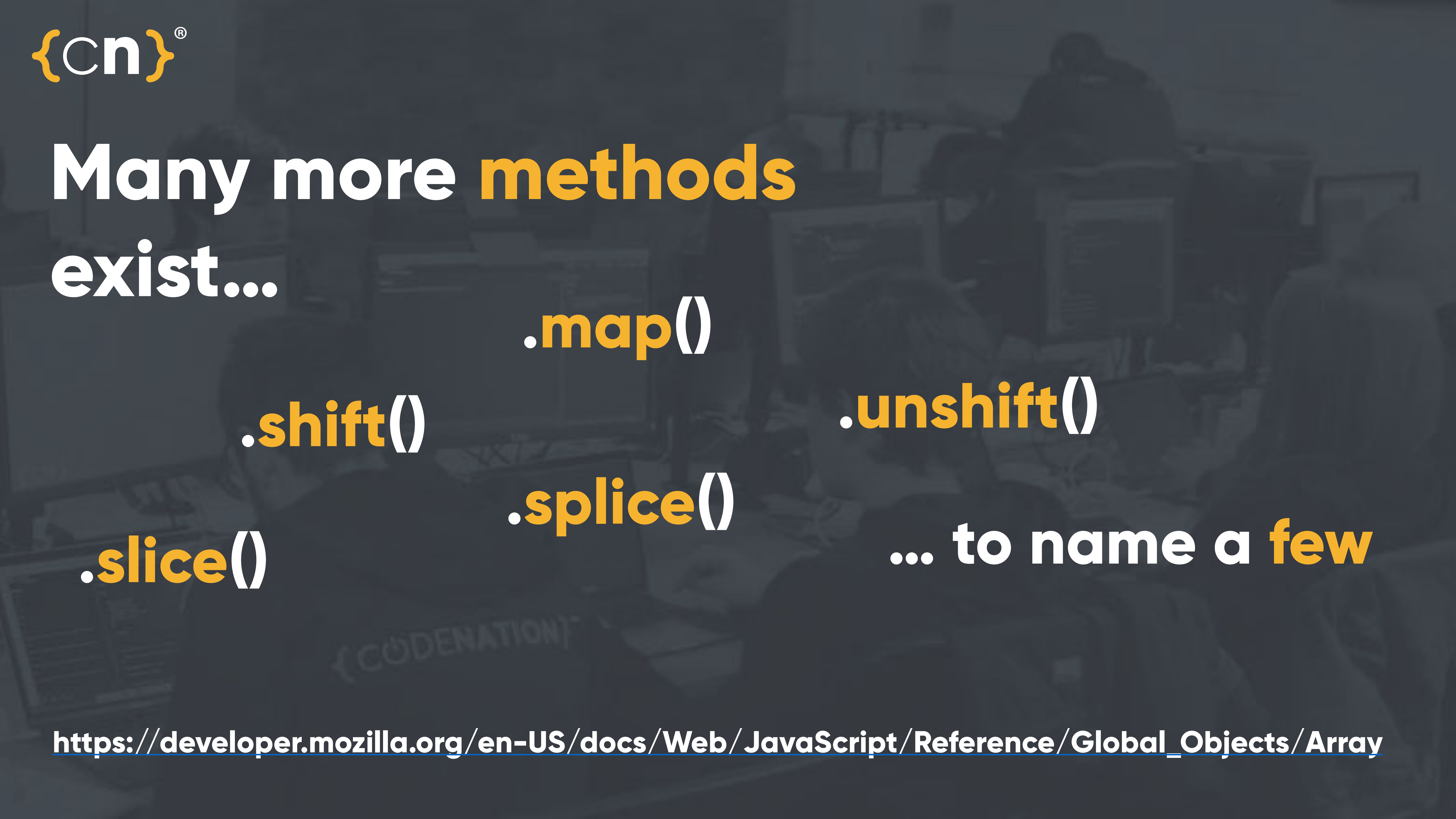


Well, anyway..

.pop()

```
let coffeeOrder = [
    "Alex - Cortado",
    "Ben - Cortado",
    "Charlie - Whatever's new"
];

coffeeOrder.pop();
```



Many more methods exist...

.map()

.shift()

.unshift()

.splice()

.slice()

... to name a few

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array

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Activity(1):

Create a list of your favourite website (3 of them), and then add another two once you've created the list. Then remove the last website.

Activity(2):

Research on the following methods: map(), shift(), unshift(), slice(), splice() (and many more). Create a program to demonstrate the uses of each method, some of these you may need more than one example. (Pay attention: not all methods would permanently update/make changes to the arrays themselves.)

For more info:

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array