First thing's first

Lets go back to our noughts and crosses board

Write an if statement that checks if the items on the top row meet a winning condition. So the top row are all 'o's or all 'x's.

Code Nation

JavaScript Fundamentals

Arrays

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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

An array of riches

Coding is all about data - storing it, retrieving it, doing stuff with it

In the real-world, we make lists

Let's see

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Coffee order :

Alex- Cortado
Ben - Cortado
Charlie - whatever's new

We can do the same thing in JavaScript

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

console.log(coffeeOrder);
```

Activity:

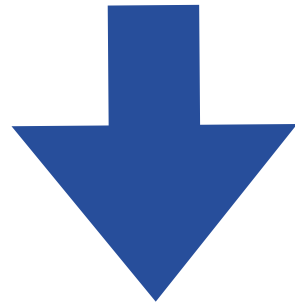Make an array of your favourite songs.

3 of them.

Log to console.

Like any good list, we can access individual items

We use square brackets for that [   ]

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

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

Charlie – whatever's new

But wasn't that the 3rd item?

JavaScript starts counting at 0, so 0, 1, 2 = our 3 items in coffeeOrder

Arrays can be updated like variables

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

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

Properties **work, just like in** variables**.**

Are you getting this yet?

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

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

It will output the number of **items in the array**, not the number of characters

Have you ever gone shopping and just had to **add** those chocolate biscuits to the end of your list?

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JavaScript's got you covered. The .push method.

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

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

Have you ever thought you actually don't want that pointless broccoli?

JavaScript's got you covered. The .pop method, which removes the last item from your list (array)

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

coffeeOrder.pop();
```

Lots of methods available to use in arrays, from **adding things,** removing **things,** adding in certain **places.**

.shift()
.unshift()
.slice()
.splice()

so many...

Check out the Mozilla Developer Network for more.

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

Learning Objectives

- To understand the uses of arrays
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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: 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 updates/make changes to the arrays themselves.)

For more info:

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