Introduction to Arrays

Arrays provide us with a way to create and maintain a list of data. In this lesson, you'll be introduced to arrays and how you can access the elements inside them.

Introduction

An array is an ordered list of items. The items may be of any type. You know, in most post offices, there are hundreds or thousands of post boxes. Each post box may or may not contain something. Each post box has a numeric handle. Post box 25 may be your box. You unlock it, grab its handle, and access its contents.

The trick is that in case of arrays, you have to imagine the post boxes with keys 0, 1, 2, and so on. Typically, arrays have continuous keys.

```
let days = [ 'Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday' ];
```

Arrays do not have to contain elements of the same type:

```
let storage = [ 1, 'Monday', null ];
```

Accessing elements

Each element of the array can be accessed using an index starting from zero. The syntax for indexing is shown below:

```
let days=['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday'];

console.log(days[0]);
console.log(days[4]);
console.log(days[5]);
```

In the third example, we indexed out of the array. As we indexed beyond the

In the third example, we indexed out of the array. As we indexed beyond the length of the array, the program returned undefined for `days[5]`.

Array length

Arrays have lengths:

```
let days=['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday'];
console.log(days.length);
```