

Bookstore:**React JS**

Programming language:**JavaScript**

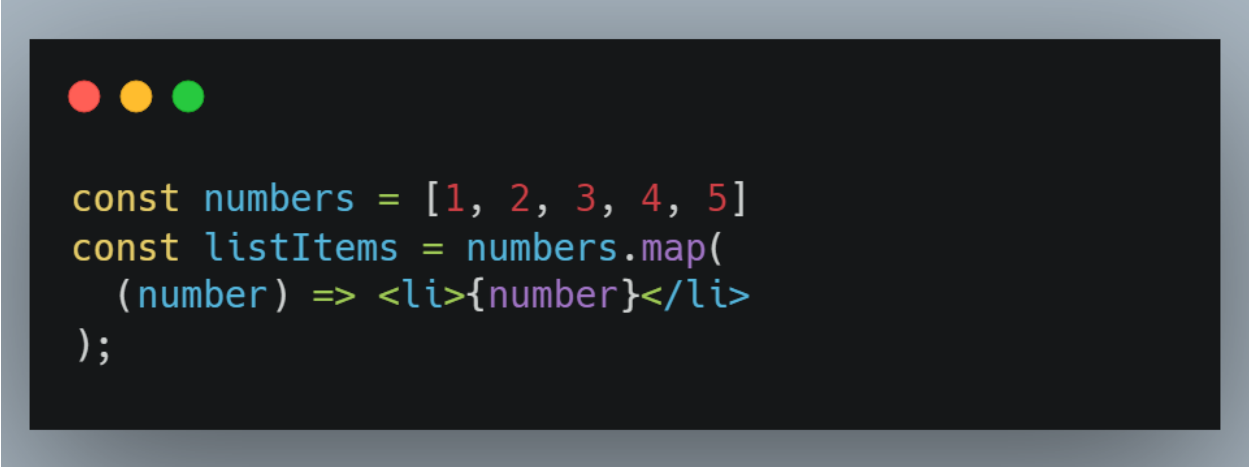
Topic:**Lists and Keys**

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## Presentation of several components

You can build collections of elements and include them in JSX using curly braces {}.


Below, we loop through the array of numbers using the JavaScript `map()` function. We return a `<li>` element for each item. Finally, we assign the resulting set of elements to the list of items:



```
const numbers = [1, 2, 3, 4, 5]
const listItems = numbers.map(
  (number) => <li>{number}</li>
);
```

Then, we can enclose the entire set of list items inside a `<ul>` element.

This code displays a bulleted list of numbers between 1 and 5.



```
<ul>{listItems}</ul>
```

## Basic list component

Usually you will provide lists inside a component.

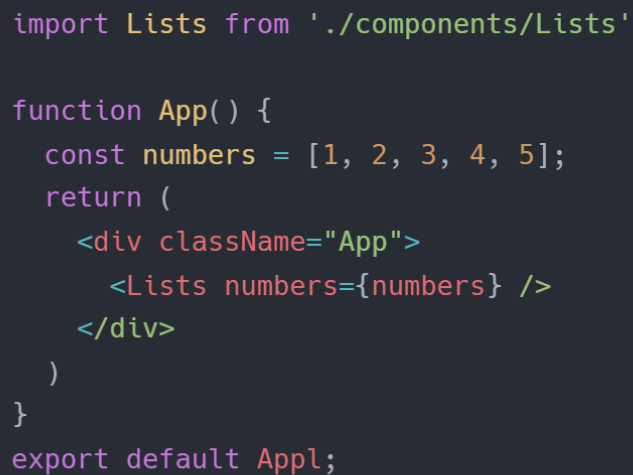
We can refactor the previous example into a component that accepts an array of numbers and outputs a list of elements.



```
import React from "react";

function Lists(props) {
  const numbers = props.numbers;
  const listItems = numbers.map((number) => <li>{number}</li>);
  return <ul>{listItems}</ul>;
}
export default Lists;
```

File name: Lists.js



```
import Lists from './components/Lists'

function App() {
  const numbers = [1, 2, 3, 4, 5];
  return (
    <div className="App">
      <Lists numbers={numbers} />
    </div>
  )
}
export default App;
```

File name (parent file) : App.js

When you run this code, you will be given a warning that a key must be provided for the list items.

```
⚠ Warning: Each child in a list should have a unique "key" prop.

Check the render method of `Lists`. See https://reactjs.org/link/warning-keys for more information.
    at li
    at Lists (https://swrlhb.csb.app/src/components/Lists.js:17:25)
    at div
    at App
```

A "key" is a special string attribute that you must include when creating lists of elements. We'll discuss why it's important in the next section.

Let's assign a key to our list items inside `numbers.map()` and fix the missing key problem.

```
import React from "react";

function Lists(props) {
  const numbers = props.numbers;
  const listItems = numbers.map((number) => (
    <li key={number.toString()}>{number}</li>
  ));
  return <ul>{listItems}</ul>;
}
export default Lists;
```