JavaScript Arrays

Why Use Arrays?

If you have a list of items (a list of car names, for example), storing the cars in single variables could look like this:

```
let car1 = "Saab";
let car2 = "Volvo";
let car3 = "BMW";
```

Creating an Array

Using an array literal is the easiest way to create a JavaScript Array.

Syntax:

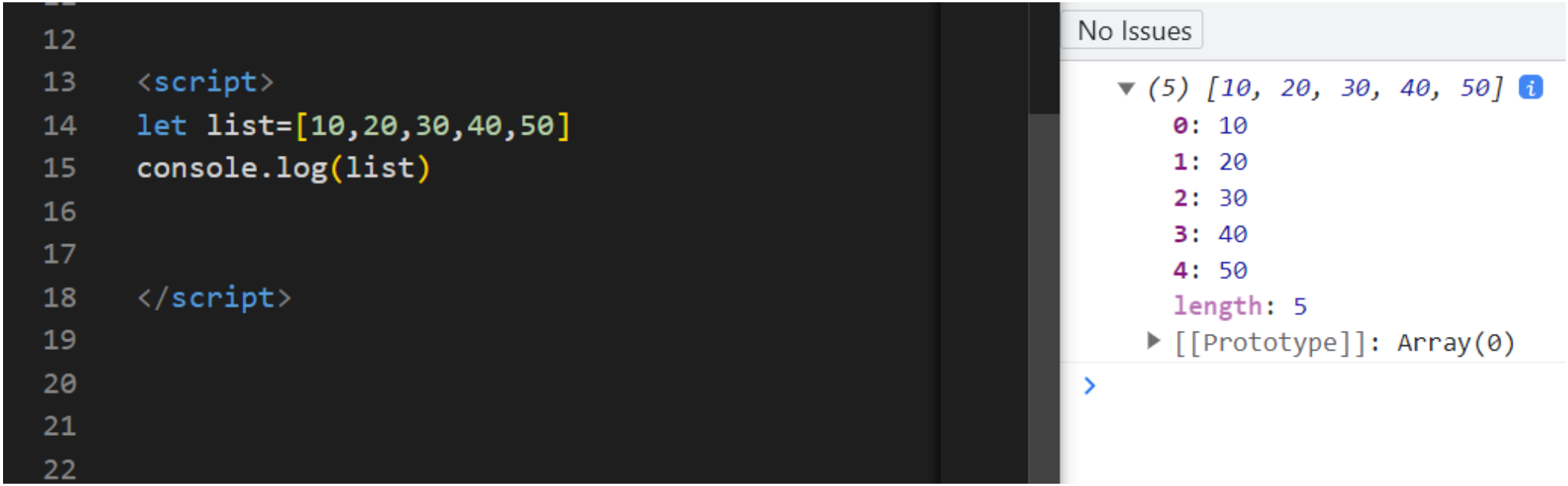
```
const array_name = [item1, item2, ...];
```

Example

```
const cars = ["Saab", "Volvo", "BMW"];
```

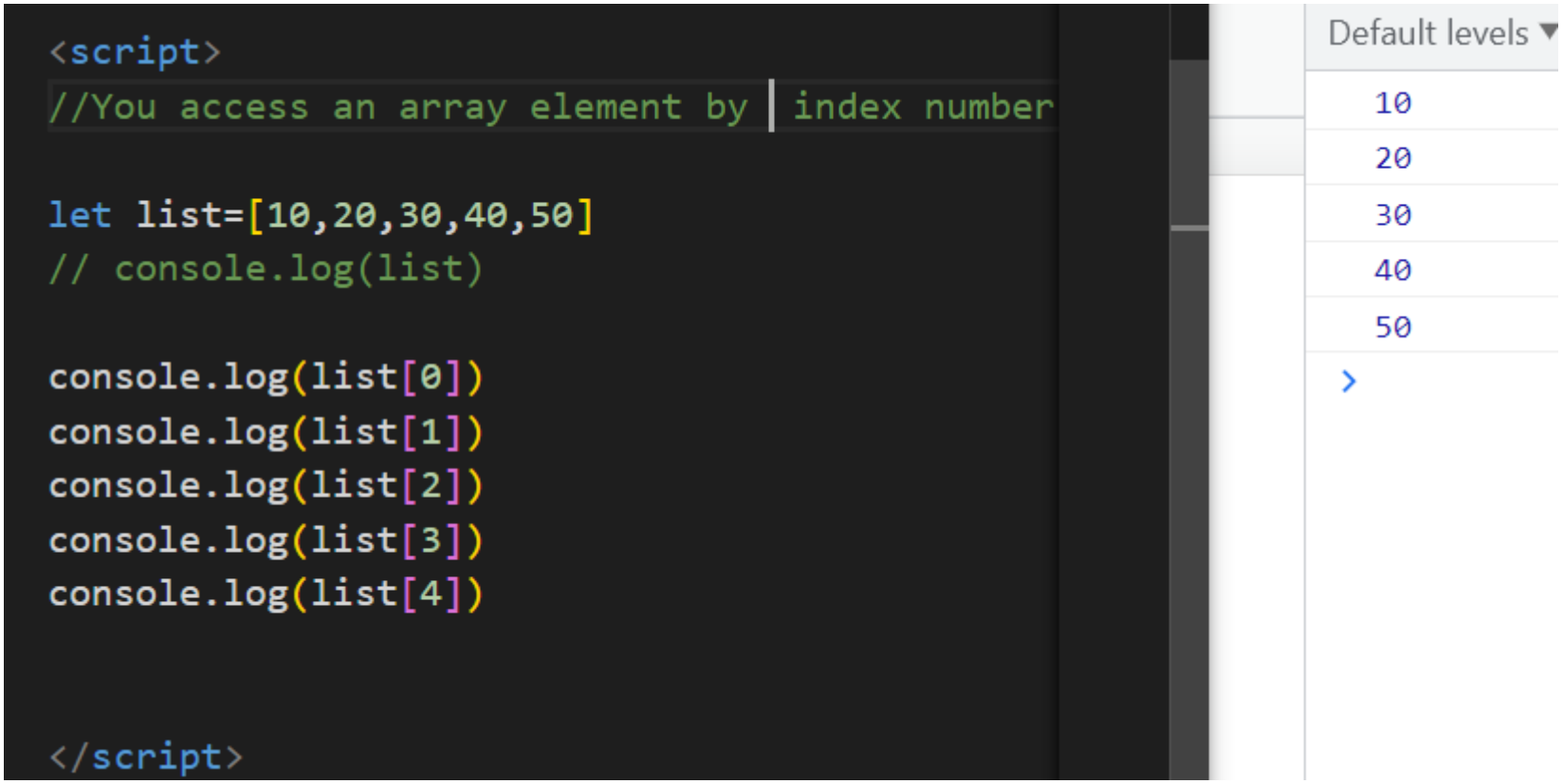
Example

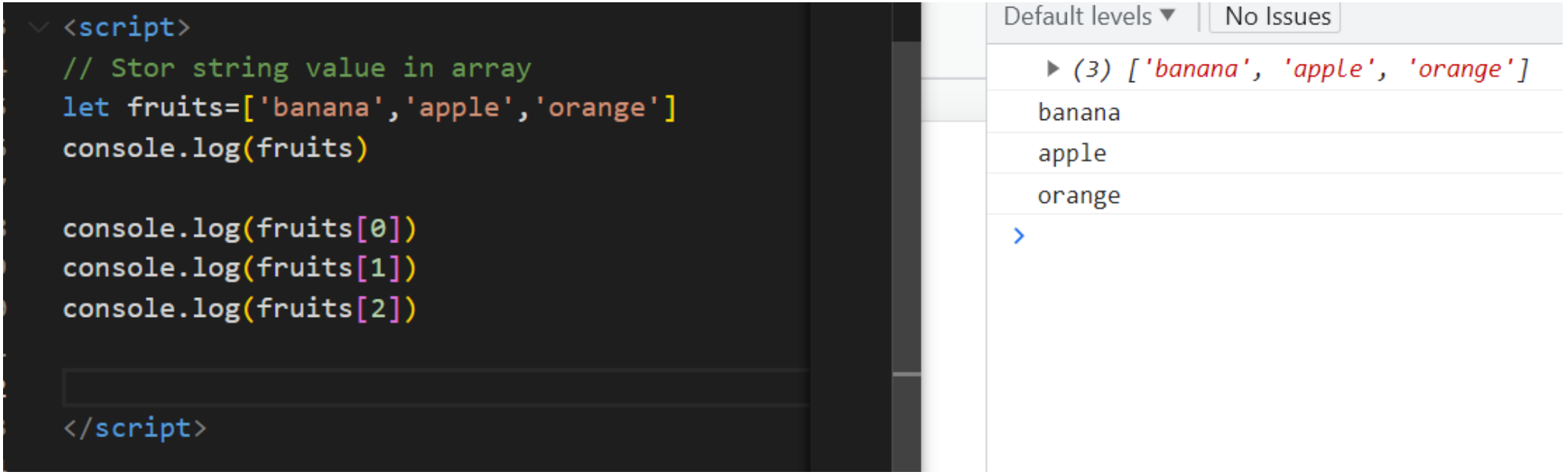
```
const cars = [
  "Saab",
  "Volvo",
  "BMW"
];
```


12
13 <script>
14 let list=[10,20,30,40,50]
15 console.log(list)
16
17
18 </script>
19
20
21
22
No Issues
(5) [10, 20, 30, 40, 50]
0: 10
1: 20
2: 30
3: 40
4: 50
length: 5
[[Prototype]]: Array(0)

Accessing Array Elements

You access an array element by referring to the **index number**:



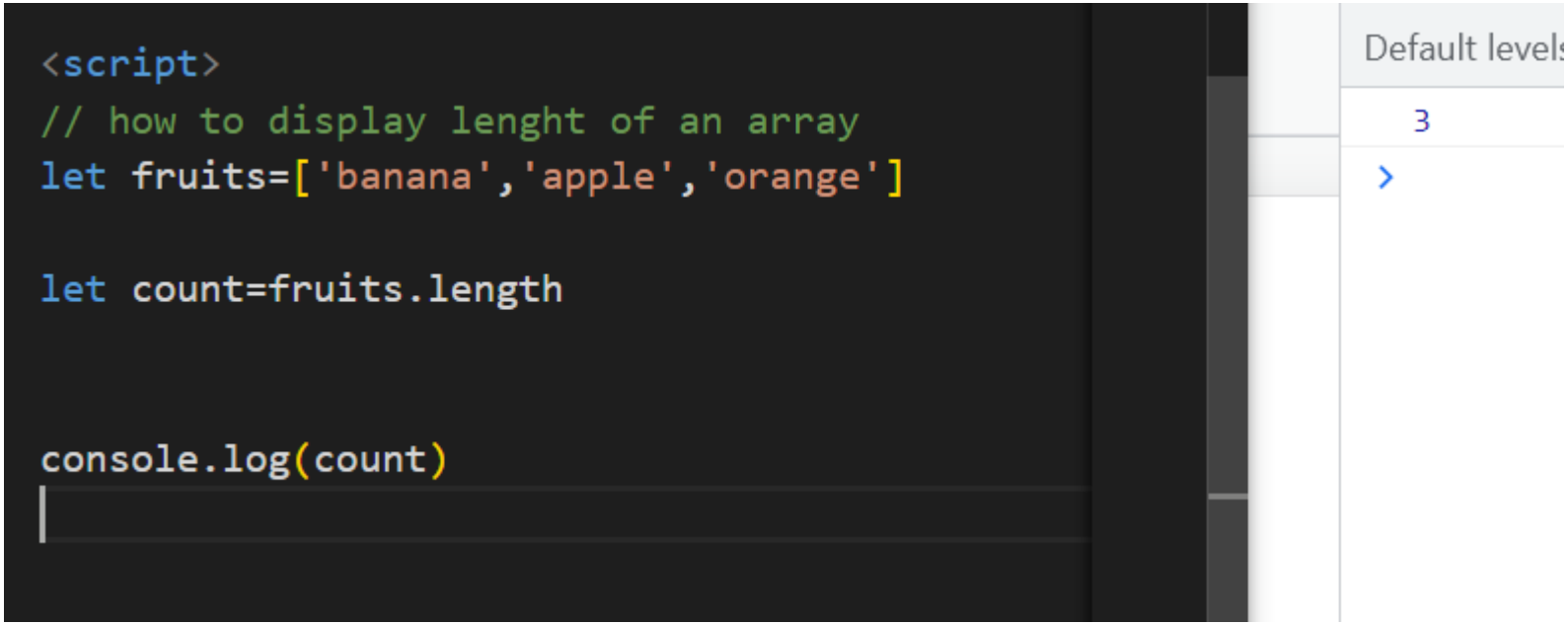

<script>
// Stor string value in array
let fruits=['banana','apple','orange']
console.log(fruits)
console.log(fruits[0])
console.log(fruits[1])
console.log(fruits[2])
</script>
Default levels
No Issues
(3) ['banana', 'apple', 'orange']
banana
apple
orange

The length Property

The `length` property of an array returns the length of an array (the number of array elements).

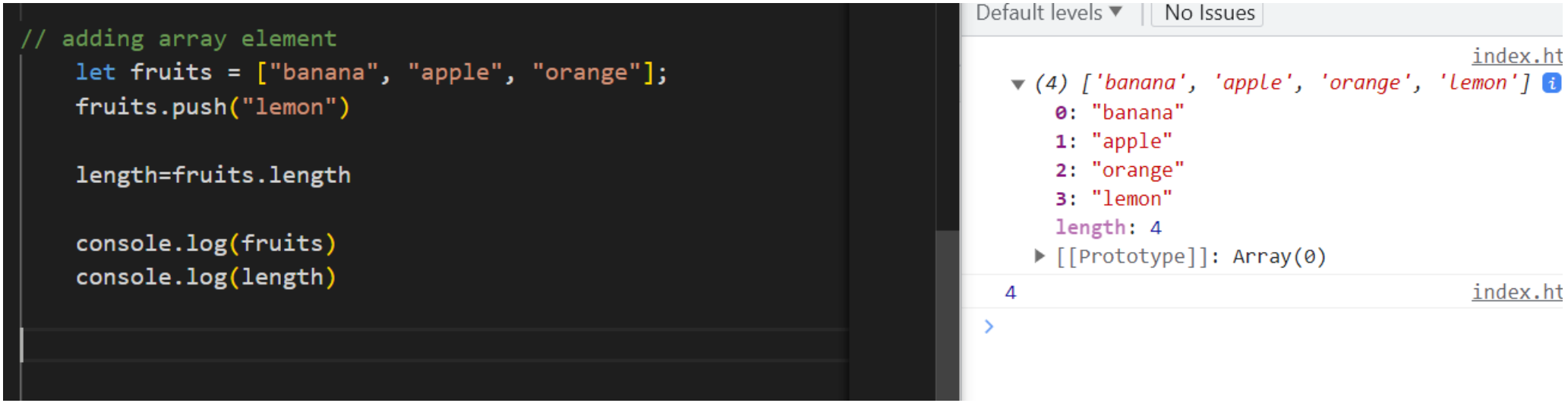
Example

```
const fruits = ["Banana", "Orange", "Apple", "Mango"];
let length = fruits.length;
```



Adding Array Elements

The easiest way to add a new element to an array is using the `push()` method:

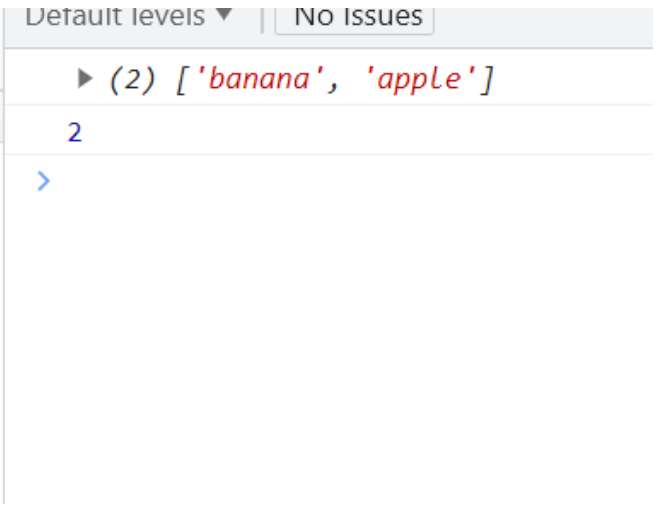


Remove element from last

```
// Remove  array element from last
    let fruits = ["banana", "apple", "orange"];
    fruits.pop()

    length=fruits.length

    console.log(fruits)
    console.log(length)
```



Add array element from beginning

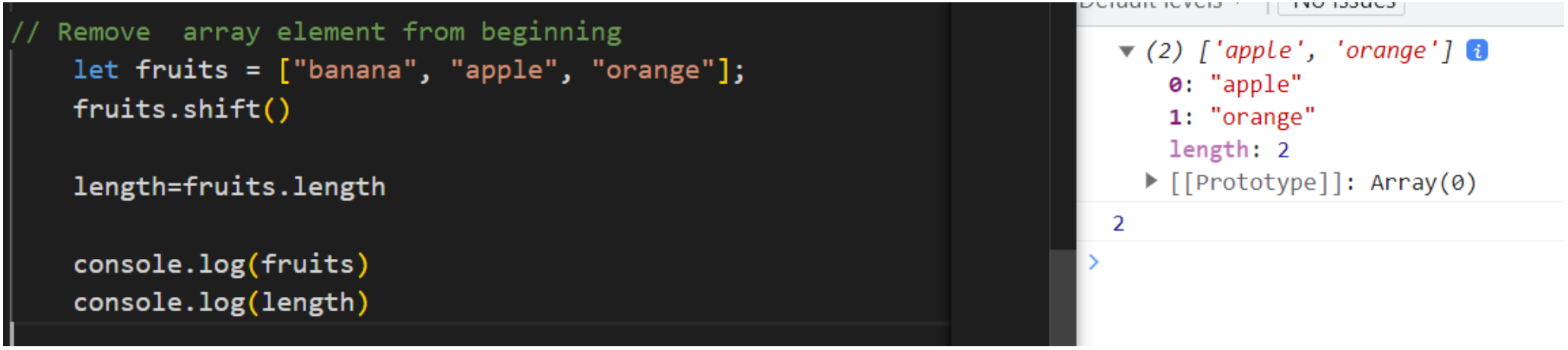
```
// Add  array element from beginning
    let fruits = ["banana", "apple", "orange"];
    fruits.unshift("mango")

    length=fruits.length

    console.log(fruits)
    console.log(length)
```

```
                                                                index.html:64
▼ (4) ['mango', 'banana', 'apple', 'orange']
    0: "mango"
    1: "banana"
    2: "apple"
    3: "orange"
    length: 4
  ▶ [[Prototype]]: Array(0)
4                                                               index.html:65
>
```

Remove array element from beginning



display array element using for loop

```
  // sort  array element

  let fruits = ["banana", "apple", "orange"];

  // fruits = fruits.sort();
  // fruits=fruits.sort().reverse();

  length = fruits.length;
  for (let i = 0; i < length; i = i + 1) console.log(i + "    " + fruits[i]);
</script>
/html>
```