

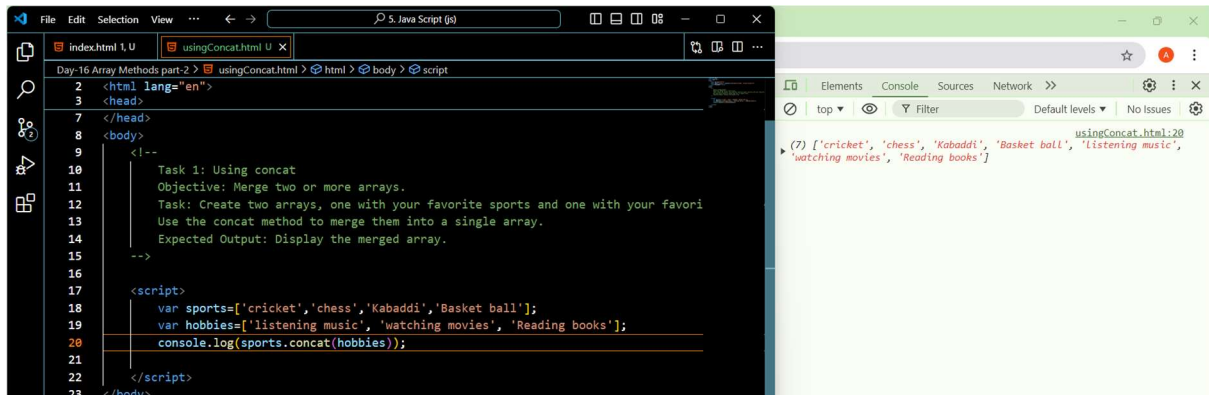
TASKS:

Task 1: Using concat

Objective: Merge two or more arrays.

Task: Create two arrays, one with your favorite sports and one with your favorite hobbies. Use the concat method to merge them into a single array.

Expected Output: Display the merged array.



```
index.html 1, U usingConcat.html U X
Day-16 Array Methods part-2 > usingConcat.html > html > body > script
2 <html lang="en">
3 </html>
7 </head>
8 <body>
9 <!--
10 Task 1: Using concat
11 Objective: Merge two or more arrays.
12 Task: Create two arrays, one with your favorite sports and one with your favori
13 Use the concat method to merge them into a single array.
14 Expected Output: Display the merged array.
15 -->
16
17 <script>
18   var sports=['cricket','chess','Kabaddi','Basket ball'];
19   var hobbies=['listening music', 'watching movies', 'Reading books'];
20   console.log(sports.concat(hobbies));
21 </script>
22 </body>
23 </html>
```

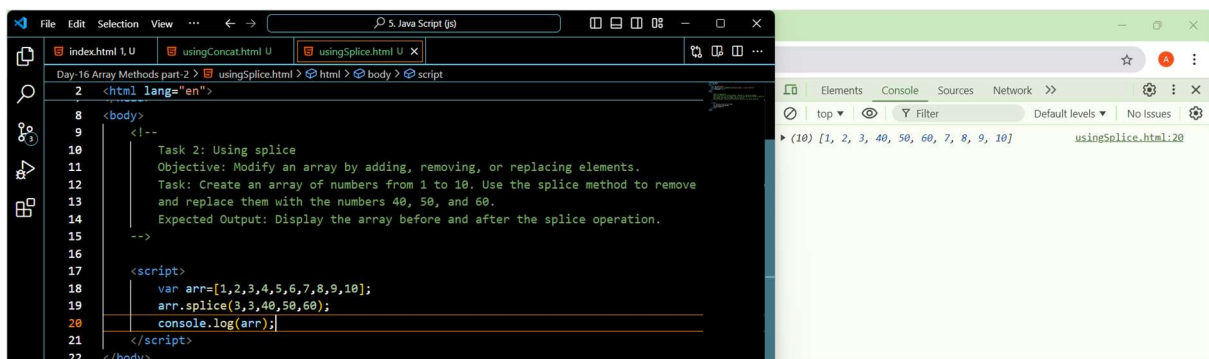
Console: (7) ['cricket', 'chess', 'Kabaddi', 'Basket ball', 'listening music', 'watching movies', 'Reading books']

Task 2: Using splice

Objective: Modify an array by adding, removing, or replacing elements.

Task: Create an array of numbers from 1 to 10. Use the splice method to remove the numbers 4, 5, and 6, and replace them with the numbers 40, 50, and 60.

Expected Output: Display the array before and after the splice operation.



```
index.html 1, U usingConcat.html U usingSplice.html U X
Day-16 Array Methods part-2 > usingSplice.html > html > body > script
8 <body>
9 <!--
10 Task 2: Using splice
11 Objective: Modify an array by adding, removing, or replacing elements.
12 Task: Create an array of numbers from 1 to 10. Use the splice method to remove
13 and replace them with the numbers 40, 50, and 60.
14 Expected Output: Display the array before and after the splice operation.
15 -->
16
17 <script>
18   var arr=[1,2,3,4,5,6,7,8,9,10];
19   arr.splice(3,3,40,50,60);
20   console.log(arr);
21 </script>
22 </body>
23 </html>
```

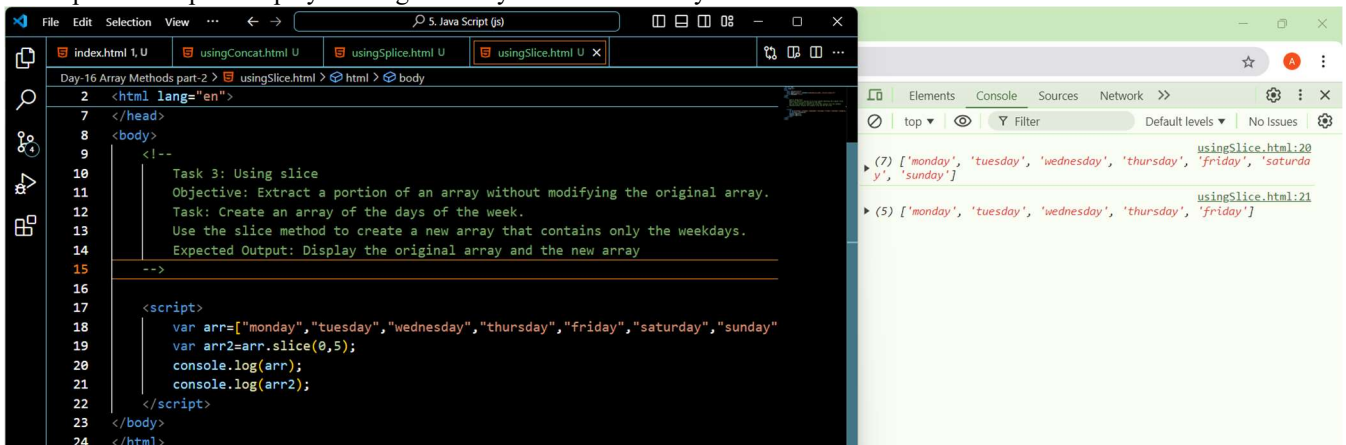
Console: (10) [1, 2, 3, 40, 50, 60, 7, 8, 9, 10]

Task 3: Using slice

Objective: Extract a portion of an array without modifying the original array.

Task: Create an array of the days of the week. Use the slice method to create a new array that contains only the weekdays.

Expected Output: Display the original array and the new array.



```
index.html 1, U usingConcat.html U usingSplice.html U usingSlice.html U X
Day-16 Array Methods part-2 > usingSlice.html > html > body
7 </head>
8 <body>
9 <!--
10 Task 3: Using slice
11 Objective: Extract a portion of an array without modifying the original array.
12 Task: Create an array of the days of the week.
13 Use the slice method to create a new array that contains only the weekdays.
14 Expected Output: Display the original array and the new array
15 -->
16
17 <script>
18   var arr=["monday","tuesday","wednesday","thursday","friday","saturday","sunday"]
19   var arr2=arr.slice(0,5);
20   console.log(arr);
21   console.log(arr2);
22 </script>
23 </body>
24 </html>
```

Console: (7) ['monday', 'tuesday', 'wednesday', 'thursday', 'friday', 'saturday', 'sunday']
(5) ['monday', 'tuesday', 'wednesday', 'thursday', 'friday']

Task 4: Using join

Objective: Convert an array to a string.

Task: Create an array of words that form a sentence. Use the join method to combine them into a single string with spaces between each word.

Expected Output: Display the resulting sentence.

The screenshot shows a VS Code editor with a file named `usingJoin.html` open. The code is as follows:

```
<html lang="en">
<head>
</head>
<body>
<!--
Task 4: Using join
Objective: Convert an array to a string.
Task: Create an array of words that form a sentence. Use the join method
to combine them into a single string with spaces between each word.
Expected Output: Display the resulting sentence.
-->

<script>
var arr=["creating","an","array","of","words","that","form","a","sentence"];
var arr2=arr.join(" ");
console.log(arr);
console.log(arr2);
</script>
</body>
</html>
```

The browser window shows the console output:

```
(9) ["creating", "an", "array", "of", "words", "that", "form", "a", "sentence"]
creating an array of words that form a sentence
```

Task 5: Using sort

Objective: Sort the elements of an array.

Task: Create an array of random numbers. Use the sort method to sort the numbers in ascending order.

Expected Output: Display the sorted array.

The screenshot shows a VS Code editor with a file named `usingSort.html` open. The code is as follows:

```
<html lang="en">
<body>
<!--
Task 5: Using sort
Objective: Sort the elements of an array.
Task: Create an array of random numbers.
Use the sort method to sort the numbers in ascending order.
Expected Output: Display the sorted array.
-->

<script>
var arr=[1,2,5,10,6,20,14,9,18];
console.log(arr);
// When you subtract a - b, the result will determine the order:
// If a < b, the result is negative, meaning a comes before b.
// If a > b, the result is positive, meaning b comes before a.
// If a === b, the result is zero, meaning their positions remain the same.

// This simple subtraction works perfectly for numerical sorting because:
// For ascending order: you subtract a - b.
// For descending order: you subtract b - a.

console.log(arr.sort());
console.log(arr.sort(function(a,b){return a-b}));
</script>
</body>
</html>
```

The browser window shows the console output:

```
(9) [1, 2, 5, 10, 6, 20, 14, 9, 18]
(9) [1, 10, 14, 18, 2, 20, 5, 6, 9]
(9) [1, 2, 5, 6, 9, 10, 14, 18, 20]
```