Array Methods

Splice:

The splice() method can be used to add new items to an array and splice is also used to remove elements from an array.

let arr=[1,2,3,4,5,6]

arr.splice(2,3, 7,8,9)

console.log(arr);

let x=arr.splice(2) // this returns a new array with removed elements
console.log(x); //output: [1, 2, 7, 8, 9, 6]

Explanation

The first parameter (2) defines the position where new elements should be added (spliced in).

The second parameter (3) defines how many elements should be removed.

The rest of the parameters (7,8,9) define the new elements to be added

Delete Method:

It is used to delete the value in the array and gives undefined in that index value

let arr=[1,2,3,4,5,6]

delete arr[3]
console.log(arr); //output: [1, 2, 3, <1 empty item>, 5, 6]

Flat Method:

This method is used for reducing the dimensionality of an array.Flattening is useful when you want to convert a multi-dimensional array into a one-dimensional array.

let arr=[1,2,3,[2,4],[4,5],[6,7],[8,9],10,11]

let x=arr.flat(2)

console.log(x);

Output: [1, 2, 3, 2, 4, 4,5, 6, 7, 8, 9, 10,11]

Explanation:
The flatMap() method first maps all elements of an array and then creates a new array by flattening the array.

indexOf:

The indexOf() method returns the position of the first occurrence of a value in a string.
The indexOf() method returns -1 if the value is not found.

```
let arr=["html","css","js","react"]
let x=arr.indexOf("js")      // gives output 2
let x=arr.indexOf("js",2)  //check from 2nd index if there is element after 2nd
                              index prints index value
console.log(x);
```

Explanation:
indexOf element is used to search the element in the array...
if the element is available it will returns its index otherwise returns -1

includes:

The **includes()** method returns **true** if an array contains a specified value.The **includes()** method returns **false** if the value is not found.

```
let arr=[1,2,3,4,5,6]

let x = arr.includes(10)      //returns false ar there is no value=10
let x = arr.includes(2,10)  //checks from 2nd index if there is 10 after 2nd index prints
                               true
console.log(x);             //false --there is no 10 value
```

iteration/looping method in array:

map Method:

The map() method creates a new array by performing a function on each array element.

```
let arr=[1,2,3,4,5]

let x=arr.map(function name(params) {
   return "hii"
```

```
})

console.log(x); // gives output as [ 'hii', 'hii', 'hii', 'hii', 'hii' ]

let x=arr.map(function (a,b) {    //here it gives array values when we calling a and
indecs for b
   return a+" hii"
})

console.log(x);                  //output:[ '1 hii', '2 hii', '3 hii', '4 hii', '5 hii' ]
```