JS ARRAY METHODS

① .toString ()   ⟹ Converts an array to a string.

Example :-

```
const arr = [1, 2, 3, 4];
let str = arr.toString();

console.log(str);
// Output    1,2,3,4
```

② .concat ()   ⟹ Joins 2 or more arrays.

Example :-

```
const arr1 = [1, 2, 3];
const arr2 = [4, 5];
const arr3 = [6];
const con = arr1.concat(arr2, arr3);

console.log(con);
// Output    [1, 2, 3, 4, 5, 6]
```

③ .indexOf ()   ⇒ Returns the 1st index at which a given element can be found.

Example :-

```
const fruits = ['Apple', 'Grapes',
                'Orange', 'Apple'];

console.log (fruits. indexOf ('Apple'));
// Output  0


// start from index 1
console.log (fruits .indexOf ('Apple', 1));
// Output  3


console.log (fruits . indexOf ('Mango'));
// Output   -1
```

④ .findIndex() → Returns the index of 1st element in the array that satisfies the provided testing function.

Example :-

```
const  arr = [9, 15, 4 , 34 , 22];

const  a = (element) => element > 12;

console. log (arr. findIndex(a));
// Output 1
```

⑤ .includes() → Determines whether an array includes a specific element.

Example :-

```
const  arr = [1, 2, 3];
```

```
console. log ( arr. includes(2));
// Output    true
```

⑥ .forEach() ⟹ Calls a function for each array element.

Example :-

```
const arr = [1, 2, 3];
arr.forEach(element => console.log(element));
// Output    1
            2
            3
```

⑦ .join() ⟹ Joins all the elements of the array into a string, separated by commas or specific separator.

Example :-

```
const arr = ['a', 'b', 'c'];
console.log(arr.join());
// Output    a, b, c

console.log(arr.join('-'));
// Output    a-b-c
```

(8) .unshift() ⇒ It adds one or more elements to the beginning of an array and returns new length of the array.

Example :-

```
const arr = [1, 2, 3];

console.log(arr.unshift(4, 5));
// Output    5

console.log(arr);
// Output    [4, 5, 1, 2, 3]
```

(9) .filter() ⇒ Creates a new array with all elements that pass the test implemented by the provided function.

Example :-

```
const arr = [15, 5, 9, 22, 104];

const result = arr.filter(element =>
                              element < 12);

console.log(result);
// Output    [5, 9]
```

⑩ .every() => Checks if every element in an array pass the test.

Example:-

```
const ages = [45, 34, 60, 23];

console.log (ages.every (checkAge));

function checkAge (age) {
    return age >18;
}
// Output  true
```

⑪ .pop() => Removes the last element from an array and returns that element.

Example:-

```
const arr = [1, 2, 3, 4, 5];

console. log (arr.pop());
// Output  5

console. log (arr);
// Output  [1, 2, 3, 4]
```

(12) .push() ⇒ Adds one or more elements to the end of an array & returns the new length of the array.

Example :-
```
const arr = [1, 2, 3];
console.log(arr.push(5));
// Output  4
console.log(arr);
// Output [1, 2, 3, 5]
```

(13) .map() ⇒ Creates a new array from calling a function for every array element.

Example :-
```
const arr = [1, 2, 3];
console.log(arr.map(x => x*2));
// Output [2, 4, 6]
```

(14). reduce() ⟹ Executes a reducer function for array element and returns a single value.

Example :-

```
const num = [1, 2, 3];
const sum = num.reduce(function
              (previousValue, currentValue) {
    return previousValue + currentValue;
});
console.log(sum);
// Output 6
```

(15). reverse() ⟹ Reverses the array.

Example :-
```
const arr = [1, 2, 3];
const reversed = arr.reverse();
console.log(reversed);
// Output [3, 2, 1]
console.log(arr);
// Output [3, 2, 1]
```

(16) .shift() => Removes the first element of an array and returns that removed element.

Example:-

```
const arr = [1, 2, 3];

console.log(arr.shift());
// Output  1
```

(17) .slice() => Selects the part of an array and returns the new array.

Example:-

```
const arr = ['a', 'b', 'c', 'd', 'e'];
console.log(arr.slice());
// Output  ['a', 'b', 'c', 'd', 'e']
console.log(arr.slice(2));
// Output  ['c', 'd', 'e']
console.log(arr.slice(1, 3));
// Output  ['b', 'c', 'd']
console.log(arr.slice(2, -1));
// Output  ['c', 'd']
```

(18) . sort() ⇒ sorts the array in ascending order.

Example :-
const arr = [1, 5, 4, 2];
console.log(arr.sort());
// Output [1, 2, 4, 5]

(19) . splice() ⇒ Add/removes elements from an array.

Example :-
const months = ['Jan', 'March', 'April', 'June'];

// inserts at index 1
console.log(months.splice(1, 0, 'Feb'));
# // Output ['Jan', 'Feb', 'March', 'April', 'June']

// replaces 1 element at index 4
console.log(months.splice(4, 1, 'May'));
// Output ['Jan', 'Feb', 'March', 'April', 'May']

(20) .some()   ⇒ Checks if atleast one element pass the test.

Example :-

```
const arr = [1, 2, 3, 4, 5];

const even = (x) => x % 2 === 0;

console.log(arr.some(even));
// Output    true
// As atleast one of them is even
```