# ARRAYS

JS

# WHAT TO EXPECT



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## What are Arrays?



- Ordered collections of items of any data type.
- Access items by their index (starting from 0).
- Useful for storing groups of related data like product names, test data sets, or element IDs.

## **Creating Arrays**

- Arrays are created using square brackets []
- Elements are separated by commas

```
let fruits = ['Apple', 'Banana', 'Orange']
```

## **Accessing Array Elements**

- Arrays are zero-indexed; the first element is at index 0.
- Access elements using square bracket notation.

```
let firstFruit = fruits[0]
```

# **Modifying Arrays**

- Arrays are mutable; elements can be changed after creation.
- Assign a new value to a specific index.

```
fruits[1] = 'Grapes'
```

# **Array Methods**

push()	Adds an element to the end.
pop()	Removes the last element and returns it.
shift()	Removes the first element and returns it.
unshift()	Adds an element to the beginning.
indexOf()	Finds the index of a specific element.

# **Array Methods in Action**

## **Looping Through Arrays**

Using for loop:

```
for (let i = 0; i < array.length; i++) {
  console.log(array[i]);
}</pre>
```

#### Wrapping Up

- Arrays are vital for data organization and manipulation in JavaScript.
- We explored array creation, accessing elements, and modifying arrays.
- Array methods offer powerful tools for efficient manipulation.
- Practicing with examples is crucial for mastering arrays.





