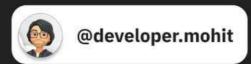
# Arrays in JavaScript





 Array is a user defined data types that can store any type of datatypes and it is a collection of multiple data types. In the below example,

An array 'a' stores a string, integer, float number, and a boolean expression.

 The type of array is object and array are mutable that means it can be changed according to need.

```
let a = ["apple", 5, 5.9, 'c', true]
console.log(a, typeof a)
//output :- complete array and "object"
```



## **Basic Array Methods**

02

#### 1. length

```
// length is used to find the total number of elements
// in an array. Counting starts from 1
console.log(a.length) //5
```

#### 2. Index

```
// index is also counting but it starts from 0 and
// every array element is automatically assigned an index
// and we can also access array elements from its index
// index are written in square bracket
console.log(a.indexOf(true)) //4
console.log(a[2]) //5.9
```



#### 3. Element Manipulation

```
// we can change any array element. for that we use index
// of the element we want to change and then assign a value
a[4] = false
console.log(a[3], a[4]) // c false
```

#### 4. toString()

```
//we can convert an array into string
let new_array = a.toString()
console.log(new_array) // apple,5,5.9,c,false
console.log(typeof new_array) //string
```

### 5. pop()

```
//we can delete an array element using pop function
// delete the element in the last
a.pop()
console.log(a)
```



```
6. join()
```

```
//we can write any thing inplace of ','
console.log(a.join(" and "))
// apple and 5 and 5.9 and c
```

#### 7. push()

```
//push appends element in the end
a.push(100)
console.log(a)
```

#### 8. shift()

```
//shift removes first element
a.shift()
console.log(a)
```



```
9. unshift()
```

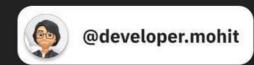
```
//unshift add element in the beginning
a.unshift("apple")
console.log(a)
```

#### 10. delete()

```
//delete an element
//Memory will retain but value will be deleted
delete a[3]
console.log(a)
```

#### 11. sort()

```
//sort array element.
a.sort()
console.log(a)
```



#### 11. splice()

```
//splice is used to add items in array
// array.splice(start, no.of deletion, to be added)
// here 3 is excluded only 0,1,2 will deleted
a.splice(0,3,"delta")
console.log(a)
// ['delta', <empty>, 100]
```

#### 12. slice()

```
// slice is used to delete a particular range of element
// last number is excluded
let array = [1,2,3,4,5]
console.log(array.slice(2)) // [3,4,5]
console.log(array.slice(1,3)) // [2,3]
```

#### 13. reverse()

```
//reverse the array elements
console.log(array.reverse())
// [5,4,3,2,1]
```

