

## 1 Add & Remove From End

```
let fruits = ["apple", "banana"];
```

- Add "orange" to the end.
  - Remove the last element.
  - What is the final array?
- 

## 2 Add & Remove From Beginning

```
let numbers = [2, 3, 4];
```

- Add 1 to the beginning.
  - Remove the first element.
  - What is the final array?
- 

## 3 Find Position

```
let colors = ["red", "blue", "green", "yellow"];
```

- Find the index of "green".
  - Find the index of "purple" (what will it return?)
- 

## 🟡 Intermediate Level

### 4 Shopping Cart Simulation

```
let cart = ["milk", "bread"];
```

- Add "eggs" to the cart.
- Add "butter" to the beginning.
- Remove the last item.
- Find the index of "milk".

👉 What does the cart look like at the end?

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### 5 Undo Feature (Stack Concept)

```
let actions = [];
```

- User performs: "login", "view page", "logout"
- Add them properly.
- User clicks undo → remove last action.
- What remains in the array?

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## 6 Queue Simulation (Line System)

```
let queue = ["Person1", "Person2"];
```

- New person joins at the end.
  - First person leaves.
  - Another person joins at the beginning (VIP).
  - What is the final queue?
- 

## Challenge Level

### 7 Remove Specific Element Using indexOf

```
let animals = ["cat", "dog", "lion", "dog"];
```

- Remove the first "dog" using `indexOf()` and another array method.
  - What does the array become?
- 

### 8 Check & Add If Not Exists

```
let users = ["Alice", "Bob"];
```

Write logic:

- If "Charlie" is NOT in the array, add it.
- If "Alice" is in the array, remove the last user.

What is the final array?

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### 9 Predict the Output

```
let arr = [10, 20, 30];
arr.push(40);
arr.shift();
arr.unshift(5);
arr.pop();
console.log(arr);
```

Write a program to merge two arrays into a single array.

[1, 2, 3] and [4, 5, 6]

Write a program to remove a specified element from an array.

[5, 3, 8, 9, 4]

Write a program to convert an array of strings into a single string.

["apple", "banana", "cherry"]

Write a program to reverse an array without using reverse function

[1, 2, 3, 4, 5]

Given an array of numbers, remove elements from index 2 to index 4 using the splice() method.

[10, 20, 30, 40, 50]

Given an array of numbers, extract a portion of the array from index 1 to index 4 (inclusive) using the slice() method.

[10, 20, 30, 40, 50]

Given an array of strings, extract the last three elements using the slice() method.

['apple', 'banana', 'cherry', 'date', 'fig', 'hello', 'hi']

split an array into chunks of a specified size.

[1, 2, 3, 4, 5, 6, 7, 8, 9]

answer:[ [1, 2, 3], [4, 5, 6], [7, 8, 9] ]