

Arrays In Java Script

1. Write a JavaScript code to add an element to the end of an array using the Push method.

Example: [1, 2, 3] -> [1, 2, 3, 4]

```
let array = [1, 2, 3];  
array.push(4);  
console.log(array);
```

Output: [1, 2, 3, 4]

Explanation:

In this example, we start with the array [1, 2, 3] and then use array.push(4) to add the number 4 to the end of the array. The updated array is then printed to the console.

2. Write a JavaScript code to remove the last element from an array using the Pop method.

Example: [1, 2, 3, 4] -> [1, 2, 3]

```
let array=[1,2,3,4];  
array.pop();  
console.log(array);
```

Output: [1, 2, 3]

Explanation:

In this example, we start with the array [1, 2, 3, 4] and then use array.pop() to remove the last element, which is 4. The updated array, [1, 2, 3], is printed to the console.

3. Write a JavaScript code to add an element to the beginning of an array using the Unshift method.

Example: [2, 3, 4] -> [1, 2, 3, 4]

```
let array=[2,3,4];  
array.unshift(1);  
console.log(array);
```

Output: [1, 2, 3, 4]

Explanation:

The unshift method adds 1 to the beginning of the array, resulting in [1, 2, 3, 4].

4. Write a JavaScript code to remove the first element from an array using the Shift method.

Example: [1, 2, 3, 4] -> [2, 3, 4]

```
let array=[1,2,3,4];  
array.shift();  
console.log(array);
```

Output: [2, 3,4]

Explanation:

The shift method removes the first element (1) from the array, resulting in [2, 3, 4].

5. Write a JavaScript code to convert an array into a string using the Join method.

Example: [1, 2, 3] -> "123"

```
let array=[1,2,3];  
let stringResult=array.join("");  
console.log(stringResult);
```

Output: 123

Explanation: The join method concatenates the elements of the array into a single string with no spaces, resulting in "123".

6. What will be the output of [1, 2, 3, 4].pop()?

A) [1, 2, 3, 4]

B) [1, 2, 3]

C) [2, 3, 4]

D) Error

Output: B) [1, 2, 3]

Explanation:

- The `pop()` method removes the last element from the array and returns that element.
- In this case, it removes 4 from the array `[1, 2, 3, 4]`, resulting in the updated array `[1, 2, 3]`.
- However, `pop()` itself returns the removed element (4), not the updated array. So if you call it like this, it will return 4, but since you are asking for the resulting array after the operation, it would be `[1, 2, 3]`.

7. What will be the output of `[1, 2, 3].push(4)`?

- A) `[1, 2, 3]`
- B) `[1, 2, 3, 4]`
- C) `[4, 1, 2, 3]`
- D) Error

Output: B) `[1, 2, 3, 4]`

Explanation:

- The `push()` method adds one or more elements to the end of an array and returns the new length of the array.
- In this case, calling `push(4)` adds 4 to the end of the array `[1, 2, 3]`, resulting in the updated array `[1, 2, 3, 4]`.
- So the final output reflects the new state of the array after the operation, which is `[1, 2, 3, 4]`.

8. What will be the output of `[1, 2, 3, 4].shift()`?

- A) `[1, 2, 3, 4]`
- B) `[2, 3, 4]`
- C) `[1, 2, 3]`
- D) Error

Output: B) `[2, 3, 4]`

Explanation:

- The `shift()` method removes the first element from an array and returns that element.
- In this case, it removes 1 from the array `[1, 2, 3, 4]`.
- Therefore, the returned value is 1, not the updated array.
- However, if you're asking for the updated array state after the operation, it would be `[2, 3, 4]`.

9. What will be the output of `[2, 3, 4].unshift(1)`?

A) `[2, 3, 4]`

B) `[1, 2, 3, 4]`

C) `[1, 3, 4]`

D) Error

Output: B) `[1, 2, 3, 4]`

Explanation:

- The `unshift()` method adds one or more elements to the beginning of an array and returns the new length of the array.
- In this case, it adds 1 to the beginning of the array `[2, 3, 4]`, resulting in the updated array `[1, 2, 3, 4]`.
- Therefore, the correct answer is B).

The original array is modified, and if you were to print the updated array, it would show `[1, 2, 3, 4]`.

10. What will be the output of `[1, 2, 3].join("")`?

A) 123

B) `[1, 2, 3]`

C) 1 2 3

D) Error

Output: A) 123

Explanation:

- The join() method concatenates all elements of the array into a single string.
- By passing an empty string "" as the separator, the elements are joined together without any spaces or commas.
- Therefore, the resulting string is "123".