

Theory Assignment Array In JS

Question 1: What is an array in JavaScript?

An **array** in JavaScript is a collection of elements stored in a single variable. It can hold values of any type, like numbers, strings, or objects.

➤ **Declaration and Initialization:**

1. **Using Array Literal:**

```
let fruits = ['apple', 'banana', 'cherry'];
```

2. **Using new Array():**

```
let numbers = new Array(1, 2, 3);
```

3. **Empty Array:**

```
let empty = [];
```

Question 2: Methods **push()**, **pop()**, **shift()**, and **unshift()**

1. **push()**: Adds elements to the **end** of the array.

```
let fruits = ['apple'];  
fruits.push('banana'); // ['apple', 'banana']
```

2. **pop()**: Removes the **last** element and returns it.

```
let fruits = ['apple', 'banana'];  
fruits.pop(); // ['apple']
```

3. **shift()**: Removes the **first** element and returns it.

```
let fruits = ['apple', 'banana'];  
fruits.shift(); // ['banana']
```

4. **unshift()**: Adds elements to the **beginning** of the array.

```
let fruits = ['banana'];  
fruits.unshift('apple'); // ['apple', 'banana']
```