

## Day 5 – [25th June 2025]

### TOPICS COVERED

#### JavaScript Strings

##### 1. .trim()

Removes extra spaces from both the beginning and end of a string.

```
let str = " Hello World ";  
console.log(str.trim()); // Output: "Hello World"
```

##### 2. .indexOf()

Finds the position of the first occurrence of a specified character or substring. Returns -1 if not found.

```
let msg = "JavaScript";  
console.log(msg.indexOf("S")); // Output: 4  
console.log(msg.indexOf("z")); // Output: -1
```

##### 3. Method Chaining

Allows multiple string methods to be called in sequence.

```
let name = " Navpreet ";  
console.log(name.trim().toUpperCase()); // Output: "NAVPREET"
```

##### 4. .slice()

Returns a part of the string from the specified start index up to (but not including) the end index.

```
let fruit = "Mango";  
console.log(fruit.slice(1, 4)); // Output: "ang"
```

#### Prompt and Alert:

prompt(): Displays a dialog to take user input.

alert(): Shows a pop-up message to the user.

```
let username = prompt("Enter your name:");  
alert("Hello, " + username + "!");
```

## JavaScript Arrays:

### 1. Array Initialization

Arrays can be created using literal or constructor syntax.

```
let arr = [1, 2, 3];
```

```
let names = new Array("Nav", "Aman");
```

### 2. Insert Elements

- push() adds to the end

- unshift() adds to the start

```
arr.push(4); // [1, 2, 3, 4]
```

```
arr.unshift(0); // [0, 1, 2, 3, 4]
```

### 3. Delete Elements

- pop() removes the last item

- shift() removes the first item

```
arr.pop(); // [0, 1, 2, 3]
```

```
arr.shift(); // [1, 2, 3]
```

### 4. .slice()

Returns a shallow copy of a portion of the array without changing the original.

```
let sliced = arr.slice(1, 3); // [2, 3]
```

### 5. .splice()

Used to remove or insert elements into the array at specific positions. Alters the original array.

```
let nums = [1, 5];
```

```
nums.splice(1, 0, 2, 3, 4); // Inserts at index 1
```

```
console.log(nums); // [1, 2, 3, 4, 5]
```

### 6. Array References

Arrays are stored by reference, not by value. Changes to one reference reflect in the other.

```
let a = [1, 2];
```

```
let b = a;
```

```
b.push(3);  
console.log(a); // [1, 2, 3]
```

**TOOLS USED:**

Visual Studio Code (VS Code)

Google Chrome Developer Console

**TASK:**

- ◆ Study how JavaScript functions and objects work.
- ◆ Practice declaring, calling, and passing arguments to functions