

STRING IN JS

A string is a sequence of characters used to represent text.

Creating Strings

```
let str1 = "Hello";    // double quotes
let str2 = 'World';    // single quotes
let str3 = `Hi, Sewak`; // backticks
```

String Properties

Length: `string.length` → number of characters (spaces count too).

COMMON & IMPORTANT STRING METHODS

Accessing Characters:

charAt(index)

```
let word = "Hello";  
console.log(word.charAt(1)); // "e"
```

Bracket notation:

```
console.log(word[1]); // "e"
```

Changing Case:

toUpperCase() → Converts to uppercase.
toLowerCase() → Converts to lowercase.

```
let name = "Sewak";  
console.log(name.toUpperCase()); // "SEWAK"  
console.log(name.toLowerCase()); // "sewak"
```

Searching Inside Strings

- `indexOf(searchValue)` → First occurrence position.
- `lastIndexOf(searchValue)` → Last occurrence position.
- `includes(searchValue)` → Boolean if found.
- `startsWith(searchValue)` → Checks start.
- `endsWith(searchValue)` → Checks end.

```
let text = "JavaScript is awesome";  
console.log(text.indexOf("is"));      // 11  
console.log(text.includes("awesome")); // true  
console.log(text.startsWith("Java")); // true  
console.log(text.endsWith("me"));     // true
```

Extracting Parts of Strings

- **slice(start, end)** → Extracts portion (end not included).

```
let str = "Frontend Developer";  
console.log(str.slice(0, 8)); // "Frontend"  
console.log(str.slice(-9));  // "Developer"
```

- **substring(start, end)** → Similar to slice, but can't use negative indexes.

```
console.log(str.substring(0, 8)); // "Frontend"
```

- **substr(start, length)** → (Old, avoid in new code)

```
console.log(str.substr(0, 8)); // "Frontend"
```

Removing Extra Spaces

- **trim()** → Removes spaces from start & end.
- **trimStart() / trimEnd()** → Removes from start or end only

```
let messy = "  hello world  ";  
console.log(messy.trim()); // "hello world"
```

Splitting and Joining

- **split(separator)** → Turns string into array.

```
let fruits = "apple,banana,orange";  
console.log(fruits.split(","));  
// ["apple", "banana", "orange"]
```

TEMPLATE LITERALS (BACKTICKS)

Allows embedding variables and expressions.

```
let user = "Sewak";  
let greet = `Hello, ${user}! Today is ${new Date().toLocaleDateString()}`;  
console.log(greet);
```