

Live Cohort DAY-2

JavaScript Basics



Welcome back to JavaScript Learning Series! In this session, we'll cover statements, expressions, and all types of console methods used for debugging and displaying information in JavaScript.

* TOPICS COVERED:

- 1. var, let, const
- 2.console methods (log, error, warn, table, etc.)
- 3. Strings what they are
- 4. Slice, template literals, split, replace, includes
- 5. Statements and expressions

1. var, let, const

These are used to declare variables.

Keyword	Scope	Can Reassign?	Redeclare?	Example
var	Function	✓ Yes	✓ Yes	var name = "Ritik";
let	Block	✓ Yes	X No	let age = 21;
const	Block	X No	× No	const country = "India";

Tip: Use `let` and `const` instead of `var` in modern JS.

2. console Methods in JavaScript 💻

The `console` object in JS helps us **print**, **debug**, **and test code** easily in the browser console.

Here are the most useful console methods:

console.log()

Prints normal messages or data.

```
console.log("Hello World!");
console.log(10 + 5);
```

2. console Methods in JavaScript 💻

- console.error()
 - Displays an error message in red.
- ***** Example:

```
console.error("Something went wrong!");
```

- console.warn()
 - Shows a warning message in yellow.
- ***** Example:

```
console.warn("This is a warning!");
```

- console.info()
 - Displays an informational message.
- ***** Example:

```
console.info("Server started successfully!");
```

2. console Methods in JavaScript 💻

console.table()
 Displays data in a table format — great for arrays and objects.

```
let user = {
  name: "Sheryians",
  email: "hello@gmail.comm",
  course: "JavaScript"
};
console.table(user);
```

- console.group() and console.groupEnd()`
 Helps group multiple logs together.
- ***** Example:

```
console.group("User Info");
console.log("Name: John");
console.log("Course: JS");
console.groupEnd();
```

2. console Methods in JavaScript 💻

- console.time() and console.timeEnd()`
 Used to measure execution time of a block of code.
- ***** Example:

```
console.time("loopTime");
for(let i = 0; i < 1000000; i++) {}
console.timeEnd("loopTime");</pre>
```

- console.clear()
 - Clears the console screen.
- **#** Example:

```
console.clear();
```

3. Strings in JavaScript 📃

A **string** is a sequence of characters wrapped in quotes.

```
let name = "Ritik Rajput";
console.log(name);
```

- 4. String Methods slice, template literals, split, replace, includes
 - slice()Extracts part of a string.
 - ***** Example:

```
let str = "JavaScript";
console.log(str.slice(0, 4)); // Java
```

- Template Literals (using backticks ``)
 Makes string creation easier with variables.
- ***** Example:

```
let name = "Ritik";
console.log(`Hello, ${name}! Welcome to JS.`);
```

split()

Splits a string into an array.

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

4. String Methods – slice, template literals, split, replace, includes

replace()

Replaces a word or character.

***** Example:

```
let sentence = "I love HTML";
console.log(sentence.replace("HTML", "JavaScript")); // I love JavaScript
```

includes()

Checks if a substring exists.

```
let text = "Learning JavaScript is fun";
console.log(text.includes("fun")); // true
```

5. Statements and Expressions 💡

STATEMENT

A **statement** performs an action — like declaring a variable or writing a loop.

***** Example:

```
let a = 10;
if (a > 5) {
   console.log("a is greater than 5");
}
```

EXPRESSION

An **expression** produces a value.

***** Example:

```
2 + 3; // 5
"hello" + " world"; // "hello world"
```

Tip: Every expression can be part of a statement, but not every statement is an expression.

Conclusion:

You've now learned about **console methods, statements, and expressions**— essential tools for debugging and writing better JS code.

Next, we'll dive into data types, operators, and conditionals!