

### 3. JavaScript Operators

**Q1. What are the different types of operators in JavaScript? Explain with examples.**

Operators are symbols used to perform operations on values and variables.

JavaScript has different types of operators:

Operator	Description	Example
+	Addition	$5 + 3 \rightarrow 8$
-	Subtraction	$10 - 4 \rightarrow 6$
*	Multiplication	$6 * 2 \rightarrow 12$
/	Division	$12 / 3 \rightarrow 4$
%	Modulus	$10 \% 3 \rightarrow 1$

**Example:**

```
let a = 10, b = 3;  
console.log(a + b); // 13
```

**2. Assignment Operators — used to assign values**

Operator	Example	Meaning
=	$a = 10$	Assign value 10
$+=$	$a += 5$	$a = a + 5$
$-=$	$a -= 2$	$a = a - 2$

### 3. Comparison Operators — used to compare values

Operator	Example	Result
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<code>==</code>	<code>5 == '5'</code>	<code>true</code>
<code>===</code>	<code>5 === '5'</code>	<code>false</code>
<code>&gt;</code>	<code>10 &gt; 5</code>	<code>true</code>
<code>&lt;</code>	<code>2 &lt; 1</code>	<code>false</code>

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### 4. Logical Operators — used for conditions

Operator	Meaning	Example
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<code>&amp;&amp;</code>	AND	<code>(a &gt; 5 &amp;&amp; b &lt; 10)</code>
<code>  </code>	OR	<code>(a &gt; 5    b &lt; 10)</code>
<code>!</code>	NOT	<code>!(a &gt; 10)</code>

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### Q2. What is the difference between `==` and `===` in JavaScript?

Operator	Name	Comparison Type	Example	Result
<code>==</code>	Loose equality	Only checks value	<code>5 == "5"</code>	<code>true</code>
<code>===</code>	Strict equality	Checks value <b>and data type</b>	<code>5 === "5"</code>	<code>false</code>