

### 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
=	<code>a = 10</code>	Assign value 10
+=	<code>a += 5</code>	<code>a = a + 5</code>
-=	<code>a -= 2</code>	<code>a = a - 2</code>

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

Operator	Example	Result
==	5 == '5'	true
===	5 === '5'	false
>	10 > 5	true
<	2 < 1	false

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### 4. Logical Operators — used for conditions

Operator	Meaning	Example
&&	AND	(a > 5 && b < 10)
	OR	(a > 5    b < 10)
!	NOT	!(a > 10)

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

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