**Assignment Operators (OR) Update Operators**

**A single operator perform two operations**

1. **Binary Operation**
2. **Assignment**

|  |
| --- |
| **Operator** |
| = |
| += |
| -= |
| \*= |
| /= |
| %= |
| \*\*= |

Example

|  |  |
| --- | --- |
| Js1.js | Jstest3.html |
| let x=10;  console.log(x);  x+=5;  console.log(x);  let y=5  console.log(y);  y-=2;  console.log(y);  let z=9;  console.log(z);  z\*=3  console.log(z);  let a=6;  console.log(a);  a/=3;  console.log('a='+a);  let b=5;  b\*\*=2;  console.log('b='+b); | <!DOCTYPE html>  <html lang="en">  <head>      <meta charset="UTF-8">      <meta name="viewport" content="width=device-width, initial-scale=1.0">      <title>Document</title>      <script src="/src/js1.js"></script>  </head>  <body>    </body>  </html> |

**Unary ++,-- operator**

++ operator is used for incrementing value by 1

--operator is sued for decrementing value by 1

++opr 🡪 pre-increment

opr++ 🡪 post-increment

opr-- 🡪 post decrement

--opr 🡪 pre decrement

|  |  |
| --- | --- |
| **Js1.js** | **Jstest4.html** |
| let x=5;  let y=x++;  console.log(y);  console.log(x);  let a=10;  let b=++a;  console.log(b);  console.log(a);  let c=8;  console.log(c++);  console.log(c);  let d=9;  console.log(++d);  let p=5;  let q=--p;  console.log(q);  let e=9;  let f=e--;  console.log(e);  console.log(f);  let num=5;  num++;  console.log(num); | <!DOCTYPE html>  <html lang="en">  <head>      <meta charset="UTF-8">      <meta name="viewport" content="width=device-width, initial-scale=1.0">      <title>Document</title>      <script src="/src/js1.js"></script>  </head>  <body>    </body>  </html> |

**Logical Operators**

These operators are used for combining two or more logical expressions or boolean expressions.

|  |  |
| --- | --- |
| **Operator** | **Description** |
| && | Logical and operator |
| || | Logical or operator |
| ! | Logical NOT operator |

**Comparison Operators or Relational Operators**

These operators are used for comparing values. These relational operators return Boolean value (true/false).

|  |  |
| --- | --- |
| **Operator** | **Description** |
| == | equal to |
| === | equal value and equal type |
| != | not equal |
| !== | not equal value or not equal type |
| > | greater than |
| < | less than |
| >= | greater than or equal to |
| <= | less than or equal to |

|  |  |
| --- | --- |
| let a=10;  let b=10;  console.log(a==b);  let c=10.0;  console.log(a==c);  console.log(a===b);  console.log(a===c);  console.log(typeof a);  console.log(typeof b);  console.log(typeof c);  let s1="A";  let x=65;  console.log(s1==x);  console.log(s1===x);  console.log(1==true);  console.log(0==false);  console.log(1===true);  console.log(0===false);  console.log(10>2);  let p=5;  console.log(++p>5);  console.log(10<2);  console.log(10<=10);  console.log(5>=4); | <!DOCTYPE html>  <html lang="en">  <head>      <meta charset="UTF-8">      <meta name="viewport" content="width=device-width, initial-scale=1.0">      <title>Document</title>      <script src="/src/js1.js"></script>  </head>  <body>    </body>  </html> |

|  |  |
| --- | --- |
| console.log(10>5 && 6>2);  console.log(10>5 && 10>20);  console.log(2>5 && 5>2);  console.log(2>5 && 2>10);  console.log(10>5 || 6>2);  console.log(2>5 || 5>2);  console.log(10!=20);  console.log(!(10>20));  console.log(!10);  console.log(!0) | <!DOCTYPE html>  <html lang="en">  <head>      <meta charset="UTF-8">      <meta name="viewport" content="width=device-width, initial-scale=1.0">      <title>Document</title>      <script src="/src/js1.js"></script>  </head>  <body>    </body>  </html> |

**Conditional operator**

Conditional operator is ternary operator and required 3 operands.

Conditional operator is used for creating conditional expression.

Syntax: opr1?opr2:opr3

Opr1,Opr3 are executed based on the result of opr2

Opr2 is a Boolean expression or condition.