



JavaScript



Type Coercion or Implicit Coercion:

• Type coercion is similar to type conversion, but the only key difference is the coercion performed automatically or implicitly by the JavaScript engine.

To String Coercion:

 When a string is added with the number or non-string value using the plus(+) operator then the output of the expression is always a string.

```
console.log('1' + 2); // Output >> 12
console.log(2 + '1' + true); // OutPut >> 21true
console.log('12' + undefined); // OutPut >> 12undefined
console.log('12' + null); // OutPut >> 12null
console.log('12' + NaN); // OutPut >> 12NaN
```

To Number Coercion:

- The mathematical operations like Subtraction(-), Multiplication(*), Division(/), and Modulus(%) performed with the string then the output of the expression is converted into a number implicitly.
- In number coercion, the plus(+) operator is not used.

```
console.log('12' - 2); // OutPut >> 10
console.log('2' * 2); // OutPut >> 4
console.log('10' / 2); // OutPut >> 5
console.log('10' % 2); // OutPut >> 0
console.log('Hello' - 'World'); // OutPut >> NaN
console.log('Hello' * 2); // OutPut >> NaN
```

To Boolean Coercion:

 In boolean coercion, the boolean values such as true and false are converted to a number.

```
console.log(true + 1); // OutPut >> 2
console.log(false - 1); // OutPUt >> -1
console.log(true * undefined); // OutPut >> NaN
console.log(false / null); // OutPut >> NaN
console.log(true % NaN); // OutPut >> NaN
```



Thank you

