

# JavaScript Type Conversion

In programming, type conversion is the process of converting data of one [type](#) to another. For example, converting [string](#) data to [number](#).

There are two types of type conversion in JavaScript:

- **Implicit Conversion** - Automatic type conversion.
- **Explicit Conversion** - Manual type conversion.

## JavaScript Implicit Conversion

In certain situations, JavaScript automatically converts data of one type to another (to the right type). This is known as implicit conversion. For example,

```
// numeric string used with + gives string type
let result;

// convert number to string
result = "3" + 2;
console.log(result, "-", typeof(result));

result = "3" + true;
console.log(result, "-", typeof(result));

result = "3" + null;
console.log(result, "-", typeof(result));
```

### Output

```
32 - string
3true - string
3null - string
```

In this example, we performed implicit type conversion using the `+` [operator](#) with a string and another data type.

Here,

- `"3" + 2` - Converts the number **2** to string and joins it to `"3"`, resulting in the string `"32"`.
- `"3" + true` - Converts the **boolean** `true` to string and joins it to `"3"`, resulting in the string `"3true"`.
- `"3" + null` - Converts **null** to string and joins it to `"3"`, resulting in the string `"3null"`.

**Note:** The `typeof` operator gives the data type of the variable.

## JavaScript Explicit Conversion

In explicit type conversion, you manually convert one type of data into another using **built-in functions**. For example,

```
let result;

// convert string to number
result = Number("5");
console.log(result, "-", typeof(result));

// convert boolean to string
result = String(true);
console.log(result, "-", typeof(result));

// convert number to boolean
result = Boolean(0);
console.log(result, "-", typeof(result));
Run Code
```

### Output

```
5 - number
true - string
false - boolean
```

Here,

- `Number("5")` changes the string `"5"` into the number **5**.
- `String(true)` turns the boolean `true` into the string `"true"`.

- `Boolean(0)` converts the number **0** to the boolean `false` because **0** is considered a **falsy** value in JavaScript.