**Type Conversions**

In This page I Understand **type conversions** in JavaScript, which means changing values from one type to another (like converting a number to a string).

**1. Types of Conversions**

JavaScript automatically or manually converts values between **strings, numbers, and booleans**.

**A. String Conversion**

* Converts any value into a string.
* Done using **String(value)** or automatic conversion.

Example:

Javascript

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let num = 123;

console.log(String(num)); // "123"

**B. Number Conversion**

* Converts values into numbers using **Number(value)**.

Example:

javascript

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console.log(Number("123")); // 123 (valid number)

console.log(Number("abc")); // NaN (Not a Number)

* Special cases:
  + null → 0
  + true → 1, false → 0
  + " 456 " → 456 (spaces are ignored)

**C. Boolean Conversion**

* Converts values into true or false using **Boolean(value)**.
* Example:

javascript

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console.log(Boolean(1)); // true

console.log(Boolean(0)); // false

console.log(Boolean("hello")); // true

console.log(Boolean("")); // false

* **Falsy values (converted to false)**: 0, "" (empty string), null, undefined, NaN.
* Everything else is **truthy (true)**.

**2. Automatic (Implicit) Type Conversion**

* JavaScript sometimes converts types automatically:

javascript

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console.log("5" - 2); // 3 (string "5" converted to number)

console.log("5" + 2); // "52" (number 2 converted to string)

* + operator prefers **string concatenation**, while -, \*, / prefer **numbers**.

**Main Points**

* Use **String()**, **Number()**, and **Boolean()** for manual conversions.
* Be aware of **automatic conversions**, especially with + and - operators.
* Empty values like 0, "", null, and NaN are **falsy**, while everything else is **truthy**.