

# JavaScript Datatypes Demonstartion

- JavaScript is a dynamic type language, means you don't need to specify type of the variable because it is dynamically used by JavaScript engine.
- There are two types of data types in JavaScript.
  - Primitive data type
  - Non-primitive (reference) data type
- JavaScript has dynamic types. This means that the same variable can be used to hold different data types.

No	Data Type Name	Description	Example
4	Boolean	<ul style="list-style-type: none"><li>Booleans are a fundamental data type in programming that represents two possible values: true or false.</li><li>These values are commonly used in decision-making and conditional statements.</li><li>Booleans are often used in conditional testing.</li><li>In JavaScript, you can convert other types of values into boolean values using the Boolean() function.</li><li>The conversion rules for different types of values are as follows.<ol style="list-style-type: none"><li>Strings: An empty string ("") will be converted to false, and any other string will be converted to true.</li><li>Numbers: Zero (0) and NaN (Not a Number) will be converted to false, and any other number will be converted to true.</li><li>Objects: All objects, including arrays and functions, will be converted to true.</li><li>Undefined: Undefined will be converted to false.</li></ol></li><li>The Boolean value of an expression is the basis for all JavaScript comparisons and conditions</li></ul>	<pre>let trueValue = true;  let falseValue = false;</pre>

## Boolean

This is an example 1 of Boolean - True Value: true

This is an example 2 of Boolean - False Value: false

This is an example 3 of Boolean - You can use the Boolean() function to find out if an expression (or a variable) Boolean(10 < 9) is : . false

This is an example 4 of Boolean - Booleans as Objects : Boolean as Object type is : object and the value is : false

This is an example 5 of Boolean Comparing two JavaScript objects always return false.

The 1st object is : let x = new Boolean(false);  
The 2nd object is : let y = new Boolean(false);  
After comparing these 2 objects is :

The Object 1 is : false and the type is : object

The Object 2 is : false and the type is : object

The result is : false

This is an example 6 of Boolean -  
An empty string ("") will be converted to false, and any other string will be converted to true.

Example : let emptyStrBool1 = "";

The Type is : string  
The value is :  
The Boolean converted value is : false

This is an example 7 of Boolean -  
An empty string ("") will be converted to false, and any other string will be converted to true.

Example : let emptyStrBool2 = "Manoj";

The Type is : string  
The value is : Manoj  
The Boolean converted value is : true

This is an example 8 of Boolean -  
Numbers: Zero (0) and NaN (Not a Number) will be converted to false, and any other number will be converted to true.

Example : let numBool = 0;

The Type is : number  
The value is : 0  
The Boolean converted value is : false

This is an example 9 of Boolean -  
Numbers: Zero (0) and NaN (Not a Number) will be converted to false, and any other number will be converted to true.

Example : let nanBool = NaN;

The Type is : number  
The value is : NaN  
The Boolean converted value is : false

This is an example 10 of Boolean -  
Numbers: Zero (0) and NaN (Not a Number) will be converted to false, and any other number will be converted to true.

Example : let nBool = 34;

The Type is : number  
The value is : 34  
The Boolean converted value is : true

This is an example 11 of Boolean -  
Numbers: Zero (0) and NaN (Not a Number) will be converted to false, and any other number will be converted to true.

Example : let nMinusZero = -0;

The Type is : number  
The value is : 0  
The Boolean converted value is : false

This is an example 12 of Boolean -  
Undefined will be converted to false.

Example : let undBool;

The Type is : undefined  
The value is : undefined  
The Boolean converted value is : false