

# A Challenge in Specifying All In-Built Object Methods in JavaScript

Unfortunately, providing a comprehensive list of all in-built object methods in JavaScript is impractical due to the language's vastness and constant evolution.

However, I can provide a structured overview of the primary object types and their commonly used methods. This will give you a strong foundation and guide you to explore specific methods as needed.

## Core Object Types and Their Methods

JavaScript offers several core object types, each with its own set of methods:

### 1. String

- **Manipulation:** `length`, `indexOf`, `lastIndexOf`, `slice`, `substring`, `substr`, `replace`, `toUpperCase`, `toLowerCase`, `trim`, `concat`, `split`
- **Searching and Matching:** `match`, `search`, `includes`

### 2. Number

- **Conversion:** `toString`, `toFixed`, `toPrecision`, `toExponential`
- **Mathematical Operations:** `isNaN`, `isFinite`, `parseInt`, `parseFloat`, `Math` object (for advanced math functions)

### 3. Array

- **Manipulation:** `length`, `push`, `pop`, `shift`, `unshift`, `splice`, `slice`, `concat`, `join`
- **Iteration:** `forEach`, `map`, `filter`, `reduce`, `find`, `findIndex`
- **Sorting:** `sort`, `reverse`

## 4. Object

- **Properties and Methods:** `hasOwnProperty`, `propertyIsEnumerable`, `keys`, `values`, `entries`, `assign`, `freeze`, `seal`

## 5. Date

- **Creation and Manipulation:** `new Date()`, `getFullYear`, `getMonth`, `getDate`, `getDay`, `getHours`, `getMinutes`, `getSeconds`, `setFullYear`, `setMonth`, `setDate`, `setHours`, `setMinutes`, `setSeconds`
- **Formatting:** `toLocaleString`, `toISOString`

## 6. Function

- **Properties and Methods:** `length`, `name`, `apply`, `call`, `bind`

## 7. Other Built-in Objects

- **Math:** `PI`, `abs`, `ceil`, `floor`, `round`, `random`, `sin`, `cos`, `tan`, etc.
- **RegExp:** Regular expressions for pattern matching
- **Error:** Error objects for handling exceptions
- **JSON:** For parsing and stringifying JSON data
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## How to Find Specific Methods

To find specific methods for a particular object, you can:

- **Consult MDN Web Docs:** This is the official reference for JavaScript, providing detailed information about all built-in objects and their methods.
- **Use a JavaScript console:** Experiment with different objects and their properties to discover available methods.

- **Leverage code completion in your IDE:** Many IDEs offer intelligent code suggestions, including method names.

## **Additional Notes**

- JavaScript is dynamically typed, so you can often use methods on different object types. For example, `length` property is available for strings, arrays, and other objects.
- Prototype-based inheritance allows objects to inherit methods from other objects, expanding their capabilities.
- There are numerous third-party libraries that provide additional object methods and utilities.

**Would you like to explore a specific object or its methods in more detail?**