

# JavaScript String Methods – Mini Guide + 20 Questions

JavaScript strings are sequences of characters and come with many useful built-in methods.

Below is a guide to the most commonly used ones, then exercises to practice them.

## String Methods You Should Know

### 1. **toUpperCase()**

Converts all letters to uppercase.

```
"hello".toUpperCase() // "HELLO"
```

### 2. **toLowerCase()**

Converts all letters to lowercase.

```
"HELLO".toLowerCase() // "hello"
```

### 3. **trim()**

Removes spaces from the start and end of a string.

```
"  hi  ".trim() // "hi"
```

### 4. **indexOf()**

Finds the first index of a substring.

Returns **-1** if not found.

```
"javascript".indexOf("script") // 4
```

## 5. **lastIndexOf()**

Finds the last index of a substring.

```
"banana".lastIndexOf("a") // 5
```

## 6. **includes()**

Checks if a string contains a substring — returns `true` or `false`.

```
"hello world".includes("world") // true
```

## 7. **slice(start, end)**

Extracts part of a string.

```
"hello".slice(1, 4) // "ello"
```

## 8. **substring(start, end)**

Similar to `slice` but cannot accept negative values.

```
"hello".substring(0, 2) // "he"
```

## 9. **replace(old, new)**

Replaces the first occurrence of a substring.

```
"cat".replace("c", "b") // "bat"
```

## 10. **replaceAll(old, new)**

Replaces all occurrences.

```
"ha ha".replaceAll("ha", "ho") // "ho ho"
```

## 11. **split(separator)**

Splits a string into an array.

```
"one,two".split(",") // ["one", "two"]
```

## 12. **charAt(index)**

Returns a character at a specific index.

```
"hello".charAt(1) // "e"
```

# 20 String Questions (with Step-by-Step Instructions)

## 1. Convert a string to uppercase

String: `"hello world"` Task: Convert it to uppercase.

Steps:

1. Store the string in a variable.
2. Use `.toUpperCase()`.
3. Print the result.

## 2. Convert a string to lowercase

String: `"JAVASCRIPT"`

Steps:

1. Save the string in a variable.

2. Use `.toLowerCase()` .
  3. Display output.
- 

### 3. Remove extra spaces

String: `" I love JS "`

#### Steps:

1. Store the string.
  2. Call `.trim()` .
  3. Print cleaned string.
- 

### 4. Find the first index of a character

String: `"programming"` Find: index of `"m"`

#### Steps:

1. Use `.indexOf("m")` .
  2. Print result.
- 

### 5. Find the last index of a character

String: `"programming"` Find: last index of `"g"`

#### Steps:

1. Use `.lastIndexOf("g")` .
  2. Output result.
- 

### 6. Check if a word exists

String: `"Learning JavaScript is fun"` Check: does it include `"fun"` ?

#### Steps:

1. Use `.includes("fun")` .
  2. Print `true / false` .
- 

## 7. Extract part of a string

String: `"javascript"` Extract: `"java"`

### Steps:

1. Use `.slice(0, 4)` .
  2. Print substring.
- 

## 8. Use `substring()` to extract a part

String: `"coding"` Extract: `"cod"`

### Steps:

1. Use `.substring(0, 3)` .
  2. Print.
- 

## 9. Replace a word

String: `"I love cats"` Replace: `"cats"` → `"dogs"`

### Steps:

1. Use `.replace("cats", "dogs")` .
  2. Print.
- 

## 10. Replace all occurrences

String: `"ha ha ha"` Replace: `"ha"` → `"ho"`

### Steps:

1. Use `.replaceAll("ha", "ho")` .

2. Print.

---

## 11. Split a string into words

String: `"apple,banana,grapes"`

Steps:

1. Use `.split(",")`.
  2. Print the array.
- 

## 12. Get a character at an index

String: `"hello"` Get char: index 2

Steps:

1. Use `.charAt(2)`.
  2. Print.
- 

## 13. Count characters in a string

String: `"JavaScript"`

Steps:

1. Use `.length`.
  2. Print total characters.
- 

## 14. Check if a string starts with a specific word

String: `"hello world"` Check: starts with `"hello"` ?

Steps:

1. Use `.startsWith("hello")`.
  2. Print result.
-

## 15. Check if a string ends with a specific word

String: `"hello world"` Check: ends with `"world"` ?

### Steps:

1. Use `.endsWith("world")` .
  2. Output result.
- 

## 16. Join array into string

Array: `["JS", "is", "awesome"]` Join using: space `" "`

### Steps:

1. Use `.join(" ")` on array.
  2. Print.
- 

## 17. Repeat a string

String: `"ha"` Repeat: 3 times

### Steps:

1. Use `.repeat(3)` .
  2. Print `"hahaha"` .
- 

## 18. Find the position of a word

String: `"web development"` Find: position of `"development"`

### Steps:

1. Use `.indexOf("development")` .
  2. Print index.
- 

## 19. Convert each word to uppercase individually

**String:** `"hello javascript world"`

### Steps:

1. Use `.split(" ")` → array
  2. Use `.map(word ⇒ word.toUpperCase())`
  3. Use `.join(" ")`.
  4. Print final string.
- 

## 20. Remove only leading spaces

**String:** `" hello"`

### Steps:

1. Use `.trimStart()`.
  2. Print.
- 

Gagan Baghel