In JavaScript, strings are sequences of characters used to represent text.
Strings are immutable, meaning their values cannot be changed once created.

JavaScript String Methods

1. length
   - Returns the length of the string.
   - Example: `"Hello".length` → 5
2. charAt(index)
   - Returns the character at the specified index.
   - Example: `"Hello".charAt(1)` → "e"
3. charCodeAt(index)
   - Returns the Unicode value of the character at the specified index.
   - Example: `"ABC".charCodeAt(0)` → 65
4. concat(str1, str2, ...)
   - Joins two or more strings.
   - Example: `"Hello".concat(" ", "World")` → "Hello World"
5. String.fromCharCode(num1, num2, ...)
   - Converts Unicode values to a string.
   - Example: `String.fromCharCode(72, 101, 108, 108, 111)` → "Hello"
6. indexOf(substring)
   - Finds the first occurrence of a substring.
   - Example: `"Hello World".indexOf("o")` → 4
7. lastIndexOf(substring)
   - Finds the last occurrence of a substring.
   - Example: `"Hello World".lastIndexOf("o")` → 7
8. includes(substring)
   - Checks if a substring exists in the string (returns `true` / `false`).
   - Example: `"Hello World".includes("World")` → `true`
9. search(regex or string)
   - Searches for a substring (or pattern) and returns the index of the first match.
   - Example: `"Hello World".search("World")` → 6
10. slice(start, end)
    - Extracts a part of a string.
    - Example: `"Hello World".slice(0, 5)` → "Hello"
11. substring(start, end)

- Similar to `slice` , but does not accept negative indexes.
- Example: `"Hello".substring(1, 4)` → `"ell"`

12. substr(start, length)
- Extracts a substring from a given start position and length.
- Example: `"Hello World".substr(6, 5)` → `"World"`

13. replace(old, new)
- Replaces a substring.
- Example: `"Hello World".replace("World", "JS")` → `"Hello JS"`

14. split(separator)
- Splits a string into an array based on a separator.
- Example: `"a,b,c".split(",")` → `["a", "b", "c"]`

15. trim()
- Removes whitespace from both ends of a string.
- Example: `"  Hello  ".trim()` → `"Hello"`

16. repeat(n)
- Repeats a string n times.
- Example: `"Hi".repeat(3)` → `"HiHiHi"`

17. padStart(length, char)
- Pads the start of a string with char until it reaches length .
- Example: `"5".padStart(3, "0")` → `"005"`

18. padEnd(length, char)
- Pads the end of a string with char until it reaches length .
- Example: `"5".padEnd(3, "0")` → `"500"`