

JavaScript Cheat Sheet: Strings & Sets

String Methods

1. Character Access & Length

```
let str = "Hello";
console.log(str.length);    // 5
console.log(str[0]);        // 'H'
console.log(str.charAt(1)); // 'e'
```

2. Case Conversion

```
let str = "Hello World";
console.log(str.toUpperCase()); // 'HELLO WORLD'
console.log(str.toLowerCase()); // 'hello world'
```

3. Searching & Matching

```
let str = "Hello World";
console.log(str.indexOf("o"));    // 4
console.log(str.lastIndexOf("o")); // 7
console.log(str.includes("Hello")); // true
console.log(str.startsWith("He")); // true
console.log(str.endsWith("ld"));   // true
console.log(str.search("World"));  // 6
```

4. Extracting Substrings

```
let str = "Hello World";
console.log(str.slice(0, 5));    // 'Hello'
console.log(str.slice(-5));      // 'World'
console.log(str.substring(0, 5)); // 'Hello'
console.log(str.substr(6, 5));   // 'World'
```

5. Splitting & Joining

```
let str = "apple,banana,orange";
console.log(str.split(","));    // ['apple','banana','orange']
```

```
let arr = ['Hello', 'World'];
console.log(arr.join(" "));           // 'Hello World'
```

6. Trimming & Padding

```
let str = "  Hello  ";
console.log(str.trim());           // 'Hello'
console.log(str.trimStart());      // 'Hello  '
console.log(str.trimEnd());        // '  Hello'

console.log("5".padStart(3, "0")); // '005'
console.log("5".padEnd(3, "0"));   // '500'
```

7. Replacing

```
let str = "Hello World";
console.log(str.replace("World", "JS")); // 'Hello JS'
console.log(str.replace(/o/g, "0"));     // 'Hello w0rld'
```

8. Concatenation

```
let str1 = "Hello";
let str2 = "World";
console.log(str1.concat(" ", str2)); // 'Hello World'
```

9. Repeating

```
let str = "Hi! ";
console.log(str.repeat(3)); // 'Hi! Hi! Hi! '
```

10. Converting to Array

```
let str = "Hello";
console.log(Array.from(str)); // ['H','e','l','l','o']
```

11. Locale-based Methods

```
let str = "straße";
console.log(str.localeCompare("strasse")); // returns 1, 0, or -1
```

12. Miscellaneous

```
let str = "Hello World";  
console.log(str.valueOf()); // 'Hello World'  
console.log(str.charCodeAt(0)); // 72
```

Set Methods

Creating a Set

```
let mySet = new Set([1, 2, 3, 3, 4]);  
console.log(mySet); // Set {1,2,3,4}
```

1. add(value)

```
mySet.add(5);  
console.log(mySet); // Set {1,2,3,4,5}
```

2. delete(value)

```
mySet.delete(2);  
console.log(mySet); // Set {1,3,4,5}
```

3. has(value)

```
console.log(mySet.has(3)); // true  
console.log(mySet.has(2)); // false
```

4. size

```
console.log(mySet.size); // 4
```

5. clear()

```
mySet.clear();  
console.log(mySet); // Set {}
```

6. Iterating a Set

```
let mySet2 = new Set(["a","b","c"]);
for (let item of mySet2) {
  console.log(item);
}

// Using forEach
mySet2.forEach(value => console.log(value));
```

7. Converting Set to Array

```
let arr = [...mySet2]; // ['a','b','c']
let arr2 = Array.from(mySet2); // ['a','b','c']
```