

## JavaScript Strings

Strings in JavaScript are sequences of characters used to represent text. Strings can be created using single quotes ('...'), double quotes ("..."), or backticks (`...`).

### String Concatenation

The old way of concatenating strings uses the + operator:

```
const name = "Pranay";  
const repoCount = 22;  
console.log(name + repoCount + " Value");
```

However, the modern and cleaner way is to use template literals with backticks:

```
console.log(`Hello, my name is ${name} and my repo count is ${repoCount}`);
```

### Creating Strings using String Object

You can also create strings using the String constructor:

```
const gameName = new String('codeguy');
```

### Accessing Characters

You can access characters in a string just like an array:

```
console.log(gameName[0]); // Output: 'c'
```

### String Methods

1. **Length:** Get the length of a string

```
console.log(gameName.length); // Output: 7
```

2. **Uppercase:** Convert to uppercase

```
console.log(gameName.toUpperCase()); // Output: 'CODEGUY'
```

3. **Character at Specific Index:**

```
console.log(gameName.charAt(5)); // Output: 'u'
```

4. **Index of Substring:**

```
console.log(gameName.indexOf('g')); // Output: 1
```

5. **Substring Extraction:**

6. `const newString = gameName.substring(0, 4);`

```
console.log(newString); // Output: 'code'
```

7. **Slice:**

8. `const anotherString = gameName.slice(-8, 4);`

```
console.log(anotherString); // Output: 'code'
```

#### 9. **Trim Whitespace:**

```
10. const newStringOne = "  codeguy  ";  
console.log(newStringOne.trim()); // Output: 'codeguy'
```

#### 11. **Replace Characters:**

```
12. const url = "https://codeguy.com/code%0guy";  
console.log(url.replace('%0', '-')); // Output: 'https://codeguy.com/code-guy'
```

#### 13. **Check Substring Existence:**

```
console.log(url.includes('code')); // Output: true
```

### **Summary**

JavaScript strings are versatile and come with many built-in methods to manipulate and transform text. Understanding these methods helps write cleaner and more efficient code.