# **♦** Three Ways to Replace "World War II" in JavaScript

You've learned three different methods to replace "World War II" with "the Second World War" in a string.

# **Loop and Slice Method (Basic Approach)**

```
for (var i = 0; i < text.length; i++) {
    if (text.slice(i, i + 12) === "World War II") {
        text = text.slice(0, i) + "the Second World War" + text.slice(i + 12);
    }
}</pre>
```

### **W** How It Works

- Loops through the string character-by-character.
- Checks each 12-character segment to see if it matches "World War II".
- Uses slice() to reconstruct the string with the replacement.

#### **∧** Downsides

- Inefficient (especially for long strings).
- Only replaces the **first occurrence**.
- Requires a manual loop.

# 2 indexOf() Method (Improved Approach)

```
var firstChar = text.indexOf("World War II");
if (firstChar !== -1) {
   text = text.slice(0, firstChar) + "the Second World War" + text.slice(firstChar +
12);
}
```

#### **W** How It Works

- Uses indexOf() to find the starting index of "World War II".
- **Reconstructs the string** using slice(), similar to the first approach.

### **▲ Downsides**

- Only replaces the **first occurrence**.
- Still requires manual slicing and concatenation.

# 3 Jeplace () Method (Best Approach)

# **♦** Replace First Occurrence

text = text.replace("World War II", "the Second World War");

# **♦** Replace All Occurrences (Global Replace)

text = text.replace(/World War II/g, "the Second World War");

### **W** How It Works

- replace("oldText", "newText") replaces the first occurrence.
- replace(/oldText/g, "newText") replaces all occurrences using a regular expression (/pattern/g).
  - o The g flag makes it a global replacement.

# **4** Why is this the Best Approach?

- **⊘** More concise
- **⊘** More readable
- **⊘** More efficient
- **∀** Handles multiple replacements (when using /g/)

# Summary Table

Method	Replaces First Occurrence?	Replaces All Occurrences?	Efficient?	Best for?
Loop & Slice	∜ Yes	<b>X</b> No	X No (Slow)	Learning how string manipulation works
indexOf & Slice	∜ Yes	<b>X</b> No	⚠ Medium	Basic replacements
replace()	<b>∜</b> Yes	✓ Yes (With /g/ flag)	∀ Yes     (Fast)	Best method for replacing text

# Pest Practice

#### If you need just one replacement, use:

```
text = text.replace("World War II", "the Second World War");
```

#### If you need to replace all occurrences, use:

text = text.replace(/World War II/g, "the Second World War");