Js strings

// Declaring Strings

let singleQuoteString = 'Hello, World!'; // Using single quotes

let doubleQuoteString = "Hello, World!"; // Using double quotes

let templateLiteralString = `Hello, World!`; // Using template literals (backticks)

// String Concatenation

let firstName = 'John';

let lastName = 'Doe';

let fullName = firstName + ' ' + lastName; // Using the + operator

console.log(fullName); // Output: John Doe

let fullNameTemplate = `${firstName} ${lastName}`; // Using template literals

console.log(fullNameTemplate); // Output: John Doe

// Accessing Characters in a String

let str = 'JavaScript';

console.log(str.charAt(0)); // Output: J

console.log(str[0]); // Output: J

// String Length

let lengthStr = 'Hello, World!';

console.log(lengthStr.length); // Output: 13

// toUpperCase and toLowerCase

let caseStr = 'Hello, World!';

console.log(caseStr.toUpperCase()); // Output: HELLO, WORLD!

console.log(caseStr.toLowerCase()); // Output: hello, world!

// indexOf and lastIndexOf

let indexStr = 'Hello, World!';

console.log(indexStr.indexOf('o')); // Output: 4

console.log(indexStr.lastIndexOf('o')); // Output: 8

// slice and substring

let sliceStr = 'Hello, World!';

console.log(sliceStr.slice(0, 5)); // Output: Hello

console.log(sliceStr.substring(0, 5)); // Output: Hello

// replace

let replaceStr = 'Hello, World!';

let newStr = replaceStr.replace('World', 'JavaScript');

console.log(newStr); // Output: Hello, JavaScript!

// split

let splitStr = 'Hello, World!';

let arr = splitStr.split(', ');

console.log(arr); // Output: ['Hello', 'World!']

// String Interpolation with Template Literals

let name = 'Alice';

let age = 30;

let greeting = `Hello, my name is ${name} and I am ${age} years old.`;

console.log(greeting); // Output: Hello, my name is Alice and I am 30 years old.

// Checking for Substrings

let includeStr = 'Hello, World!';

console.log(includeStr.includes('World')); // Output: true

console.log(includeStr.startsWith('Hello')); // Output: true

console.log(includeStr.endsWith('!')); // Output: true

// charAt

let charStr = 'Hello, World!';

console.log(charStr.charAt(7)); // Output: W

// concat

let concatStr1 = 'Hello';

let concatStr2 = 'World';

let concatResult = concatStr1.concat(', ', concatStr2, '!');

console.log(concatResult); // Output: Hello, World!

// trim

let trimStr = ' Hello, World! ';

console.log(trimStr.trim()); // Output: 'Hello, World!'

// repeat

let repeatStr = 'Hello';

console.log(repeatStr.repeat(3)); // Output: HelloHelloHello

// substr

let substrStr = 'Hello, World!';

console.log(substrStr.substr(7, 5)); // Output: World

// match

let matchStr = 'The rain in Spain stays mainly in the plain';

let matches = matchStr.match(/ain/g);

console.log(matches); // Output: ['ain', 'ain', 'ain']

// search

let searchStr = 'Hello, World!';

console.log(searchStr.search('World')); // Output: 7

// replaceAll

let replaceAllStr = 'Hello, World! World is beautiful.';

let newReplaceAllStr = replaceAllStr.replaceAll('World', 'Earth');

console.log(newReplaceAllStr); // Output: Hello, Earth! Earth is beautiful.

# Javascript template literals

// Multi-line string

const multilineString = `This is a string

that spans across multiple

lines.`;

console.log(multilineString);

// Expressions

const a = 5;

const b = 10;

const sumMessage = `The sum of ${a} and ${b} is ${a + b}.`;

console.log(sumMessage);