

JavaScript



Strings

Pooja Godse
&
ALK Bilahari

Outline



- Introduction to Strings
- String Literals

Recap



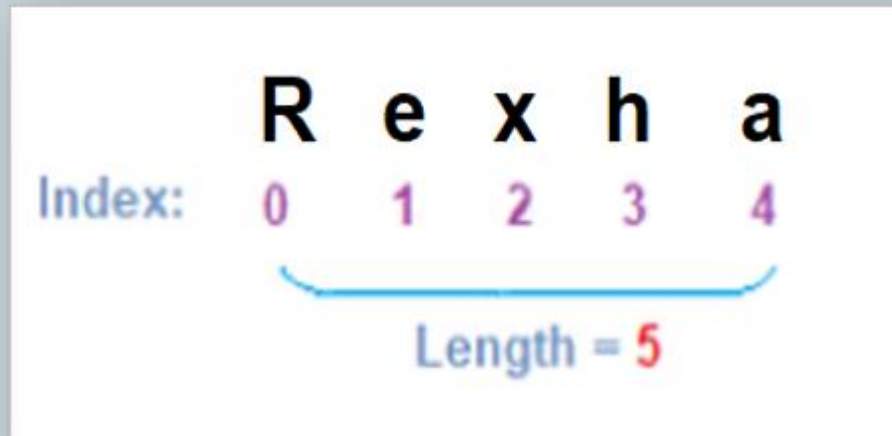
Loops

- for
- while
- do while

String



- a **sequence of characters** used to represent text
- the **textual data** is stored as strings.
- there is no separate type for a single character.
- a String is one of the **primitive values** and the String object is a wrapper around a String primitive.



String Literals



Strings can be enclosed within either single quotes, double quotes or backticks:

```
let single = 'single-quoted';  
let double = "double-quoted";  
let backticks = `backticks`;
```

```
"" // The empty string: it has zero characters
```

```
'testing'
```

```
"3.14"
```

```
'name="myform"'
```

```
"Wouldn't you prefer O'Reilly's book?"
```

```
" $\tau$  is the ratio of a circle's circumference to its radius"
```

```
`"She said 'hi'", he said.`
```

String Literals



Advantage of using backticks is that they allow a string to span multiple lines:

```
let guestList = `Guests:
* John
* Pete
* Mary `;
console.log(guestList); // a list of guests, multiple lines
```

String Literals



- Single or double quotes do not work this way

```
let guestList = "Guests:
```

```
  • John"; // Error: Unexpected token ILLEGAL
```

- Strings delimited with **backticks** are a feature of ES6.
- They allow JavaScript expressions to be embedded within (or interpolated into) the string literal.

Strings are immutable



Strings cannot be changed in JavaScript. They can only be reassigned.

```
let str = 'Hi';
```

```
str[0] = 'h';
```

```
console.log( str[0] ); // H
```

```
let s = "hello"; // Start with some lowercase text
```

```
s.toUpperCase(); // Returns "HELLO", but doesn't alter s
```

```
console.log(s) // => "hello": the original string has not changed
```

```
s=s.toUpperCase() ;
```

```
console.log(s) // HELLO
```


String Methods



let msg = "Hello, " + "world"; // Produces the string "Hello, world"

let greeting = "Welcome to my blog," + " " + name;

let msg = "Hello world!"; console.log(msg.startsWith("Hello")); //
true

console.log(msg.endsWith("!")); // *true*

console.log(msg.includes("o")); // *true*

String Methods



```
console.log(msg.startsWith("o")); // false
```

```
console.log(msg.endsWith("world!")); // true
```

```
console.log(msg.includes("x")); // false
```

```
console.log(msg.startsWith("o", 4)); // true
```

```
console.log(msg.endsWith("o", 8)); // true
```

```
console.log(msg.includes("o", 8)); // false
```

String Literals

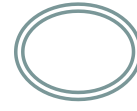


- Can also use '\n' for multi line string.

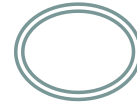
```
let guestList = "Guests:\n * John\n * Pete\n * Mary";  
console.log(guestList); // a multiline list of guests
```

- But single or double quotes do not work this way.

```
let guestList = "Guests:  
 * John"; // Error: Unexpected token ...
```



Questions?



Thank you.