

VARIABLES

AFTER THIS PRESENTATION

- You'll understand different data types in JavaScript

WE WILL LOOK AT

var

typeof

DATA TYPES

- Number
- String
- Boolean
- Other e.g. Object

NUMBER

- JavaScript has only one type of number
- Can be written with or without a decimal place

```
var number1 = 34.289;  
var number2 = 100;
```

- Can use scientific notation

```
var big_number = 123e5; //12300000  
var small_number = 123e-5; //0.00123
```

STRING

- A *string* simply means text
- You can use single or double quotes

```
var name = "David";  
var title = 'Professor';
```

- You can use quotes inside a string, as long as they don't match the quotes surrounding the string

```
var message = "It's alright";
```

BOOLEAN

- A Boolean value can only be true or false

```
var condition1 = true;  
var condition2 = false;
```

- Do not confuse Boolean values with String values

```
var myBool = true; //Boolean type  
var myString = "true"; //String type
```

A VARIABLE TYPE CAN CHANGE

- If you do this

```
var storage = "David";
```

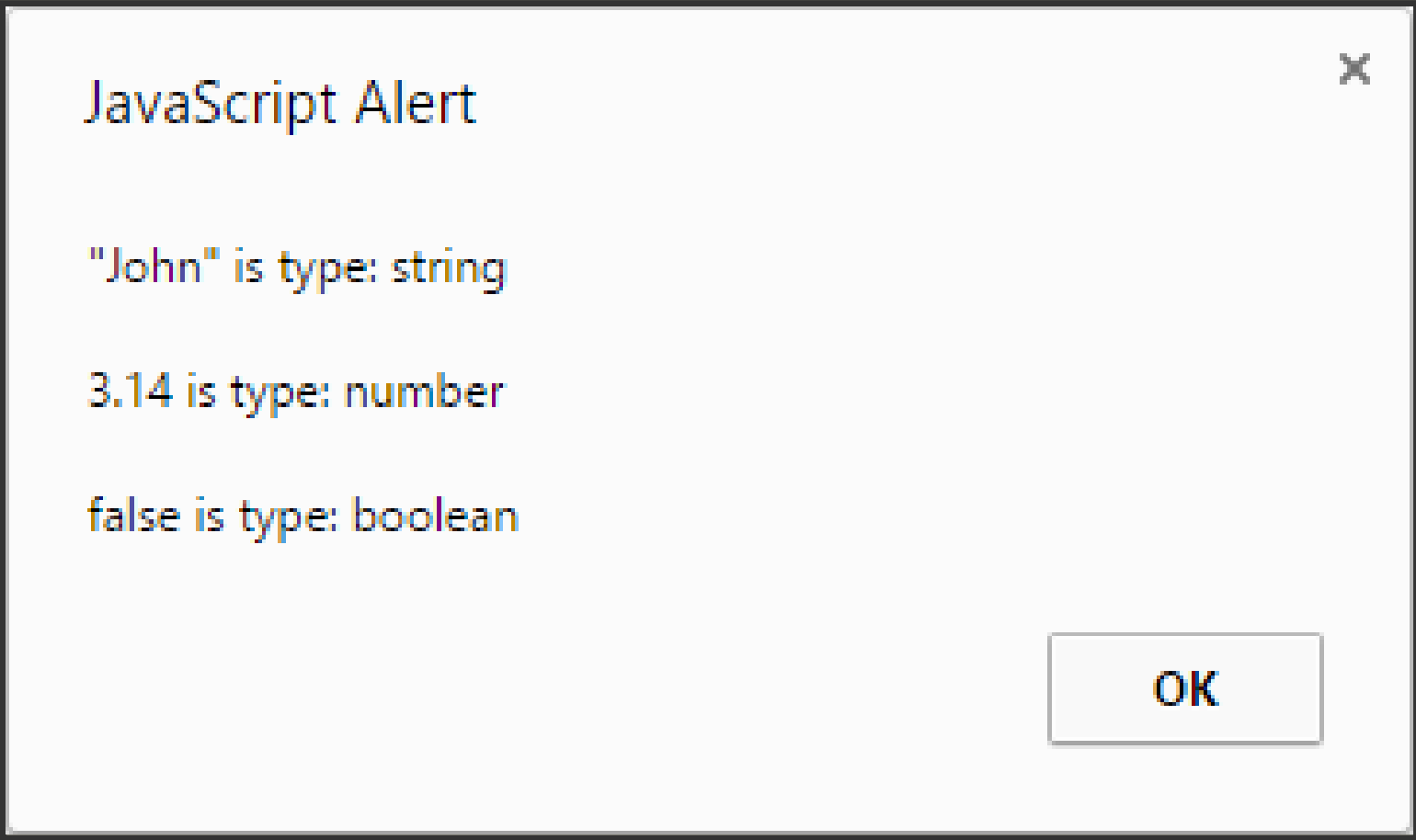
- And then this:

```
storage = 98;
```

- The type of the variable is immediately changed

USING TYPEOF

- You can use the typeof operator to check the type of a variable



```
<!doctype html>
<html>
<head>
  <title>Variable Type Example</title>
</head>
<body>
  <script>
    alert( '"John" is type: ' + typeof "John" + "\n\n"
          + "3.14 is type: " + typeof 3.14 + "\n\n"
          + "false is type: " + typeof false ) ;
  </script>
</body>
</html>
```

COMMON CHANGES

Code	Quicker Typing
<code>count = count + 1</code>	<code>count++</code>
<code>count = count - 1</code>	<code>count--</code>
<code>count = count + 10</code>	<code>count += 10</code>
<code>hello = hello + "!"</code>	<code>hello += "!"</code>
<code>marks = marks - 20</code>	<code>marks -= 20</code>
<code>pigs = pigs * 5</code>	<code>pigs *= 5</code>
<code>cakes = cakes / students</code>	<code>cakes /= students</code>

FROM ONE TYPE TO ANOTHER

Function	Meaning
<code>parseInt()</code>	Converts to an integer
<code>parseFloat()</code>	Converts to a floating point number
<code>String()</code>	Converts the value of an object to a string