Comments

//	recommended
/	those pairs can occur in regular
/	expression literals, so block comments are not safe for commenting out blocks of code

Simple types

numbers

strings

booleans

null

undefined

All other values are **objects**. Numbers, strings, and booleans are object-like in that they have methods, but they are immutable

Objects in JavaScript are mutable keyed collections

In JavaScript, arrays are objects, functions are objects, regular expressions are objects, and, of course, objects are objects.

Objects

An object is a container of properties, where a property has a name and a value

property name	any string, including the empty string
property value	any JS value, except for undefiend

Objects in JS are class-free

Objects can contain other objects, so they can easily represent tree or graph structures

JavaScript includes a **prototype linkage feature** that allows one object to inherit the properties of another - this can reduce object initialization time and memory consumption.

String

** - escape character

Js does not have a **charater** type - make a string just with one character in it

length property - "seven".length = 5

immutable - Once it is made, a strng can never be changed. But it is easy to make a new string by concatenating other strings together with the + operator

'c' + 'a' + 't' === 'cat' - two strings containing exactly the same characters in the same order are considered to be the same string

JavaScript was built at a time when Unicode was a 16-bit character set, so all characters in JavaScript are 16 bits wide.

Object Literals

An object literal is a pair of curly braces surrounding zero or more name/value pairs.

Commas are used to separate the pairs

```
var empty_obejct = {}
var stooge = { "frist-name" : "Teo",
last_name = "G"}
```

Numbers

integer

fraction

exponent	100 and 1e2 are the same. (multiplying the e by 10 raised to the power of the part after e)
NaN	number value.NaN is not equal to any value, including itself. Detect NaN with isNaN(number) function
Ininity	All values greater than 1.7976..e+308

Numbers (cont)

Numbers have methods	Math object that contains a set of methods thata ct on numbers

JavaScript has a single number type. Internally, it is represented as 64-bit floating point, the same as Java's double. Unlike most other programming languages, there is
no separate integer type, so 1 and 1.0 are the same value