

JavaScript is ...

*a dynamic, weakly typed, prototype-based language with first-class function

* JavaScript == ECMAScript == JScript

Dynamic:

- compilation and execution happen together

```
1 var propMap = {  
2   val: "value", html: "innerHTML"  
3 }  
4  
5 for(var fnName in propMap){  
6   $.prototype[fnName] = (function(prop){  
7     return function(){  
8       return this[prop];  
9     }  
10  })(propMap[fnName]);  
11 }
```

Weakly Typed:

- type is associated with value, not variable (type travels with value not variable)

First-class function:

- can treat a function like an object [create, return, arg(s)]

Prototype-Based:

- looks up inherited and shared properties

DATA TYPES, OPERATORS & PRIMITIVES :

Data Types::

undefined undefined—> refers to a pointer who's point has not been set

Null null —> refers to null pointer (it is by intent)

Boolean true

String "hello"

Number	2
Object	{name: "value"}
Array	[1,2,3]
Date	new Date()
RegExp	././g
Function	function(){}

Operators::

var [var foo]
new [new Foo]
assignment [foo = {bar : "a value"}]
delete[delete foo.bar]
member[foo.bar] or [foo["bar"]]
call [bar()]
comparison ['==', '===']

```
1 var me = {  
2   name: {first: "justin"}  
3 },  
4 name = me.name;  
5 name = {first:"alexis"};  
6 me.name.first //justin
```

delete :

delete doesn't actually delete the memory object // delete only deletes a reference to an obj

Type	Result
Undefined	"undefined"
Null	"object"
Boolean	"boolean"
Number	"number"
NaN	"number"
String	"string"
Function	"function"
Array	"object"
Any other object	"object"