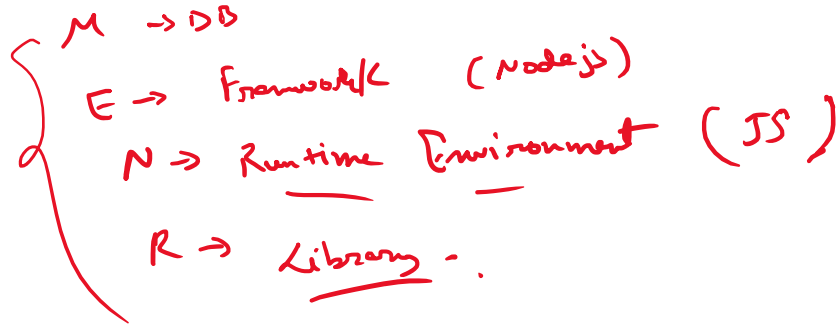


# MERN

JS



ES6 (2015)

ECMA → European Computer Manufacturing Association

ECMA 6

ES 6

(Engine) → Compiler + Interpreter

Safari → JS loops

IE → Chakra

Firefox → Spider Monkey

Brave / Chrome → V8 Engine

JS says

Functions are the No. 1 citizen.

Object → object

var a;

arguments

function add(x, y)

int, float, double, long  
 char, string

Loosely Typed

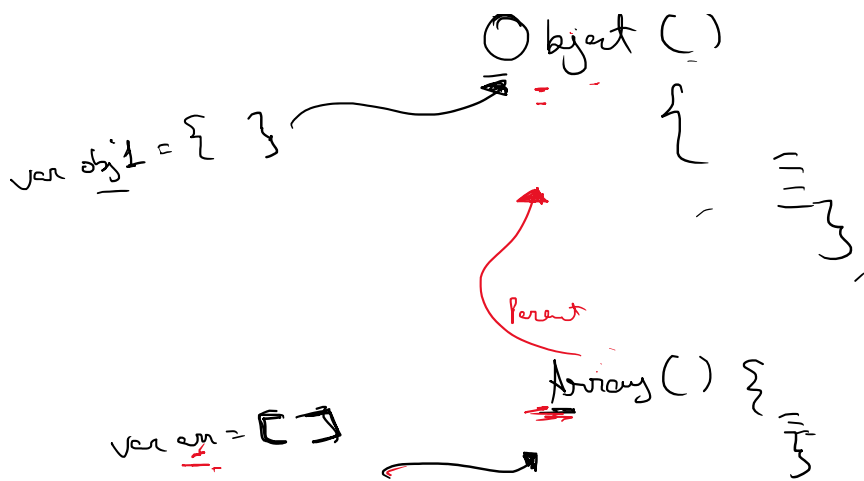
function add(int n, float y)  
 {  
 }  
 }

var a = 10;  
 a = " ";

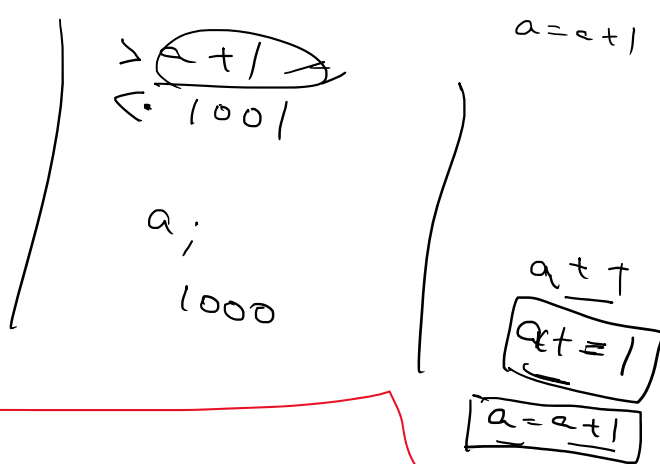
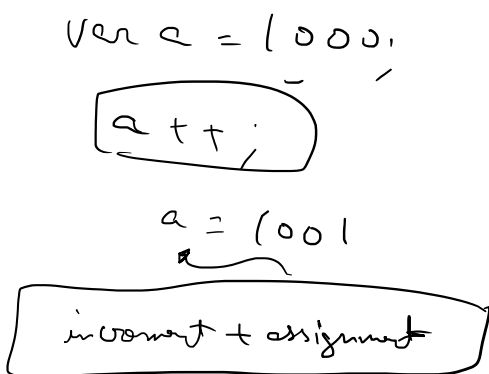
int a;  
 a = 10;  
 a = 10000;  
 a = "Prig";

Global level / Top level

Object()



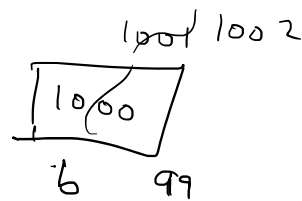
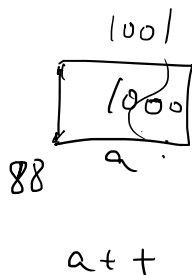
are instance of Object  
true



## Immutability

changes done in  
Either copied value or original value, does not affect the  
other

var a = 1000;  
var b = a;



## Immutability

number, string, boolean, bigint

var a;  
var arr1 = [ ]  
arr2 = arr1;



var arr2 = arr1;  
memory address / reference.

arr2.pop()

Mutability

changes done in Either original value or copied value, will ultimately affect the other

by ref.

Keys

Keys: car, Same car.  
 car → dent;  
 Original car damaged

var obj1 = {

type of obj1  
 'object'

null internally  
 stored as

obj1 = null

acts like scissor

removed

G.C / Garbage Collection

Heap  
 memory

{ Key : value }

200

null ↓

To dereference an object

primitive type

'object' ← arr, obj

P = "  
 P = '  
 P = -

'string'

var a = new String("praja");

new → object

String

Explicitly

AutoBoxing

Powers,  
 methods,  
 Properties

"praja";

```
var a = "priya";
a.toUpperCase();
'PRIYA'
```

normal string (value type)

var. 1/  
Properties  
↓  
convert value type

[undefined == null]

== loose comparison

- ① Type Convert
- ② value checking

empty values

=== strict comparison

- ① Type check
- ② value check