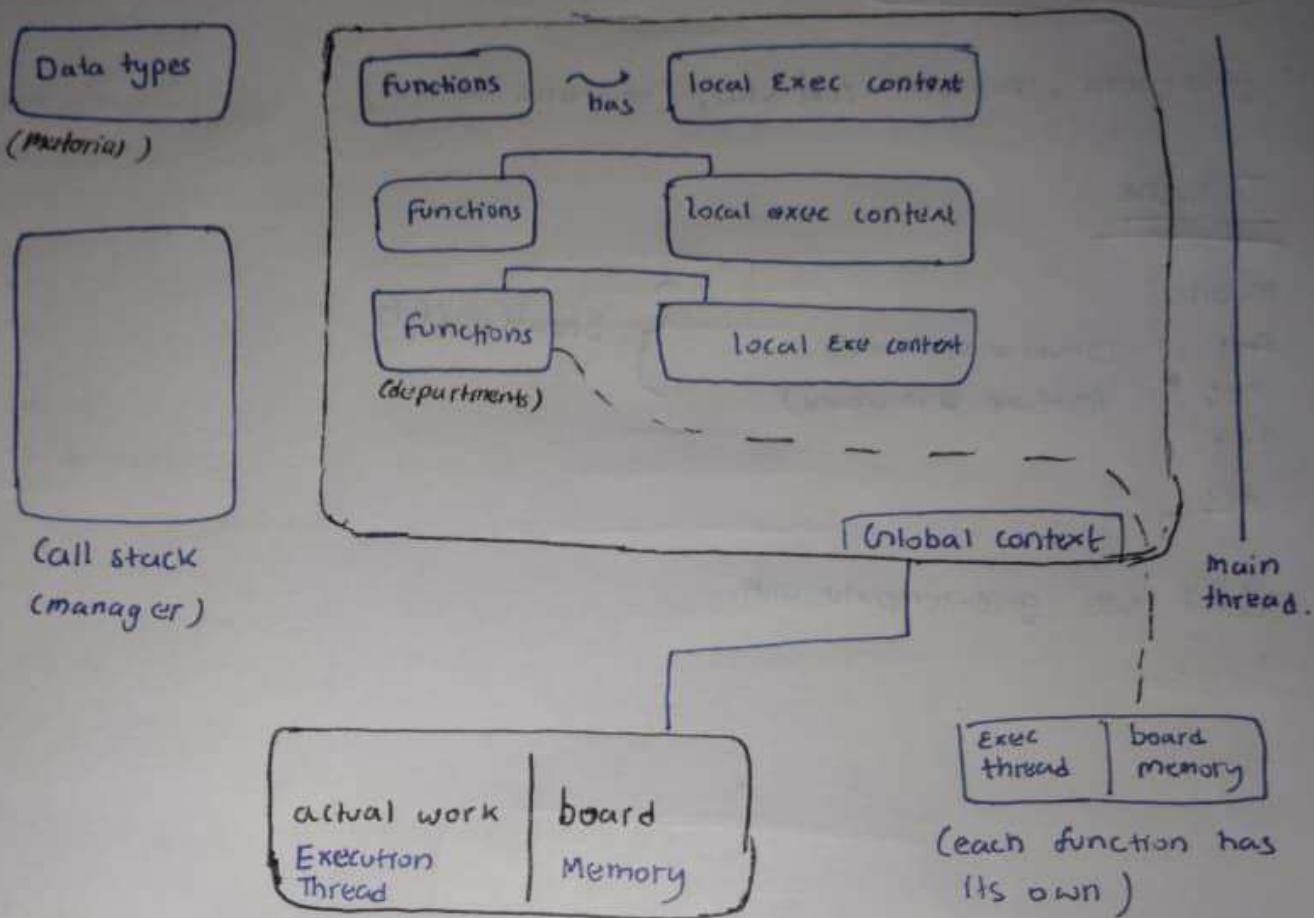


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## JAVASCRIPT



(main thread: analogy → owner of factory, interpreter)

↓  
reads  
line by  
line

- > `const number = 5` → stored in memory
  - > ~~Function addTwo (num) {~~
  - >     ~~return ~~num~~ num+2~~
  - > } → stored in memory
  - > `const valueOne = addTwo (num)` → function set to work  
(by call stack)  
(main thread reads the  
function)

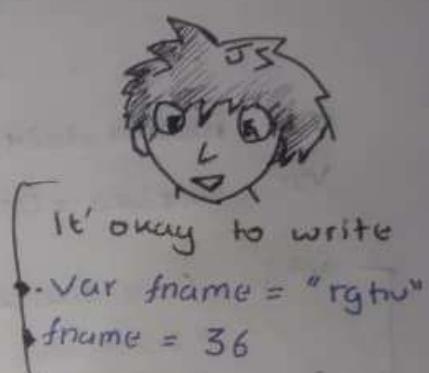
- Node.js → runtime environment
  - ↳ not framework/library



- Node.js → V8 engine + Cpp compliances  
to move JS outta browser

- Internal JS → <script> // Your JS CODE </script>
- External JS → file-name.js
- JS is loosely typed language...

```
> function addNumbers (num1, num2) {
    var result = num1 + num2;
    console.log ('Result is', result);
}
```

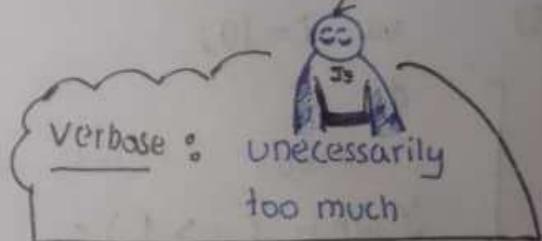


> addNumbers (3, 13) → go check console



## CONDITIONAL CODE

```
if (condition) {           → returns boolean (yes or no)
    // execute this
}
else {
    // execute this
}
```

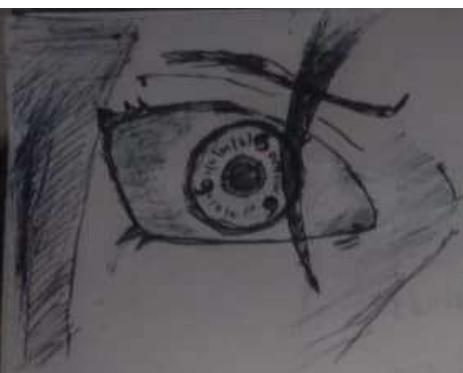


#multi-condition, ; var age

```
var childage = age <= 12
var teen = age <= 14
var adult = age <= 40
var senior = age > 40
```

```
if (childage) {
    // child
} else if (teen) {
    // teen
} else if (adult) {
    // adult
} else if (senior) {
    // senior
} else {
    // all false
}
```

# Loop Is GENTJUTSU



→ various Types of loops in JS

1) `for (var x = 0 ; x <= 10 ; x = x + 1) {  
 // code  
}`

→ When you exactly know no. of iterations you wanna have

2) `var filesize = 1024;  
var currSize = 0;` → initialization.

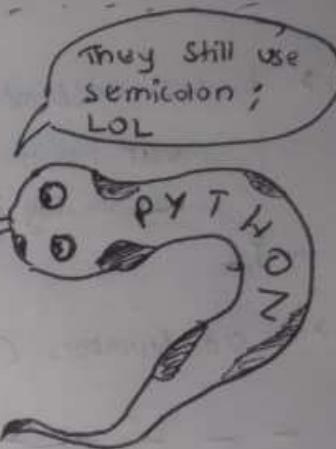
`while (currSize < filesize) {  
 // Downloaded  
 currSize += 40; // update`

→ When you know condition to stop, but not no. of iterations.

\* Sirf kaam hone se matlab hai ...

3) `var i = 10;  
do {  
 // code , i = i - 1 → update  
} while (i > 1);`

→ Ensures atleast one iteration



mem	exec
1.	age ... age = 32
2.	undef 32
first	second

console.log (age)

var age = 32

console.log (age )

Output => undefined  
32

- \* age = 36
- \* console.log (age )
- \* var age

→ Hoisting

variables, functions, class  
declarations conceptually moved on the top of scope during compilation phase.

O/P : 36

mem	exec
1.	age
2.	age = 36
	36

