

## JavaScript Execution Code Context.

- An execution context is an abstract environment where JS code runs.
- Each time a script runs, a context is created.

\* Three types are:-

### 1. Global Execution Code (GEC):-

- Created when 1<sup>st</sup> page loads.
- Creates window obj. (in browsers) or global object (in Node.js.)
- Sets up this keyword to point to that global object.

### 2. Function Execution Code (FEC):-

- Created when function is called.
- Has its own scope & this binding.

### 3. Eval Execution Context

- 

## Execution Context Life cycle:-

### 1. Creation Phase (Memory Phase)

- variable, functions, arguments are hoisted.
- this is set

### 2. Execution Phase

- Code is executed line by line.
- Variable values are assigned.



## Program

```
let val1 = 10
let val2 = 5
function addNum(
  num1, num2) {
  let total = num1 + num2
  return total
}
let result1 = addNum
  (val1, val2)
let result2 = addNum
  (10, 2)
```

## # Steps

1. Global Execution Context created  
↳ this is set.

## 2. Memory Phase

- ↳ val1 - undefined
- ↳ val2 - undefined
- ↳ addNum - definition of function
- ↳ result1 - undefined
- ↳ result2 - undefined

## 3. Execution Phase

val1 = 10

val2 = 5

add new

result1 = 15

new variable  
environment  
+  
execution thread

→ Memory

num1 - undefined

num2 - undefined

total - undefined

→ Execution

num1 = 10

num2 = 5

result = 15

↳ this will be returned

in Global Execution

Context to ~~var~~

variable

— new variable  
environment  
is deleted



result 2  $\Rightarrow$  12  $\rightarrow$  new variable  
environment  
+  
execution thread

$\rightarrow$  Memory

num1 = undefined  
num2 = undefined  
total = undefined

$\rightarrow$  Execution

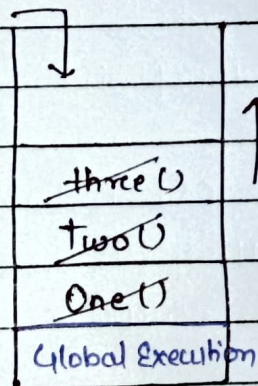
num1 = 10

num2 = 2

returned  $\leftarrow$  total = 12

$\rightarrow$  Deleted ~~envi~~ environ-  
ment.

Call Stack :-



Program

```

One ( ) {
    two () {
        three { }
    }
}

```