

# JAVA Script

## 1) Decl<sup>r</sup> of Variable :-

A) VAR → var a = 10

B) let

C) const

var :- 1) var has global scope & functional scope

2) we can redecl<sup>r</sup> variable with same name in the same scope & different scope

3) we can reinitialize the variable with same scope & different scope.

# Execution Context:- (How to run JS internally)



global execution context

this = window

- 1) Memory allocation phase
- 2) Execution phase

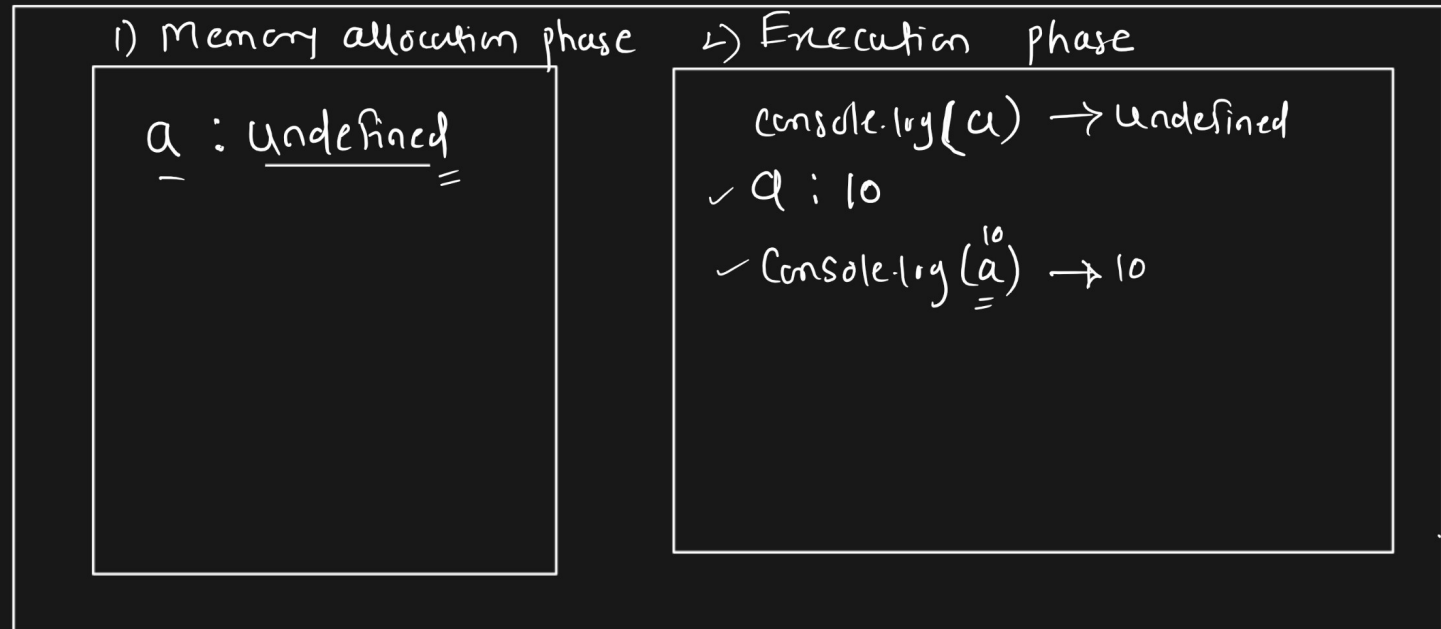
global execution context

JS

→ 1) global execution context

→ 2) function execution context

JS  
↓  
run  
↓  
global execution context



→ console.log(a)

→ var a = 10

→ console.log(a)

```

✓ var a = 10
✓ console.log(a) // 10
✓ a = 20
✓ console.log(a) // 20
function display()
{
  console.log(a) // undefined (20)
  var a = 30
  console.log(a) // 30
}
display()
console.log(a) // 20

```

run

global execution phase

1) Memory Allocation phase      Execution phase

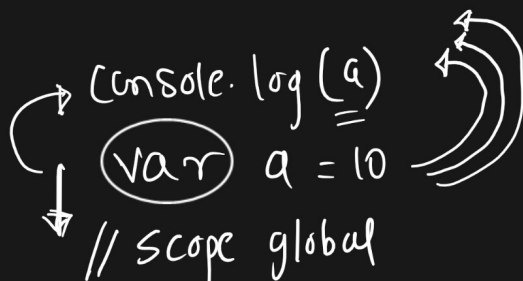
a : undefined  
display : {  
}

a : 10  
console.log(a) → 10  
a : 20  
console.log(a) → 20

display()	Ex. phase
✓ Memory A.p.	<del>c.log(a) → undefined</del>
<u>a : undefined</u>	<del>a : 30</del>
	<del>c.log(a) → 30</del>

a display → 20

Variable Hoisting :-



It is behaviour of variable & fun<sup>n</sup> decl<sup>s</sup> are moving to top of their scope (either the global scope or the fun<sup>n</sup> scope) during the compilation phase before the code is executed.

Hoisting for var  
console.log(a)  $\Rightarrow$  undefined  
var a = 10

let & const  
console.log(a)  $\rightarrow$  a is  
not  
defined  
let a = 10

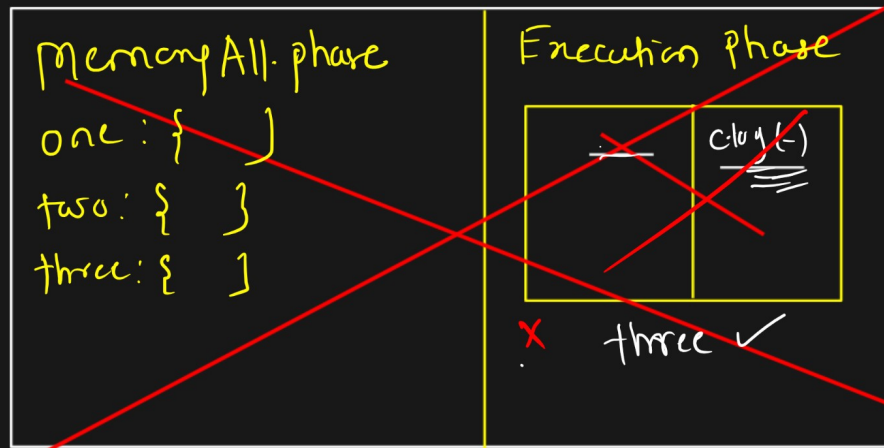
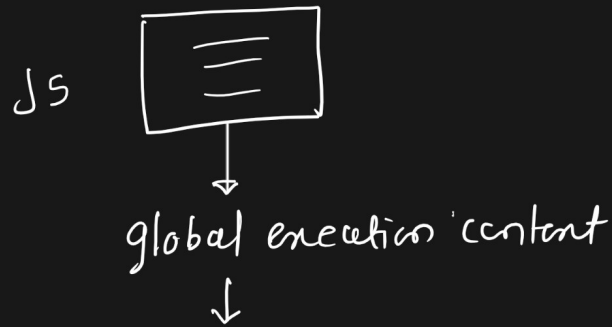
Whenever variable declar with let & const and try to access their value before their declar then it show's one error that is variable is not defined because it goes temporal dead zone

\* Scope:-

- 1) global scope
- 2) fun<sup>n</sup> scope
- 3) block scope
- 4) local scope
- 5) script scope

\* Call Stack :-

JS

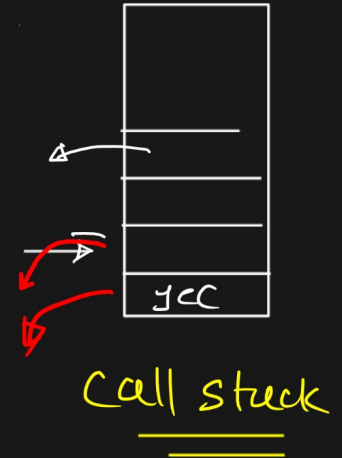


function one ()  
 {  
   c.log ("one");  
 }

function two ()  
 {  
   c.log ('two')  
 }

function three ()  
 {  
   c.log ('three'); ✓  
 }

→ one ()  
 → two ()  
   three ()



Call Stack :- They manage the all the operation of JS code

## Variable Declr

- 2) let :- they have block scope & (script scope)
- redeclr - only in different scope
  - reinitialize - in same scope & different scope
- 3) const :- same as let type variable
- ≡ as well as
- reinitialize is not allowed

- 1) Variable declr → var, let & const diff
- 2) scope variable → with code & browser
- ✓ 3) type of scope → global, local, block, script
- 4) execution context → global ~~exps~~ execution context
- 5) function execution context
- 6) Hoisting / Temporal Dead zone
- 7) call stack
- M.A.P.  
exe.ph