

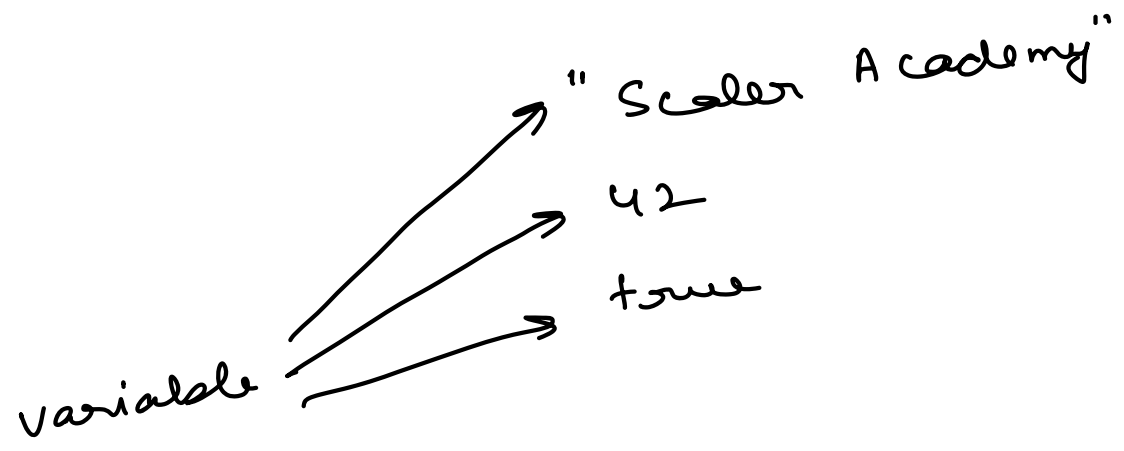
## Agenda

- Functions
- Execution Context
- Hoisting and TDZ

## Functions

The function is an abstract body and inside that body a particular logic is written and function accepts parameters to operate.

some Beverage



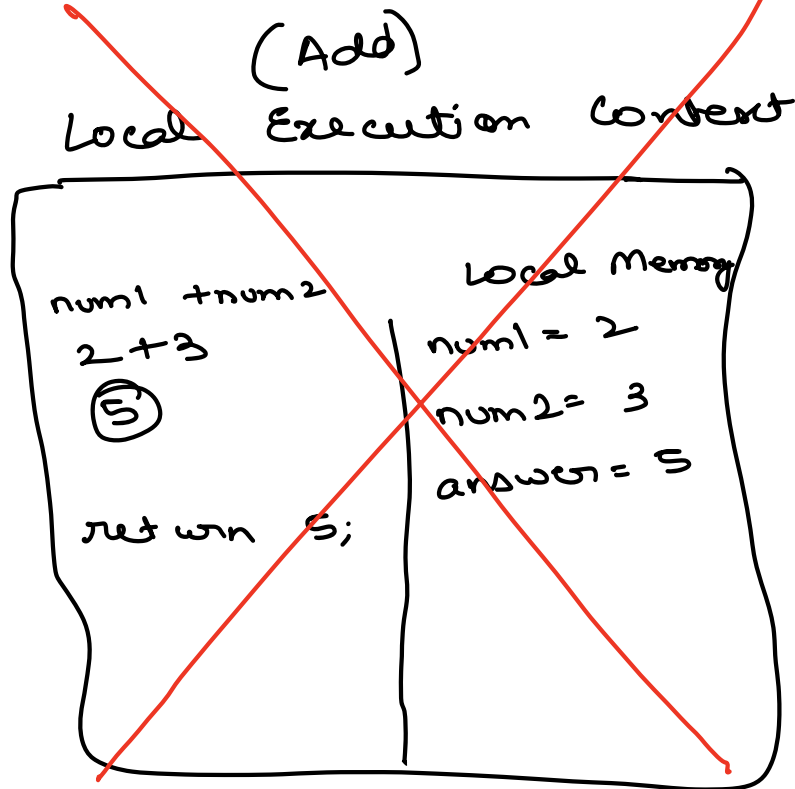
[ 1, 2, 3, 4 ]  
x01    x02    x03    x04  
└──────────┘  
addresses

## Execution Context

When the JS Engine scans the JS file, it makes an environment called Execution context that handles the entire transformation and execution of code.

```
1 // Example 1
2 var a = 2;
3 var b = 3;
4
5 function add(num1, num2) {
6   var answer = num1 + num2;
7   return answer;
8 }
9
10 var sum = add(a, b);
11 console.log(sum); // 5
12
```

Area B  
Call Stack



destroyed after use

Area A  
Global memory

a = 2  
b = 3  
add = Fn  
sum = 5

global

Call Stack:- A call stack is a mechanism that JS uses to track what function is currently running.

```
// Example 2
const n = 2;

function square(num) {
  const answer = num * num;
  return answer;
}

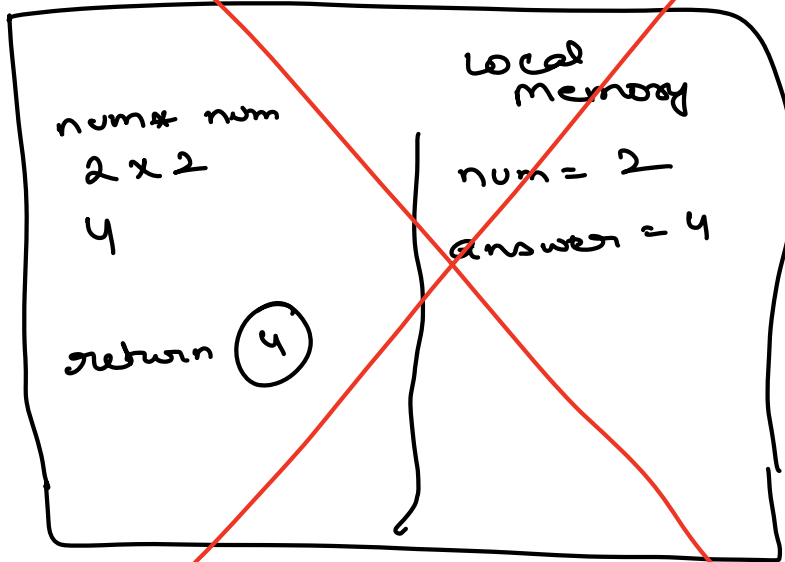
let s1 = square(n);
console.log(s1);
```

Destroyed

~~LEC (SQUARE)~~

Area B

CS



Area A  
Global mem

n = 2  
square = (fn)  
s1 = 4

global

Hoisting

Hoisting is a behavior in JS language through which functions, variables, etc are moved to the top of the file at start of the program before the actual parsing begins.