Improvisations + Recap

19 August 2023 21:06

1. To keep an eye on chat box and take the doubts inbetween. ✓

1. How to access an element in Array

Using index, starts from 0

arr[↑]
index

2. How to access an element in an Object

Key

obj.key ✗

or

obj["key"]

Key is numeric

obj.0 ✗✗

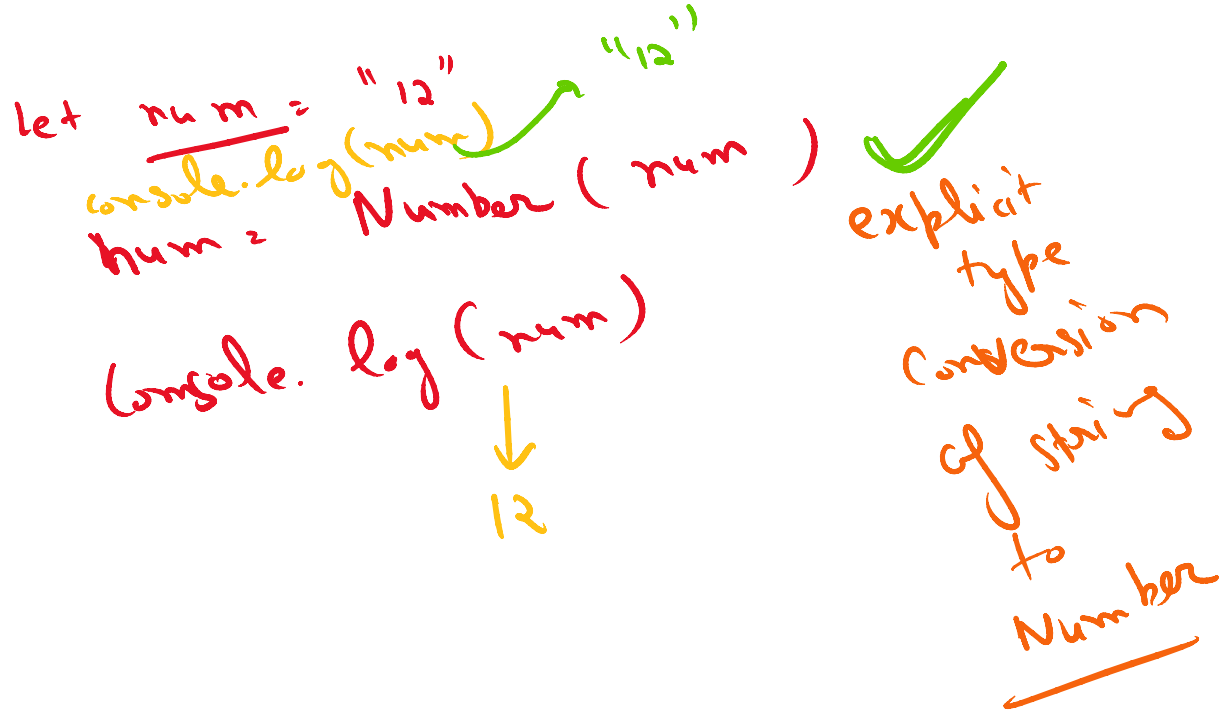
obj[0]

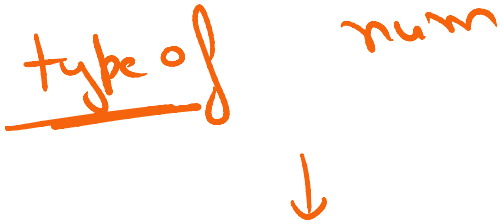
const obj = {

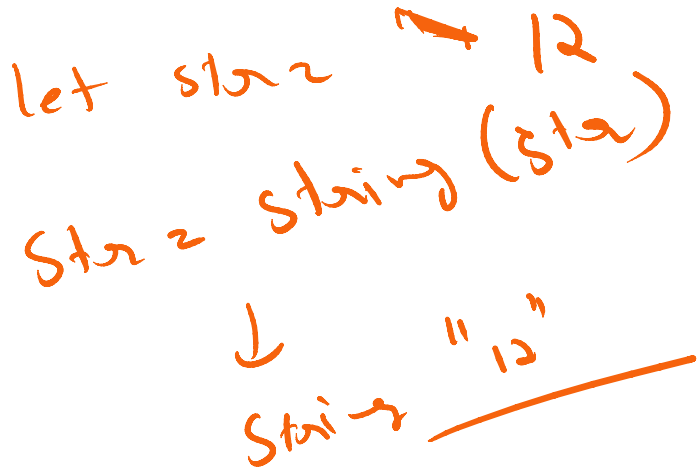
0 : "bhavesh"

Explicit type conversion

17 August 2023 20:52







Not a Number

abc

↓

Number

X

Number("abcd") = NaN

Errors are very Rare

Math

Hoisting

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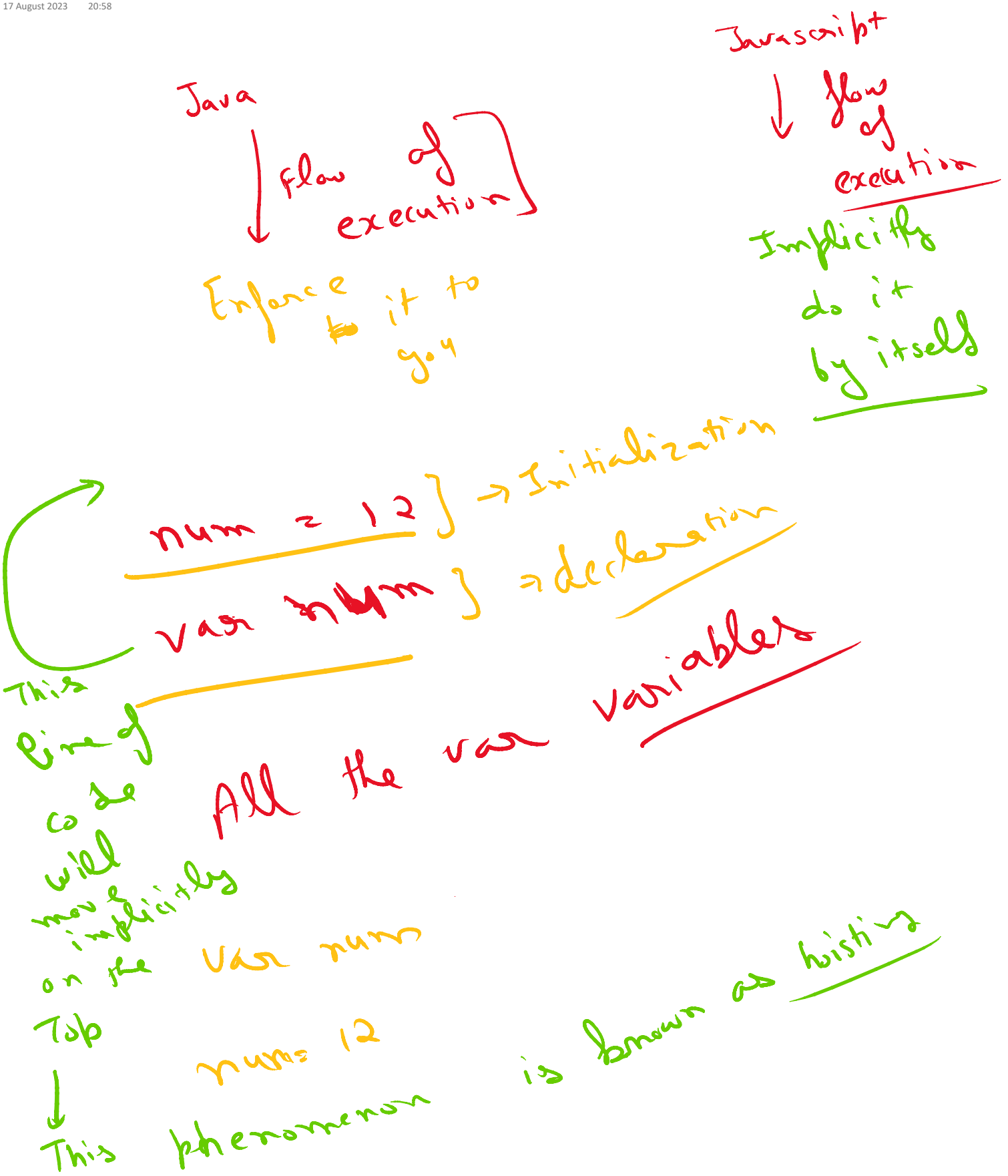
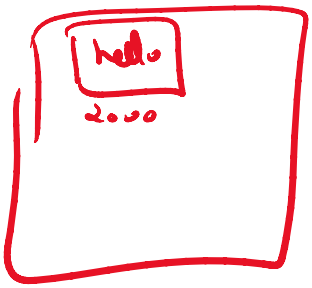


var, function

Var num1

num1 = 12

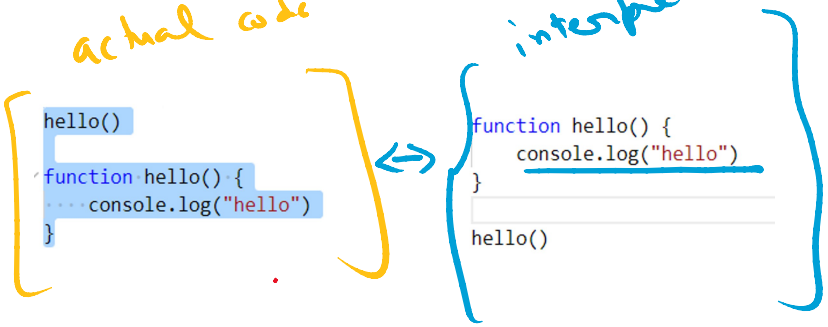
console.log(num1)



actual code

```
hello()

function hello() {
    console.log("hello")
}
```

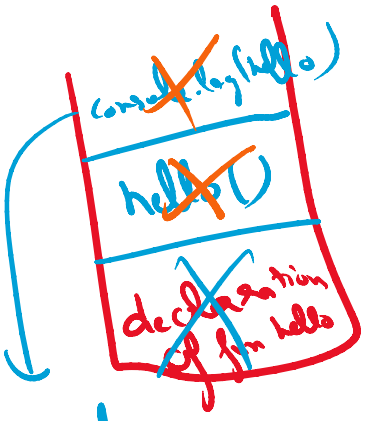


intermediate interpretation

```
function hello() {
    console.log("hello")
}

hello()
```

due to hoisting



hello

So, hoisting is an internal phenomenon of JavaScript language, which includes two keywords var and function. whatever the variables we will declare not initialize using these two keywords will automatically move to the top of their scope during execution.

Arrow functions

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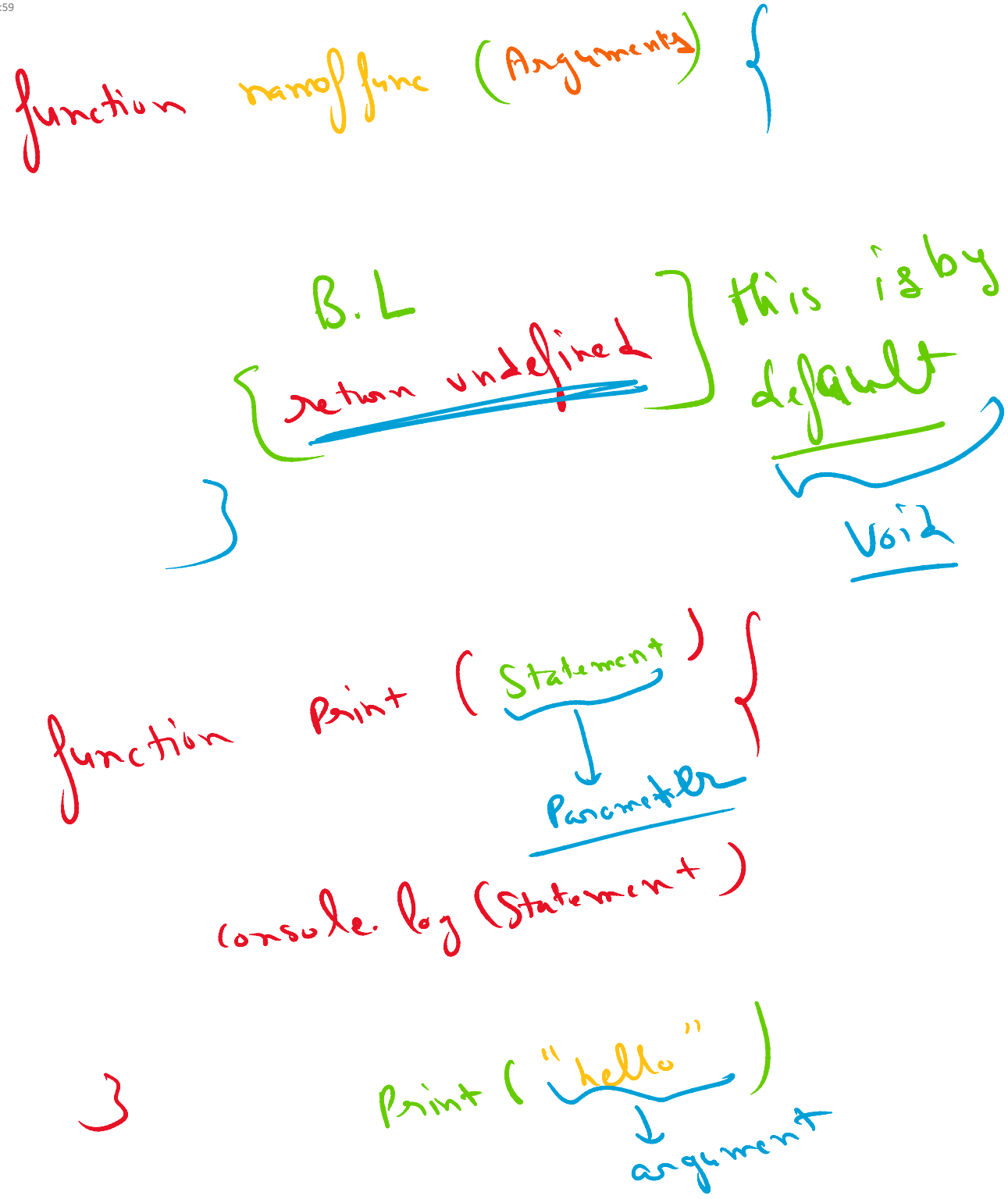


Array
Object
} Reference

String
Number
boolean
} value

function Sum (a , b) {
(Parameters)

B.L

}

Sum (1 , 2)
↓
arguments

function PrintAll (a, b, c, d, ... z)

{

}

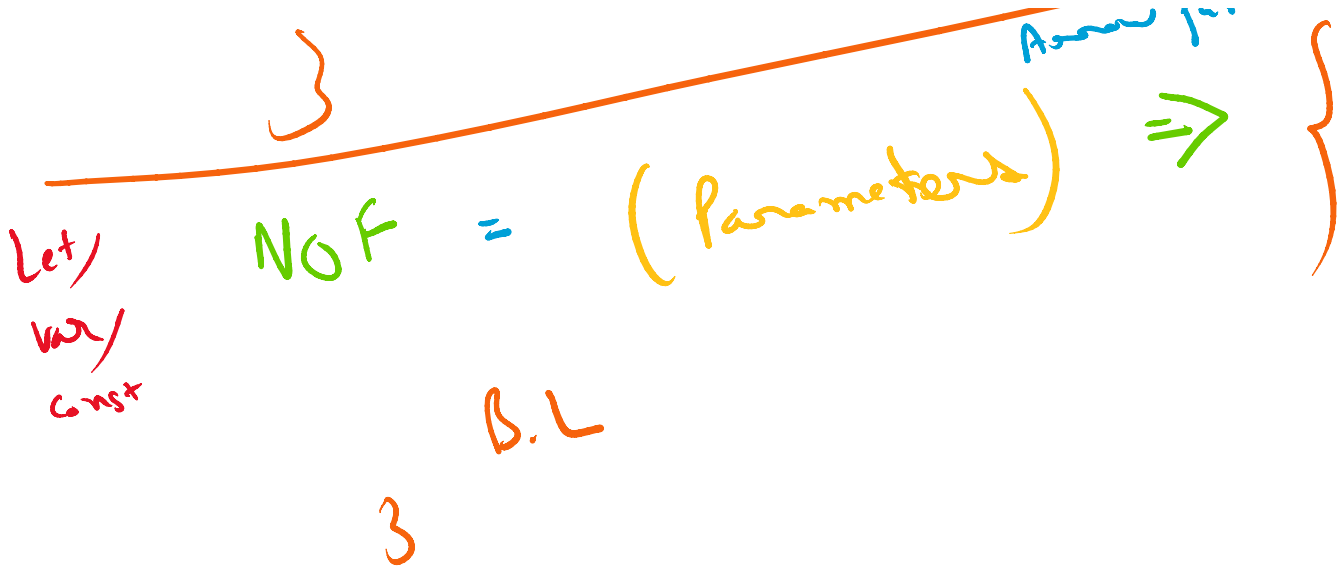
PrintAll (1, 2 ... 25)

z = undefined

function NOF (parameters) {

B. L

Arrow function


Let/
var/
const
NOF
=
(parameters)
⇒
B.L
3

Operators

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Mathematical

+	Sum
-	Subtraction
/	Division
*	Mul
%	Modulus

7 + 5 = 12

"7" + "5"

"75"

"7" + 5 = 75

"5"

Number("7") + Number("5")

12

Number("7") + "5"

Number("7")

75

String

7 - 5 = 2

9 / 3 = 3

9 x 3 = 27

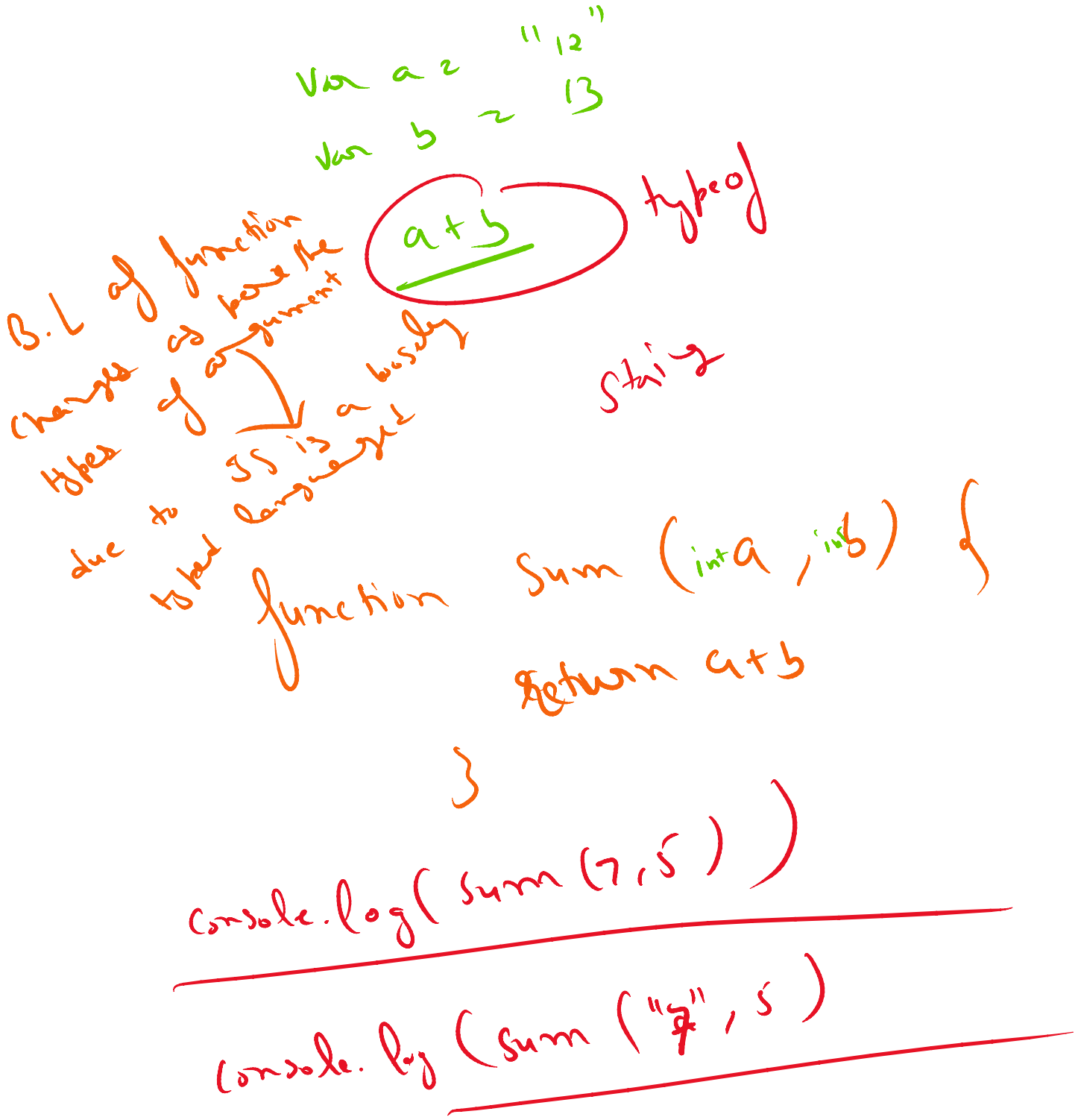
9 % 3 = 0

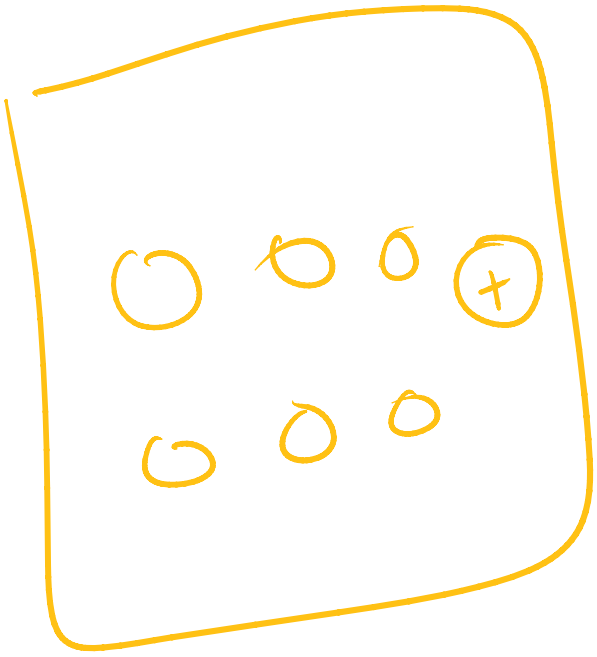
Var a = 12

Var b = 13

a + b

"12"


Var a = "12"
Var b = 13
a+b
typeof
String
B.L of function changes as per the types of argument
due to JS is a loosely typed language
function Sum (int a, int b) {
return a+b
}
console.log(Sum (7,5))
console.log (Sum ("7", 5)



number + string

"1" + "2" = 12

JS is a loosely typed language

Java is a strictly typed language

Typescript

Comparison Operators → two variables/constant → boolean

>

>=

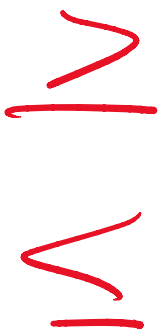
2 > 1 → true

1 > 2 → false

$1 > 2 \rightarrow$ false

$2 < 1 \rightarrow$ false

$1 < 2 \rightarrow$ true



$2 \geq 2 \rightarrow$ true

$2 \geq 3 \rightarrow$ false

$2 > 2 \rightarrow$ false

$2 == 3 \rightarrow$ false

$2 == 2 \rightarrow$ true

$2 == "2" \rightarrow$ true

Number(2) = String(2)

$2 === "2" \rightarrow$ false

$2 === "2"$ ✓ to String

2 == 2 ✓

2 = 2

Number ≠ String

Logical Operators

and	&&
or	||

1 1	1
0 1	0
1 0	0
0 0	0

1 1	1
0 1	1
1 0	1
0 0	0

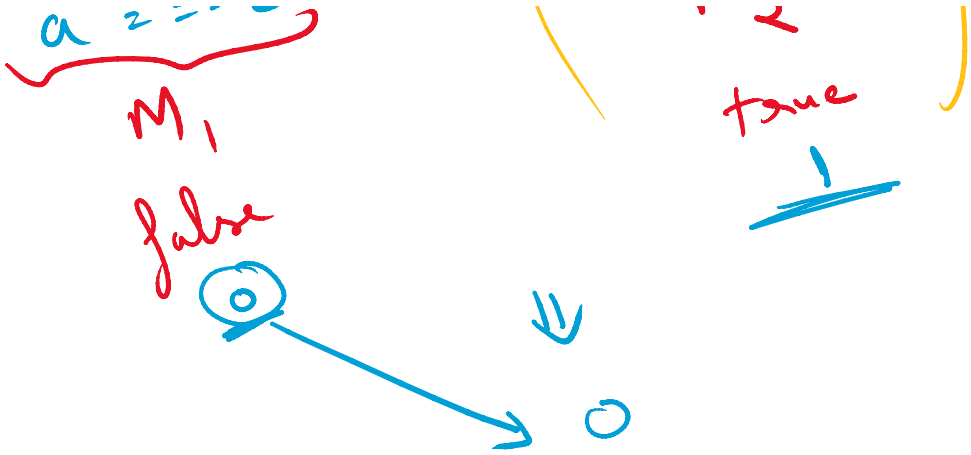
```
var a = 2
var b = 3
var c = 4
var d = 4
```

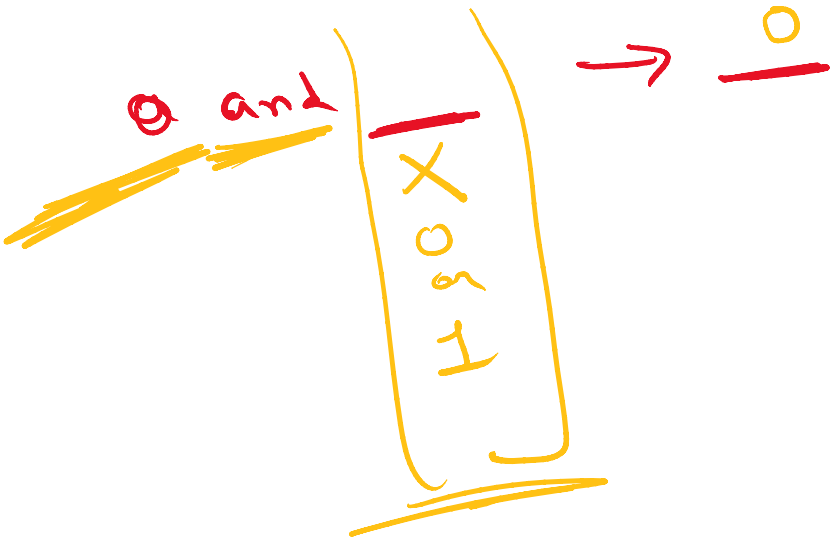
a == b && (c == d) X

M2

M2 will not be executed

true





ab() → false

↓

0

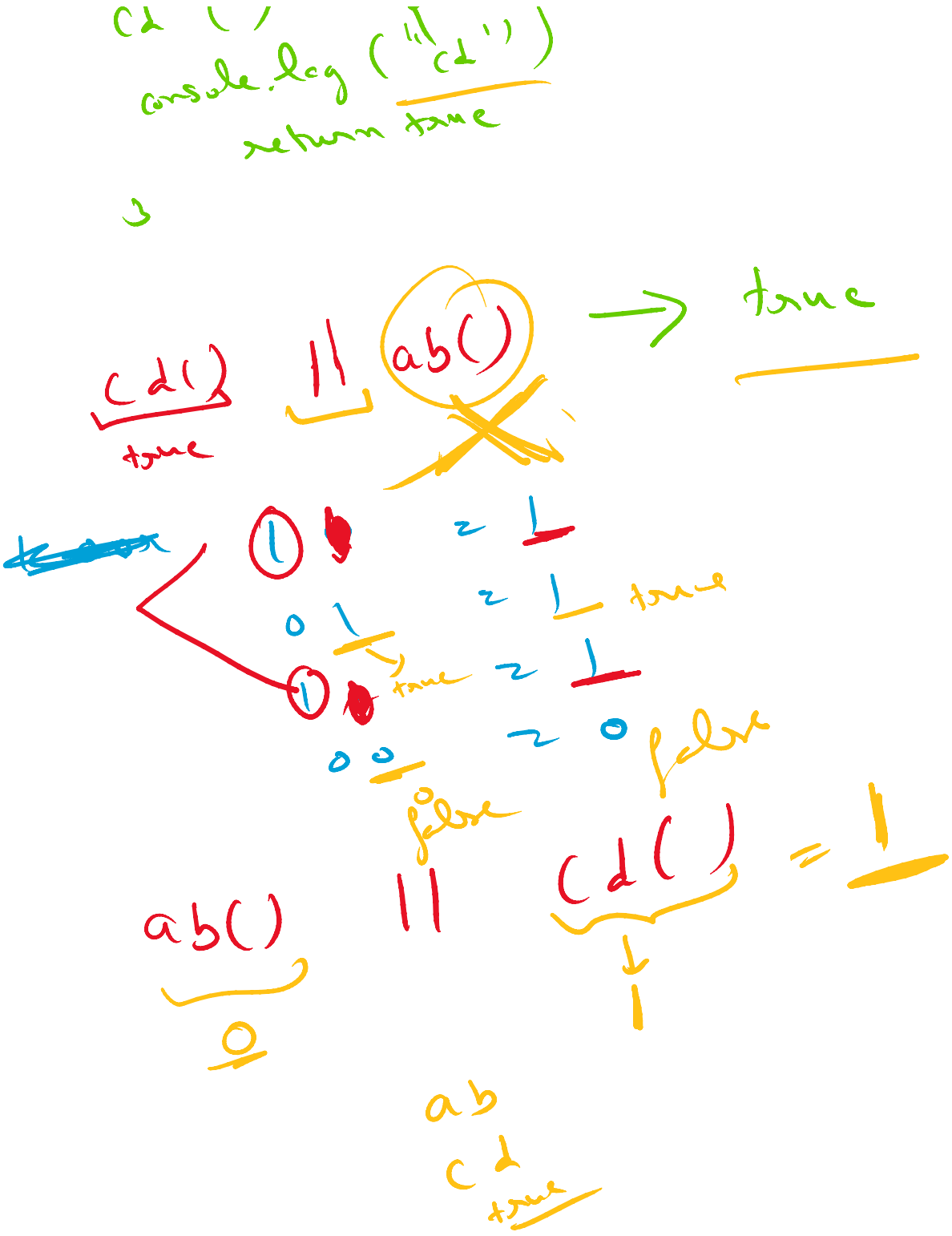
cd() → true

↓

1

```
ab ( ) {
console.log ("a b")
return false
}

cd ( ) {
console.log ("cd")
```



https://my.newtonschool.co/playground/code/pnq7rspxs3tm

https://my.newtonschool.co/playground/code/fv6e39kvftkr

https://my.newtonschool.co/playground/code/q5ymcex3sdny

https://my.newtonschool.co/playground/code/ysoektioyrl5

Loops and control flow

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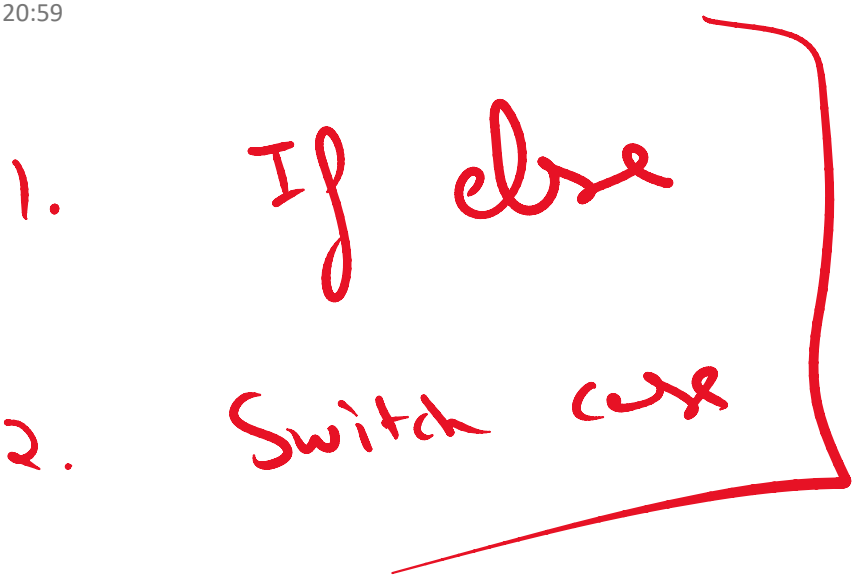

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