Datatypes In JS

1) Numbers → 8, -10, 33, 4.5602, 0, -0, NaN
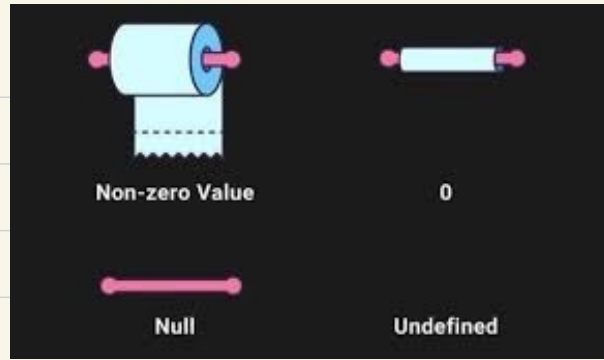
   not a number

2) Strings → " hello world "

   → text

3) Boolean → true
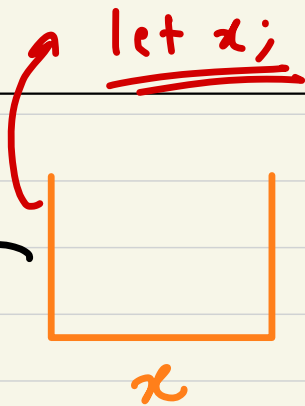   false

Paper roll

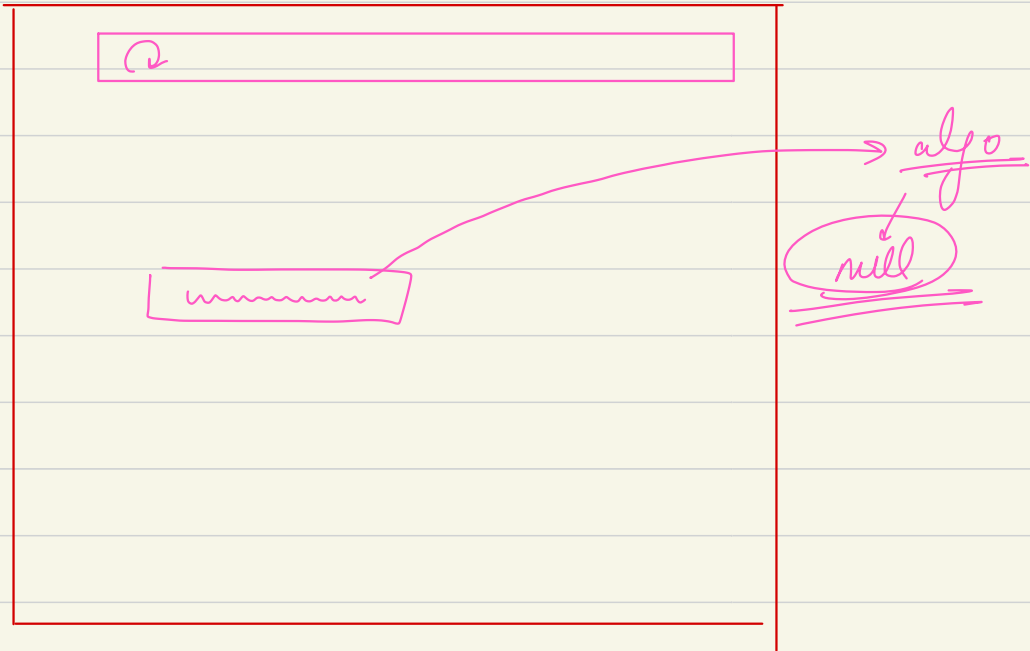Non-zero Value   0
Null   Undefined

4) **null** → null represents no value or nothing. i.e, variable is declared & defined also but with an empty value i.e. <u>null</u>

5) **undefined** → it shows a variable who has been declared but never defined.

let x;

new bucket

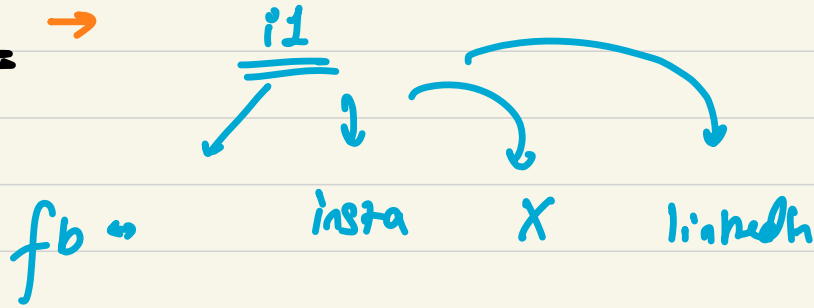with name x

x

null

y

let user;

algo

null

6) BigInt

In JS (as per my latest info) a normal number can store maximum $(2^{53} - 1)$ and minimum $(-2^{53} - 1)$

for numbers beyond this range, we use bigint.

To make a no. BigInt, we write the number & append a 'n' at last.

let x = 3125068999999ffff8n;

Objects →

i1

fb ∞   insta   X   linkedin

let fb = ——

let insta = ——

⋮

Key   values

{
  fb: 3000,
  "insta": 10000,
  X: 15000,
  linkedIn: 3000
}

keys
and
values

(Symbol)

(Skip)

Symbol("—")

using programming lang. we can do computations.
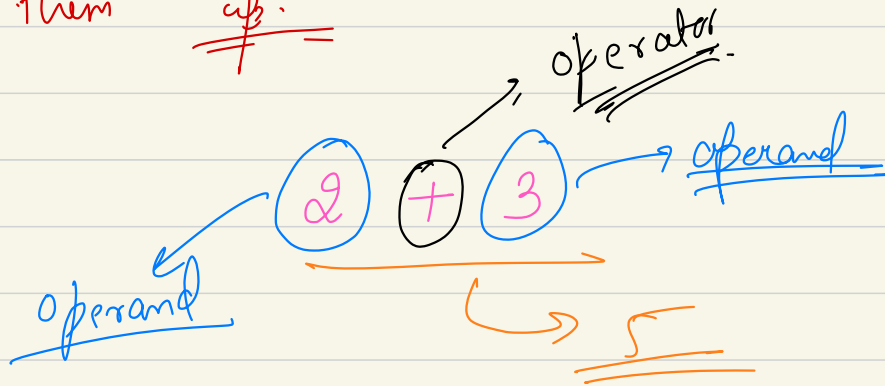
→ Operators →

Operators are Symbols that can do Some computation or calculation. eg → + , − , == , *

Ex → +

this plus operator if used with 2 numbers adds

them up.

operator

② (+) ③ → operand

Operand

→ 5

Arithmetic Operators → used with numbers.

2 + 3   → add 2 and 3

2 - 3   → subtract 2 and 3

2 * 3   → multiply 2 and 3

2 / 3   → divides 2 with 3, gives you the quotient.

modulo

2 (%) 3   → remainder of dividing 2 & 3

$2 ** 3 \longrightarrow$ calculate $\underline{\underline{2^3}}$

assignment operator: `let x (=) 10;`

these help us to assign values to a variable.

$=$ $\longrightarrow$ equals $\longrightarrow$ let $x = 10;$

let $x = 10;$
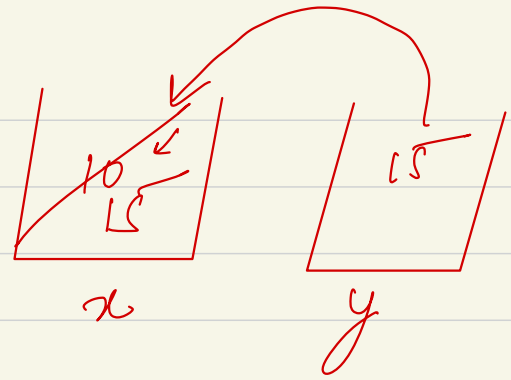
you want to add 5 to x & store the result in x.

first way

let $x = 10$;

$\Rightarrow$ let $y = \underline{x + 5};$

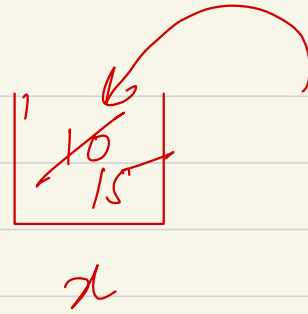$\underline{x = y};$

Second way

```
let x = 10;

x = x + 5;
```

1
10
15

x

3rd way

```
let x = 10;

x += 5;
```

Shortcut

$$x = x - 2 \qquad \longrightarrow \qquad x \mathrel{-}= 2$$

$$x = x * 3 \qquad \longrightarrow \qquad x \mathrel{*}= 3$$

$$x = x / 5 \qquad \longrightarrow \qquad x \mathrel{/}= 5$$

$$x = x \% 3 \qquad \longrightarrow \qquad x \mathrel{\%}= 3$$

$$x = x ** 5 \qquad \longrightarrow \qquad x \mathrel{**}= 5$$

assign.
operator

Netflix

(Kapil Sharma)

Show

$\rightarrow$ only those users who $\rightarrow$

1) are registered on netflix, AND

2) those who have paid for subscription And

logical operators $\longrightarrow$ Logical Comp

AND	OR	NOT
&&	||	!

$\longrightarrow$ operands of a logical operator are always boolean. if we donot pass boolean then JS automatically convert them to boolean.

AND

x && y

false   false $\longrightarrow$ false

false   true $\longrightarrow$ false

true   false $\longrightarrow$ false

true   true $\longrightarrow$ true

x	$\|\|$	y		
false		false	$\longrightarrow$	false
false		true	$\longrightarrow$	true
true		false	$\longrightarrow$	true
true		true	$\longrightarrow$	true

not

!

x $\longrightarrow$ $!\ x$

true   false

false   true