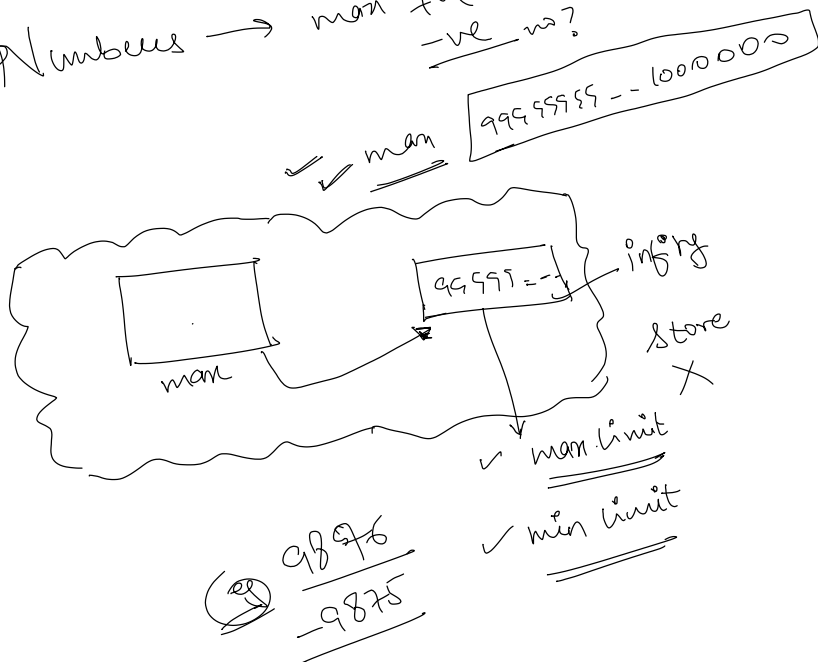


JS

Numbers \rightarrow man +ve no?
-ve no?



$(\text{INT})_{\text{MIN}} - \text{INT} - (\text{INT})_{\text{MAX}}$

max \rightarrow Number • MAX_SAFE_INTEGER ✓

min \rightarrow Number • MIN_SAFE_INTEGER ✓

✓ html → index.html → JS own?

< script > ✓

str[5]

Let str = "Hi i-am your friend";

① 1 file pile up

2 Separation or concern
code

efficient

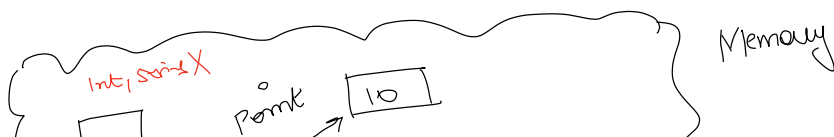
- ✓ HTML →
- ✓ CSS →
- ✓ JS →
- ✓ Boot →

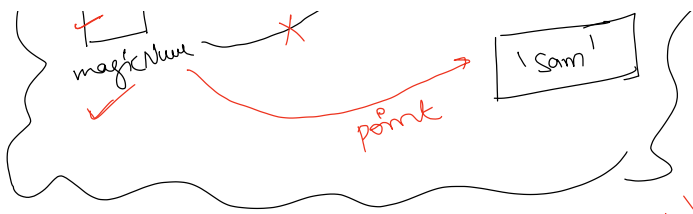
Diff. files
easily readable
easily accessible
bug (Kis jagah)

same variable \rightarrow (Let)
cannot be reinitialised.

(1) Let magicNum = 10;

② magic Num = 1 Sam /
(valid)





variable type X (zavoorat)

JS
variable

datatype X

weakly typed PL

CPP

variable

datatype ✓

int buck1 = 10;

buck1 = 'Sam';

Let variable_name = 10;
variable_name = 'Sam';
(allowed) ✓

(Number) X

→ Let var_name = 10;

X Let var_name = 100; X error

var_name = 100; ✓

var_name = 'string'; ✓

= True; ✓

any datatype (change)

PL 1 declare kuch bhi stored

- ✓ ① Let naam = 10; → Number } weakly
 - ✓ ② naam = true; → Boolean
 - ✓ ③ console.log(naam); → true // ans
 - ✓ ④ naam = 'Samanth'; → String
 - ✓ ⑤ console.log(naam); → Samanth // ans
- X end X →

naam Kis type ka hai

run X

run variable type
time

Dynamically typed PL

CPP (strongly typed & statically typed)

int naam = 10;

X
DT
(naam) = 100,
= 1500 / 2000;

JS → interpreted → weakly typed → Dynamically typed → ? PL

let str =

0	1	2	3	4	5	6	7	8	9	10	11	12
s	a	m	a	r	t	n		v	o	n	r	a

 - - - -

str[5] = t ✓

str[7] = 0 ✓

str[17] =

explicitly (khudse) str[17] → value (assign)

str[17] = undefined JS automatically undefined

str[17] → undefined → undefined

methods / func
JS String

String methods

① substr ✓

② substring (replacement) ✓

③ indexOf ✓

④ replace

⑤ replaceAll

⑥ repeat

⑦ toUpperCase()

⑧ toLowerCase()

⑨ trim()

① substr →

0	1	2	3	4	5	6	7	8	9	10	11	12
S	a	m	a	r	t	n		v	o	n	r	a

str.substr(2)

start pointing → sp

str.substr(2, 5);

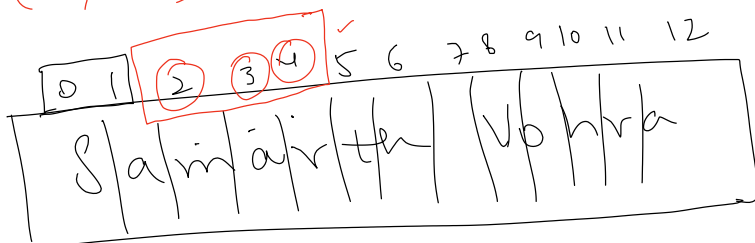
(sp) (length) count

marth

str.substr(-5, 5)

str.substr(-5, -5)

② substring



substring(2, 5) ~~length~~ X

mart

ep → is not included

substring(5, 2)

→ whenever $sp > ep$ swapping of values
 $(5, 2) \rightarrow (2, 5)$

substring(-5, 2)

→ (-ve) values are encountered they are allotted to 0.

$(-5, 2) \rightarrow (0, 2)$

$\left\{ \begin{array}{l} -5 \rightarrow 0 \\ -100 \rightarrow 0 \\ -500 \rightarrow 0 \end{array} \right\}$

→ substring(-5, -2);
 $(-5, -2) \rightarrow (0, 0)$

③ indexOf

Samarth Vohra - Vohra

def (str.indexOf('a')) → number

$(a, 2)$
 $\uparrow \times$
 $str =$ Samarth Vohra is a good boy
 $\begin{matrix} 3^{rd} a \\ 2^{nd} a \\ 1^{st} a \end{matrix}$
 $\begin{matrix} 2^{nd} & 3^{rd} \\ a & a \end{matrix}$
 \downarrow skip/jump
 $(a, 2)$

$str =$ "Samarth is a good boy"
 $0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ \dots$

$str.indexOf('a') \rightarrow$ 1st encounter \rightarrow $\begin{matrix} 1 \\ +1 \\ \hline 2 \end{matrix}$
 $str.indexOf('a') + 1 \rightarrow 2$

\leftarrow 2nd encounter \rightarrow $str.indexOf('a', str.indexOf('a') + 1);$
 \downarrow
 $3 + 1 = 4$

\leftarrow 3rd encounter \rightarrow $str.indexOf('a', str.indexOf('a', str.indexOf('a') + 1) + 1);$

Boolean

$==$ (general equality) \rightarrow datatypes \times

$===$ (strict equality) \rightarrow datatypes \checkmark