

## Section 9 → Introduction to JavaScript.

### ① Introduction to Javascript.

- It ~~help~~ 90s Netscape (N1) was the only browsing Application, later it was overpowered by Internet Explorer.
- In 90s, if you wanted functionality, the request was sent to the server and it return the data.
- A website can't load ~~data~~ without Javascript. Youtube & Netflix don't work.
- Name formation → Live script → JScript → ECMAScript → Javascript.

### What it does

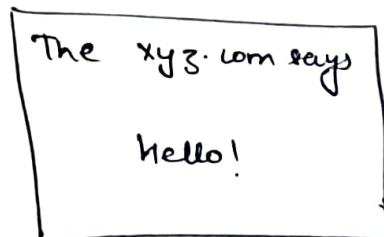
- Like in case of actors, in their script they have func like, Adam appears after 1 sec, Adam gets angry & raises his voice.
- Simi Javascript applies script to web.

### Java vs JavaScript

- As much in common as that in Car & Carpet.
- JS → interpreted (like python, Ruby)  
Java → Compiled (C++, C).

### ② JavaS Alerts.

→ `alert("hello!");`  
(a pop up).



→ `[ " " ≠ " " ]`

## ③ Data types and Variables

→ `alert("Hello");`

Data type → String, Bool, Integer

String

↳ common int'g var.

↳ func (like printf).

↳ combine string using + ["a" + "b"]  
= "ab".

→ prompt → Like alert but allows user to type something.

↳ int's.

↳ data.

→ `var myName = "Angela";` & `alert(myName);`

↳ Name of fn.

∴ In prompt → `var YourName = prompt("What is your name");`

## ④ Naming Conventions

→ Give your var meaningful names.

→ Can't use keywords (func) as name.

→ Can't begin with number, and spaces.

→ Lower case then upper case → `myName` (called camel casing)

## ⑤ String length

→ `fnName.length;`

→ Used for counting letters before accepting.

For eg:- In an essay only 140 characters are req

then `if (fnName.length)`

`> 140`  
`{ cutoff = true;`

## ⑥ Slice & Extract

⇒ var myName = "Tyagi";

myName.slice(0, 1);

i.e starting from

0 & going all the way to 1.

output → T

pos(0) = T.

not included.

⇒ Extract means to take what you need from slice on word.

Extra → word.toUpperCase() → changes word to uppercase.

## ⑦ Basic Arithmetic

Ctrl + R

change same word repeated many times.

⇒ var a+b; (same for -, \*, /)

% → remainder/modular.

⇒ Brackets → (3+5)\*2 & 3+(5\*2).

⇒ Increment → x++ → x = x+1  
Decrement → x-- → x = x-1  
--x

## ⑧ Functions

⇒ A package with instruction to perform a specific task.

⇒ Syntax → calling → getMilk();

creating → fn getMilk() {

}

→ console.log → Like alert, but not visible to user, just the developer.

└→ Only visible on console, not a pop up.

Stanford Karel → A simple IDE.

## Functions Part 2

→ Parameters & Arguments → Calling → `getMilk(2);`  
Create → `getMilk(2 bottles)` → not needed  
  
{ `console.log("buy" + bottles + "bottles of milk");` }

Math.floor to round value.  
Math.round.

## Functions Part 3

→ Return & outputs → `x = getMilk(5);`

func `getMilk(bottles)` {  
    Return `bottles * 1.5;`  
}

[0, 1, 2, 3] = [0, 1, 2, 3] = [0, 1, 2, 3]

[0, 1, 2, 3] = [0, 1, 2, 3]

[0, 1, 2, 3] = [0, 1, 2, 3]

(x) = [0, 1, 2, 3]

[0, 1, 2, 3] = [0, 1, 2, 3]