

* Node JS is a runtime to write Javascript

Ryan Dahl ne node JS, JS se banayi jisse wo na hi serif browser me run ho sake aur baki local systems me bhi run ho sake without the need of browser.

LibUV + Javascript = V8 Engine of Google
(C++ Library)

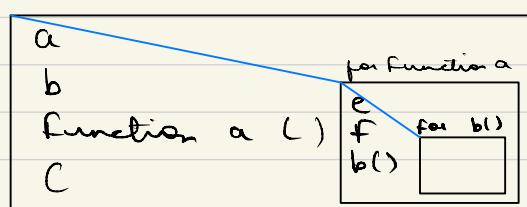
let a = 10 ; is line se
console.log(a); is line tak ke time ko hum kehte hain
temporal dead zone kyunki let ck
block level declaration hoi. a tha
par ffe kisi use ka nahi tha jab tak
second line pe nahi jate

Global memory (global)

Scope memory (local)

```
var a = 10
var b = 10
function a () {
    var e = 10
    var f = 10
    function b () {
        }
        a ()
        var c = 10
```

will create 3 memories
one is the main memory
and 2 for functions



* lexical scope of b is a and for a is the main one

Everything in JavaScript is Object

* let name = null

here name does not have any value

Data Types

+ Primitive

Number , String , Boolean

null , undefined

(Single value)

Non Primitive

Array , Object

(More than one value)

Use Strict : used to avoid mistakes

eg: == 8 ===

Syntax : "use strict";

+ type of (to check type of anything)

var a = [1, 2, 3, 4]

console.log(typeof a);

+ Template Literals / Template Strings

let name = "Mohit"

console.log(`Hi \${name} Sir/Madam`);

* Operators : logical , Arithmetic etc

* Conditions : if else

Switch case

Ternary Condition

* Switch case

```
let user = "human";
switch (user) {
  case "human":
    console.log ("Hello");
    break;
  default:
    console.log ("Insan");
}
```

* Ternary Condition

Syntax: ? True : False

```
var hello = "hey";
(hello == "hey")? console.log ("Hello") : console.log ("hey"),
```

* Array : has under and values

Object : has key and values

+ Array :

```
let names = [
  "Anureg",
  "Anirudh",
  "Vysm",
  "Nishant",
];
```

* names.length

```
let names = new Array (
  "Anureg",
  "Anirudh",
  "Vysm",
  "Nishant",
);
```

Important in Array

Push	Fill	concat
Pop	includes	sort
Slice	unshift	trim
Splice	join	split
Shift	keys	reduce
Unshift	lastIndexOf	filter

+ Math Date

+ Loops: while for of (for Array)
do while for in (for Object)
for

* const number = [1, 2, 3, 4, 5]
for (const num of number) {
 console.log (num);
}

* const number = {1: 1, 2: 2, 3: 3, 4: 4, 5: 5};
for (const num in number) {
 console.log (num) **output:** 1 There are key and not
 2 values
 3
 4
 5
 console.log (number [num]);
 will print values

* Functions

Normal Function

Function with Parameter & Return Type

Anonymous Function

Expression Function

Self Invoking Function.

* Object

let userDetails = {

 firstName: "Mahit",

 lastName: "Kumarwati";

 coursesList: [],

 website: "anvaygtrwali.me";

 buyCourse: function (courseName) {

 this.coursesList.push(courseName);

 },

(3)

 console.log(userDetails.firstName);

 userDetails.buyCourse("FSJS");

 console.log(userDetails.coursesList);

New lexical scope
for userDetails start
from here and if
we write
UserDetails.coursesList.
push(courseName),
it will not be
able to find
that's why we
write this for user-
name

* Arrow Function is not allowed in a Method (Function in a Object)

getCourseCount: function () {

 return `\${this.firstName} is enrolled in \${this.coursesList.length}`;

},