

Lecture 18

7/2/23

Date: 7/2/23
P. No: 1

* JavaScript

- Light weight Programming
- Scripting Language
- Add Behaviour, functionality in website
- Client Side Scripting Language

* What can we do with JS?

- (i) Web App (ii) Mobile App (iii) Games
- (iv) Networking App (v) CLI Tool

* Add JS/Script in HTML

#1 → `<script>`

add in before body ending
`console.log("Hello");`
`</script>`
`</body>`

#2 → Separate file and link in Head
`<script src="/script.js"></script>`

* Variable in JS

Create Variable by let, var, const
`let a = 10`

- (i) Var → (i) global variable type
(ii) two var with same name

- (ii) let → (i) Local Scope Variable

- (iii) Constant → (i) Constant

- (ii) Can not be changed
- (iii) Can not Reassigned

* Data Types

(i) Primitive Data Type

- (i) String (ii) Number
 - (iii) Boolean (iv) Undefined (v) Null
- let a;
console.log(a)

* Dynamic Typing

let a = 5; // 5

a = "priyansh"; // priyansh

* Variable Rules [Naming]

- (i) Not used Reserved words.
- (ii) Can not start by number. (Ex → 1abc)
- (iii) Used Special word =, \$
- (iv) Names are Case Sensitive.
- (v) Name started with → digit, \$, _

* Reference Type

- (i) Objects (ii) Arrays (iii) Functions

* Operator

- (i) Arithmetic (+, -, *, /, %, ++, --)
- (ii) Assignment (++, --, +=, -=, *=, /= - etc)

Ex → let a = 50, b = 10

ans1 = (++a) * (--b) = 54

ans2 = (a++) * (--b) = 45

ans3 = (a++) * (b--) = 50

ans4 = (++a) * (b--) = 60

- (iii) Comparison (>, <, >=, <=, ===, !==)

- (iv) Ternary Operator.

Condition ? Val 1 : Val 2

(v) Logical Operator

(i) AND (ii) OR (iii) NOT

* Bitwise Operator (&, |, ^)

* Operator Precedence

→ let $c = a + b * c$

* Control Statements

(i) If Else

(ii) Switch Case

→ write break after

each case is very imp

* Loops

(i) For Loop (ii) While Loop (iii) Do while

(iv) what is an infinite loop

(v) ~~for~~ for-in loop (vi) for-of loop