

# JavaScript

## 1. Variables

- var
- let
- const

variables can be two types

- Global
- Local

## 2. Data types and their methods

### i) Primitive data types

- Number
- String
- Boolean
- Null
- undefined
- Symbol
- BigInt

### ii) Non-Primitive Data types:-

- Object

### 3. Operators

- i) Arithmetic (+, -, \*, \*\*, /, %, ++, --)
- ii) Assignment (=)
- iii) Comparison (==, ===, !=, !==, >, <, >=, <=)
- iv) Logical (&&, ||, !)
- v) Ternary (?) it's like if-else condition.
- vi) Bit-wise (&, |, ^, ~, <<, >>, >>>)
- vii) typeof (It returns the operand type like undefined, object, boolean, number, string, symbol and function.

### 4. If else and Switch Statement

### 5. Functions

- Simple functions
- Functions with params & default params
- Arrow functions
- "this" keyword in functions vs Arrow-fun

## 6. Objects in detail

- object methods
- Deep copy vs shallow copy
- clone object
- object destructuring

## 7. Loops

### i) Entry controlled loops

- For loop
- while loop

### ii) Exit controlled loop

- do-while

## 8. Arrays in details

- Array methods
- Higher-order array method
- chaining

9. Template Literals
10. Hoisting
11. Spread operator
  - for Arrays
  - for Objects
12. Rest operator
13. Import and Export
  - Default Export vs named Export
14. Promises, Async & Await
15. Sets
  - Set methods (add, delete, has, clear)
  - How sets reduce complexity
  - Remove duplicates using sets
16. Constructor Function Prototype inheritance in JS

17. classes in JS

- oops concept

18. cookies vs Local storage

19. The concepts of how the JS Engine works.

20. DOM manipulation with JS.