

J.S Crash Course

~~Compiler~~
Interpreter → who runs our J.S code

1) word v/s keyword

↓
// Salman
// Rammy
// god

↓
// for
// if
// else
// while

→ Anything which has some meaning in J.S known as keyword

2) Variables & Constant

↓
which can be change

↓
which can't be change

→ hoisting v/s hoisting

3) hoisting

// Before making a variable we can use it known as hoisting

→ Variable & functions are hoisted which means their declaration is moved on the top of code.

→ Top

Var a = 12;

↓ J.S convert

Var a;

→ declaration

a = 12;

→ initialization

* everytime when we use variable J.S will convert that into two parts
① declaration
② initialization
will move to top of the code
→ if we will not given any value to 'a' by default it is undefined

→ Undefined v/s not-defined

↓
Existence
but didn't
know the
value

↓
not Existence
→ console.log(b);

Ex.

→ console.log(a);
var a=12

→ console.log(a);
var a=12; } ^{nothing} var a; ~~console.log(a);~~ // ^{undefined}
a=12;

console.log(b); } // o/p → not-defined
↓
not Existence

→ but if you print console.log("b"); // o/p → b
(not exist) due to b is a string

5) Types of J.S. → Primitive → numbers, ~~on~~ string, null, undefined, boolean
Reference → [], {}, {}

Reference → aisi hai bhi value jisko copy karne par real copy nahi hoti hai, but usme value ka reference pass hota hai. Known as reference

Primitive → jiska copy karne par real copy ho jata hai known as primitive

Var a = [1, 2, 3, 4];

Var b = a;

b.pop();

now a → [1, 2, 3]

b → [1, 2, 3]

6) Conditionals → if
→ else
→ else-if

if (false) {
 ?
} else {
 ?
}

execute →

7) Loops → for → for (start; end; change);
→ while

0 to 10 printing → for (var i = 0; i <= 10; i++) {
 var i = 0;
 console.log(i);
}

while (var i <= 10) {
 console.log(i);
 i++;
}

8) Functions

1) Jab aapka code aap khud hi nhi Chalana chate future main karna chate ho

2) jab aapka code aap reuse karna chate ho

3) Jab aap code Chalana chate ho har bar with diff. data

Function → code ko naam dena

```
Function hello () {  
    console.log("hello");  
}  
hello(); // call the function
```

reusable

↓
Function Jabman () {
 console.log("sum");
 console.log("BDK");
}

one reusability

Jabman();
console.log(a);
Jabman();

→ real value jo hum dete hai chotane wakt
function → variable jisme value store
hoti hai arguments wala

Argument Passing & parameter

```
Function sum(a) {  
    console.log(a);  
}
```

→ parameter

sum(12);

→ argument

9) Arrays → multiple value we can use,
(or) group of value

Var arr = [12, 13, 14, 15] ^{0 1 2 3 → indices}

arr[0] → 12

arr[1] → 13

arr[2] → 14

arr[3] → 15

Push, Pop, Shift, unshift

Shift
Push v/s Pop
ST ST
1 remove 1st remove

Pop → remove last index of array

arr.pop(); → [12, 13, 14, ~~15~~]

~~arr~~.

unshift → add value at 0th index of array

arr.unshift(18); → O/P: [18, 12, 13, 14, 15]

Shift → initial index value will be remove

arr.shift(); → [13, 14, 15]

Push → add member in last index of array

arr.push(9); O/P → [12, 13, 14, 15, 9]

splice → ^{remove} ^{index} ^{total no. from that index}
(from, how much)

arr.splice(2, 2) → O/P [12, 13]

arr.splice(1, 3) → O/P [12]

10) Object → ek se jyada bande ki baat ki tohwa
array, ek bande ke bare mein saxi baat
ki tohwa object

1) blank obj.

```
Var a = {};
```

2) filled obj

```
Var rectangle = {
```

```
length: 1,  
breadth: 2  
};
```

→ object

key value pair (or) property

```
Var Subham = {
```

```
age: 23,  
name: "Subham",  
Job: "TTL",  
Email: "Sm4646779@gmail.com",  
Contact: 8018409696
```

→ key
(or)
property

```
};
```

need of obj → if someone told me give the detail of person Subham

array v/s object

↓
Bhopal me jitne
harshn hai
uska sectors

```
Var Bhopal = ["A-10", "A-30", "A-40"]
```

↓
Bhopal
harshn

me sector A-30 me do
renta hai uska detail

```
Var harshn = {
```

```
Age: 23,  
Contact: 8018409696,  
dist: "Bhopal"
```

```
};
```

how to Access keys value of object

`Subham.age;` o/p \rightarrow 23

Object name Access key value

method in a object (or) method

\rightarrow object ke andar ek esi property he jiska hum property na value function ko usko property na bolke method bole he.

`Village: function() { }`

`Var Skm = {`

`Age: 23,`

`School: "RGT",`

`Village: function() {`

`console.log("BBSR");`

`}`

`}`

Access \rightarrow

`Skm Skm.Village()` o/p = BBSR

if : want to Change value of a object's property

`Skm.Age = 24;`

now `Skm.Age` // o/p \rightarrow 24