

Arithmetic

A: Operators :-

- $+$ → Addition
- $-$ → Subtraction
- $*$ → Multiplication
- $/$ → Division
- $\%$ → Remainder
- $**$ → Exponentiation

out:-
`console.log (a+b);`
 ↑
 operands
 ↓
 operators

`console.log (9+10);`
`console.log (9-8);`
`console.log (10*4);`

2 Assignment operator:-

let $x = 20;$
let $y = 10;$
 $// x = x + y;$

$x += y;$ or $x -= y$ or $x *= y;$

`console.log (n);`

Small b:- x & y ko add karne aur
min store karne de.

* Comparison Operator.

> Greater than

< less than

\geq Greater than or equal to

\leq less than or equal to

$== \rightarrow$ Ye String ko number me ne
change kar doga.

$== \rightarrow$ Pehle ye check, karega ki dono
string hone chahiye. Ya number nahi
to ~~to~~ pehle string ko number me change
karega phir compare karega.

* Rule :- null is loosely equal to undefined only.

console.log(null == undefined); ~~False~~ True

console.log(null === undefined); False

console.log(null == 0); False

console.log(null == ""); //

console.log(null == false); //

console.log(null == true); //

Rule :- $>, <, \geq, \leq$ (null \rightarrow number)

i.e. :- Ab khiye operators ko tb null jo ho wo
number me convert ho jata hai.

Console.log(null >= 0); True

Console.log(null <= 0); True

Console.log(null > 0); True

Console.log(null < 0); True

4 loops

for loop

```
for (let i = 0; i < 10; i++) {  
    console.log(i);  
}
```

while loop

```
let i = 0;  
while (i < 10) {  
    console.log(i);  
    i++;  
}
```

do while loop

```
let i = 0;  
do {  
    console.log(i);  
    i++;  
} while (i < 10);
```

If else condition

~~let age~~

```
let age = 15;  
if (age >= 18) {  
    console.log('Eligible for vote');  
} else {  
    console.log("Not eligible for vote");  
}
```

// kid, young, old.

```
let age = 20;  
if (age < 18) {  
    console.log("kid");  
} else if (age >= 60) {  
    console.log("old");  
} else {  
    console.log("young");  
}
```

Q logical operators!:-

→ Dono True hone chahiye or some hone chahiye
& & , || , != → true dega. ya false (dono same kyun
AND OR. → agr ek bhi true hua hai toh wo
true dega.

console.log(true & & true); True
console.log(true & & false); False
console.log(false & & false); False
console.log(false & & true); False.

console.log (true || true); True
console.log (true || false); True
console.log (false || false); false
console.log (false & true); True.

\therefore (Logical Not).

console.log (5 != 5); False.