

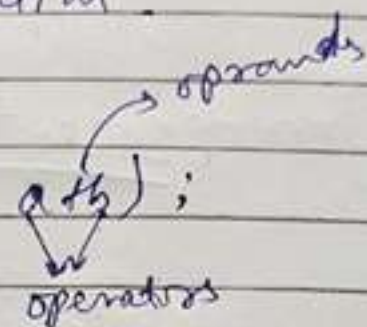
Arithmetic

A. Operators :-

- $+$ \rightarrow Addition
- $-$ \rightarrow Subtraction
- $*$ \rightarrow multiplication
- $/$ \rightarrow Division
- $\%$ \rightarrow Remainder
- $**$ \rightarrow Exponentiation

ex:-

`console.log(9+10);`



`console.log(9-8);`

`console.log(10*4);`

`console.log(10%4);`

* Assignment operator :-

`let x = 20;`

`let y = 10;`

`// x = x + y;`

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

`console.log(x);`

Example:- x & y ko add karo aur
in store karo de.

* Comparison Operator.

- > Greater than
- < less than
- >= Greater than or equal to
- <= less than or equal to

== → Ye string ko number me change kar dega.

=== → Pehle ye check karega ki dono string hone chahiye. Ya number nhi to pehle string ko number me change karega phir compare karega.

* Rule 1- 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: >, <, >=, <= (null → number)

ie:- Jb khr ye operators ho to null jo hai 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

1. 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 hona chahiye or some hona chahiye
 & & , || , !=
 AND OR. → agr ek bhi true hai to wo true dega.
 If true. dega. ya false (dono same hona chahiye).

```

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.

!= (logical not).

console.log (5 != 2.5); False.