### Operator

• An operator is a sign or symbol, which performs an operation or evaluation one or more operands.

## Arithmetic Operator

Arithmetic Operator And Expression
 These types of operators are used specially for arithmetic operations

Operators	Meaning	Operators	Meaning
+	Addition	/	Division
-	Subtraction	%	Modulo Division
*	Multiplication	()	Brackets

# Logical Operators

• It Creates logical relation between two expression

Operators	Meaning
&&	Logical AND
II	Logical OR
	Logical NOT

#### Bitwise Operators

• The operation perform after converting every value to binary e equivalent

Operators	Meaning
~	One's Complement
>>	Right Shift
<<	Left Shift
&	Bitwise AND
	Bitwise OR
۸	Bitwise XOR

<script></th><th></th><th>10</th></tr><tr><td>console.log(2 & 3)</td><td></td><td>11</td></tr><tr><td></script> <td>Output will be 2</td> <td>10</td>	Output will be 2	10
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#### Other Operator

- Assignment Operator (=)
- Comma Operator(,)
- Increment Operator(++)
- Decrement Operator(--)
- Ternary operator(?)

```
If (a%2==o)?(printf("even") : (printf("odd")
```

# JavaScript Data Types

- Primary Data Types
  - Number
  - String
  - Boolean
  - NULL
- Non Primitive
  - Object
  - Array
  - Function

## JavaScript Variables

- Variables name are case sensitive
- Variable name must begin with a letter
- Name can also begin with \$ and\_
- Name can contain letter, digits, underscore and Dolor sign
- Name cannot start with number
- Reserved word cannot be used as name
- Variable are declared using var or let keyword
- Variable name cannot contain space .

## JavaScript Variable Scope

- Global Variable
  - ➤ A global variable has global scope which means it can be defined anywhere in your JavaScript code.
- Local Variable
  - ➤ A local variable will be visible only within a function where it is defined function parameters are always local to the function.

# Variable Declaration on java script

• You can use the Var, let and const keywords to declare variables in JavaScript. The main difference between let and var is that variables declared with let have a block scope, while variables declared with var have a function scope. const is similar to let, but the value of a const variable cannot be reassigned.

Example

Var a=20;

Let a=20;

Const a=20;

```
let
```

```
<script>
function test()
for(let i=1;i<5;i++)
  console.log(i); // here i can be print
       console.log(i); // here cannot print i
test();
</script>
```

```
var
```

```
<script>
function test()
for(var i=1;i<5;i++)
  console.log(i); // here i can be print
       console.log(i); // here also can access i
test();
</script>
```