

Module 8) JavaScript

JavaScript Operators

Question 1: What are the different types of operators in JavaScript?
Explain with examples.

- **Arithmetic operators**
- **Assignment operators**
- **Comparison operators**
- **Logical operators**

1.Arithmetic Operators: Perform basic math operations.

(+ - * / %)

Example:

Javascript

```
var a = 31;  
var b = 10;  
var mod=a%b;  
document.write(mod);
```

2. Assignment operators : Assign values to variables.

(= += -= *= /= %= a=10 a+=b a=a+b; // a-=b a=a-b)

Example:

Javascript

```
var a=20;  
var b=30;  
document.write(a=a+b); // a=a+b; a+=b
```

3. Comparison Operators: Compare two values and return **true** or **false**.

(== != > < <= >=)

Example:

Javascript

```
1.)      var a="30";  
          var b=31;  
          if(a==b)  
          {  
              document.write('a equal to b');  
          }  
          else
```

```

{
    document.write('a not equal to b');
}

```

2.)

```

var a=30;
var b=30;
if(a===b)
{
    document.write('a equal to b with same data type');
}
else
{
    document.write('a not equal to b or not same data type');
}

```

4.Logical Operators: Combine conditions.

(&& || ! // use with if(condition))

Example: **Javascript**

```

var a=20;
var b=30;
var c=10
if(a<=b && a<=c)    // if(!(a<=b))    if(a<=b || a<=c)
{
    document.write('a less then b & c');
}
else
{
    document.write('cond false');
}

```

Question 2: What is the difference between == and === in JavaScript?

== (Loose Equality): Compares values, converting types if necessary.

Example:

javascript

```
let a = 5, b = "5";  
let isEqual = a == b; // true (because "5" is converted  
to number 5)
```

-

=== (Strict Equality): Compares both value and type without conversion.

Example:

javascript

```
let a = 5, b = "5";
```

- ```
let isStrictlyEqual = a === b; // false (because one
is a number and the other is a string)
```