

CSE326

Internet Programming Laboratory Lecture #11 Part 1

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Outline

- `<script>`
- Variables
- Operators

<script>

- The **<script>** HTML element is used to embed executable code or data; this is typically used to embed or refer to JavaScript code.

<head>

<script>

. . .

</script>

</head>

<script>

<head>

<script src="javascript.js">

. . .

</script>

</head>

Variables

- A variable is a container for a value, like a number we might use in a sum, or a string that we might use as part of a sentence.

var name = “Manish”;

or

let name = “Manish”;

or

const name = “Manish”;

Operators

- Arithmetic operators
- Assignment operators
- Comparison operators
- Logical operators
- String operators
- Conditional (ternary) operator

Arithmetic Operators

- Remainder (%)
- Increment (++)
- Decrement (--)
- Unary negation (-)
- Unary plus (+)
- Exponentiation operator (**)

Assignment Operators

Name	Shorthand operator	Meaning
Assignment	$x = f()$	$x = f()$
Addition assignment	$x += f()$	$x = x + f()$
Subtraction assignment	$x -= f()$	$x = x - f()$
Multiplication assignment	$x *= f()$	$x = x * f()$
Division assignment	$x /= f()$	$x = x / f()$
Remainder assignment	$x \% = f()$	$x = x \% f()$

Comparison Operators

Operator	Description	Examples returning true
Equal (==)	Returns true if the operands are equal.	<code>3 == var1</code> <code>"3" == var1</code> <code>3 == '3'</code>
Not equal (!=)	Returns true if the operands are not equal.	<code>var1 != 4</code> <code>var2 != "3"</code>
Strict equal (===)	Returns true if the operands are equal and of the same type.	<code>3 === var1</code>
Strict not equal (!==)	Returns true if the operands are of the same type but not equal, or are of different type.	<code>var1 !== "3"</code> <code>3 !== '3'</code>

Comparison Operators

Operator	Description	Examples returning true
Greater than (>)	Returns true if the left operand is greater than the right operand.	<code>var2 > var1</code> <code>"12" > 2</code>
Greater than or equal (>=)	Returns true if the left operand is greater than or equal to the right operand.	<code>var2 >= var1</code> <code>var1 >= 3</code>
Less than (<)	Returns true if the left operand is less than the right operand.	<code>var1 < var2</code> <code>"2" < 12</code>
Less than or equal (<=)	Returns true if the left operand is less than or equal to the right operand.	<code>var1 <= var2</code> <code>var2 <= 5</code>

Logical operators

- Logical operators are typically used with Boolean (logical) values.
 - Logical AND (&&) -> **expr1 && expr2**
 - Logical OR (||) -> **expr1 || expr2**
 - Logical NOT (!) -> **!expr**

String operators

- The concatenation operator (+) concatenates two string values together, returning another string that is the union of the two operand strings.

```
console.log("my " + "string");
```

Conditional (ternary) operator

- The conditional operator is the only JavaScript operator that takes three operands. The operator can have one of two values based on a condition.

condition ? val1 : val2

const status = age >= 18 ? "adult" : "minor";

References

- https://www.w3schools.com/js/js_arithmetic.asp
- https://www.w3schools.com/js/js_assignment.asp
- https://www.w3schools.com/js/js_comparisons.asp
- <https://www.geeksforgeeks.org/javascript-ternary-operator/>

Program link

- <https://onlinegdb.com/7xNzMPxDa>

Thank you