OUTPUT

# This is a comment
/* This is a multi-line comment */

window.alert("Hello World")
Displays “Hello World” in an alert box

custom.log("Hello World")
Writes “Hello World” into the browser console

DOM METHODS
These methods affect the overall HTML page.

document.getElementById("id")
Returns the element where id = “id”

document.getElementsByClassName("class")
Returns a list of elements where class="class"

document.getElementById("id")
Creates a button element

element.childNodes
Returns all children elements within ‘element’

element.parentNode
Returns the predecessor of ‘element’

element.appendChild
Adds a DOM element to ‘element’

element.removeChild(child_element)
Removes ‘child_element’ from ‘element’

element.id
Returns or assigns an id to an element

element.class
Returns or assigns a class to an element

elementName.innerText = "Hello World"
Assigns text to an HTML element

EVENTS
Events occur only in certain circumstances; they’re generally associated with functions.

document.onload
Occurs when the web page is initially loaded

element.onclick
Occurs when the element is clicked

element.onkeyup
Occurs when any key is pressed in the element

VARIABLES
Variables must be declared before they are used.

var number = 1;
var workshop = "Advanced Web Dev";
var even_numbers = [2, 4, 6, 8];

ARITHMETIC OPERATORS
+ Add  - Subtract  * Multiply  / Divide
++ Increase by one  -- Decrease by one

STRING FUNCTIONS

var string = “javascript”;
string.length
Returns 10 – the length of the string
string.slice(0, 4)
Slices string from index 0 to index 4. Returns “java”

string.replace(‘a’, ‘A’)
Replaces first instance of ‘a’. Returns “jAvascript”

**CONDITIONAL STATEMENTS**

**Relational Operators**
- `==` Equal to
- `!=` Not equal to
- `>` Greater than
- `<` Less than
- `>=` Greater than or equal to
- `<=` Less than or equal to

**Boolean Operators - evaluate to True or False**
- `&&` and
  - `(1 > 0) && (4 > 0)` Evaluates to: True
- `||` or
  - `(1 > 3) || (4 > 3)` Evaluates to: True
- `!` not
  - `!(1 == 1)` Evaluates to: False

**One Way Selection**
```javascript
if (name == “Sudo”) {
  alert(“Hello Sudo”);
}
```

**Two Way Selection**
```javascript
if (mark >= 50) {
  alert(“Pass”);
} else {
  alert(“Fail”);
}
```

**Multiple Selection**
```javascript
if (number > 0) {
  alert(“Positive”);
} else if (number < 0) {
  alert(“Negative”);
} else {
  alert(“Zero”);
}
```

**LOOPS**

**Counted Loops**
```javascript
for (i = 0; i < 5; i++) {
  alert(i);
}
```
This outputs the values 1-9.

// Loop through an array
```javascript
var even_numbers = [2, 4, 6, 8];
for (i = 0; i < even_numbers.length; i++)
  alert(even_numbers[i]);
```
This all values stored in the array.

**Conditional Loops**
```javascript
var i = 1;
while (i < 10) {
  alert(i);
}
```
This outputs the values 1-9

**FUNCTIONS**

// Function that adds two numbers
```javascript
function add(number1, number2) {
  return number1 + number2;
}
alert(add(3, 4));
```
Displays 7

// Anonymous Functions Example
```javascript
window.onload = function() {
  alert(“Hello”);
};
```
This outputs “Hello” once the window is loaded, and cannot be used any other time.